



PROGETTO
MAMBRINO

HISTORIAS FINGIDAS



Senses of the Ending. Literary and Political Imagination on the Environmental Crisis

Caterina Diotto
(Università di Verona)

Abstract

The contribution presents an ecofeminist analysis on Science Fiction and its relation to the political imaginary of a way out from the ecological crisis. Considering three novels from Mary Shelley, Margaret Atwood and Ursula K. Le Guin, it explores the possibilities and contradictions in «worlding» literary counter-narratives in relation to the hegemonic representation of the apocalypse during capitalist realism.

Keywords: dystopia, science fiction, naturalism, ecofeminism, philosophy, capitalist realism.

Il contributo presenta un'analisi ecofemminista della fantascienza e la sua relazione con l'immaginario politico dell'uscita dalla crisi ecologica. Considerando tre romanzi, rispettivamente di Mary Shelley, Margaret Atwood e Ursula K. Le Guin, si esplorano le possibilità e le contraddizioni delle contro-narrazioni letterarie di finzione in relazione con la rappresentazione egemonica dell'apocalisse durante il realismo capitalista.

Parole chiave: distopia, fantascienza, naturalismo, ecofemminismo, filosofia, realismo capitalista.



Any human power can be resisted and changed by human beings.
Resistance and change often begin in art,
and very often in our art, the art of words.

Ursula K. Le Guin

According to the XX century German poet Ingeborg Bachmann, literature at its best has the ability to «represent something before its time has yet to come» (2011, 20)¹. To depict an ephemeral flashing vision of

¹ «[...] repräsentieren, und etwas zu präsentieren, für das die Zeit noch nicht gekommen ist» (my translation).

something that will, or could, be in the future. Literature therefore has a political quality in addition to its cultural one, and this should be taken into account by everyone approaching it, be it writers, readers, literary theorist or philosophers.

Science Fiction has become a mass literary genre in the last decades, producing global bestsellers like *Hunger Games*, *Divergent*, *The Handmaid's Tale*. The dystopic narrative has spread from literature to cinema, videogames, and TV series. Utopian narratives, on the other hand, seem to have disappeared. During times dominated by fast growing fear and anxiety due to the climate crisis and the first pandemic disease of the century, by increasing social inequalities and global conflicts, which role does dystopic Science Fiction play in Western cultures? What flashing vision of the future is it bringing to us, and how should we politically take it into account?

Before addressing these questions, it is important to understand why narratives, stories and novels, play a fundamental part in human relationship with reality. Frank Kermode, in his most famous work *The Sense of an Ending. Studies in the Theory of Fiction*, puts it as follows:

Men, like poets, rush “into the midst”, *in medias res*, when they are born; they also die *in mediis rebus*, and to make sense of their span they need fictive concords with origins and ends, such as give meaning to lives and to poems. The End they imagine will reflect their irreducibly intermediary preoccupations. They fear it, and as far as we can see have always done so; the End is a figure for their own deaths (2000, 7).

According to Kermode, the human condition – that is, being thrown «into the midst» of a universal Time current – leads to a permanent research of consistency. A «sense» – either as a meaning, an organization of the events, and a direction extended to the future – capable of transforming the simple progression of moments, the *Chronos*, in the organized wholeness of the *Kairos*. This operation is constantly made by each one of us, by composing a story; the mind weaves memories, impressions, knowledge and the present moment in a form that can be described as «narrative». An inner architecture of connections that can be expressed as a story of ourselves, of the world and of the meaning of all

things from our perspective. It is not a closed narrative, one where we know exactly what is going to happen, but an open one, endlessly re-calculated by reference to the present moment. By creating such a narrative, we fulfill the need of a structure from which to extrapolate a meaning. This narrative therefore constitutes the starting point of our understanding of reality and the root of all our projects and actions.

There is no doubt that Kermode developed his theory from a constant dialogue with the concept of *Mythos* in Aristotle's *Poetics*. *Mythos* is defined as the composition of facts that structures a story. To Aristotle, it is the very essence of tragedy itself

[the art of making tragedy] consists simply of visuals and character and plot and speech and song, and thought too of course. But the most important of these is the putting together (? structuring) of the events. For tragedy is a mimesis not of men [simply] but of actions – that is, of life. That's how it is that they certainly do not act in order to present their characters: they embrace their characters for the sake of the actions [they are to do]. And so the [course of] events – the plot – is the *end* of tragedy, and the end is what matters most of all (Aristotle, *Poetics*, §50a, 73).

The *end* of tragedy is the *telos*, the fundamental aim of tragedy, that is the *catharsis*. Only if it generates a cathartic moment in the audience, does tragedy fulfill its social and political role, which is to be a «social medicine». Tragedy should connect the individual to the realm of necessity, fate and reversals of fortune. In other words, to the unpredictability of life and to the smallness of humans' worries and actions. That should then lead the spectator to humility and the understanding of its place in the universe, which would eventually make it *megalopsychos*, – a «great soul». What makes Aristotle's tragedy a social and political tool is, then, the aim to create a connection with what can be called the «meaning of life» – a «collective» one though, meant to contribute to the *poleis*.

To do so, the plot must be precisely constructed as a whole.

A “whole” is [something] that has a beginning, a middle and an end. A “beginning” is what does not necessarily have to follow anything else, but after which something naturally is or happens; an “end”, the other way round, is what naturally is after something else, either of necessity or usually, but has nothing

after it; a “middle” is what comes after something else and has something else after it (Aristotle, *Poetics*, §50b, 77).

What stands out in Kermode’s interpretation is the overlapping of the two meanings of the *Poetics*’ «end», the narrative’s ending and the *telos*. On the contrary, in Aristotle’s theory while the *telos* represents tragedy’s crucial point, it does not inevitably coincide with its ending; the three moments of the *Mythos* have the same value. As a consequence of this conceptual shift, in Kermode’s theory the wholeness of the story that one’s mind constantly creates arises from the fiction of its own end/ending. The movement can be divided in two times. The first: a fiction of the future is created from the concrete present, therefore projecting fears and expectations, but also an interpretation of reality. The second moment, narratives of the future directly influence the present by composing an imagery of possibilities. To Kermode, it is by creating a «fiction of the ending» that the mind retrospectively shapes the story, defining the meaning of what happened in the past, the «beginning», and what is happening now, the very «middle» where we «rush».

Kermode’s theory has many flaws and has already been described as outdated. Personally, I do not believe that we are all shaping our lives as individuals only out of our present fears, creating fictions of our «end» over and over, and acting in accordance with these. Nor do I believe that the crucial point and meaning of whatever narrative is necessarily found at the end of the story. I do however believe that Kermode’s scheme represents an interesting key to understand how literary imageries of the future, and especially imageries of apocalyptic ends, can influence present narratives, shaping our understanding and even our actions.

