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Bringing the Climate Crisis into the Classroom through Dystopian Cli-fi

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Dissertação realizada no âmbito do Mestrado em Estudos Anglo-Americanos,
orientada pela Professora Doutora Maria de Fátima de Sousa Basto Vieira

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À minha família

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Declaração de honra

Declaro que a presente dissertação é de minha autoria e não foi utilizada previamente noutro curso ou unidade curricular, desta ou de outra instituição. As referências a outros autores (afirmações, ideias, pensamentos) respeitam escrupulosamente as regras da atribuição, e encontram-se devidamente indicadas no texto e nas referências bibliográficas, de acordo com as normas de referenciação. Tenho consciência de que a prática de plágio e auto-plágio constitui um ilícito académico.

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Lília Sá Pereira Santos

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Resumo

De uma forma geral, os jovens adultos de hoje parecem estar cientes das consequências nefastas dos maus tratos das gerações anteriores ao meio ambiente, especialmente porque serão eles os mais afetados pelas alterações climáticas. Nesse sentido, a literatura distópica como *Breathe*, de Sarah Crossan, apresentada em sala de aula, será uma forma de garantir a esses jovens adultos que os problemas retratados por esse tipo de ficção, apesar de serem reais, não são necessariamente sem solução, inspirando-lhes esperança e cumprindo assim uma função pedagógica de relevo. Ao propormos aos estudantes a leitura de textos distópicos estamos não apenas a contribuir para a construção do seu pensamento crítico, mas também a potenciar o seu conhecimento sobre problemas prementes e a sensibilizá-los para a necessidade de adoção de comportamentos sustentáveis de mudança de vida. A leitura de *Breathe*, em particular, mostrar-lhes-á importância da iniciativa individual, preparando-os para se assumirem como agentes ativos da construção do futuro da comunidade em que vivem.

Palavras-chave: [literatura distópica, ficção climática, alterações climáticas, alterações climáticas antropogénicas]

Abstract

In general, today's young adults seem to be aware of the harmful consequences of the abuse of previous generations of the environment, especially since they will be the ones most affected by climate change. In this sense, dystopian literature such as *Breathe* by Sarah Crossan, presented in the classroom, will be a way of reassuring these young adults that the problems portrayed by this type of fiction, despite being real, are not necessarily without solution, inspiring them hope and thus fulfilling a major pedagogical function. By proposing the reading of dystopian narratives to students we are not only contributing to the construction of their critical thinking, but also enhancing their knowledge of pressing problems and making them aware of the need to adopt sustainable life-changing behaviours. Reading *Breathe* will show them the importance of individual initiative, preparing them to become active agents in building the future of the community in which they live.

Keywords: [dystopian literature, climate fiction, climate change, anthropogenic climate change]

Abbreviation List

Cli-fi.....	Climate Fiction
SWS.....	Sustenance Webinar Series
YA	Young Adult

Introduction

In order to fully comprehend the urgency of the threats of global warming, humankind needs to be confronted with the devastating chaos that climate change will bring about through narratives of nearby or distant futures, tales about the devastation and desolation that will be caused by our inability to take action or our procrastination in implementing decisive measures. This awareness, however, can also arise through narratives of hope and anticipation of a new and better world.

How many more natural catastrophes and life-threatening diseases do we have to experience before acknowledging the fact that climate change and many other climate-related problems are not empty, meaningless ideas that are used to describe the hoax that many believe in? They are real and should be borne closely in mind.

It is essential to talk about this openly, to debate what we are doing to our planet and the horrific fate that lies ahead if nothing is done. However, it is just as important to make others realize that there is a speck of light at the end of the tunnel and that we are probably not destined to be doomed. Utopian and dystopian cli-fi narratives can do this. They not only warn the readers of what is to come, by comprising the adverse and pernicious implications the threat of climate change poses, but also show a path to move onwards. These storylines foment debate and increase awareness of a problem that needs to be battled on a global scale, taking as a starting point the changes of attitudes and behaviours of each individual, more specifically the readers of these narratives.

These are the reasons writers are engaging in this sort of narrative. As Daniel Bloom – the blogger and climate activist who first coined the term "cli-fi" in 2008 – suggested, "[c]limate change is the most important issue the humankind has ever faced." (Bloom, 2017). Over time, authors have written about meaningful and controversial issues, topics that made them anguished and triggered their inner fears - problems that go much further than just private ones. They have also dedicated themselves to wishful thinking and giving signs of hope. Cli-fi literature can be used to encourage and promote climate action by shaping the opinion of the readers and present, at the same time, answers to many social problems. As Bloom declared in his interview published in

William Ligget's blog, "I believe that cli-fi novels and movies will change attitudes about and awareness of global warming. Cli-fi is a global warning, a wakeup call, a warning flare, a *cri du coeur*." (2018) Unlike the crushing scientific statistics, cli-fi offers stories we can relate to and be engaged in and that is why it can be argued that they can be used in an impactful way in the classroom. Science is decoded and made easy for readers who are sometimes uninterested or sceptical about the topic, while others are worn out by an issue that seems to never go away.

Over the years, as a teacher, I have been suggesting diverse books, films, and documentaries to the adolescents I have taught. I have come to believe that these young students do understand the need to look after the ecosystem. I have also come to realize that these young people are aware of the dangers brought about by the environmental crisis and the impact that this will have on their lives. They worry about the fact that they are going to face the effects of the hazardous activities that were carried out by their parents and grandparents' generations and feel powerless to overturn the impending results that loom ever nearer.

This dissertation intends to look at Sarah Crossan's *Breathe* as a young adult climate fiction dystopian novel and how this sort of literature can be used in the classroom to assure students that although their doubts and concerns in relation to climate change are genuine and justified, they do not need to be regarded as final and without resolution. This can be accomplished by furthering the young students' reflection on new thinking about and on giving a sound response to climate change. The didactic benefits of using these types of narratives in the classroom will be analysed and some strategies to use Crossan's novel will be suggested. For this purpose, the following research questions have been defined:

- 1- Why does *Breathe* fall under the category of young adult dystopian literature?
- 2- How can cli-fi utopian/dystopian literature help enhance students' critical thinking and awareness of the society they live in?
- 3- How can it empower them to engage in life-changing, sustainable choices, attitudes and behaviours?

- 4- How can climate fiction develop the students' initiative to take action proactively?
- 5- How can these narratives boost positive thinking and promote an optimistic attitude despite the negativity that sometimes overshadows young people's lives?
- 6- How can this type of narrative improve students' proficiency in the English language?

The *Perfil dos Alunos à Saída da Escolaridade Obrigatória* (*The Students' Profile by the End of Compulsory Education*) is a Portuguese Ministry of Education reference document that describes the principles, vision, values and competencies that Portuguese students should have acquired when they finish compulsory schooling. According to the profile, the twenty-first-century students are expected to be citizens who are equipped with cultural, scientific and technological literacy to analyse and critically question their reality, evaluate and select information, formulate hypotheses and make informed decisions in their daily lives. Citizens that are aware of the world around them, able to deal with change and uncertainty through collaborative work skills and communication skills, to continue their lifelong learning, value human dignity and reject any form of discrimination and social exclusion (Martins et al., 2017). The primary purpose of this document is to indicate the skills and competencies future citizens require to be able to face the inherent challenges of living in a global community that is constantly changing.

The English language was chosen to be the *lingua franca* to be used in the global interactions in which individuals are going to engage. This global community is characterized by an ever-growing number of citizens who are unable to accept the cultural differences which distinguish them. This society is also characterised by unlimited access to information as a result of the rapid development of technology, more precisely through information and communication technologies, urging its citizens to stay up to date with their digital skills. However, the educational methodologies adopted by many teachers are still very much teacher-centred, relying on the teacher to be the primary conveyor of knowledge and students the recipients – and reproducers – of this knowledge. Never before has there been a greater need to invest in renewed

teaching and learning processes that may allow for the development of essential competencies to form global, critical and proactive citizens able to collaborate on a global scale with their counterparts of other nations.

The discussion of utopian/dystopian climate fiction literature in the English classroom will provide teachers with space for prompting the development of students' critical autonomous thinking, which they may use in other contexts. In this way, students are steered to become independent critical observers of our society.

The *English Subject Curriculum* also highlights the advantages of being proficient in the English language in a globalized world. Fluency in English allows individuals to be a part of a wider global community without feeling excluded, allowing for greater tolerance and open-mindedness. Utopian/dystopian literature enables students to enhance their language skills and attain the aims set out in the *English Subject Curriculum*.

I start this dissertation by providing an overview of the scholarly sources and the current knowledge on utopian and dystopian literature and defining these concepts. For this task, I will rely on the readings of, Raffaella Baccolini (2013), Gregory Claeys (2010, 2013), Laurence Davis (2013), P  re Gallardo (2013), Krishan Kumar (2013), Tom Moylan (2013), Lyman Sargent (1994, 2006, 2010, 2013, 2016), Lucy Sargisson (2013) and F  tima Vieira (2010, 2013). I will then continue by focusing on Young Adult (YA) dystopian literature and its characteristics and distinctiveness concerning adult dystopian novels by relying on authors like Basu, Broad and Hintz (2013), Cart (2010), Hintz (2002).

I will then proceed with the analysis of the emergence of climate fiction narratives by focusing on the writings of John Abraham (2017), Gregers Andersen (2019), Dan Bloom (2014), David Holmes (2014), Adeline Johns-Putra (2015), William Liggett (2018), Emily Martin (2018), Antonia Mehnert (2016), Andrew Milner and J. R. Burgmann (2018), Mathew Schneider-Mayerson (2017, 2018) and Emine   ent  rk (2015). I will also consider the Point Advisory Sustenance Webinar Series #6, which stresses climate fiction's contribution to behavioural changes by presenting scientific data in a more comprehensible and easy manner. I will look at how climate fiction can be a useful instrument to promote adolescents' climate literacy, their understanding of the effects

human-steered activity can have on climate, and consequently the results that these influences have on the organisational systems of humankind. By understanding what humankind is doing wrongly, they will feel emboldened to change their behavioural characteristics and adopt more sustainable goals to achieve a safer and better life. After analysing the didactic benefits for students of using these literary choices, I will present an overall literary and didactic theory to show the importance of promoting extensive reading in the classroom relying on Richard Day and Julian Bamford (1998), David Eskey (2002), David Kidd and Emanuele Castano (2013), F. M. Hafiz and Ian Tudor (1989).

The discussion of the novel *Breathe*, by Sarah Crossan, through the lens of dystopian fiction, will be the focus of my dissertation. I will seek to show how the narrative falls under the definition of cli-fi dystopianism, meeting the criteria established in the previous chapters. I will look at it in both social and political terms; analyse the environmental degradation as both cause and outcome of the social organisation; identify technology as the trigger of the installed chaos; and finally, at how the characters are to be seen as role models of self-determination and social and political commitment to their community.

The next section will deal with the didactic potential of reading *Breathe* in the English classroom to develop students' skills and climate literacy. I will sustain that exposing students to young adult utopian/dystopian climate fiction, in general, will provide students with the tools they need to can achieve the aims identified in the document "*Perfil dos Alunos à Saída da Escolaridade Obrigatória*" (Students' Profile by the End of Compulsory Schooling), increase their language ability and reading proficiency, raise their awareness, empower them to take action (Character Building) and increase their understanding and reflection about society

Lastly, I will present my final considerations.

1. Utopian / Dystopian Literature

1.1. Defining Utopian / Dystopian Literature

To apprehend the dystopian themes found in YA narratives, one must look at the definitions of both utopia and dystopia. Dystopian literature has its origin in the utopian genre, which began with Thomas More's *Utopia*, published in 1516. More's *Utopia* was a narrative intended to point out the flaws of contemporary English society by presenting an idyllic political state named Utopia. The term "utopia" refers to "no-place", as its Greek etymology suggests ("ou" and "topos"). However, the word "ou" is very close to the word "eu", which means "good". More coined the term "utopia", but played with "eutopia" (the "good place"), and so "no place became the non-existent good place" (Sargent, 2013, p. 10). Utopia can simultaneously be a place, a state, a space that is non-existent and good. Utopia generally references ideal societies, bearing positive connotations. It is not exclusively religious, nor exclusively about perfectibility, but these components do play a role in its tradition, being built as a satirical discourse eyeing corruption and degradation while valuing the communal bond. Following Thomas More, sociability, rather than individuality, was appreciated (Claeys, 2013, p. 15). Not being exclusively literary, utopia has given rise to an important literary tradition.

Despite having attributed the name to his work and ensuing literary genre, Thomas More cannot be touted for being accountable for imagining a perfect society with a newly designed socio-political structure, ideally designed as far as politics, laws, customs, and conditions are concerned. This society is quite often very similar to the one the author lives in but is presented as being superior in terms of organisation and suggested as a model for improving the current system. Studying the concept of utopia, as Vieira (2010, p. 3) states, is not the same as historicizing the word. Only the word was coined by Thomas More, because the concept has a long and complex history. The concept of utopia exists before the novel *Utopia* (Sargent, 2010, p. 4). The word was used to designate a new phenomenon but refers to a pre-history of the concept. More invented the word, but not the doctrine, meaning the yearning for a better life. He altered the manner this yearning would be expressed, by connecting classical and Christian traditions, adding the role the individual was to play in his lifetime (Vieira, 2010, p. 6). The genre is often identified with the Christian tradition because of its

association with Thomas More, but utopias are not limited to the West nor to this tradition. (Sargent, 2010, p. 85).

Utopias had been portrayed in many narratives many centuries before More's narrative: The Garden of Eden, the biblical paradise in Genesis, Plato's Republic, portraying the flawless state governed by philosopher-kings. These idyllic scenarios, nonetheless, impossible to be instantiated due to their dreamlike goals, continued to be depicted after More's *Utopia*, in many narratives like Jonathan Swift's famous *Gulliver's Travels* (1726) and along the nineteenth century with Samuel Butler's *Erewhon* (1872) and William Morris's *News From Nowhere* (1891).