According to the Oxford English Dictionary, a dystopia is «an imaginary place or state in which everything is extremely bad or unpleasant» (2015, 481). General as it is, this definition could be considered vague and inaccurate, though not in this case. In fact, as it can be deduced from Gregory Claeys’ broad study *Dystopia: a Natural History* (2017), dystopia seems to be an aesthetic form that gains a content from time to time depending on the society that creates it. A mirror, therefore, of the worst cultural and political fears that run through an historical time

and place. Moreover, when speaking of «dystopian forms», it is very difficult to draw an actual distinction between the literary and the real. A literary dystopia is, also, *real* because it mirrors and exaggerates something that truly exists, participating therefore in the cultural generation of what is perceived as «reality». In this instance, dystopia is exactly what Kermode defined as a «fiction of the ending».

How is a dystopia related to the perception of reality? How much can it exaggerate; how far can it go before it becomes something completely unbelievable – then irrelevant? Taking from Leon Festinger's studies on cognitive dissonance, the author elaborated a Theory of Consonance in the human production of fictions of the ending. If in making stories there is a need for internal coherence, humans also «feel the need to show a marked respect for things as they are» (Kermode, 2000, 17), for their incoherence. So, there is a constant dialectic between «credulity» – the desire for neat, well-rounded stories – and «skepticism» – a story which is excessively well-rounded feels unrealistic as well as boring, because it is fully predictable.

Such dialectic generates a peculiar kind of pleasure when the fictions that we are confronted with refute our anticipations.

The story that proceeded very simply to its obviously predestined end would be nearer myth than novel or drama. Peripeteia, which has been called the equivalent, in narrative, of irony in rhetoric, is present in every story of the least structural sophistication. Now peripeteia depends on our confidence of the end; it is a disconfirmation followed by a consonance; the interest of having our expectations falsified is obviously related to our wish to reach the discovery or recognition by an unexpected and instructive route. [...] The more daring the peripeteia, the more we may feel that the work respects our sense of reality; and the more certainly we shall feel that the fiction under consideration is one of those which, by upsetting the ordinary balance of our naïve expectations, is finding something out for us, something *real* (Kermode, 2000, 18).

The *realness* that we enjoy in these sorts of «peripeteia» comes from the balance between the fictional feature of the new – in the dystopic case, the creative focus is mostly on the negative aspects or fears, what is exaggerated and how –, and the realistic of the already known – «how things are and work», therefore how we expect the story to develop and

end according to common sense and personal experiences. When stereotypical anticipations – especially on «the midst» of the story – are refuted and the reader is surprised by new structures, it feels like something important about reality's mechanisms can be learned, a key that makes reality clearer, possibly influencing our relations with it, our understanding and even our actions.

Nonetheless, not every fantasy is acceptable. There is, Kermode writes, a «rigidity», a line that distinguishes what is considered plausible, even in the wildest fantasies, from what is unbelievable. How people draw that line both depends on their individual sensibility and flexibility in imagining possible realities, and on their broad cultural definitions of «how things are and work». That line, therefore, is deeply related to what a culture, a community in a specific time and place, considers «acceptable» about the future and what is not. What literature – and Science Fiction in particular – typically do, and the main reason why people love it, is to challenge cultural spaces and definitions by constantly shifting borders and expectations. Tracking down the directions of what is accepted as believable or unbelievable on the forefront of imaginary about the future can function as a marker of the deep contrasts between cultural visions beneath the surface of nowadays political narratives on the climate crisis.

The critical analysis of literary fictions of the ending, then, can be conducted at least on two different levels of insight, firstly, by analysing what kind of cultural structures, concepts and paradigms are visible between the lines of a fiction of the ending. This level engages the concept of *Weltanschauung*. Secondly, by deepening the analysis. How are chosen concepts and paradigms to build a narrative that will at the same time mirror and influence the present moment's sociopolitical understanding of reality? This second level focuses more on the acts of «worlding» in Science Fiction: «SF is storytelling and fact telling; it is the patterning of possible worlds and possible times, material-semiotic worlds, gone, here, and yet to come» (Haraway, 2016, 31)². It is this second level that can answer more specifically to the main question of this study.

² See also Haraway (2019, 10).

1. Naturalism

As the ecofeminist tradition has highlighted³, the perception of what has been called «Nature» in Western culture and its relations to the human sphere nowadays is deeply influenced by a radical conceptual shift in philosophy during the Modern Age, that gave birth to scientific method and the Cartesian foundations of Rationalism.

Ancient Greece's philosophy understood knowledge as a research on the «final causes» of things, analysing every entity in relation to their own value, characteristics and place inside an organic cosmos. The essential concept of *Lògos* was derived from *legein*, which means to bind together, connect, but also weave. Thus, every science that has the suffix *-logy* (i.e. biology, psychology, geology, etc.) traces back to a conception of knowledge as a study of the relationships between the elements in a field. The radical change started with the translation (and betrayal) of *Lògos* into the Latin *Ratio* – «relation», «proportion». The dualistic opposition of contraries – in Ancient Greece's philosophy (i.e. in the *Apeiron* of Anaximander) contraries were bound together in a relation where both were equally indispensable to maintain the cosmic balance – was progressively transformed and affirmed in the Modern Age as a vertical hierarchy and proportion, a *Ratio*, between a superior element and an inferior one. Galileo Galilei claimed that mathematics is the secret language of Nature and it should be considered the key to develop science, in so doing starting the shifting from a qualitative paradigm of knowledge to a quantitative one. Furthermore, Francis Bacon in his *Novum Organum* wrote that the focus should be moved to the understanding of «efficient causes», with the aim to dominate Nature by intervening in the mechanical chains of causes and effects to advantage human needs. The intrinsic value of beings, then, is replaced by an evaluation of usefulness. Ultimately, René Descartes built the foundations of his Method (of knowledge) on the scission between *res cogitans* and *res extensa*, thought and matter; the latter opposite and inferior to the former. The result of such cultural transformation is that what has been called «Nature», once seen as an organic transcendental being, was

³ Carolyn Merchant, Evelyn Fox-Keller, Vandana Shiva, Maria Mies.

reduced to a mechanical entity with no intrinsic value, apt to be dominated by the human superior force of intellect – *Ratio*. On this basis Rationalism, and then the Enlightenment, shaped their philosophy and politics toward Nature.

Second Wave's Feminism, and particularly Ecofeminism, have recognized the vertical hierarchy built on opposition as a recurring scheme, weaving together different forms of oppression not only among humans but also in relation with non-human entities: «the ideology which authorizes oppressions such as those based on race, class, gender, sexuality, physical abilities, and species is the same ideology which sanctions the oppression of nature» (Gaard, 1993, 1). That same scheme is at the root of the capitalist system, which represent the main cause of the climate crisis⁴.

Such *Weltanschauung*, based on an opposing and competitive conceptualization of what is considered «Human» or «cultural» to what is, in turn, «Nature» or «natural», has been widely described by the environmental anthropologist Philippe Descola in *Beyond Nature and Culture* (2013) as the typical paradigm of Western cultures, and called «Naturalism». Naturalism is a perspective that values differences upon similarities based on a «objectification of the subjective», dividing and elevating what is considered representative of «humanity» above everything else.