Earlier traditions of utopia focus on bodily pleasures (body utopias), with food, drink, and carnal pleasure at their centre. It is the body utopia of the biblical Eden, the Greek and Roman earthly paradise, the Golden Age, associated with the saturnalian tradition of the world upside down, The Feast of Fools, depicting carnal excesses, earthly versions of Carnival, all of which place the poor in place of their superiors and vice-versa. The second tradition, utopias of human contrivance, focuses on social organisation, realistic presentation, and intelligence at work. Virgil (70-19 BCE) changed the myths, moving the past Golden Age to the future (Fourth Eclogue), turning the better world into a consequence of human activity, not a gift from the gods. Western utopias were created from this transition (Sargent 2010, p. 16). Descendants of Saturnalia were suppressed by the Church. In the Middle Ages, the Greek and Roman Gods were set aside, and stories like Cockaigne developed in several European countries.

Utopia has been historically defined through one characteristic, which is that of the yearning for enhanced life, as the result of dissatisfaction in relation to the individual's society. It is a reaction to an undesirable present, imagining or hoping for possible alternatives. The didactic purpose of its discourse can never take the second stage to the entertaining one. That is why the relationship between the familiar world and the imaginary is rooted in recognition. Its satire is always aimed at real society but does not dominate pedagogy. More closely to the eighteenth century, utopias were placed in the future, moving to *euchronia*, the good place in the future, as a result of the optimism of the Enlightenment, likening reason to a happy life and human perfection. In the

nineteenth century, its positive dynamic is lost, giving rise to anti-utopia, whose "only aim was to denounce the irrelevance and inconsistency of utopian dreaming and the ruin of society it might entail." (Vieira, 2010, p. 16)

The word "dystopia", meaning bad place, was first used by John Stuart Mill in a parliamentary speech (Vieira, 2010, p. 16). Although it was coined in 1747, it became more common in the twentieth century. When utopian accounts are predominantly eutopian they are often read as resulting from an attempt to escape reality; however, their primary intention is to enhance the need for change. When utopian accounts are predominantly dystopian, their deep connection to reality is enhanced as the future is presented as the consequence of choices of the present. Dystopian accounts became the dominant form of utopian literature since World War I, bearing a close connection to other twentieth-century historical events (Sargent, 2010, p. 25).

Although it emerged from utopia, dystopia is not to be seen as its opposite: it is, in fact, one of utopia's offspring – or, as some theorists have defined it, its sibling (Vieira, 2013, p. 7). At the background of dystopian narratives were the satires of reason, science, progress, faith in the future, proclaimed by the most significant representatives of the utopian literary genre, which became dominant in the 18th century (Kumar, 2013, p. 19). Dystopia, much more than a parodic inversion of utopia, as traditionally depicted, pulls its dreamy companion down to earth (Davis, 2013, p. 4). Dystopia, as a younger concept, dating back to the nineteenth century, is not linked to a particular text or tradition. It has a broader tradition, but it portrays the opposite of democracy. Masses have lost control of their own destinies; they are in the hands of fate, theocratic authoritarianism being the paradigm in this context. While utopia represents ordered freedom, dystopia is more associated with the lack of it, the rule of exterior forces over the individual's free will (Claeys, 2013, p. 17).

Dystopias are intended to be artistic while being instructive. Their aim by criticising the current society is to point out the need for social reform. (Gallardo, 2013, p. 38). They are both didactic and moralistic with the intention of scaring the readers, letting them know that events can have substantial negative impacts, according to the individual's behaviour. Negativity aims at achieving positive reactions from the readers. It leaves

them with the idea that there is room for hope. Given the unlikelihood of achieving an ideal society, humankind must strengthen its efforts to improve the present one. (Vieira, 2010, p. 17). Being didactic, they are supposed to lead us to think, informing us what is currently wrong, to envision how easily our society can be on the brink of the abyss, but, still, improve (Sargisson, 2013, p. 40).

Dystopian literature portrays "a society in which evil or negative social and political developments" (Claeys, 2010, p. 107) have got hold. Contrary to the dreamlike world presented in utopian fiction, dystopias describe utopian societies where things have gone wrong. Dystopias introduce us to worlds that are heading towards social dissolution or already in that process (Gallardo, 2013, p. 38). A dystopia is an imagined universe that has been impacted by an oppressive societal control or an apocalyptic event that has brought upon its inhabitants inhumane conditions, oppression, violence, ailments and chaos. Dystopias were proposed to be utopias; however, as a result of an unpredictable fatality or flaw, the utopian concept is distorted. This is the world depicted in Sarah Crossan's *Breathe*; one that is characterized by suffering from a shortage of oxygen and where dystopia is sustained through corporate, technological, totalitarian control.

Devising worst-case scenarios has been widely sought-after by fiction authors and continues to be so in the twenty-first century. Due to the social and political unrest – the many wars fought during the twentieth century, including the two devastating world wars as a result of the tyrannical regimes –, as well as to ecological disasters, many fiction writers have engaged in critically analysing and writing about the individual's place in these structures by resorting to dystopian narratives: "the twentieth century [...] has become dystopia, the bad place, under the pressure of two world wars and the rise of Soviet communism." (Sargent, 2016, p. 565). In the twenty-first-century, dystopia has become "the predominant expression of the utopian ideal, mirroring the colossal failures of totalitarian collectivism" Claeys (2010, p. 108).

By presenting a catastrophic scenario, dystopian authors draw our attention to their concerns regarding the existence and the future of humankind. They are issuing a warning to raise society's awareness of the fact that it can too easily degenerate into

chaos. This alert is called on by dealing with recurrent topics to portray the pseudo-idyllic society which is accomplished through control, whether it be corporate or bureaucratic, technological, philosophical or religious. The dwellers of this land are manipulated by means of propaganda and strict surveillance exerted by a figurehead that is regarded as being a protective morality that keeps the citizens safe from any human, technological or environmental danger. They are led to believe that their society is ideal and the world that lies beyond their confined space is dangerous. They are trapped in a dehumanized and denaturalised world, restricted of their freedom and free will. In reference to the two dystopian novels that Claeys presents as "key texts which define the genre", Aldous Huxley's *Brave New World* (1932) and George Orwell's *Nineteen Eighty-Four* (1949), the utopian theorist (2010, p. 109) states that

[t]heir common theme is the quasi-omnipotence of a monolithic, totalitarian state demanding and normally exacting complete obedience from its citizens, challenged occasionally but usually ineffectually by vestigial individualism or systemic flaws, and relying upon scientific and technological advances to ensure social control.

The social control brought about by the limitation of movement and thought, the annihilation of collective identity and consciousness, the classification and consequent stratification of the people provides the citizen with a sense of powerlessness doomed to face a permanent dead end. Anyone unable to abide by the norms and the codes is enslaved, exiled or annihilated. This can lead to an uprising of the long-suffering people that have experienced the unfairness of the established rules of the oppressive and corrupt regime that begin to doubt the true purpose and correctness of the system and yearn for an escape from this trap. It is when the looming threat gets closer or an opportunity to make a choice arises that the feeling of rebellion starts and spreads through the remaining group. This rebellious attitude results in the changing of the lives of the characters involved, whether it be through the defeat of the cruel forces and the liberation of the oppressed society or simply by escaping from the evil rulers.

The dystopian protagonists' quest for survival begins by rejecting the system and acting with a bigger or smaller group of allies because their instincts tell them that action is required for change to occur since the so-called normality is unnatural and wrong. The dystopian protagonists might not be heroes in the literal sense of the word, for they may lack the physical attributes and the qualities to achieve outstanding accomplishments. Still, it is their yearning for change as they realize they need to take action and ultimately to enact change that distinguishes them from the other characters. In this sense, they show their noble attributes that set them apart.

The character and/or the group engage in dangerous situations, providing an action-packed narrative loaded with suspense. Still, it is their strong loyalty and trust in relation to each other that helps them overcome the hardships and obstacles that they encounter. This tight allegiance makes them stronger as individuals and as a group. Dystopia involves a warning, in the tradition of the Jeremiad, that if you behave in a certain way you will be punished in a certain way, although, at the same time, it suggests there is room for improvement (Sargent, 1994, p. 22). Standard dystopia presupposes the need for a "hero/heroine". They might hold a positive message, but many of them are jeremiads, named after Jeremiah, meaning that, although people erred, they still can make changes and be rewarded, whether in the biblical or non-biblical sense (Sargent, 2013, 12).

Literary utopias have to do with the description of a desirable/undesirable society, an alternative to the present one, to demonstrate the possibility of improvement. If a wider vision and hope for the future of society is offered, the result is utopia; on the other hand, if it is viewed pessimistically, the result is a dystopia. Hope is essential in changing society for the better (Sargent, 2010, p. 8). Dystopia is about the intellectual and emotional engagement of its readers (Baccolini, 2013, p. 44); it is presented as the result of human behaviour but acknowledges the possibility for change (Sargent, 2013, p. 12). It warns about the future but with a note of hope, sometimes associated with a "heroic" figure. Sargisson (2013, pp. 40-41) suggests that dystopias stimulate thought, raising awareness of climate change while stimulating the debate on the subject –

sometimes triggering real action as they draw attention to current behaviours that need to be addressed.

1.2. Young Adult (YA) Utopian and Dystopian Literature

Young Adult (YA) dystopian fiction emerged from the conventional adult dystopian literature and has become increasingly attractive for young adults, especially since Suzanne Collins's *The Hunger Games* (2008) was released. After the film adaptation of the trilogy, perhaps due to the nature of the narrative with its fast-paced action sufficiently impregnated with ever-evolving technological and scientific accomplishments, dystopia was included in the lexicon of many youngsters. Hintz argues that utopian narratives for young adults present many of the characteristics of mainstream dystopian narratives: the dominance of the authoritarian regime, the annihilation of free thought and the prioritization of collectivism over individualism. However, they differ in the sense that "the major quality of these YA utopias is their advancement of a particular type of utopian pedagogy: one in which political action is addressed within the developmental narrative of adolescence." (2002, p. 254). The hero of this narrative is a young adolescent who, during a process of self-discovery and transitioning into adulthood, often needs to escape the adult control whether parental or governmental, one that he/she is critical of. The adolescent's developmental issues and inner struggles in relation to the outer world are portrayed within his/her rising social and political awareness, which in turn results in action and reform directed at the harmful social and political forces in the imperfect society. The hero of these narratives is a voice of dissent and discontent that embraces action and embodies a calling for removal or remedy of the abuses, manipulations and exploitation the people are subjected to. The high sense of integrity and moral conduct manifested by the protagonist is part of his/her moral and psychological journey which he/she embarks on. It can probably be argued that this sort of narrative borrows many character-building narratives' characteristics; however, the YA dystopian narrative encompasses a shorter period of the teen's life, forcing a faster-paced development but hardly ever reaching adulthood. Still, it is a coming-of-age narrative with a shared goal: to demonstrate that by overcoming adversities and challenges, the hero discovers his/her identity and

matures into a better version of himself/herself by manifesting a high sense of integrity and moral conduct.

The readers of YA dystopian novel are provided with a sign of hope which is required to make a change in an apparent hopeless world by allowing for reflection on the current state of the world and speculating about the future of society if no positive change is enacted. Thus, Cart (2010, p. 103) suggests that

dystopian fiction can serve a larger purpose, inviting idealistic teens to examine the logical consequences of illogical human behaviour and to consider how their own actions—or failures to act—might affect the future of the planet and humanity. And therein lies reason for hope, or at least cautious optimism.

Through the hero, the readers are obliged to take a critical approach concerning the injustices of the world and the impending dangers. This didactical nature of the narratives allows the young readers to acknowledge the fact that conformity is not an inescapable state, and autonomy and initiative are possible and effective in reforming and healing the world. By identifying themselves with the hero, the readers are empowered and embraces a defiant attitude, adopting an optimistic approach regarding the darkest scenarios. The young readers are led to believe that they can become constructive agents in the world and that their actions can make a change. This sign of hope is fundamental to allow the readers to comprehend that their understanding of the world's problems, their critical attitude and inspiring ideas can alter the course of the current state of affairs and open new alternatives for the future.

The themes of conformity and uniformity contrary to individualism, autonomy, independence and creativity are familiar tropes in YA dystopias. Through the annihilation of free thought and individual expression, the oppressive power is able to control the tensions that arise from diverse ideas and thoughts and thereby manipulate the collective being in a manner that it acts accordingly and obediently and believes that it is in its interest to act so. The oppressor's hold over the society is put at risk when the hero realizes that this total allegiance need not be and can be questioned and changed, even though he/she is then viewed as a threat that needs to be terminated. (Basu et al., 2013, p. 4)

Basu et al. (2013) further state that "[t]he YA dystopia's rigid and repressive regimes are often enforced through the enslavement and silencing of citizens, and several methods are used to achieve this." This enslavement is achieved through psychological, physical and economic restraint by recurring to ways such as detention facilities, technology to control and change the mind, drug-induced stupor or cruel manifestations of power. Once again, the young adult readers relate to the hero's imprisoned life because their own experience is one of rule-abiding, not only at home but also at school and in the community. The young adults are expected to perform the roles of the lawful, moral, orderly citizens, the well-behaved, decent students and the respectful, obedient sons or daughters. And sometimes "YA dystopias can also indulge a very different, and seemingly contradictory, impulse: escape from the strictures of social convention—surely an adolescent's dream" (Basu et al., 2013, p. 5).

Another common trait of the YA dystopian literature is access to information. "[D]ystopias are sensitive registers to the explosion of information that characterizes contemporary society, and to the atmosphere of conspiracy that pervades popular political discourse" (Basu et al., 2013, p. 4). By accessing information, the protagonist can uncover the truth and unveil the lies and the manipulation and find out what is right and wrong. This revelation can be challenging and dangerous, but it will lead to insurgence and ultimately freedom.

Technology and its advances are predominant in dystopian narratives, and, most often, the setting of the story is placed in a highly developed technological future. Claeys (2010, p. 109) argues that the objective of this sort of narrative is to depict a social system that is maintained through a totalitarian power relying on "scientific and technological advances to ensure social control." Still, quite often, "the dystopia is the product of technology gone wrong." (Cart, 2010, p. 103); it is in cautionary messages about the dangers of over-relying on technology for attaining a better world that the authors portray technology. As Claeys (2010, p. 116) argues, It is not only presented as a positive factor in the progress of humankind but also as a negative one for being the form used by the authoritarian regime to control the citizens and for having prompted a withdrawal from the natural world and dehumanising humankind. Hence, by

contemplating these risks, the readers can decide whether to use it wisely within reasonable boundaries or allow technology to rule their lives.

A frequent theme depicted in YA utopian narratives is the concern for the current ecological state and the threat of total environmental destruction. As Basu et al. (2013, p. 3) argue,

[t]hey envision the world as it has been damaged by global warming and other scenarios of ecological destruction. Rising sea levels, storms, drought, and the end of fossil fuels create social, political, and economic nightmares that sensitize readers to the dangers of environmental ruin at the same time that they depict young protagonists learning to adapt and survive in altered times.

This recurrent theme in YA narratives is intended to show the readers that nature is not a force that should be combatted and destroyed; instead, it is vital for humankind's survival and should be protected. By portraying a world on the verge of an ecological disaster or a post-apocalyptic one in which an environmental catastrophe has occurred, the young readers are confronted with the harsh truth of the difficult life that lies ahead if no action is taken. The readers may be encouraged to question the authorities' answers to the problem of climate change and as to whether account is taken of their interests.

2. Climate Fiction (cli-fi)

During the first decade of the twenty-first century, climate change became a recurrent theme throughout many different forms of art and entertainment, including literature. Many authors engaged in writing about the changes in local and global climate patterns brought about by the high levels of carbon dioxide in the atmosphere resulting from the usage of fossil fuels as a way of stirring and arousing indifferent and complicit readers. According to Mathew Schneider-Mayerson, traces of this storytelling which came to be known as climate fiction (cli-fi), dramatizing the dangers of climatic uncertainty, can be found "[s]ince our earliest records, [...] from Sumerian mythology to indigenous cosmogonies to the Biblical deluge" (2017, p. 310). Climate fiction, a term initially used by the journalist Dan Bloom in 2008, nonetheless, comprises fictional writing that takes

real, simple, and understandable, scientific facts connected to the climate change problem as its main subject, bringing them closer to the common reader (Abraham, 2017), namely the young adult one. Evidence of climatic transformation in literature throughout the twentieth century can be found as the subject became better known by the public in general. Science fiction is a recurrent user of this theme in its storytelling. J. G. Ballard's science fiction triad, *The Wind from Nowhere* (1961), *The Drowned World* (1962), and *The Burning World* (1964), is considered by Schneider-Mayerson one of the seminal works of proto-cli-fi, describing "material environments, social worlds, and subjectivities in three phantasmagorical alternate futures" (Schneider-Mayerson, 2017, p. 310).

A call for literary works that depicted the reality of climate change as a looming and not a far-off threat came from many scholars and intellectuals. As a result, the first decade of the twenty-first century saw a rise in books dealing with anthropogenic climate change. The increased interest in these literary works as wake up calls resulted from the fact that anthropogenic climate change became undisputable, as suggested by Schneider-Mayerson (2018, p. 474)

the increasingly obvious manifestations of climate change, [...] the hope that these plays, novels, short stories, poems, and children's stories might lead to a wider and deeper climate consciousness and thereby contribute to more progressive environmental policies and politics.

Cormac McCarthy's *The Road* (2006), Ian McEwan's *Solar* (2010) and Barbara Kingsolver's *Flight Behavior* (2012) are some examples of the first-generation authors of this form of literary fiction.

Behind its concern with the individual, small communities, and their action in the world, is cli-fi's interest in the protagonist as a main fictional vehicle, one with whom the readers can identify. Although individual in nature, this protagonist is universal in meaning because he/she represents a global community, every man and woman of today. He/she also becomes a way of humanizing science, making it more approachable and understandable to the common readers (Johns-Putra, 2015).

Cli-fi fictionalizes what might happen to our planet once our resources are finally depleted because of human action and consequent global warming (Martin, 2018). Through its events, science is presented in a very credible manner, becoming a teaching tool, connecting people to their world (Abraham, 2017).

It offers a future perspective based on currently known facts and the predictions of science, thereby functioning as a vehicle to help us imagine how things might be, making the experiences portrayed sound as real as possible while offering the opportunity for reflection. Through fiction, and as an appeal to the readers' imagination, cli-fi contributes to the discussion of climate change, incorporating it into our daily life (Abraham, 2017).

Cli-fi makes its readers think about how life will be if certain probabilities discussed by science today take place. Harsh conditions of living, in which essential goods are not available to most of the inhabitants on Earth, usually give way to the implementation of new social systems, namely of the dictatorial kind. It also shows the political and psychological dimensions of life under harsh physical conditions (Johns-Putra, 2015).

The Earth is not only a different, remote place but also a challenging place to live in. Cli-fi, then, implements a dystopian and post-apocalyptic world born exactly from human-made climate change conditions, but while being futuristic it brings us closer to the real science of today, making it inherently pedagogical (Abraham, 2017). That is why it is more action-based than theoretical, empirical, or demonstrative, rather than discursive. It shows, rather than tells, with the purpose of inciting young adults to act because they are the future.

According to Holmes (2014), Dan Bloom, the climate activist responsible for the first-ever blog on cli-fi, is an ambassador of the literary/cinematic form. Interviewed by Holmes, Bloom agrees that cli-fi, whether in novels or movies, can be set in the present or the future, and it is only dystopian if its authors want it to be. A cli-fi novel can also be utopian, present, optimistic, offering its readers a hopeful future, being still open to definition by its readers and its authors. The one thing that is definable in cli-fi novels is that climate change is real and currently happening.

As a fictional genre, cli-fi might help wake up peoples' consciousness to a very real problem. Although Bloom coined the term, when talking to writers of cli-fi he often hears them say that it is a sub-genre of sci-fi. Not disagreeing with their point of view, he would rather see it as a genre on its own, one that is currently working on its definition, perfecting it as time goes by. Only the future will determine what it will be. Despite this, Bloom considers it essential that cli-fi flourishes now because writers play a crucial role in helping their readers envision the impact of climate change (Bloom, 2014).

In its inception, it is possible to observe an overlapping of climate fiction and science fiction; however, there has been a distancing between these narrative forms, as cli-fi, according to (Mehnert, 2016, p. 4), refers to

literature dealing explicitly with anthropogenic climate change - gives insight into the ethical and social ramifications of this unparalleled environmental crisis, reflects on current political conditions that impede action on climate change, explores how risk materializes and affects society, and finally plays an active part in shaping our conception of climate change... serves as a cultural-political attempt and innovative alternative of communicating climate change.

What separates climate fiction from other forms is the fact that it is not a narrative in which humankind must seek to survive in a world in which the climatic conditions are very severe. Instead, as Andersen (2019, p. 5) states, "what defines cli-fi is, thus, that it uses as a narrative element the scientific consensus that humanity's emissions of greenhouse gases cause global warming". The narrative's starting point is anthropogenic global warming. Andersen indicates five sorts of imagination in this narrative form: social collapse, the notion of judgement, conspiracy, loss of wilderness, and the sphere. As far as the idea of Social Collapse is concerned, cli-fi portrays societies in which anthropogenic climate change has deeply impacted its institutions and harmed the intricacy of the relationships between the citizens causing a great division and violent conflicts, leading to "the downfall of civilizations" (Andersen, 2019, p. 23). On a broader level, the conflicts can be presented in the form of wars, and, on a narrower level, they can be portrayed through individuals fighting for basic, but limited resources. As a result

of the ruthless, unrestrained technological progress, anthropogenic global warming ensued, bringing about a failure in communication between individuals and the breach of the social contracts preventing the peaceful coexistence of humankind.

Another recurrent imaginary in cli-fi novels is the idea of Judgement that relates to the relationships between humankind and Nature. Nature assumes a violent and vengeful attitude and rebels against humankind for its misuse and disrespect as well as its lack of understanding of its entities, taking upon itself to punish humankind. Unlike the earliest narratives of our Western culture, the deadly displays brought upon humankind by Nature are no longer signs of God's discontentment regarding humankind's selfish, unconcerned destructive behaviour. According to Andersen (2019, p. 83),

[h]ere the non-human world both judges and punishes humanity for its abuse in what can essentially be perceived as acts of self-defence. This is specifically expressed via a transformation in the non-human world that grants its entities an uncanny animateness making it impossible to perceive them as mere objects.

To the aforementioned topics, the theme of Conspiracy can be added, which refers to the denial of the effects of anthropogenic climate change. Unfortunately, many are the voices, some in very influential positions, that condemn the panic-stricken attitudes of scientists and regard the undeniable manifestations of climate change as part of a conspiracy theory. In these climate fiction narratives, as Andersen (2019, p. 62) sustains, "[t]he Conspiracy appears quite often in a shape that covers the real threat anthropogenic global warming poses to humanity," intending to uphold private interests rather than public ones. The boundaries between politics and science become blurred. The real scientific phenomenon is perceived (and given to be perceived) as a creation of Evil in an alarmist speech that aims to mask the real underlying economic and political interests. In these stories, climate change is used as a tool of manipulation (Andersen, 2019, p. 62).

The topic of the loss of wilderness and biodiversity is largely related to the separation between nature and society, in the sense that anthropogenic global warming leads to

the loss of the remaining wild places on Earth. Wilderness is equated with a deserted, non-cultivated area, the imagination part implying the idea that the Earth still has places untouched by human hand or footprint. In climate fiction, this imagination is pictured as endangered, the issue of Anthropocene resurfacing through the wilderness in decline. Wilderness is separated from society as something which is not only pure but also untouched and beautiful, something modern perception may view as lost to artificial worlds (Andersen, 2019, p. 81).

Because anthropogenic global warming gives origin to the proliferation of artificial atmospheres, Andersen focuses on another theme: the Sphere, in line with the idea that we live in a world that is already able to create artificial atmospheres by resorting to engineering knowledge. This possibility influences climate fiction, engendering fictive responses to that same idea. Hope in the future lies in technological advancement, namely through the creation and proliferation of artificial atmospheres. This form of imagination is called *The Sphere* due to its affinity to the sphere geometry, like the bubble and the globe, symbolic of a protective shield or cover that enables humans to exist in the world as is. Fictional worlds that trust this type of imagination are those that trust technology as being vital for human survival. As a consequence of anthropogenic global warming and its devastating consequences to human survival, only human-made technology can be trusted to have hope for the future (Andersen, 2019, p. 105).

According to Andersen, these worlds are limited to social designs (equated with bubbles) and to worlds designed to contain all life existing on Earth (equated with globes). They derive from different world pictures and different ways of being in the world as well. Their common ground is that they both demand transformation from their inhabitants. Depending on the size of the sphere, this transformation can be extreme (Andersen, 2019, p. 105).

Today, communicating climate change is essential, as is underlined by the webinar organized by Point Advisory¹ (*Sustenance webinar series # 6. The ways we*

¹ The Point Advisory, was created in 2013 in Australia and is a sustainable consultancy group. The different professionals it comprises are dedicated to different fields of knowledge and are involved in

communicate: Positive Climate Change Communication for Agency and Empowerment, 2020). The way we talk about climate change is shaped by our world views, values, political identification, mental and cultural models. The language we use influences people's behaviour. Talking about the climate crisis, climate emergency, and climate breakdown is now a more powerful terminology than talking about global warming or climate change.

The way we communicate climate change is critical because we need to make sure that we engage people in the conversation. In this sense, rather than just facts and statistics, which may have reverse effects over time, stories have become an important communicative tool that engages, is solution-focused, personal, emotional, particularly relatable and empowering (*Sustenance webinar series # 6. The ways we communicate: Positive Climate Change Communication for Agency and Empowerment*, 2020).

When communicating climate change, we use different frames that help us present things in a certain way and suggest certain types of responses; we emphasize certain information to activate people and give them agency. Some of these frames are non-scary frames or non-negative approaches, rather than moral and ethical approaches (right or wrong), or economic impact approaches, natural impact approaches, scientific uncertainty approaches. We must choose different approaches for different audiences.

Communication strategies for having positive and meaningful conversations that foster climate actions are the ones we need to look for. One of the strategies that has been considered is the non-traditional communication method of storytelling. Since the language of emergency can disengage a young adult audience, the non-traditional method of communicating climate change needs to captivate YA's interest, leaving them with the feeling of agency and empowerment.

There are some strategies for positive conversations about climate change: pointing out that it is caused by humans, focusing on anthropogenic climate change, but also

giving strategic expertise to companies and organisations all over the world to diminish the results of global warming and promote sustainable businesses. In May 2020, it hosted a webinar (#6), addressed by David Holmes, focusing on positive climate change communication.

emphasizing that its solution lies in human action, as David Holmes (*Sustenance webinar series # 6. The ways we communicate: Positive Climate Change Communication for Agency and Empowerment*, 2020). Raising people's literacy on climate change, connecting gloom and doom, the positives and the negatives, is another viable option.

The facts themselves will not get delivered unless they are transmitted by a verified personality, a trusted source (David Holmes believes that source can very well be the local weatherman), putting them into a storytelling frame. Underlining the local impact of a global phenomenon has proven a successful method of bringing awareness to the climate change issue (*Sustenance webinar series # 6. The ways we communicate: Positive Climate Change Communication for Agency and Empowerment*, 2020).

Holmes (2014) views cli-fi as a form able to communicate the seriousness of climate change to a wider audience. Because it seems not to be fully understood, it is important to raise awareness. Cli-fi writers may play a major role in this process because books are impactful. Cli-fi is not just entertainment or literary escapism but plays a significant role in getting the due understanding of the climate change issue before it is too late (Holmes, 2014).

3. The Benefits of Extensive Reading

As previously noted, the document containing the Portuguese students' profile when leaving compulsory education (*Perfil dos Alunos à Saída da Escolaridade Obrigatória* (Martins et al., 2017)) identifies the skills, competencies and values Portuguese students must have acquired by the end of compulsory education. They are expected to be fully integral citizens with a highly developed cultural, scientific and technological literacy. This, in turn, will allow them to view the world with a critical mind, questioning it, while being able to select relevant information and make informed decisions.

Learning a foreign language involves developing key competencies identified in the document. It is associated with the stimulation of cognitive development such as logical reasoning, critical thinking, creativity, project management and problem-solving. Moreover, it allows the development of a citizen's identity in terms of attitudes and values.

Foreign language teachers' strategies must be directed towards the development of all the skills, competencies and values identified above by providing and promoting diverse learning situations. The focus of the teacher must not be restricted to teaching the language or simply explaining how to use the language correctly. The learning process must be centred on the students. The students' natural inquisitiveness and curiosity needs to be encouraged, and their critical thinking promoted.