The infinite and homogeneous space of linear perspective is, however, constructed on axes that start from an arbitrary point, that of the direction of the gaze of the observer. So, a subjective impression serves as the starting point for the rationalization of a world of experience in which the phenomenal space of perception is transposed into a mathematical space. Such an “objectification of the subjective” produces a twofold effect: it creates a distance between man and the world by making the autonomy of things depend upon man; and it systematizes and stabilizes the external universe even as it confers upon the subject absolute mastery over the organization of this newly conquered exteriority (Descola, 2004, 59-60).

⁴ See, among others, Merchant (1983); Gaard (1993); Mies and Shiva (1993); Federici (2004); Moore (2017).

In other words, «Naturalism» identifies a centralizing perspective that develops a structure of reality from an archetypal model of human. Such model of subjectivity has been built throughout the entire history of Western culture, but went through a particular radicalization during the Modern Age, thickening around the features of male, white, rational, active and dominating subject. Naturalism therefore develops as an anthropocentric, patriarchal, ethnocentric and colonialist perspective.

Naturalism represents the dominating symbolic order in Western cultures. It still represents, in other words, the frame of reference for reality's interpretation mostly used by those who hold a position of power, be it institutions, governments, politicians, universities or corporations, while managing the social space and figuring out solutions. On the other end, it is also the very frame that gave birth to the social, political and economic causes of the climate crisis.

2. Capitalist realism and Science Fiction

From its publishing in 2009, Mark Fisher's *Capitalist Realism: Is There no Alternative?* (1996) has increasingly become one of the most discussed books in Western social critique, and has already being called a «classic». The author's political analysis is tightly interwoven with pop culture and arising from the upturning between the exuberant, revolutionary and creative approach to the future from the 90s to the nostalgic and disillusioned one of the 2000s. What stands at the core of *Capitalist Realism's* critique is, indeed, capitalist narratives and their influences on political imaginaries.

In spite of the 2008's economical breakdown, the neoliberal and Thatcherian «There Is No Alternative» perspective did not collapse on reality's evidence, thus, according to Fisher, confirming a new «state» of capitalism, the one of «capitalist realism». This kind of realism has reached the extreme by designating an ideologic state of *impasse* – its ideology believes in capitalism as the only economic system that can exist, now and in every future –, that spreads from the economic field to the cultural one, becoming internalized by people and showing itself most evidently in the

artistic production. To Fisher, capitalistic realism is characterized by «hauntology», a term conceived by Jacques Derrida, meaning a nostalgic attitude toward a lost future. In Western societies, and rapidly spreading through the whole world through globalization, such *Weltanschauung* cancels the possibility of a future different from the present. It does not mean that there is no progress or change in habits, but that those changes would be only *within* capitalistic tracks and borders.

To Mark Fisher, art, history and culture in capitalist realism are subjected to a materialistic and neutralizing irony that transforms them in pure objects, «artifacts» detached from any transcendent meaning. The reason is to shield people from any ideology that could possibly lead to totalitarianisms or fanaticism, but also to «reassemble» culture in a different shape, compliant to capitalist means. The result is the loss of the culture's structure of significance, as well as the capacity for people to learn from historical experience, to apply critical thinking and to deeply believe in ideas, visions, possibilities. It is like trying to locate a place with a map torn in pieces. Furthermore, the normal dialectic between revolutionary and reactionary forces in society has been numbed through «precorporation», defined as «the pre-emptive formatting and shaping of desires, aspirations and hopes by capitalist culture» (Fisher, 1996, 16). In other words, to Fisher capitalistic realism changes cultural and political imaginary, making their fictions of the future essentially *compliant* to its ideology: «it's easier to imagine the end of the world than the end of capitalism» (1996, 8)⁵. This quote stands at the core of the most recent debates about «worlding» in Science Fiction and particularly about dystopic narratives.

Dystopic and utopic narratives are nowadays considered identical to Science Fiction, but actually it is more of a recent situation. To some scholars, utopic writing in particular developed independently from the genre, becoming «a sort of para-SF, entwining itself round the genre in the Nineteenth and Twentieth centuries» (Roberts, 2006, IX)⁶. The debate on the definition of what is to be considered «dystopic literature» or «anti-utopic literature», if they are the same thing or not, and which are their

⁵ The sentence is originally by Fredric Jameson.

⁶ See also Suvin (1988) and Ferns (1999).

main traits, is still open⁷. To address it, I will briefly recall the history of dystopic narratives and their role as critical tools in Western cultures.

According to Gregory Claeys' *Dystopia: a Natural History* (2017), dystopia has always had a strong relation to political satire and criticism. Indeed, it is believed to origin from political satire right after the French Revolution. During the Industrial Revolution its critical aspects developed out of industrialization, social inequality, and the growing popularity of Socialism and social Darwinism. Focused at first on economic and political issues, dystopia extended now to science and technological future imaginaries. The main topics became the ideology of Progress and the fear that machines would overpower humans. The Russian Revolution in 1917 ignited a new collectivist version of the «industrial utopia» (Claeys, 2017, 337) but, when violent means tainted revolutionary ideals, Stalinism became one of the main targets of satirical and dystopic fictions. Between the two Wars, in the 30s, Claeys reports the spreading of «future war novels» about fascist/totalitarian imaginary, especially in Britain and the USA, lately replaced by anti-Soviet fictions and dystopic interrogations of «the problematic of political dictatorship and the overpowering nature of machine civilization» (Claeys, 2017, 356).

The period between 1938 and 1946 has been defined the «Golden Age» of Science Fiction, characterized by «'Hard SF', linear narratives, heroes solving problems or countering threats in a space-opera or technological-adventure idiom». More precisely, according to Adam Roberts, it was an enhancement of «idea-fictions rooted in recognizable science (and later in his long career, in pseudo-sciences such as telepathy); can-do stories about heroes solving problems or overcoming enemies, expansionist humano-centric (and often phallogentric) narratives, extrapolations of possible technologies and their social and human impacts» (Roberts, 2006, 195).

It is in the years between the 60s and the 80s that the bind between SF and utopic/dystopic narratives became more fruitful. The period has been called «New Wave» and almost considered to coincide with the

⁷ Regarding the problem of definitions, I recommend Claeys' detailed overview at the beginning of the chapter «Mechanism, Collectivism and Humanity: the Origins of Dystopian Literature, 1810-1945»; see also Clute *et al.*, eds. (1993).

journal *New Worlds*' publications. They «reflected a broader artistic refusal of 'the shiny promise of technological modernity'» (Merrick, 2009, 104) and included the sociopolitical critique coming from environmental and feminist Science Fiction new explorations. As Alcena Madeline Davis Rogan writes, the «critical utopia» represented the most popular form of that times.

The critical utopia, which emerged as a dominant form of utopian writing during the 1960s and 1970s, tends to reflect the sociopolitical concerns of an era characterized by demands for change in the areas of global exploitation (the "Third World problem," ecological exploitation), gender inequality, race inequality, and class antagonism. These novels "reject utopia as a blueprint while preserving it as a dream," they "dwell on the conflict between the originary world and the utopian society opposed to it so that the process of social change is more directly articulated", and they "focus on the continuing presence of difference and imperfection within the utopian society itself and thus render more recognizable and dynamic alternatives". Such explicitly critical works of this era include novels by Suzy McKee Charnas, Samuel R. Delany, Ursula K. Le Guin, Marge Piercy, and Joanna Russ (Davis Rogan, 2009, 313).

The author separates critical utopias from dystopias «in a provisional way» by defining the latter as «critical utopias that contain the *least* promise for the change or growth of the posited future or parallel space». However, what is relevant to this study is that in those years the reference to socio-political theories and critiques was crucial to (broadly intended) dystopic fictions. Thus, SF could be seen as a literary expression of political activism. As Coral Ann Howells writes about Atwood's dystopic narratives «the primary function of a dystopia is to send out danger signals to its readers: «Many dystopias are self-consciously warnings. A warning implies that choice, and therefore hope, are still possible» (Howells, 2006, 161; Moylan, 2000, 136). Between the late 60s and the 80s, indeed, a clear feeling of the Western capitalist and imperialist paradigm's destructiveness was driving, both in Europe and abroad. The never-ending war's escalating violence and horrors, the ecological disasters caused by reckless behaviors by capitalistic exploitation – i.e. Seveso (1976), Love Canal (1978), Three Mile Island (1979), Bhopal (1984), Chernobyl (1986) –, and the actual danger of a world atomic destruction inflamed the political and

cultural critique. Science Fiction by feminist authors was a strong part of this counter-culture.

Analogous to feminist reading, feminist sf [science fiction] is not simply sf about women; it is sf written in the interests of women – however diversely those interests are defined by individual writers. It is a potent tool for feminist imaginative projects that are the necessary first steps in undertaking the cultural and social transformations that are the aims of the feminist political enterprise. [...] As feminist theoretical models – abstract constructions of the subject, of representation, of sexual difference – become fleshed out in the particularized worlds of the sf imagination, sf articulates and explores those models through its narrative experiments and, in the ongoing dialectical relationship between abstraction and concretization, feminist theory continues to influence the development of the new worlds and new futures of the genre. The resulting stories are not simply programmatic “mirrors” of particular theoretical arguments, of course, but rather they incorporate those arguments into the lives and actions of imagined human subjects in imaginary worlds, subjecting them to detailed fictional examination (Hollinger, 2003, 129).

However, the Science Fiction mainstream of that same years – or, at least, its institutional recognition – seemed to follow other directions. The political scientist Hoda Ms. Zaki, author of *Phoenix Renewed: the Survival and Mutation of Utopian Thought in North American Science Fiction 1965-1982* (1988), developed a study on utopic narratives based on nineteen novels that won the Nebula Award. The author highlighted a radical shift. If «utopic» (literally, to represent worlds and situations distant from reality) features were common to all of them, none of them is an actual utopia (a better place). On the contrary, they seem to have shifted completely to dystopia: although criticizing the contemporary, no better alternative is presented for the future. From the 80s on, the situation developed even more. As John Clute writes,

Since 1980, the relationship between sf and the world, a relationship which could be described as a kind of mutual harnessing, had altered, therefore, almost out of all recognition. [...] This institution continued to figure the future in ways useful and pleasurable to its readers; or it dissolved into a world so complex and future-irradiated that sf was just another voice in a Babel of mission statements; or both. [...] By around 1990, however, when the Internet began radically to

shape our sense of the nature of the real world, sf as a set of arguments and conventions was in some disarray. It had been blindsided by the future. The only form of sf to grapple imaginatively with at least some aspects of the dizzying new order was Cyberpunk, a term coined by sf writer Bruce Bethke in 1983 to describe novels and stories about the information explosion of the 1980s (hence “Cyber”, from cybernetics), most of them picturing a dense, urban, confusing new world in which most of us will find that we have been disenfranchised from any real power (hence “punk”) [...] imaginatively dense but clearly not directed towards explicating or illuminating the revolutions in the routines of individual and corporate life that were transforming the daylight hours first of the industrialized world, and soon afterwards the world entire (2003, 65-67).

Cyberpunk seems to lose the aim to criticize its contemporary time, focusing instead on the attempt to simply represent the «new world» of information technology and the marvelous future coming from it (Clute, 2003, 68).

Therefore, it can be said that especially from the 80s on, and apart from the feminist current (i.e. Atwood, Le Guin), Science Fiction generally faced a progressive detachment from its critical role and, in particular, from the aim to speculate on social and political alternatives to build political imaginaries.

In his recent study *Contra la distopía. La cara B de un género de masas* (2021), the philosopher Francisco Martorell Campos analyses the dystopic narratives’ developments in Western culture from a perspective similar to the one of Mark Fisher, focusing on the mutual relationships between capitalism, postmodernism, fictions and political imagination. The author’s focal point is nowadays’ massive circulation of dystopic narratives in pop culture compared to the simultaneous disappearance of the utopic ones. Martorell Campos calls such phenomenon «dystophilia» or «Dystopiland»⁸.

As he outlines, dystopia’s popularity has already been high in the past, but with some differences.

the first [difference][...] is that, for many dystopian waves that have occurred in the past, none has conquered the *mainstream* circles so strongly. [...] The second

⁸ All the English translations from this work are mine.

[difference][...] is that dystopia is no longer limited to a specific literary genre. In a certain way, it leads the demoralized spirit of our epoch, an instance where, between other alarmist speeches (apocalyptic, conspiratorial), it plays the most prominent role. [...] The third difference is related to the two mentioned above, and represent the most disruptive and extraordinary element. I refer to the fact that the current preponderance of dystopia conflates with the absence of alternatives to capitalism (Martorell Campos, 2021, 38-39).

Martorell Campos' thesis is that dystophilia – the massive spreading of dystopic narratives – mirrors neoliberal TINA's (There Is No Alternative) scenarios. The author broadens Fredric Jameson's assertions on the reversed balance between utopias and dystopias cultural significance in the USA (Jameson, 2016) by affirming that dystophilia finds its beginnings way back, in the end of World War II, and has nowadays spread also to non-Western societies by following capitalist globalization.

Dystophilia is the result of the simultaneous processes of «dystopization» and «de-utopization» of narratives (Martorell Campos, 2021, 24; 37). At the end of the Second World War, when «with totalitarianisms, atomic bombs, genocides, the Gulag and state violence occupying the forefront of the discussion, it was already dystopia that monopolized the public's appreciation, not utopia, which on the contrary reached its historical lowest levels of publishing» (Martorell Campos, 2021, 34). To the author the dystopization was directly connected to «the wealthy late capitalism's transformation, supported by the rising computer technologies, from national markets to the global market, from the industrial economy to the financial economy, from social democracy to neoliberalism, [thus transitioning] from modernity to postmodernity» (2021, 34). It is especially from 1989, when Thatcherian TINA's neoliberal perspective conquered Western political horizons, that the «general eclipse» of utopic narratives was completed.

In the very same years de-utopization rooted in political disillusionment toward the utopic visions of socialism and in the consequent fear for the future.