The secondary school students of English (upper-intermediate (CEFR level B2) are expected to understand the ideas of diverse texts, whether they are simple or complex, concrete, or abstract; communicate spontaneously and comfortably with native speakers; express themselves clearly, as independent users of the English language (B2 level).

When practised regularly, reading can contribute to the students' writing, listening, and speaking proficiency (Day et al., 1998, pp. 32-39). Familiarity with YA dystopian cli-fi, grounded in colloquial written speech is advantageous for English language learners. Proficiency is made easier for students because learning becomes more meaningful.

More frequently than expected, students hope to find a certain purpose for the school activities proposed by the teacher. Reading, in general, is not the students' most popular leisure activity, not only in their mother tongue but above all in a foreign language. Students who do not like reading do not feel motivated to read a book in a foreign language because their attitude towards reading is negative right from the start. And they will feel even less encouraged if they are unable to relate the content of the reading process to their personal experiences. It is essential that the extensive reading approach not only gets students reading but also enjoy doing it. As Day et al argue (Day, et al., 1998, p. 86), "[i]t is an approach that sees reading not merely as translation or as a skill, but as an activity that someone chooses to do or not to do for a variety of personal, social, or academic reasons". According to these authors, the materials to stir up enthusiasm must be easy; in other words, meeting the students' linguistic competence as well as interesting.

But what do students gain by engaging in extensive reading? According to Eskey (2002, p. 9), "[p]eople learn to read, and to read better, by reading". In this sense, the more the students read, the better readers they become because of the greater amount of language they become acquainted with and the greater number of times they encounter that same language. This exposure to a wider variety of vocabulary, syntactic and textual features provides the readers with a vaster range of expressive resources that can also be directed at written activities, enhancing their writing proficiency, as well as the overall language competencies such as listening and speaking skills. As a result of this improvement of the language proficiency, the readers develop "a generally more positive attitude towards the target language, [...] translated into a greater feeling of ease with it, and a willingness to actively experiment with it." (Hafiz et., 1989, p. 8). By becoming more comfortable in the target language, the readers become less inhibited to actively engage in the foreign language and feel more encouraged to experiment with it, hence boosting their proficiency.

Improving proficiency can also impact the readers' self-esteem and confidence, leading them to believe that they have a serious and meaningful role in our society, giving them a positive attitude and leading them to act, both on a personal level and a broader level. Kidd et al. (2013, p. 377) also argue that like literary fiction centres on the characters' psychology and interactions, by making the readers imagine the protagonists' inner thoughts and dialogues, reading can have an important influence on the socialization process of the readers.

Since reading literary fiction increases "the understanding of others' mental states" which "is a crucial skill that enables the complex social relationships that characterize human societies" (Kidd et al., 2013, p. 377), engaging in reading about other people and making an effort to understand the characters will turn the readers into more empathetic and compassionate citizens.

4. *Breathe* by Sarah Crossan

4.1. The novel

Sarah Crossan's dystopian novel, *Breathe*, portrays an imagined society where there is great suffering and blatant injustice. The cause of the depletion of the forests remains a mystery; however, one can speculate on the reasons for this overall decline: creation of more available farmland for the growing population; the runoff of agriculture that poisoned the lands and killed the seeds; lumbering; human settlement, forest fires; or climate change. Whatever the reason, the fact is that the oxygen levels plummeted, and the vast majority of the Earth's inhabitants died. Those who survived can no longer live in the natural world for lack of breathable air.

Most of the survivors are forced to live in glass domes or pods, with artificial breathing oxygen and food. *Breathe* is the name of the pod where most of the characters live, having become dependent on the conditions created by the ruling authority named the Ministry. When in the Outlands, the grounds outside that enclosed environment, people must carry portable air tanks.

The Resistance members are a group of two hundred or so young people who are fighting the Ministry's policies by growing trees outside, in the Grove, their hideout and headquarters, while also learning new ways to breathe more normal oxygen levels than those that are fed to the inhabitants of the pod. Besides planting trees, they have training rooms, practise relaxation techniques to reduce their heart rates and save oxygen to adapt to existing natural conditions.

The story is narrated from the alternate perspectives of three teenage characters: Alina Moon, Bea Whitcraft and Quinn Caffrey. While Alina is a member of the Resistance, Bea is an auxiliary, and Quinn a Premium. Their paths cross when Alina embarks on a failed Resistance mission to steal some tree trimmings from *Breathe*.

A whole chain of actions is triggered by that singular event. Alina realises she must quickly flee the pod and her getaway plan ends up involving Quinn, who is smitten with her beautiful green eyes, and Bea. Alina shares with them that she is a member of the Resistance and explains its mission as well as what happened to the Earth and why. She intends to leave them behind, not wanting to fail again on her mission, but they follow her.

Alina and her group reach the Grove but are met with silence because all the Resistance members are hiding from the zips flying overhead. Enraged by the fact that Alina brought strangers to the Grove, Petra, the leader of the Resistance, holds them responsible for the impending war.

After returning to the Pod, Quinn is caught in unlawful acts by the general surveillance and is forced to hold a press conference, in which he is expected to slander the Resistance as a terrorist group. Instead, he publicly denounces Breathe for lying about the ability to grow trees, accusing it of destroying everything that is planted, forging a lie, while overfeeding people with oxygen to thwart their survival outside the pod and maintain control over them.

Soldiers advance on the Grove, destroying everything. The three young characters, along with some other members, form the moderate faction of the Resistance. They represent the hope for the future when authoritarianism is defeated by tolerance, equality, and struggle for the common good.

4.2. The dystopian setting

Breathe falls under the classic dystopian literature category as far as the setting is concerned. It depicts a frightening post-apocalyptic world in the future in which an environmental disaster has wholly affected the social and political organisation. Despite not being thoroughly knowledgeable of the reasons that led to that environmental disaster, the readers sense that humans caused it. As there is no oxygen on the planet, the only option is to live in pods. The people who were fortunate enough to get a place in the pod are fed artificial air; however, they do so under the strict control and rules of the authority.

The fundamental rights of the citizens have been confiscated, and they are led to believe that it is for the common good. The thought-controlling authority has been successful in making the citizens believe they are better off now than they were before. This is observed during the leadership programme when one of the young competing Premiums states that "[t]rees were essential, historically, but now they're dead, we can do without them. One only need enter the pod to witness how happy and healthy every

citizen is." (*Breathe*, p. 11). Hence, the citizens abide by the rules and conform to their role, doing whatever is expected of them without questioning the *status quo*.

The terrifying grim setting and the environmental issues described can cause the readers to feel anguish and fear but, at the same time, lead to eco-political reflections regarding anthropogenic changes and environmental degradation. The readers can easily relate the fictional representations with the environmental devastation their own world is currently facing. They will just have to think of the most recent heat waves that have beset North America and many countries in Europe, devastating forests, causing hundreds of deaths and destroying so many homes, or of the severe floods that hit Germany and its neighbouring countries in the summer of 2021.

By presenting this gloomy dystopian setting in *Breathe*, the author shows the YA readers how easily things can go wrong. But this cautionary message comes along with another that is equally important, one that advocates hope. Resigning ourselves to the *status quo* and not taking action are not acceptable options. Change only stems from action.

4.3. The dystopian social and political organisation

Breathe is an action-filled novel, and this technical choice serves a broader purpose: that of an entrenched social and political criticism that depicts human behaviour at its worst. This criticism is common to dystopian novels and is intended to raise awareness of the problems that the readers' society may be confronted with if no action is taken to change the course of events. According to Vieira (2010, p. 17), "[i]f dystopias provoke despair on the part of the readers, it is because their writers want their readers to take them as a serious menace." Although the message may be frightening, the readers are left with a glimpse of hope of a better future at the end of the novel. All is not lost, and the readers are led to believe that a proactive reaction on their behalf may, in fact, trigger change. The author intentionally provokes the young readers' thoughts by making them confront the reality that they cannot close their eyes to and seeks to guide them into action.

According to Moylan (2013, p. 42), we already live in a dystopia, a world that is in constant crisis, whether it be ecological, economic, political or cultural. But despite

believing that we are living under democratic ideals, Moylan defends that authoritarianism has taken hold in a disguised manner, and that its agenda is being carried out. Not only Nature but also humankind are the subjects of this oppression, exploitation and annihilation. It is up to each of us to take on the role of protagonists in this narrative and assume the responsibility of making a change, and hopefully save the Earth and the humanity. These concerns of our society portrayed in the dystopian narratives make the readers reflect on them and ultimately take action. The author inspires the readers to question how they perceive the society, how they fit in, and thus reflect on what part they are to play in it.

As the social structure of the dystopian world in *Breathe* is unveiled, the readers begin to recognise that the ultimate objective of the governing power that promotes social division is to obtain total control through conformity. In this world, oxygen is not free, it is licensed, and not everyone has access to an equal amount. This access is determined by people's social class. There are only two social classes: the very rich and the very poor. Social inequality is the foundation of this society and one of the focuses of the critical point of view adopted in the novel, the other being the political one.

The Switch marks a critical moment of change in the lives of people. The readers are left unclear about what the Switch refers to but are able to recognise it as the moment of unprecedented social and political change. When the Switch occurs, society expects the governing body to act in accordance with the problem and solve the immediate damage. The governing authority, named Breathe, resorts to deceiving, manipulative strategies to contain the people and make them comply with the domineering ideology. This falls under the category of the dystopian narrative; as Claeys sustains (2013, p. 17), "in dystopia we are merely pawns in the hands of others."

The society depicted in *Breathe* bears many of the characteristics found in classical dystopian literature: it is depicted in a dark, pessimistic manner; people are hierarchised by the government and dehumanised through the restriction of basic liberties and thought; technology is used to enslave the citizens; and the collective memory is suppressed.

Breathe overfeeds its citizens with 30% oxygen rates (when Earth's current oxygen levels are about 6%), causing their addiction to it and ensuring they will never break free from the authoritarian rule. Originally meant to protect its citizens; however, Breathe is ultimately exposed as dangerous and authoritarian.

In the new reality, social stratification is required to ensure the new social order. In Breathe's bipartisan society, auxiliaries or subs (poor citizens of Breathe) live in squalor and slavery, struggling to pay for the little air they are allowed to use. In contrast, the Premiums (rich Breathe citizens) have plenty of air, natural food (grown by auxiliaries) and goods, and more humane conditions. Only Premiums can afford to buy the food grown by auxiliaries. This implies that those in control weaken the less privileged by denying them access to normal levels of oxygen and regular food.

No physical barriers separate the space occupied by the Premiums and the auxiliaries. However, as people move from one zone to another, the physical conditions are very distinct. The streets become narrower, and the inhabitants' living conditions alter. Social discrimination is brought about by the amount of oxygen a person is allowed to get. The inhabitants' lives are better or worse according to the oxygen they are provided with. This idea (that the amount of oxygen that people are entitled to is the central problem of society) leads the readers to reflect on the seriousness of the impact of climate change on their society. Crossan, much in the dystopian manner, presents the readers with the frightening scenario of a world where oxygen is restricted and the citizens struggle to survive.

Although humankind has probably still a long way to go before it reaches a world with no oxygen, there are many other issues that climate change and other environmental problems have brought upon our society. "That environmental predicament has now been absorbed into the present. Problems that would have seemed extreme projections fifty years ago are reported as unfolding right now." (Garforth, 2017, n.p.) Today, we are witnessing migratory movements from rural areas to urban ones, from countries that have been harshly hit by extreme temperatures and intense droughts to ones where the environmental impact has been less significant. As Garforth (2017, n. p.) sustains this is happening because

Decision-making is located far away from the communities who must live with the consequences, and increasingly global forces of capital and power undermine the capacity to care for local environments.

The shifting has not been very smooth, and in the long run it will become even less peaceful. The migrants have encountered resistance and been subject to unjustified discrimination and injustice. Unfortunately, these contexts favour selfishness instead of solidarity because people feel that their *status quo* can be threatened by outsiders. In these contexts, people tend to resort to social grouping in order to protect their interests and guarantee their survival in both the short and long term.

As far as the political organisation in *Breathe* is concerned, it falls under the category of the dystopian narrative, since the people are governed by an authoritarian government that has ultimate power and keeps total control of everything and everyone. This novel bears many similarities with other classical dystopian novels such as George Orwell's *Nineteen Eighty-Four* or Margaret Atwood's *The Handmaid's Tale*, as far as the political organisation is concerned. They all depict totalitarian regimes with repressive and restrictive laws and orders and constant surveillance. In the former, the readers are faced with Big Brother's power, representing the frightening level of power an authoritarian government can acquire, as well as the methods used to maintain it. The latter, the Republic of Gilead, run by the Divine Republic, is a totalitarian patriarchal theocracy where women are considered second-class citizens and have to submit to the male authority.

The repressive corporation in *Breathe*, also named Breathe, uses manipulative and controlling methods to make people submissive and abide by the established rules. The authoritarian political power has the ability to decide people's fate and whether they are entitled to live or die. Ironically, it could provide better living conditions and supply the necessary amounts of oxygen, but by having this control over the atmosphere, it is able to keep its dominance over the people who need oxygen to live. Citizens are left with no choice and have to accept and comply with the rules since they are deprived of the most fundamental element to live. Alina's words are, in that sense, enlightening:

"[n]ot that we want to be using excess oxygen; we would prefer it if they turned the oxygen levels right down." (Breathe, p. 37). Her statement exposes the arbitrariness of power and the helplessness of those who are persecuted for not following Breathe's rules, which, in case of the Resistance, amounts to just stealing tree trimmings.

The drunk pod minister's heavily gold-covered hands denote a dictatorial regime enriched by the exploration of the poor and manipulation of others' opinions. When he visits Quinn's family to tell them that he made the Leadership Programme, his parents take down an old oil painting of a seascape from the wall, putting up a portrait of the same minister in its place. Also, their whole demeanour changes when he arrives. They become subservient, and grovel over him, obeying his orders.

4.3.1. Control through technology

Gregory Claeys asserts that the dystopian novel presents a society that is ruled by a totalitarian power that relies "upon scientific and technological advances to ensure social control" (Claeys, 2010, p. 109). Just as in other dystopian books, in *Breathe* social and political control is imposed through the abuse of science and technology in favour of a particular organisation, and to the detriment of individual free will. There are many instances where the readers are confronted with examples of these forms of abuse. When Bea returns home from the debate, she presses her thumb against a fingerprint scanner to get to her zone. "The apartments are airtight and fitted with oxygen meters so the Ministry can monitor our intake – if they have to pump in any more oxygen than our taxes cover, we pay extra" (Breathe, p. 16).