The millenarian drift at the beginning of 2000 was the foretaste of what was to come: an era of disenchantment and distress in which the future loses its aura

and degenerates into a hostile territory, populated with the worst nightmares and omens, crossed by the feeling that our misdeeds, vices and egoisms are going to be punished. Two decades later, we face an atmosphere even more miserable, subjugated by the “fascination for the apocalypse” and by the impression of living the over and over extended times, in the antechamber of tomorrow’s final sentence when the planet will suddenly collapse (Martorell Campos, 2021, 25-26).

To Martorell Campos Science Fiction’s total loss of its critical role and capacity to imagine alternatives coincided with the spreading of dystopic imagination to the point that such narratives have become, nowadays, devices of assimilation to TINA’s scenarios in capitalist realism. In other words, his interpretation represents a development and a very literal understanding of the expression «it’s easier to imagine the end of the world than the end of capitalism» (Fisher, 2009, 1). Dystopic narratives are directly working on making people accept apocalyptic scenarios rather than change the economic system to reduce the climate crisis. Western people are culturally getting used to the idea of living in apocalyptic scenarios of natural disasters, pandemics, famine, drought, heat waves, and structural cruel inequalities, because they are convinced that «there are no alternatives» to the economic and cultural system that is causing them.

However, the theories of Fisher and Martorell Campos must be considered in two ways. On the one side, they are fruitful to highlight problematic aspects of the cultural mainstream specific to Western countries and neoliberal narratives around the world. On the other side, their theories lack the non-Western political perspectives, the ecological, feminist and ecofeminists studies and activism, the decolonial studies and movements. It is significant, that Fisher’s references in *Capitalist Realism: there is no Alternative?* are exclusively of Western male theorists, and that even the Western tradition of feminist studies on capitalism⁹ is completely ignored. Regarding Martorell Campos’ reconstruction of the Western dystopization, he openly dismisses the impact of feminist and environmentalist novels from the ’70-’80s. Therefore, in a certain way both Fisher and Martorell Campos fall into a Western and male self-

⁹ For instance: Silvia Federici, Nancy Fraser, Maria Mies.

referential bubble which is likely to theoretically reproduce TINA scenarios. Lacking in the recognition of other voices and literatures around the world, as well as the counter-movements and the counter-narratives, their critique miss the opportunity to lead to any truly alternative solution. It is only by stepping out of the frame of reference of Western culture and Naturalism that new perspectives can arise: as Audre Lorde wrote, «the Master's tool will never dismantle the Master's house» (Lorde, 2020, 39).

Science Fiction and Fantasy are literary genres that take imagination to the limit. Unlike other kind of fictions, they do not only challenge the relations between characters, the evolution of the inner world, the contrasts between the individual and the collective, as well as between tradition and innovation, great movements of history and private life of individuals. What they challenge is the very structure of the world and the representation of it: of what is thought as «impossible». Science Fiction represents the maximum level of literature's questioning on reality, and practicing of «worlding». It is not surprising, therefore, that Haraway in *Staying with the trouble* describes it as an «ubiquitous figure» and develops her concept of «worlding» around the acronym «SF», to be understood as an iridescent texture between «science fiction, speculative fabulation, string figures, speculative feminism, science fact, so far» (Haraway, 2016, 2).

The next sections of this study will be dedicated to analyze three Science Fiction novels to outline the dialectic between the representation of a fiction of the ending and the attempt to create a different vision of reality that could influence the present political imaginary. How their practices of «worlding» work with Naturalism?

3. Mary Shelley

Mary Shelley's *The Last Man* and Margaret Atwood's *Oryx and Crake* share three interesting elements in their particular «worlding». Firstly, a dystopic narrative of the human species' apocalyptic extinction by a pandemic. Secondly, the fact that only a human male survives to witness

the end, and finally a critique of Naturalism. It is particularly in this third aspect that lies a crucial distance between the two. Atwood's representation can be considered as an evolution of Shelley's perspective. An evolution that mirrors the cultural development of modern Rationalism in the late XX century's ideology of Progress and Scientism.

Kate Rigby, in her 2015 book *Dancing with Disaster. Environmental Histories, Narratives, and Ethics for Perilous Times*, has analysed Shelley's *The Last Man*. As she writes, the choice of a pandemic scenario comes with specific features.

Until very recently, and in most cases presumably still today, earthquakes and volcanoes are not anthropogenic in origin, even though [...] the eco-catastrophes that they trigger have a strongly sociocultural dimension. Epidemics, by contrast, are hybrid through and through: pestilence spreads, to be sure, and over the past 150 years our understanding of the multiple other-than-human agencies responsible for the proliferation of infectious diseases has grown enormously; but so too have those sociocultural practices through which humans themselves inadvertently spread pestilence across the planet (Rigby, 2015, 52).

Earthquakes, floods, hurricanes and similar natural disasters have been considered for centuries in Western cultures as expressions of a non-human entity's will, some kind of *Otherness* that occasionally afflicts humans due to anger or simple malignity. From the modern era onward, that entity has no longer been represented as supernatural and active but as natural and passive. Nature became the Otherness' material burden from which humans must emancipate through rationality, science and, later, technology¹⁰. In this perspective, calamities have been usually ascribed entirely to Nature, therefore easily embedded in a Nature vs Human/Culture logic. However, a disease has never been easy to univocally attribute. It is a calamity that passes through from the outside to the inside of our bodies, from body to body, and from place to place. Its spreading depends on natural factors as well as on cultural and social ones, debunking ideological separations. Shelley's choice of «worlding»

¹⁰ Shiva and Mies outlined an interesting connection between the concept of emancipation from nature and the shaping of a concept of freedom (1993).

therefore can be read as a questioning of the Naturalism *Weltanschauung* from the very beginning.

Within this perspective, both novels can be read as depicting an opposition. On the one side there is human society, dominated by the modern conception of Nature and the cultural desire of emancipation from its limits; on the other, the interconnections between humans, non-human and the environment. In *The Last Man*, additionally, the more humans seem to deny their vulnerability and belonging to Nature, the more the disease worsens. The detachment and consequent collision between reality and the human's ideological interpretation is at the core of both novels, representing one of the main axes of their critique.

Focusing now on Mary Shelley's novel, it is interesting to notice that the author's view of the Human-Nature relationship is opposite to the one of her contemporaries and fellow Romantics, particularly of her partner, Percy Bysshe Shelley,

some writers and philosophers of the Romantic period were attracted by the idea that human moral and techno-scientific advancement could, in time, bring about an "active imparadising" of the Earth. Among them was Percy Bysshe Shelley, who, in his ecotopian poem "Queen Mab" (1813), for example, envisages an emancipated humanity living in harmony with other creatures, as "an equal amidst equals" (VIII, line 226), in a universally habitable (and specifically, temperate) earth from which, echoing the eschatology of Isaiah, all wildness and discord have been eradicated, thanks to a felicitous marriage of Mind and Nature, in which the former has nonetheless retained its "omnipotence" (line 236) (Rigby, 2015, 66).

In *The Last Man* the author dismantles this *Weltanschauung* by shaping a fiction of the ending about what would happen with such «felicitous marriage».