In *Breathe*'s heavily guarded world, surveillance cameras and individual pads track and record every person's movement within and outside the pod, which is the symbol of a purposefully constrained life. The batteries installed in the pads that every citizen carries are tracking devices the regime uses to monitor the citizens. People are constantly informed on how to act, how to behave, what not to do, even when they are inside their homes. These warnings are intended to cause fear and show the ruling power's omnipresence.

This constant monitoring and tracking resorting to technological devices gets the readers thinking about their current context, in which common everyday gadgets like the mobile phone and computers can be used to track and spy on them. Crossan exposes the readers to an existing reality, one to which the readers might have never thought about or remained unconcerned about. The readers are made more aware of this reality and begin to raise questions about who is really in charge, what is being controlled, and where a person's freedom of expression ends and the violation of people's privacy begins. They become conscious of the need to fight to regulate and control the use of the information that is collected by faceless corporations and organisations. These same corporations and organisations may be intentionally collecting this data to get a grip on society.

4.3.2. Control through fear

It is believed that Breathe, the repressive corporation, is concerned with the well-being of all the citizens; however, these are fed with lies about the quantity of oxygen they require, the purpose of the mass vaccination campaigns, the people that might represent a threat to the system, and the Outlands who are described as being "sad out there. Desolate. The land and sea" (Breathe, p. 19). These lies are meant to instil fear while guaranteeing that the government is there to take care of them. The pod minister himself, Cain Knavery, addresses citizens through news bulletins to report the state of current affairs, denounce the traitors and warn people against dissent.

Conditioning people's minds to maintain absolute control of the people is common in other dystopian novels, such as in Aldous Huxley's *Brave New World* (1932) and George Orwell's *Nineteen Eighty-Four* (1949). It is, in fact, used to reinforce the usefulness of the measures taken by the government and to retain the support of the people. Because people fear for the safety of their lives and their families, they blindly trust those that are able to demonstrate that their concern is their primary interest.

In *Breathe*, the biosphere – the Outlands – is now only a place of tourism, accessible to a privileged few like the Premiums (who go there tour-guided by stewards). Outcasts still fight for the restitution of some normalcy or are only left to die miserably. Going

further and further into the airless planet means moving away from guaranteed air. The Outlands are usually visited during school trips, and the students are offered a chance to try and breathe without a mask and struggle for air. As Bea acknowledges, these trips were meant to show students how desperately they need the pod, making sure that they would not think about defecting from it.

These organised trips to the dangerous outside world are not without intent; in fact, they have the purpose of manufacturing external threats. By spreading fear, the authoritarian power can present itself as the sole guardian of the people and present itself as putting the people's interests above its own. People are very easily convinced to put their fate in the hands of entities who seem to be strong, especially when they feel that their security and stability are under threat. In times of crisis – whether they be economic, social or political –, people very easily exchange their freedoms for an apparent safety, without weighing the risks.

Another episode in the novel that exemplifies the control of the masses by instilling fear is the mass vaccination campaigns that carried out. Officially, health authorities claim that the immunisation, as is flashed on billboards, is meant to combat the green flu or copper flu.

Alina stands out as the voice of dissent and opposition. The vaccination, Alina explains, is meant to lower peoples' red blood cells so that they need more oxygen. This way, everyone feels the need to buy more oxygen, even those who are poorer. The Resistance, however, has a nurse inside the vaccination facility that injects the members of the organisation with a saline solution instead of the official one. Alina is the one that casts some doubt in Quinn's mind as to the legitimacy and utility of this public health measure. Her disbelief makes it clear to him (and the readers) that there are several aspects of this world which are more aligned with control than protection because everything is mandatory, there is no free will, no self-determination, only government orders that establish even the simplest everyday-life actions.

Ultimately, doubt is what makes Quinn stand up for the Resistance and defy the power his father represents. Also, what is mandatory is meant to instil fear because authorities

do not explain why vaccines are given to prevent diseases no one has ever had, as Quinn himself realises. Even if he has never known anyone who has had the diseases they are regularly being protected from, he and everyone else are afraid to take the chance of not getting vaccinated. In this sense, the misinformation and fear campaigns work against people and favour the regime whose image is that of the saviour of the common good.

Another point worthy of note, as far as instilling fear to control is concerned, is that many actions carried out by the power elite target younger age groups, namely the school trips to the Outlands and the vaccination line organised at school. This is a widespread practice among authoritarian regimes since children and adolescents are more impressionable and thus easier to indoctrinate. Moreover, by targeting children, the ruling power gets them out of the influence of their parents.

These episodes are horrific reminders of our present pandemic context and how easily our society can become submissive and give up its rights when faced with a highly frightening phenomenon. People worldwide complied with the orders and restrictions imposed by their rulers, believing that it was in their best interest. Facial masks, lockdowns and mass vaccination campaigns were questioned by some, but in most cases the arguments presented were not sufficiently strong to discredit the governments and dissuade the people. Even if one believed that the measures were taken for the common good, one cannot help but think what if it had not been so. This cautionary message, common to the dystopian narrative, provides food for thought for the readers. The readers are made aware of their right not to accept all the measures proposed without seriously questioning the decision-making of the authorities.

As regards control through fear, authoritarian regimes also resort to a blame culture. This approach involves using the principle of divide and rule. By pointing out a scapegoat – the Resistance, in this particular novel –, the government seeks to generate distrust and suspicion on anyone that does not act accordingly to the system. This tactic intends to weaken and eventually remove any rebellious group. While minimising the strength of the opposition, the ruling power appears as the force of good that strives to protect

the people. This way, it gains the support of the masses who become distrustful of those they believe pose as a threat.

People who fight against the system, like Abel or Alina's parents, are scratched from it, then killed. They are called RATS by official or state-run news bulletins that convey the idea that they are terrorists, dangerous for society, disturbing the equilibrium in the pod and trying to sabotage the air circulation in it.

Terrorist acts, like someone trying to interfere with the air-recycling system, endangering the air quality in the pod, are fabricated to instil fear upon pod citizens (particularly auxiliaries), legitimising the official narrative that pod authorities are only there to protect its citizens. Abel is publicly accused of such an action, although the readers know he is only guilty of the theft of tree trimmings, and this accusation is only a way to justify his death.

4.3.3. Control through conformity

Another important theme of dystopian literature is that of conformity. We can also find it portrayed in Sarah Crossan's novel in quite pertinent manner, thus appealing to the YA readers. The readers identify themselves with the same struggles and hurdles as the dystopian protagonist. The hero's fight is their fight, whether against the system or against parents or teachers who tend to tell the young adults how to behave. The hero of YA dystopian fiction presents himself/herself as rebellious, daring and defiant, hence the popularity of the genre among young readers. He refuses to comply with the norms and is determined to fight the striking injustices, oppression and discrimination that the majority of the population suffers so that the small, powerful elite can retain its privileges.

Conformity is implemented through coercive control techniques by the oppressive power to keep tight control over the people. Unwillingness to abide by the strict rules enforced comes at a cost. People are forbidden to move energetically, walk, date, and are censured by authorities and the other citizens if they do. Cameras signal them when they perform those actions hastily, and they are retrieved. Even relationships are challenging to maintain due to those restrictions. When Alina runs through the

alleyways, when the Ministry men arrive at her uncle and aunts' house to arrest her, she finds couples having sex and people exercising, things they cannot do at home because they consume too much oxygen. This results in state fines that are utterly unaffordable to them. The regime forcibly encourages these clandestine behaviours, which, in turn, entails a political gain for it.

Although the courage to break free takes centre stage in the novel, it is ultimately framed by the problem of conformity on behalf of the people and authoritarianism exercised by the governing body, a connection underlined by the motto engraved on the book cover: «It takes a lot of air to break free». In that sense, the control of the oxygen available has other purposes that do not necessarily relate to the well-being of the Earth or of its inhabitants; instead, it is presented as an instrument of authoritarian power, of the power the rich hold over the poor or the working class, which has, from the onset, been plundered.

As the readers are taken deeper into the plot, they become aware of the many ways the protagonists try to move away from the conformity that has taken hold of the people. They take on a more critical stand against the ruling power that has deprived them and their loved ones of the most basic element, oxygen. When Alina, Bea and Maude arrive at the Grove, they are practically out of breath. Alina apologises to Bea when she thinks she was going to let her die in vain. Bea, matured by the experience, answers: "I will die because I knew there had to be a better way to live." (Breathe, p. 197). Her answer is in blatant contradiction to conformity. She breathes freely, not only because she has more oxygen than ever, but because she can act of her own free will, not conforming to arbitrary rules imposed from above, regardless of environmental degradation.

4.3.4 Control through censorship

The way totalitarian regimes perceive books is indicative of the recognition of the power that it ascribes to them. Burning and banning books have been standard practices among oppressors and are often a common theme in dystopias. In Ray Bradbury's *Fahrenheit 451*, and Margaret Atwood's *The Handmaid's Tale*, books are outlawed. This practice has the purpose of preventing the readers from accessing a

broader world of thought and allowing them the opportunity to develop their critical thinking. Books are dangerous because they work up people's minds by promoting controversial ideas. Censoring books and suppressing different world perspectives allows the regime to freely propagate its ideology and its lies.

In *Breathe*, books are restricted to some, but even those only have access to a limited number of them: "A few Premiums own books, but most paper products were left in the Outlands to rot, and I've only ever seen pictures and videos of them" (*Breathe*, p. 170). Hence, when Maude and Bea find themselves in the outside world, they are not only fascinated by the snow but also by the books they find (particularly Maude). Maude wants to take one with her, *Great Expectations*, but instead takes *Pride and Prejudice*, by Jane Austen. Bea is not familiar with neither of them because, in school, literary studies are reduced to Shakespeare. Dickens' work is about social inequality, and, as Maude suggests, she would relate to Pip, its main character. However, it is also about an individual who lets go of his individuality to conform to the *status quo* and to move up the social hierarchy. She thus chooses *Pride and Prejudice*, where women exchange their individuality for a comfortable marriage. Yet, not all of them: Elizabeth, the main character, remains true to herself and chooses true love. She also stands out in a society that favours the male population and asserts herself and her interests.

Elizabeth of *Pride and Prejudice* embodies the same defiant nature and courage the young protagonists of *Breathe* show. And just like these characters, the author is counting on the readers to feel motivated and inspired by them and ultimately take action.

4.4. Environmental Degradation

In the typical cli-fi manner, the novel focuses on anthropogenic climate change, with a particular focus on the quality (or lack thereof) of the atmospheric air humans breathe. A note from the narrator, on this specific subject, deeming oxygen as an essential chemical element for most living things, also states that it was in abundance on Earth for about 2.5 billion years until (and here is where fact gives way to fiction) a life-changing event took place – the Switch – leading to the present living conditions

portrayed in the novel. Here, going further into the airless planet means moving farther and farther away from the guaranteed air. Masks keep them alive in this environment, mainly because available oxygen levels are much inferior to those distributed in the pod.

As Alina narrates in the novel's first chapter, trees are no longer a vulgar commodity. They are indeed rare, mainly because Breathe authorities claim they are impossible to grow. Still, they do exist in the biosphere, where real, breathable air remains. Here, we can see the ruins of the world as it was before that event, where tumbledown houses, old vehicles are covered in ivy. Despite the winter outside, the Earth does not seem as barren as might be expected because there are still signs of life, signs of the future possible green world. Unlike in the pod, where everything is so clean and seemingly perfect, in the Outlands there is dirt. Dirt also means life, the renewal of the environment after disastrous degradation, which is being discussed in the field of science for some time now. The world outside is still inhospitable, but the Earth has a natural ability to regenerate itself despite all the destructive attitudes and actions carried out by people. Some traces of life begin to resurface in the outside world. In that sense, hope in the future still stands.

Although the readers remain oblivious of the facts that led to the destruction of natural life and consequently the reduction of oxygen levels, they are led to believe that this current situation is the product of human-made activity. The progress that should have been used to improve humankind's well-being was used in perverse ways and ended up destroying the most vital element to sustain life.

Though breathing comes naturally to everyone and oxygen is taken for granted, the beginning of the twenty-first century has been hit by extreme temperatures and raging fires that have destroyed large expanses of woodland. The depletion of the world's forests, known as the Earth's lungs, and the pollution of the oceans, are seriously affecting the levels of the planet's oxygen levels. These destructive events have impacted the quality of the air that we breathe. According to the *Our World in Data*², air

² A project developed by the Global Change Data Lab, a non-profit organization based in the United Kingdom, supporting education regarding the global living conditions and the earth's environment.

pollution results in 5 million deaths annually. "Air pollution [...] is a risk factor for many of the leading causes of death including heart disease, stroke, lower respiratory infections, lung cancer, diabetes and chronic obstructive pulmonary disease." (Ritchie *et al.*, 2017).

In Sarah Crossan's novel, the Earth is not only a very different place but also a challenging place to live in. *Breathe*, following cli-fi guidelines, implements a dystopian and post-apocalyptic world born exactly from climate change conditions caused by humankind, but, while being futuristic, it brings us closer to the real science of today, making it inherently pedagogical (Abraham, 2017). Its purpose is to invite young adults to act because they are the future, and they can recognize themselves in the type of characters that drive the novel's action. The social and political outcomes of a global environmental catastrophe lead the readers toward reflective observation.

The inhabitants of *Breathe* are led to believe that the outlands are barren, inhospitable and dry where nothing grows and where it is difficult to subsist on lower densities of oxygen. Through this alarming propaganda of the deadly conditions of the outlands, the governing power can keep control over most of the population. In fact, without a respirator or a breathing apparatus, it is difficult to survive outside the pod. Quinn has always been privileged and has never needed to reflect on the importance of oxygen. The first time he has trouble breathing is when he is in the outlands, and it is only then that he gets a clearer picture of the reality of those affected by the deprivation of normal oxygen levels. It is a moment of awakening to the reality experienced by the most significant part of the population. From then onwards, his fight becomes the long-standing fight his friends have faced all their lives.

The younger characters in the narrative are role models of determination, courage, positive thinking and perseverance. These young heroes encourage young people to adopt a responsible and proactive attitude towards the impending dangers brought about by the destruction of Nature. Trees have become the symbol of hope and concerted and intensified efforts on behalf of the Resistance are carried out to ensure that they are secured. The young protagonists go to great lengths and take life-

threatening risks to protect and save them. Trees are precious treasures, and the fate of humankind lies in their conservation.

Alina and Abel's mission consists of stealing elm tree trimmings so they can give them to the other Resistance members, who nurture them on the outside. Old Watson, who once tried to rebel against the pod government, owns real plants within the pod, sprung from the trimmings Silas and his family cultivate. Everyone thinks he owns plastic plants and pretends to water them as if he has lost his mind; however, he only pretends that they are fake to deceive the authorities.

The Resistance keeps the plants and tree trimmings illegally because no one has an official permit to own them. People caught doing it, like Abel, or Alina's parents, a year before, go missing in the pod, which means they are killed. Abel went missing because he was flagged when his and Alina's initial mission failed. Authorities, the Ministry, allege via press releases that these people are runaways, forcing their families to corroborate this theory unless they want to go missing too.

It is possible to grow trees outside, nonetheless. There is a lab where the Resistance keeps the seedlings and cuttings from the trees. In the Grove, no one wears a mask because there is 18% breathable oxygen. To Bea's surprise, there is natural food there (berries and such), which she has only seen in movies. Only very rich Premiums can afford to buy that food from the biosphere. The Resistance chooses people who know how to nurture the trees as their gardeners.

4.5. Living in an artificial sphere

As initially pointed, the sphere is one of the five categories of imagination (Andersen, 2019, p. 139) present in this narrative. The sphere theme is derivative of anthropogenic global warming and largely influences the cli-fi universe, *Breathe* not being the exception to this rule. Because hope in the future also lies in humankind's ability to create these same spheres, the novel engenders a fictive response to that survivalist notion, which has largely to do with the dystopian worldview. The protective environment of the artificial sphere allows humans to survive beyond destruction and in the world as it is. In this sense, this kind of fictional world is also one that considers

technology as a means vital to humankind's survival. Trusting it gives the characters hope for the future (Andersen, 2019, p. 104)

[fictions where the sphere imagination is portrayed] depict worlds wherein technological world-making has become vital for human survival – simply because anthropogenic global warming has damaged the conditions of human life to such an extent that it can only be upheld in the artificial environment and climate created by an engineered atmosphere.

As Andersen put it, these worlds are either limited to social designs, when they are equated with bubbles or correspondent to worlds designed to contain all life existing on Earth, being equated with globes. In each case, they surge from different conceptions of the world and different ways of existing in this world. While both demand renovation from their inhabitants, they do so in different ways, one being more extreme than the other (2019, p. 105). In *Breathe*, most of the survivors do live in a glass dome or pod with artificial oxygen and food. They have become dependent on the artificial living conditions created by the ruling authorities who overfeed people with oxygen to maintain control over them and to prevent their survival in atmospheres different from theirs. Outside this enclosed environment, however, there are others who manage to breathe still, although they must carry portable air tanks for the most part and have learned to adapt to the existing natural conditions through training.

In this world, oxygen is not free, it is licensed, and not everyone has access to an equal amount. People's social class determines this access. This means that *Breathe* as a sphere can be equated with the bubble form because its world is limited to a social design. The purpose of this design is not to contain all life existing on Earth but only the life of those deemed relevant, namely the life of those of the upper class, which is a theme that runs through the structure and action of the entire novel.

In this sense, the sphere as a bubble shows that placing too much hope on technology as a guarantee of survival can quickly become something other than that. Technology may give rise to artificiality and authoritarianism. It may provide the citizens with the illusion of freedom and well-being, the idea that someday things might be different, that people above you are working for the common good.

4.6. Technology *versus* nature

Humankind's relationship with Nature is fundamental for both its physical and its psychological well-being. However, despite this recognized need for overall happiness, the human being has not learnt to interact with Nature in a respectful manner. Restoring a balanced interaction with nature, privileging a respectful attitude and not seeking a domineering one is urgent if we want to continue inhabiting this planet. Learning to live harmoniously with nature will also help us enhance our interaction with others.

Over the centuries, humankind has resorted to technology to shield itself from the adversities presented by the planet; however, in time, this has disrupted nature's balance, and humanity has become too dependent on technology. Restoring a constructive relationship with nature requires that we use technology not as a destructive force against nature but as a constructive one. It must be employed not only to protect and help regenerate nature but must also be used to protect nature from the harms caused by technological progress.

Looking at the relationship between technology, nature and utopian thought over time since More's *Utopia*, one can see that it has changed, sometimes viewed positively and sometimes perceived pessimistically.

In the sixteenth century, as a humanist scholar, Thomas More advocated the human beings' ability to make individual choices that could impact society positively. Reason contributed to building an ideal society and was viewed as essential for social progress because it prompted citizens to moral and cultural progress. Despite this faith in humankind's ability to progress, according to Sibley " [t]he notion of technology as a key to human fulfilment is entirely absent" (1973, p. 261) in More's *Utopia*. More sustained that material accumulation did not contribute to human happiness or social prosperity in a real sense; in this sense, the society described by Raphael Hythloday is characterised by an equal distribution of the material goods. "Utopias of sufficiency envisage instead modest, careful ways of life that value proximity to nature and conserving resources." (Garforth, 2017, n. p.). Harmony and happiness were attained through "the just ordering of the soul and the community". Hence, the Utopians embraced a simple life, engaging

themselves in agricultural tasks, for it was the primary economic activity and nature was regarded with respect and nurtured accordingly. "Contemplation and enjoyment of Nature" (Sibley, 1973, p. 261) were objectives to be pursued.

However, in time, the human beings embraced the challenges of science and technology, and their worldview was influenced by the rational thought of the Enlightenment. Humankind left its state of minority and embraced the free use of its reason, "man discovered that reason could enable him not only to have a happy life but also to reach human perfection" (Vieira, 2010, p. 9).

This new attitude welcomed innovation and scientific knowledge as necessary for progress; yet, as far as Nature was concerned, this new approach changed people's relationship with Nature and the perception they had of it. Nature, once regarded as a mighty force viewed with reverence and respect, became one of the human beings' belongings, one they could be disposed of and use for their benefit. Technology and science were tools used to control nature and tame it to the human beings' advantage to ultimately attain a utopian end.

As Garforth has sustained, "[m]any environmentalist thinkers characterize modernity precisely in terms of the increasingly distant relationship of humans from the natural world" (2017, n. p.). This approach can probably be identified as the turning point that precipitated the ecological disaster that we are witnessing in the twenty-first century.

Many voices acknowledged the dangers of over-relying on science and technology over time. Jonathan Swift, in *Gulliver's Travel* (1726), "strongly suggests that [...] mankind cannot be trusted to utilize scientific speculation and technology for desirable ends" (Sibley, 1973, p. 264). Another cautionary voice regarding the utopian potentialities of technology can be found in the nineteenth century, in Samuel Butler's satire *Erewhon* (1872) (Sibley, 1973, p. 269):

Butler turns the cult of evolution against its liberal exponents and contends that technological evolution, when uncritically accepted, is as likely to lead to human enslavement as to an enlargement of freedom

According to Garforth (2017, n. p.), "[b]y the mid-twentieth century, however, utopia

had become a much less comfortable idea, associated with totalitarian programmes from fascism to communism. There was a sense that modernity had brought violence and inhumanity as much as prosperity and progress". Science and technology were no longer seen as the solution to the problems humankind faced; instead, they were held accountable for the evils that beset society and for destroying the simple way of living and the beauty of the Earth. Science and technology, previously seen as driving forces of transformation and progress and essential to achieving utopia, were now viewed as potentially destructive, giving way to dystopias.

Over the last decades, the interest in technological dystopias that announce frightening apocalyptic scenarios surpassed the interest in technological utopias that promote technology as a means for enhancing social well-being and progress. These are narratives that depict the deadliest consequences of technology on humankind and the environment. They are harsh warnings of what might happen if we lose complete control of technology. The scientific advancement in Orwell's dystopian novel *1984* is used to control the population, deprive the citizens of their fundamental liberties, and subvert human creativity, thoughts and feelings.

In response to these terrifying narratives and the climatic crisis the planet is facing, writers quickly understood that they had an obligation to engage in fiction in which humankind's relationship with nature once again takes centre stage. "The desire for a modest way of life in communion with the natural environment that contests modernity's expansionist ambitions and offers an alternative vision for a sustainable future" (Garforth, 2017, n. p.) is depicted in Callenbach's *Ecotopia* (1975). The novel portrays a society that does not consider technology evil; it is how people decide to use it that makes it evil. Instead of rejecting it altogether, its positive aspects are taken advantage of whenever they align with a sustainable society's social and ecological principles.

As shown above, the relationship between technology (progress) and nature (preservation) is, for the most part, ambiguous. While the first, ideally, is meant to favour the latter, in the end, it is instrumentalized to hurt it more than anything, given the bipartisan perspective in *Breathe*. Progress, on the one hand, because it lies in the

wrong hands, is negatively viewed, in the sense that it is being used to destroy rather than build in spite of the idea that once it transfers to the right people, things will change accordingly. Nature, on the other hand, while it is meant to elevate the human being, bringing out what is most natural in him, has the reverse effect. In the conditions created, nature is more foe than friend, mainly because it is not given a chance to be otherwise, as a consequence of human activity: Breathe continues to destroy every living thing using technology as a weapon of destruction.

Breathe, more than anything, also uses technology not in the service of progress nor preservation but as a way of keeping its citizens subservient (the sphere as a bubble). In Şentürk's (2015, p. 129) assessment,

[u]topian fiction deals with technological advancement, civilization, society, education, legal system, government; dystopian fiction presents the themes in a darker perspective, like the enslavement of man through technology, hegemonic power and dehumanization, lack of freedom and individual right or choice.

Technology is not here to guarantee neither the survival of man nor the survival of the natural world, but rather to guarantee the domination of some over others. The relationship between technology and nature is as ambiguous as the bad intentions underlying the action of those in power, who live far more in the present and do not even have thought about the real perspective of a future for others. Everything, for them, is a question of control, and far more important than the preservation of the world, of the species, of values, of what is right, of what is decent, of the world of man and not only of material value.

Hope in the future, in the cli-fi literature domain, lies in the way in which human-developed technology can be used to overcome the destruction created by humankind. Unfortunately, the control of this technology lies in the hands of those who do not intend to use it for that purpose. Only when that agency is assigned to someone who values this mission and the future, someone who can serve as a role model, will there be the hope of a better future.

The focus on the damaged dystopian landscape and the "threat of environmental

destruction" (Basu, et al., 2013, p. 3) brought about by scientific and technological advances is recurrent in utopian and dystopian literature; however, it must not linger on the concepts of doom and annihilation. The message of hope must prevail to encourage the YA reader to act and confront the problems most adequately.

4.7. The young characters as role models

Set in an imagined future *status quo*, the narrative *Breathe* is driven by three young adult characters: Alina Moon, Bea Whitcraft, Quinn Caffrey, each taking turns in accepting a protagonist position since all the chapters of the novel in question (Part I: The Pod, Part II: The Outlands, Part III: The Resistance, Part IV: The Battle, Part V: The Ashes) are named after them. These characters were chosen as role models of self-determination, powerful social and political representatives in their community.

Although adult characters do play some part in the action, they tend to represent the norm, conformity with the established power and a generation weakened by difficult living conditions and repression. Also, unlike all the other youths mentioned, members of the Resistance, society in general, the power in the pod, these three, in particular, are well more individualized, according to the purpose-designed for them by the author, mainly related to a didactic orientation of the narrative fiction.

The young protagonists are linked to the idea of the transgression of rules. They revolt against those that condition hope, expect submission and total obedience, arbitrarily exercise their power of assessment, and demonstrate a lack of respect for human life. Alina, Bea and Quinn represent different aspects of this existence: the revolutionary one. They are the advocates of those who believe in a better world and are willing to fight for change. They are also willing to stand up for those who carry out their daily duties and have given into conformity. These protagonists are willing to risk their lives to ensure the survival of the trimmings of the trees in the hope that they may eventually plant them and begin the reforestation process.

These young heroes end up influencing each other's actions and way of thinking, which in turn leads to a heightened social and political awareness. As agents of collective awareness, they end up influencing the readers' worldview on matters of environmental

degradation, inciting them to act for the sake of their own and the Earth's future. As Alina states at the beginning of the novel, breathing is as much a right as it is a privilege, so it is up to her and the other young adults to get that right back because they are ready to lead, to lead the planet towards a more challenging future.

By having the action of the novel start *in medias res*, the author is also giving the readers a better idea of how things are in the actual fictional time represented, while at the same time focusing on the self-determination of the youths and on their struggle to reconstitute a better and fairer world hence, shaping them into role models. This is particularly true in Quinn's case because he is the one that endures a more profound transformation as the novel develops. If, at first, he decides to help Alina because he is infatuated with her and seemingly bored with his life of privilege, he matures from this search for love and adventure.

The readers feel empathy for Quinn as the novel unfolds as his empathy extends towards broader social issues. Quinn is no longer a futile, unaware, young boy because, in time, he matures due to Bea's love. It is this love that awakens him to a vastly different reality than the one he was used to. It took both the threat of the loss of this love and the absence of oxygen for him to learn not to take things for granted. Because the angry Pod Minister is always at his house, Quinn knows that he wants someone's head on the platter, and it cannot be his because he is a Premium. Quinn is now worried about everyone's future, not only his own: "It isn't enough to save ourselves. We have to find a way to tell people what's happening. We have to let people choose a new future." (Breathe, 2012, p. 315)

Alina notices the profound transformation endured by Quinn when the whole crew of the Resistance gathers in the Symposium to work out its action plan. As the readers' empathy with Quinn increases, so does his decisive social and political role as an agent in his community, so much so that he is willing to intercede for Inger when he is attacked by his father and left to die.

Quinn, while pretending to act on behalf of the Ministry, and in his moment of reckoning, identifies himself as a Premium but urges the crowd to think of him as

representing all of them. Not acknowledging that he was kidnapped by the RATS, like he was ordered to do by the Ministry, he instead describes the RATS as passionate about their cause and emphasizes that he has learnt much more about terrorism on the outside than in the pod, where he was "living in blissful ignorance while others were dying on [his] behalf" (Breathe, 2012, p. 336). He outright says that people cannot trust Breathe or the Ministry and that they are all prisoners in the pod because authorities are overfeeding them oxygen when they could learn how to breathe in the outside world, like the RATS, who want to save them. Every attempt to silence him is in vain, and he keeps inciting the crowds to react and fight without fear. They do. This compassion for others reveals a real change of attitude on the part of the protagonist. Still, this new selfless, altruistic mindset required the courage and determination to take risks.