The two male main characters (apart from the storyteller), Adrian and Raymond – who are respectively believed to represent Percy Shelley and Lord Byron (Bianchi, 2020) –, represent two contrary attitudes toward the world around them. Raymond embodies the archetypal model of the Modern subject, in opposition to the more empathetic and less radically opposed to non-human features of Adrian.

No two persons could be more opposite than Adrian and he. With all the incongruities of his character, Raymond was emphatically a man of the world. His passions were violent; as these often obtained the mastery over him, he could not always square his conduct to the obvious line of self-interest, but self-gratification at least was the paramount object with him. He looked on the structure of society as but a part of the machinery which supported the web on which his life was traced. The earth was spread out as a highway for him; the heavens built up as a canopy for him.

Adrian felt that he is a part of a greater wholenesses. He owned affinity not only with mankind, but all nature was akin to him; the mountains and sky were his friends; the winds of heaven and the offspring of earth his play-mates; while he the focus only of this mighty mirror, felt his life mingle with the universe of existence. His soul was sympathy, and dedicated to the worship of beauty and excellence (Shelley, 1996, 35).

As a consequence, the novel focuses for long on Raymond's beliefs and attitude progressive destruction, until the character's death. His actions represent the leverage point of the story, the main cause of the apocalyptic end.

In the first volume, Raymond's androcentric and anthropocentric spirit of domination, after a period of temporary calm during the idyllic life with his friends in Windsor, awakens to the lure of power and war glory. His disdain for a peaceful life, a peaceful relationship with the world around him and, in particular, for the limits that Nature seems to put on his ambitions, increases more and more. It reaches its peak when, in the second volume, Raymond forces his army to storm the city of Constantinople in spite of the plague spreading inside its walls. It is simultaneously the last act of the Modern subjectivity – the Mind – trying to impose its «omnipotence» on Nature, and the turning point of the novel. The assault claims Raymond's life, his horse's and his dog's. The plague, from that moment on, races across countries, mostly carried by soldiers. The apocalypse starts its final rush, leaving to Lionel Verney, the storyteller, the task to retrospectively understand and criticize the events in the end.

The disease' striking on humans seems to play the role of Nature's reaction to the Modern subject's denial of dependence and to its last

attempt of domination. From that moment on, a chain of natural events spreads and leads inevitably to the species' extinction, no matter what virtuous behaviors may come after – i.e. Adrian's compassion and his virtuous management of London's pandemic.

The «last man on Earth» literary *topos* seems to appear in European literature by the beginning of the XIX century. As Rigby mentions in her book, since 1823 there had been a controversy in the literary *milieu* about who invented it. Geology's latest discoveries of that times had the effect of increasing the interest in the topic even more.

Investigations of rock strata had led some in the nascent field of geology to postulate planetary catastrophe as a vehicle of terrestrial transformation, while the fossilized evidence of now-extinct species suggested that such “revolutions” might have played an important role in the generation of the existing family of life. Even among those who posited a more gradual process of evolution, the recognition that entire species had died out in the past opened the possibility that humans too could one day become extinct (Rigby, 2015, 67).

In addition, the popular concern about the impact of human societies on the environment, generated by the Industrial Revolution, increased when merged with the apprehensions that rose as a result of the natural disasters that occurred in those decades. Three cyclonic storms struck the Caribbean in the 1780s, many earthquakes shook Italy, Crete, Ecuador and Sumatra at the beginning of the XIX century, and in 1815 the Tambora volcano erupted in Indonesia, temporally changing the weather all the way to Europe. The «last man» fiction of the ending was very popular then; nonetheless Mary Shelley gave a quite original interpretation of it.

At that time the «last man» fiction provided for a general extinction of the animal world, excluding humans. Moreover, according to the alternative vision offered by the Bible, such apocalyptic image should have included a final redemption. In Shelley's «worlding» neither of these features are included; humans are the only species that disappears, while natural environments seem to flourish after its extinction, and there are no elements that can be described as redemptive. In my view, this particular swerve by the author is crucial to her critique toward Naturalism and its material consequences.

The third volume begins with a farewell to human culture – English in particular –, to the sense of omnipotence and desire of conquest, now meaningless. Here, some of the most sought-after ideals and achievements of the Industrial Revolution are easily identifiable.

Man existed by twos and threes; man, the individual who might sleep, and wake, and perform the animal functions; but man, in himself weak, yet more powerful in congregated numbers than wind or ocean; man, the queller of the elements, the lord of created nature, the peer of demi-gods, existed no longer.

Farewell to the patriotic scene, to the love of liberty and well earned meed of virtuous aspiration! — farewell to crowded senate, vocal with the councils of the wise, whose laws were keener than the sword blade tempered at Damascus! — farewell to kingly pomp and warlike pageantry; the crowns are in the dust, and the wearers are in their graves! — farewell to the desire of rule, and the hope of victory; to high vaulting ambition, to the appetite for praise, and the craving for the suffrage of their fellows! The nations are no longer!

[...] Farewell to the giant powers of man, — to knowledge that could pilot the deep-drawing bark through the opposing waters of shoreless ocean, — to science that directed the silken balloon through the pathless air, — to the power that could put a barrier to mighty waters, and set in motion wheels, and beams, and vast machinery, that could divide rocks of granite or marble, and make the mountains plain!

Farewell to the arts, — to eloquence, which is to the human mind as the winds to the sea, stirring, and then allaying it; — farewell to poetry and deep philosophy, for man's imagination is cold, and his enquiring mind can no longer expatiate on the wonders of life (Shelley, 1996, 253-254).

The author here seems to draw up a list of the cultural wonders and treasures that such a destructive attitude would tear apart, going through ideals, discoveries and inventions, arts and philosophy, thus recommending to the reader an inverse hierarchy between Nature and Culture. There is no Culture if Nature turns against the human species.

The final part of the novel, particularly from the moment of Idris' death on, can be read as the main exposure of the author's view – although *ex-negative*. The dystopian fiction of what could happen if such opposing and anthropocentric vision were pursued till the end, gives Shelley the opportunity to explicit which acknowledgments of the real dependencies between Human and Nature are most needed. Among them, the value of

life, love and kindness to others, of compassion, tolerance and peace between populations, the respect for Nature's limits.

It can also be said that Mary Shelley, facing in life what can surely be considered a «crisis» – the Greek War of Independence and the many waves of illnesses that left the author mourning her husband, her children and many friends (Rigby, 2015, 66-67), but also, on the other hand, the embitterment of modern ideology –, in her literary production refused the common visions of her times. She criticizes and dismantles her fellow Romantics' vision of a «paradise» built on the androcentric domination over Nature, calling out the undeniable interrelations between humans and the environment, as well as the irreducible duality of men and women into the species itself. It is significant, indeed, that the main protagonists of this novel – and the narrator's voice above them – are men. In this way, the author stages what can be considered as a *Bildungsroman* of the Modern subject that she saw embodied in her contemporaries' choices and attitudes. We should not forget that, although the novel is set in the future (years 2073-2100), the society, technologies and wars depicted are the ones of the writer's present. Furthermore, she refuses to consider the apocalypse in terms of a consoling vision of biblical matrix. As Morton Paley describes it, Shelley writes an «apocalypse without millennium» (Paley, 1989). There is no redemptive violence; no supernatural entity which, after a final acknowledgment of collective or individual mistakes, will come over to save and forgive. The harder the path chosen by humans, the more ruthless the reactions by Nature.

To conclude *The Last Man* analysis, Mary Shelly's literary and political approach to the crisis can be described as, firstly, a representation of the main features of what she considers its cause, the anthropocentric and androcentric perspective of Naturalism; and, secondly, as a clear rejection to it. The author creates a sharp *aut-aut* panorama. On the one side the apocalyptic fiction of the ending resulting from Naturalism; on the other, the only possibility taken in consideration to avoid the crisis appears to be the turning upside down of this *Weltanschauung*, without breaking out from it.

4. Margaret Atwood

There is one aspect that stands out immediately in Margaret Atwood's *Oryx and Crake* (2003). Unlike Shelley's need to explicit the problematicness of Naturalism, in Atwood's novel there is already a general awareness about it. What separates the two authors are the ecology movement's historical achievements during the last decades of the XX century, Critical Theory's philosophical tradition, the Feminist movement, decolonial studies and Capitalism's critique. Atwood highlight here many aspects related to late development of Naturalism, such as the racist exploitation of non-Western populations, cultural imperialism, sexism and misogyny, and the consumerism of goods, environments and people.

The scenario that the writer depicts is, in fact, part of our own reality, as XXI century Western people, and of North-Americans in particular¹¹. Indeed, the author defined this work not a Science Fiction novel but a «speculative fiction» one (Atwood, 2004a; Atwood, 2005)¹².

I define science fiction as fiction in which things happen that are not possible today – that depend, for instance, on advanced space travel, time travel, the discovery of green monsters on other planets or galaxies, or which contain various technologies we have not yet developed. But [here] nothing happens that the human race has not already done at some time in the past, or which is it not doing now, perhaps in other countries, or for which it has not yet developed the technology. We've done it, or we're doing it, or we could start doing it tomorrow.

¹¹ John Clute finds the dystopic imaginary of the American society in American Science Fiction novels of the late XX century as descending directly from the American Dream storytelling: «It was a First World vision, a set of stories about the future written by inhabitants of, and for the benefit of readers who were inhabitants of, the industrialized Western world, which dominated the twentieth century; simplistically, it was a set of stories about the American Dream. In this Dream, progress was achieved through an invasive understanding of nature that led to the control of nature, through miracles of applied opportunity-grabbing science; through the penetration of frontiers; through the taming of alien peoples on other worlds; through an establishment of hierarchical centralized governances throughout the galaxy» (2003, 66).

¹² However, according to John Clute the vanishing distance between novels and reality is one of the main '80s-to-'10s American Science Fiction's characteristics (2003).

Nothing inconceivable takes place, and the projected trends on which my future society is based are already in motion (Atwood, 2004b, 245-246)¹³.

The story is narrated from the post-apocalyptic point of view of «Snowman», who believes to be the last man of our species. Snowman – his name was Jimmy before the apocalypse – recalls his life before the pandemic. Created in laboratory by the genius villain Crake, who was also his best friend, the virus has been intentionally spread through a sex pill. Crake worked as a bioengineer in a multinational corporation, a cover for his ecoterrorist plan to extinct the human species and build a new one, herbivorous, peaceful and «integrated» with Nature. This species, called «Crakers» by Snowman, has been hidden on a tropical island, kept isolated and trained to live in the forest by Oryx, a survivor of the sex trade. During the rampage of the pandemic and the mass chaos caused by it, Jimmy discovered Crake's plan. However, it was too late, Crake killed Oryx to push Jimmy to kill him. Meanwhile, the Crakers were freed on the island. From that moment on, Jimmy was left alone and became the Snowman. While he goes over all his memories of his friendship with Crake and his love for Oryx, Snowman tries to survive and to look after the Crakers by creating myths and stories about their origin and how they should behave.

Through Snowman's memories the reader learns about a North-American society where what we call «Nature» has been completely subjugated by positivistic science and capitalistic exploitation. Scientists plays with Nature through bioengineering without any ethical boundary¹⁴: many species are genetically crossbred to better meet human desires, for profit or even for fun, creating «wolvogs, pigeons, bobkittens» and «rakunk» (Atwood, 2003, 42, 49). Animals, plants, fungi, bacteria and viruses are all brought under the name of «bioforms»; there are no real distinctions both between different configurations of «matter» within a radical mechanistic perspective, and between what existed as a result of natural processes and what has been created in laboratories by humans.

¹³ The quotation is originally referred to *The Handmaid's Tale*, but from the publishing of *Oryx and Crake's* onward, Atwood considers both novels to share the same characteristics and to equally belong to «speculative fiction».

¹⁴ Atwood takes this particular imagination from Edward O. Wilson's *The Future of Life* (2002), which she considered the background of the novel (Hengen, 2006, 73).

The only distinction that seems to matter in this society is between «hostile» and «non-hostile»: a general subtle sensation of fear and danger for everything that comes from the «outside» is constantly perceivable.

Three aspects are particularly interesting in Atwood's «worlding» in comparison to Shelley's novel. Firstly, the clear distance shown between Naturalism – particularly in its consequence, neoliberal capitalist accumulation and scientism – and reality, its non-absoluteness. Secondly, the role of the pandemic in the novel, which is very different from the one in Shelley's. Thirdly, a critique toward some ecological positions through the character of Crake.

In contrast to *The Last Man*, some of Atwood's characters in the novel are well aware of their society's present issues. Jimmy's mother, a scientist, quits her job and slowly falls into the deepest end of depression due to inner ethical conflict. The fight with her husband, just before she runs away to join the ecological rebellion, represents the collision between two perspectives: like in Shelley's, Naturalism on the one side, and a complex sociopolitical vision of a reality made by interconnections between human and non-human entities on the other.

“Can't you be positive, just for once? All this negative stuff, *this is no good, that's no good*, nothing's ever good enough, according to you!”

“Positive about what? That you've thought up yet another way of rip off a bunch of desperate people?” said Jimmy's mother in that new slow, anger-free voice.

“God, you're cynical!”

“No, you are. You and your smart partners. Your colleagues. It's wrong, the whole organization is wrong, it's a moral cesspool and you know it.”

“We can give people hope. Hope isn't ripping off!”

“At NooSkins' prices it is. You hype your wares and take all their money and then they run out of cash, and its no more treatments for them. They can rot as far as you and your pals are concerned. Don't you remember the way we used to talk, everything we wanted to do? Making life better for people – not just people with money. You used to be so... you had ideals, then. [...] Be that as it may, there's research and there's research. What you are doing – this pig brain thing. You're interfering with the building blocks of life. It's immoral. It's... sacrilegious.”

[...] “I don't believe I'm hearing this! Who you've been listening to? You're an educated person, you did this stuff yourself! It's just proteins, you know that! There's nothing sacred about cells and tissue, it's just...”

“I'm familiar with the theory” (Atwood, 2003, 56-57).