The episode described clearly illustrates Quinn's awakening moment and draws our attention to Plato's Allegory of the Cave in the *Republic*. Uncovering the truth can turn out to be very dangerous since it casts doubts on the ruling power's true intentions. But overcoming Breathe's misleading message that provides an illusory sense of security and confronting the harsh truth will prevent the inertia, passivity, ignorance and fear from further surfacing.

Humankind has become idle in the search for the truth and has placed too much trust on the news it gets, not always from the most credible sources. This superficial knowledge, contrary to profound knowledge, is merely informative and is not based on rigorous seeking of understanding, deep thought and reflection. Thus, resigning oneself to this kind of knowledge can be harmful since it provides a false impression of security while, at the same time, it encourages people to continue their undertaking that can have potentially disastrous effects.

Unfortunately, today the search for knowledge, truth and justice has been superseded by the search for pleasure, consumerism, vanity and ephemeral feelings of happiness, precisely those values fostered in social media. This foolish, mindless approach is driving humanity back into the incarceration of the cave. Freedom to seek and stand up for elementary social values requires courage and determination because it is sometimes

faced with disapproval, condemnation and rejection by people who rely on unempirical knowledge, common sense and fake news.

Plato's *Allegory of the Cave* portrays the yearning for personal liberation from the despotism of the general opinion and social norms that, in turn, will lead to a state of happiness and well-being.

Just as the prisoners of the Allegory of the Cave, the inhabitants of Breathe live in conformity and ignorance, leading them to reject the light and profound knowledge. Breaking through this state of darkness and going into the light calls for a great deal of courage and determination on the part of the individual. This is the important role assumed by the main protagonists in the novel.

Besides Quinn, Bea also changes in the course of the narrative, probably not as substantial as Quinn's, but still very relevant. After having been locked up for twelve hours in a dark bunker, Bea looks more alive than ever; she is dishevelled, but, still, looks more alive than ever, or rather "[s]he looks like she has fire in her, like she's finally alive." (Breathe, 2012, p. 267).

Empathy and compassion are also human core values that characterize Bea's attitude from the onset, ultimately making her give her oxygen to Maude Blue and Alina. In striking contrast to what is happening in the dictatorial universe portrayed in the novel, the scene is meant to focus on common solidarity as a means for human salvation, pointing out solutions for problems caused by humankind.

To move up socially and, consequently, get access to more air, the inhabitants of the pod take part in an evaluation process before the Scholastic Institute. This test is meant to select the future leaders of Breathe. Government officials and Breathe directors watch all the participants through mirrored walls. Although it is called a debate, the participants are unequally prepared, with Premiums being given tutors. What is being evaluated is their agreement with the Breathe doctrine, which is that trees are no longer needed for humankind's survival.

Bea cannot bring herself to agree with that biased position and questions everything the Professor says, defending that trees are a viable species. Quinn, being privileged and

unaware, argues against her, stating that they have more sophisticated technology because the Switch and the loss of the trees forced human beings to advance. Because Bea was too vocal about her personal opinions, contradicting the established doctrine, while focusing on the issue of social injustice (she argues that if she cannot buy more oxygen, she cannot exercise and be healthy), she does not make it through the programme.

Another character that represents change, although less significant, is Maude, who has done her share of condemnable actions; however, she did so because she was duped by Breathe and because the world was in chaos, and everyone had to fend for themselves. Like the prisoners in Plato's allegory, Maude was, for a long time, blinded by the belief that what she apprehended in her social sphere was true, without actually taking notice of the forces that drove such ideas and the radicalism she adopts.

One thing that approaches Breathe senior officers and the head of the Resistance is radicalism. A paradoxical situation arises when the rebellious groups start to become identical to the criticized authority (Şentürk, 2015, p. 135). If one conditions the other's freedom (Breathe), the other is merciless in its mission to defeat its adversary (the Resistance). The Resistance's radicalism is indirectly underlined, drawing a parallel with Breathe, and that is why the characters who survive to lead the new Resistance are more clear-headed and balanced.

It is up to Bea to highlight the contradictions of the Resistance. While weak and under arrest, along with the progressively weakened Maude, Bea questions the reason why she sided with the Ministry for so long. This is the organization that keeps her parents working around the clock and keeps them all pumped up with oxygen, so they have no way to survive without Breathe. Despite the illusion of freedom created, Bea also questions the Resistance because, while standing for freedom and justice, it does not show her or Maude any mercy and does not let them be free. It is not minimally concerned with the well-being of its members. Her view of the Resistance is confirmed when they drag Maude out of the cell. She asks that they give her water, and Petra says she will water her down because she reeks (Breathe, 2012, p. 254).

In a world where heroes or role models are not easy to find, the story is an inspirational reminder of the importance of human effort, of self-determination to conquer adversity, both natural and material. It legitimizes youth agency as a powerful social and political tool, and it shows that it is possible to boost communal efforts to rise against dangerous manipulations with disastrous consequences for humanity as a whole. Dystopia, more than being a catastrophic portrayal of the world, is meant as a sign of hope in the future. Embedded in both a critical and a scientific view of the world, it is inherently hopeful in its message, and that is why its characters are, ultimately, also self-determinate and powerful. There must be an end to that self-determination, and that end is to remain hopeful while you act to make every change possible. As is noted by Şentürk (2015, p. 134), the author values rebellious groups, which "are placed in the novel as a means of hope for the readers, and also to increase the awareness level that is possible to do something, not for the government but the people."

5. The significance of dystopian cli-fi for the 21st-century student

5.1. Understanding and reflecting on society

One thing that seems to stand out from the extensive reading proposal of dystopian cli-fi in the English classroom, namely of Sarah Crossan's *Breathe* as one of its representatives, is its didactic potential, which is the ultimate artistic aim of this fictional category (Gallardo, 2013, p. 38). Being didactic, it is meant to make us think, because dystopia is about the intellectual and emotional engagement of its readers (Baccolini, 2013, p. 44), telling them what is wrong now to allow them to envision how easily things can get much worse, which does not necessarily mean that they cannot still get better. After all, the possibility remains (Sargent, 2013, p. 13). Sargisson (2013, p. 41) suggests that dystopias stimulate thought, raising awareness to climate change, while stimulating the debate on this subject, perhaps triggering action, because they draw attention to current behaviours in need to be addressed. In that sense, dystopian cli-fi is intended as socially useful, having the potential to be didactic, that is, instructive and even moral.

Milner and Burgmann (2017, p. 5) state that contemporary climate fiction "is deeply

indebted to climate science and therefore overwhelmingly concerned with anthropogenic warming." The primordial concern of such narratives is climate change; thus, to enhance the readers' interest while trying to combat their tiredness on the subject, the scientific data is presented in an accessible way. It is described in a way that will influence the readers' opinion while raising their awareness of some underlying social issues, issues like social and gender inequality, democracy, and freedom. These issues are seriously compromised in a world in which a new world order is instituted as the result of the chaos that follows the destruction of the world as humankind knew it. The impact of climate change on social problems is valued due to the direct relationship these hold with it (Şentürk, 2015). In *Breathe*, social inequality is the norm, and it brings forth economic, financial inequality because Premiums have all the possible advantages and the auxiliaries none at all. Those disadvantages carry personal disadvantages.

As far as Andersen (2019, p. 140) is concerned, climate fiction holds two main functions: a critical one and a utopian one. Both functions, nonetheless, have something in common: they focus on the role the individual plays: the fictional one, hero or other, and the empirical one, the readers are inspired by.

The first function is the critical perception of the *status quo*. Through this perspective, cli-fi allows its readers to perceive an undesirable future while also revealing the potential for intervention. There are many ways of attaining the full understanding of global warming, one being the confrontation with the chaos resulting from our inability to act. The other is through a more hopeful depiction, that of the anticipation of a new, better world. Inaction is associated with the grimmer consequences, while anticipation tends to stress new ways to move away from a bleak scenario.

The utopian function of climate fiction narratives portrays more positive attitudes which can encourage people to act, both personally and socially, putting "their imaginative power to the service of the future by imagining worlds in which the accelerating warming of the planet inspired new and presumably better forms of civilisations" as Andersen (2019, p. 141) sustains.

In Dan Bloom's opinion (Holmes, 2014), a cli-fi novel can be utopian, present, optimistic,

offering its readers the perspective of a hopeful future. On this matter, dystopian cli-fi literature can be seen as a discourse of hope because it assists in the development of a "critical perspective that can point us toward action and change." (Baccolini, 2004, p. 519). According to this author, "only by considering dystopia as a warning can we as readers hope to escape such a dark future." (2004, p. 520). In formal terms, that hope is perceived through the resistance to present a closed ending. In fact, this type of ending allows both fictional protagonists as well as the readers to hope, that is, "the ambiguous, open endings maintain the utopian impulse *within* the work" (Baccolini, 2004, p. 520), and a kind of resistance beyond it. The possibility of utopian hope does not imply the presence of a happy ending; nonetheless, it entails awareness, responsibility, and the ability to choose (Baccolini, 2004, p. 521). The ambiguous open ending in *Breathe*, in which the surviving characters are those who resist (whether they are Resistance members or not), leaves the readers feeling equally pessimistic and hopeful for the future (Şentürk, 2015, p. 138). Although much has come to an end, it means that there is now space for individual choice and that the Resistance (organised or individual) has brought hope as much as it has brought awareness. The readers are conscious that there is perhaps more danger in surviving in slavery (particularly when it does not imply saving the planet) than there is in risking revolt when this is morally oriented.

Still, according to Andersen (2019, p. 141), the critical perception of the *status quo* is assisted by a "utopian function", correspondent to a depiction of a humanity which is politically, technologically, and existentially reformed, in its relationship with the natural world, shaping better forms of civilisation. In this regard, this second function takes us back to the question of the presence of hope in dystopian cli-fi literature. The presence of utopian hope allows its readers not only to understand what might lie ahead because of one's action in the world but also makes it possible for them to reflect on fundamental social issues, which are current problems with future consequences that will ultimately affect their lives, both individually as well as socially.

As Claeys (2013, p. 17) reminds us, dystopia portrays the opposite of democracy, a world in which the masses have lost control of their destinies because theocratic authoritarianism is the paradigm in this context. While utopia represents ordered

freedom, dystopia is associated with the lack thereof, with the rule of exterior forces being imposed upon the individual's free will (Claeys, 2013, p. 17).

In the same way, because dystopias introduce us to worlds that are heading towards social dissolution or already in that process, they also highlight the necessity for society to undergo a drastic change (Gallardo, 2013, pp. 37-39). In this spirit, dystopian cli-fi literature appeals to young adult readers because it focuses on social change in its connection to rebellion. Thus, cli-fi's contribution towards its readers' personal development and self-growth must also be assessed.

5.2. Identity and personal development

Distinct from conventional adult dystopian literature from which it emerged (Hinzt, 2002, p. 254), young adult dystopian fiction focuses on adolescence, picturing a hero in his/her process of self-discovery and transition from boyhood/girlhood to adulthood (in *Breathe*, Bea, Quinn, and Alina, fit this mould and go through this process). During this process of transformation and self-searching, his/her desire to avoid all adult control surfaces. Often adults are embodied in repressive political regimes with diverse means of domination, making the adolescent have a critical view. In fact, in young adult literature at large (not just young adult cli-fi literature in particular), the young adult represented is one capable of enacting social change. It is here, to begin with, that the protagonist rebels against authoritative governments in his/her desire to intervene (Hinzt, 2002, p. 255). Fighting this control is done by accessing information, leading to uncovering the truth and the ensuing revolt. This model of events can be seen in Sarah Crossan's novel. Once outside the sphere, the characters who finally gain access to the knowledge of the true intentions of the Ministry decide to rebel against the authority and try to break free from its power. By becoming conscious of the evilness of this element, Bea and Quinn can fight back and finally ascertain their individuality and overcome their conformity.

The personal evolution occurs at the same time as the rising of socio-political awareness. This psychological/moral journey heightens his/her sense of moral integrity, and, hence, the coming-of-age entails the discovery of personal identity and the development of a

higher sense of integrity and righteous moral conduct. The readers are also given a sign of hope through his/her maturing process because they are witnesses to the fact that the character is given a chance to exercise positive action (Cart, 2010, p. 149). This allows them to become critical observers of the injustices of the world, thereby fulfilling the inherent didactic purpose of the narrative while making them understand that individualism might be a match for conformity and a path towards reforming the world.

Even though dystopia is a consequence of human behaviour, it still acknowledges the possibility of change (Sargent, 2013, p. 10). It warns us about the future, but with a note of hope, one which, bearing in mind the previous considerations, is sometimes associated with the heroic figure mentioned (Sargisson, 2013, p. 40). In *Breathe*, this hope for the reader is linked to the struggle of the Resistance, which translates into the presence of rebellious individuals. Şentürk notes (2015, p. 135). These individuals symbolise the possibility to overrule the arbitrariness of power, a possibility that cannot be reduced to the fictional world.

As Bloom (2014) suggests, more than just raising alarm, climate fiction raises awareness towards the catastrophic effects of human behaviour. It intends to convert this awareness into "self-criticism and then transformation of the self" (Andersen, 2019, p. 141), contributing to the students' personal development in the sense that their self-awareness is heightened. By making the readers bear the unpleasant consequences of their conduct, the narratives contribute to the formation of their identity, but also the formation of a collective one, developing their sense of belonging to a broader whole, and its inevitable co-dependency in existence, particularly in a globalised world as is ours.

Sarah Crossan's *Breathe* plays a key role in helping students understand and reflect on social issues while also assisting them in the development of their own identity and their personal development, namely by empowering them to become morally oriented citizens who can take on the challenge of addressing the planet's issues, which are none other than their own. The awareness of the catastrophic effects of human behaviour is not meant as an autotelic action but is to be converted into self-criticism, furthering the remaking of the self (Andersen, 2019, p. 141).

While promoting personal development, cli-fi also empowers the readers' sense of identity, inspiring young adults, and their self-growth as an essential tool in the intervention in the rescue of the planet. Its audience is, indeed, young learning and developing adults, who are particularly sensitive to fictional characters who show determination, bravery, but are also capable of making well-informed decisions, while feeling that it is their responsibility to not give up, showing the readers the right way to cross over from adolescence to a more conscious, critically aware, adult stage of life.

As such, cli-fi has a beneficial effect on the students' self-esteem and confidence since it contributes to their acknowledgement of the valuable role they play in society, raising their awareness of it. By assisting them in the development of a positive attitude associated with that consciousness, it can also encourage them to act, both on a personal as well as on a social level. While doing so, it plays a valuable contribution towards their character building.

As has already been noted, the cli-fi utopian/dystopian novel provides a space for reflection and invites the readers to think not only on global issues but also on their lives and to review their future.

Since climate change and environmental issues are for now more urgent than ever, ecological utopias and dystopias can trigger and foster that much-desired global constructive reflection and debate. They have the potential to involve the readers in a broader discussion about sustainability problems, besides many other issues that are interconnected. Making this discussion open to the public offers the readers the opportunity to find out exactly what they expect of their nation in the twenty-first century as far as green issues, education, social responsibility, politics and others, while at the same time, galvanising them to get involved and to achieve the much-needed change of mind.

Green utopias provide an optimistic approach towards the climate crisis providing solutions for reversing the damage brought about by mankind. They focus on the power of positive thinking and outline an overall plan, and present solutions to solve the impending problems. Addressing the issues of sustainability optimistically and positively

can serve as a platform for discussing and enhancing other problems that affect the readers' society. This is, of course, also true with ecological dystopias. By showing that engaging in meaningful, constructive actions can result in positive, sustainable changes, even in the worst scenarios, contributes to a positive psychological change.

The positive and confident mindset of the narrative, as well as the focus on the ability to deliver real change, empowers the readers who are led to believe that the solution is within their reach. Consequently, the self-confident readers engage in sustainable practices, urging others to do the same.

Also, cli-fi focuses on character interaction and can help boost the development of the readers' empathy and compassion towards others while still fostering their understanding and reflection about society and its most pressing issues, like that of anthropocentric climate change.

Final Considerations

The concept of literacy is dynamic and keeps developing according to our social, cultural, and learning needs. Nowadays, that concept has become much more complex, particularly in a globalised world as is ours. The teaching and learning process no longer takes place within the school walls. Students learn and are taught in blended and different contexts, both formal and informal. This process extends throughout the students' lives because of the need to adapt to a much more demanding work environment. Reading literacy, numeracy, digital literacy, scientific literacy are some of the faces of the complexity of the concept in today's pedagogic world, and they are all demanded of the twenty-first-century student.

Climate literacy, the underlying concept of this discussion, is undoubtedly a part of scientific literacy, and it gives the student a chance to explore ethical issues relating to technological advancement. Environmental issues are real issues for real contemporary discussion, particularly climate change. Their portrayal in non-fiction can put some young readers off because of the detailed scientific data it incorporates. However, non-fiction is a powerful tool, particularly when the readers can see themselves reflected in the characters, as in the case of Sarah Crossan's young protagonists.

In that sense, cli-fi narratives seem to be an invaluable means to contextualise and involve students in scientific content that greatly impacts their present and future lives. As such, they are useful in boosting the students' critical thinking, as well as their understanding of society and the climate crisis, since, ultimately, they will be the ones most affected by its consequences.

As fictional communications, as an appeal to the readers' imaginative side, cli-fi narratives are meaningful ways of communicating scientific facts to non-specialist audiences, both in the field of literature and linguistics (*Cli-Fi: Climate Fiction & Climate Change*, 2020), particularly in a world that seems to be more and more saturated with news, portrayed as facts whose very nature as such is often being questioned, contributing to young people's, in particular, alienation.

Climate fiction, both utopian and dystopian, can help enhance student's critical thinking and awareness of the society in which they live in the sense that it provides a critical and scientific perspective of the world. Its fictional projects, much like global initiatives such as Monash Climate Change Communication Research Hub³, are guided by a simple and focused strategy aimed at promoting climate literacy to help readers better understand climate change, its impact and perhaps, the existing solutions, according to its inherent didactic purpose.

Bearing in mind that the instructive purpose, in the narrative discourse of utopian and dystopian young adult cli-fi fictions, never takes the second stage to the entertaining one, they can be considered important teaching tools. Being more related to reality, because they depart from the observation of society and the idea of causing real change (Vieira, 2010, p. 8), they can make young readers/students think. At the same time, they also assert themselves as the kind of fictional narratives capable of promoting agency, encouraging students to act on their own and others' behalf and well-being while promoting climate change literacy.

³ The Monash Climate Change Communication Research Hub conducts social research and leads impact focused projects to build media and policy infrastructure that adequately addresses climate change in Australia.

As a non-traditional way of communicating climate change literacy, storytelling, as mentioned by David Holmes (2012), has proven to be an even more effective way to convey the message of its urgency, much more than the traditional methods hitherto privileged (such as newscasts, formal meetings organised by institutions with responsibilities in the field, governmental or non-governmental organisations, etc.). The positive dynamic of emotionally engaging its reader (Baccolini, 2013, p. 44), while still managing to entertain him/her, promoting the acquisition of knowledge, is one to be considered.

It seems that the apocalyptic discourse and the echoes of the doom of humanity (although scientifically accurate) that people are confronted with today are counterproductive and disengage them from this reality. Despite this, the idea that there is room for hope, stressing that humankind must work to build a better (not so much an ideal society), like the one that is aired by utopian, dystopian literature (Vieira, 2010, p. 7), can have beneficial consequences in terms of producing involvement, especially of the younger demography which is the concern of this dissertation, towards a global cause.

Although these types of dystopian narratives play on negativity, they aim to achieve positive reactions from their readers, thus leaving them with a feeling of hope (Vieira, 2010, p. 17), and by doing so they are contributing to their empowerment as well. Young adult readers, who attend compulsory education, can be schooled on anthropogenic climate change, namely through Sarah Crossan's *Breathe*, achieving literacy on this subject in the English classroom setting. This reading is, therefore, a means of developing the students' critical thinking skills, their comprehension of society, and the climate crisis.

Young adults today are broadly aware that the harm brought forth by previous generations to the environment will directly affect them in the future, so it is important to deepen this superficial feeling by broadening their knowledge on these issues which will be relevant to their existence. Dystopian climate fiction such as *Breathe*, taught in the classroom, assures the students that their perception is right and that those

problems are real, although not without resolution. Because they are young, it is important that adults, and in this particular case, teachers, give them hope.

The work developed by teachers must be meaningful to the students; otherwise, the interest and the commitment the students manifest is significantly reduced or simply null. The students must become aware that they can relate what they learn in the classroom to their reality. Moreover, they must understand that there are no definite frontiers between areas of knowledge and the learning outcomes of different subjects are interconnected.

Hence, to achieve these goals, instead of adopting rigid and traditional teaching techniques, the teacher must be able to break the barriers between subjects in order to make the teaching process more genuine. By doing so, the students become conscious that the learning outcomes are very close to their reality. Instead of expecting the students to memorise empty concepts without understanding their importance or comprehending their meaning, the teacher will be able to make the students recognise the significance of each one. For instance, when addressing the subject of climate change in English in the eleventh-grade classes, it can make sense to deal with the topic in the History lesson when focusing on urban expansion and internal migrations and emigration. Along the same line of thought, the topic could be introduced and discussed in the Geography lesson under the theme: variability of solar radiation in Portugal or treating and preserving water resources. As far as Philosophy is concerned, the students can discuss the risks of science and technology, the impact of information on everyday life, industrialisation and the environmental impact, scientific research and economic-political interests, technoscience and ethics and genetic manipulation. It can also deal with the importance of freedom in the search for truth, the relevance of argumentation by distinguishing common knowledge from scientific knowledge. Besides these, other important contributions of other subjects to make the topic of climate change more meaningful and tangible should be taken into account.

The topic of climate change can be discussed in an integrated and interdisciplinary manner in all the subjects of the eleventh grade. This interdisciplinary work meets the objectives set by the project *Domínios de Autonomia Curricular – DAC* (Domains of

Curriculum Autonomy), which requires that the planning, implementation and assessment of teaching and learning take place together. Through the development of project work, the teachers promote better learning, leading to the development of essential knowledge, the skills attitudes and values defined in the Students' Profile. The ultimate goal, as Richard Riley, former US Secretary of Education (2014) states, is to prepare "students for jobs that don't yet exist, using technologies that haven't been invented, in order to solve problems we don't even know are problems yet."

Many existing projects can be developed in the English class, with or without the collaboration of other subjects, on a national or international level to promote the discussion and awareness of climate change. The reading of Sarah Crossan's *Breathe* can serve as a basis for boosting the development of these projects.

- *Eco-Escolas* (Eco-Schools) is an international program of the "Foundation for Environmental Education", with the intent of encouraging projects within the scope of Environmental Education for Sustainability. The schools involved in this project receive a green flag if they can provide evidence that it improved its environmental performance, by involving students in the decision-making and implementation processes of the program, in all of its phases.

- *Movimento Educativo Galp - Dá a tua Energia pelo Planeta* (Galp Educational Movement - Give your Energy for the Planet) challenges students and teachers to compete in the Energy Bootcamp with projects that positively impact their communities based on the Sustainable Development Goals!

- *Jovens Repórteres para o Ambiente (JRA)* (Young Reporters for the Environment (JRA)) is an international program of the Foundation for Environmental Education with the objective of promoting active and participative citizenship, emphasising the aspect of environmental journalism, while sponsoring the possibility of exchanges, especially during assignments for environmental reporting.

- *Future Up* - is an educational project that seeks to bring a real positive impact to society. Students and teachers actively participate in projects providing new ideas, new solutions for sustainability, energy and planet issues.

Breathe, as referred before, can generate interest in the involvement in the aforementioned projects, but it can trigger activities relating to the novel to be carried out in the classroom and then involving the school community.

Reading/Debate club - Students can discuss and debate the topics covered in the novel in the English class or a reading/debate club, among them environmental issues, biodiversity and forest protection, human rights, democracy and social issues.

- Newspaper/Magazine column - The extensive reading of the narrative can also motivate students to write articles about the novel and the issues it covers, for the school newspaper or magazine, regularly by creating a specific column dedicated to these issues.

- Drama – Students can adapt the novel for the stage and present it to the school community.

- Tree-planting activity – The students, with/without the local authorities, can organise a tree-planting initiative, in or outside their school, by mobilising the whole school.

- Eco-Forums – Students can organise periodical forums, for the school community, by contacting experts from different fields and bringing them in to talk about the issues under discussion.

Whatever activity the English teacher promotes to encourage the students to engage in extensive reading, the students must identify the learning goal for which the activity is designed. Moreover, they must recognise the usefulness of the learning process for acquiring knowledge, skills and competencies that contribute to their personal development, social inclusion and active citizenship, and subsequently to the improvement of their employment prospects. Engaging students in extensive reading is intended "for a real purpose, like entertaining or getting information, so that they apply not only their skills but who they are and what they know, rather than just going through the motions." Richard Day (1999).

These activities in the foreign language lesson are more significant when the narrative chosen by the teacher meets, according to Julian Bamford (1999), "the desires and

needs of particular students." As Richard Day (1999) argues, the material used for foreign language learners must be specific for the students at different levels; they must be narratives the students can easily comprehend. As their reading abilities improve, they move on to higher levels "at which point they'll find enough understandable reading material written for native speakers."

Cli-fi utopian/dystopian literature can help improve the students' critical thinking, their awareness of the society in which they live and empower them to engage in changing attitudes and behaviours, as well as guide them in coming to terms with the relevance of their initiative. Portuguese students, with the help of such work, will be able to view the world around them with a critical mind, questioning it.

As twenty-first-century students, they must take on the role of fully developed citizens, whose cultural, scientific, as well as technological literacy allows questioning, selecting of information, and subsequent adoption of an informed decision-making process.

In the context of the «SWS # 6» of May 2020, Holmes argued that local intervention is a much more effective form of intervention than a worldwide one because it has a more incisive effect, making people understand the direct effects of climate change in their microcosmos. In this case, the intervention in the classroom constitutes a local intervention since it affects a small group, promotes a more restricted awareness, which can have similar beneficial effects in the long run. In the teaching activity, teachers follow what is, in effect, a current line of thought, which has been defended by scholars and scientists such as Milner, Burgmann, and Holmes. "Climate fictions are an important way of communicating climate science to non-specialist audiences and are being explored within the School of Languages, Literatures, Cultures and Linguistics by Professor Milner and Mr James Burgmann." (*Cli-Fi: Climate Fiction & Climate Change*, 2020).

Books are impactful, and teachers hope that by presenting and using them in the classroom, they can help change the students and, in turn, transform the world. Their purpose is not just of entertainment or literary escapism, but they play a huge role in getting people and even world leaders to understand the value of changing lifestyles

before it is too late for those who are still too young and have a lot to hope for (Holmes, 2014). In this sense, dystopian cli-fi has an important role to play as a fictional category, with a particular relevant didactic potential that goes beyond language skills and encompasses human ones.

The process of identification between the hero and the young adult readers allows the latter to gain an optimistic worldview. As such, they are given a chance to view themselves as constructive agents in the world, ones that can make a difference, bringing hope for the future. While *Breathe* highlights that conformity tends to annihilate individualism, it also allows the triumph of the latter over the first, and, in this regard, it constitutes an appeal to non-complicity and all matters that compromise the person and the world's integrity.

Despite the initial overlapping between climate fiction and science fiction (that, to this day, might help explain why Milner and Burgmann (2017, p. 5) consider climate fiction a subdivision of science fiction rather than a fictional category in its own right), the alarming increase of climate issues legitimised the growth of the first. Being eminently realistic and dealing with anthropogenic climate change, cli-fi contributes to the general awareness towards these problems (Schneider-Mayerson, 2018, p. 487), promoting the discussion over its ethical and social consequences (Mehnert, 2016, p. 4). Ultimately, its fictional representation of social collapse (Andersen, 2019, p. 11), that refers to the division between people due to the struggle for limited resources, as well as the impact of technological progress over individual freedom and ability to connect (Andersen, 2019, p. 27), in a world where nature seems to be punishing him/her for what he/she has done, is a valid pedagogical instrument to help guide future generations. This guidance can take place in the English classroom.

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