It is interesting that not only animals suffer capitalistic exploitation. What we could call the «natural aspects» of humans according to Cartesian dualism – emotions and bodies – are not spared either. Death, love, suffering, violence, all is at the paying user's disposal through the Web without any ethical filter: surgeries, executions, electrocutions and lethal injections, mutilations, assisted-suicide, vulnerable animal killings. And porn, beyond any imagination. Everything seems to blur in a single picture of nonsense and violence that turns people insensitive.

So, they'd roll a few joints and smoke them while watching the executions and the porn – the body parts moving around on the screen in slow motion, an underwater ballet of flesh and blood under stress, hard and soft joining and separating, groans and screams, close-ups of clenched eyes and clenched teeth, spurts of this or that. If you switch back and forth fast, it all came to look like the same event. Sometimes they'd had both things on at once, each on a different screen. [...] Jimmy on the other hand would wobble homewards, still fuzzy from the dope and feeling as if he'd been to an orgy, one at which he had no control at all over what had happened to him. What had been done to him (Atwood, 2003, 86-87).

Atwood's particular «worlding» seems to show the intention to, firstly, highlight how such phenomena – many of the websites that she describes truly exists (*The Sobriquet*, 2011) – ascribes to Naturalism, which comes to consider exploitable not only natural resources and animals but also the emotional and physical beings of humans – particularly of those subjects that does not correspond to the cis-gendered, white, heterosexual, Western male. Secondly, the constant juxtaposition between the post-apocalyptic «present» of Snowman and the pre-apocalyptic «past» of Jimmy in the storytelling seems to point up the distance between such ideology and reality. As a result, the concrete possibility of entirely subjugate Nature under human control is discredited from the very beginning.

The second interesting aspect of Atwood's «worlding» is the completely different meaning of the «disease scenario». The reader understands from the beginning that to create or spread «hostile bioforms» to attack other social groups is a very common act, something that

privileged people must constantly protect themselves from by living in isolated and controlled communities. It is also, reading between the lines, a very common tool for general propaganda to maintain the society's police state by canalizing social distress against the «enemies» coming from «the outside». It is no surprise, then, that the disease turns out to be the very instrument of Crake's plan for saving the planet through human extinction. As a consequence, the choice of a pandemic scenario has nothing to do with a representation of the untamable power of Nature and its deep interconnections with humans, as it was in Shelley. On the contrary, it represents the extreme development of the Modern paradigm of a mechanistic Matter that has to be dominated by science and instrumentally used for a purpose; in other words, it shows the point where Naturalism develops in God complex.

The third interesting aspect of Atwood's «worlding» is the character of Crake. On the one side, Crake is a brilliant ecologist who fights to save the planet from the destructive «virus» represented by humans, who are responsible for animal extinctions, pollutions, violence, consumerism; on the other, he plays the role of the villain and represents the actualization of the Western Modern subject, the pure intellectual mind. Crake's approach to ecology is purely abstract, biological and mechanical. Clearly Atwood is creating this character to introduce a critique towards those ecological theories and politics that do not criticize their Naturalist foundations and universalize their culture, usually Western. In particular, her critique seems to focus on the nonsense that comes from ignoring historical dimensions and cultural analysis, building solutions that are blind to racism, sexism, colonialism and cultural imperialism. The Craker's design exposes vividly the author's critique. It reflects a Modern scientific approach: what constitutes a species? How can it be «upgraded» according to a perspective of usefulness and a compartmentalized interpretation of life's dynamics? Interrelationships between individuals, species and ecosystem are indeed completely ignored. Crakers are bioengineered to eliminate every aspect that can endanger their peaceful community, starting from imagination.

Watch out for arts, Crake used to say. *As soon as they start doing art, we're in trouble.* Symbolic thinking of any kind would signal downfall, in Crake's view. Next they'd be inventing idols, and funerals, and grave goods, and the afterlife, and sin, and Linear B, and kings, and then slavery and war (Atwood, 2003, 361).

Imagination holds a fundamental role to Atwood. She described it as the building block for human communities, allowing us to imagine circumstances and consequences before acting, thus giving us time and space to ask ourselves «what kind of world are we creating?» (Hengen, 2006, 75-76).

The same reductionist approach is used for addressing other cultural problems. Crake has built the new species to be «beautiful» and mixed up in skin colours, with the aim to eliminate racial discrimination – as if racism had its only origins in aesthetical differences and not in power relations. The «beauty» that Crakers shows is built on the Western white male gaze paradigm – be it heterosexual or homosexual.

Every time the women appear, Snowman is astonished all over again. They're every known colour from the deepest black to whitest white, they're various heights, but each one of them is admirably proportioned. Each is sound of tooth, smooth of skin. No ripples or fat around their waists, no bulges, no dimpled-orange skin cellulite on their thighs. No body hair, no bushiness. They look like retouched fashion photos, or ads for a high-priced workout program (Atwood, 2003, 100).

It's quite a sight: like the women, these men – smooth-skinned, well-muscled – look like statues, and grouped like this they resemble an entire Baroque fountain. [...] Into Snowman's head comes the image of a circle of naked car mechanics, each holding a wrench. A whole squad of Mr. Fix-its. A gay magazine centerfold (Atwood, 2003, 155).

The character of Snowman seems to assume the critical thinking's voice's role. From his childhood as Jimmy, he expresses discomfort and shock to the reductionist violence of science. As an adult, especially in Crake's laboratory, Jimmy represents the liberal arts' point of view that gives value to imagination, ideals, friendship, love, justice. He is also the only one to fear Crake's recklessness in biogenetics: «why is it he feels

some line has been crossed, some boundary transgressed? How much is too much, how far is too far?» (Atwood, 2003, 206).

To conclude, Atwood's practice of «worlding» seems to develop Shelley's Naturalism critique in three ways. Firstly, by describing its contemporary developments in the Western (particularly North-American) *Weltanschauung*, claiming its connections with present social phenomena like racism, colonialism, capitalism and sexism. Secondly, by pointing out Naturalism's attempt to universalize itself in the narratives, therefore dismissing TINA approaches. Thirdly, by problematizing the ecological approaches and warning the reader against any perspective that still holds Modern conceptualizations at its core.

Although Shelley's and Atwood's practices of «worlding» criticize Naturalism, they also keep it as the main reference. Their critique represents a dystopic fiction of the ending where no alternative is actually created.

4. Ursula K. Le Guin: Beyond Naturalism

The novel *The Word for World is Forest* by Ursula Le Guin represents a clear example of critique to Naturalism where the «worlding» is focused on building an alternative political imaginary. It was written during the winter of 1968, in the last years of the American war in Viet Nam, and published right after in 1972. Unlike other works from the author, this book was openly inspired by the political situation.

1968 was a bitter year for those who opposed the war. The lies and hypocrisies redoubled; so did the killing. Moreover, it was becoming clear that the ethic which approved the defoliation of forests and grainlands and the murder of non-combatants in the name of “peace” was only a corollary of the ethics which permits the despoliation of natural resources for private profit or the GNP, and the murder of the creature of the Earth in the name of “man”. The victory of the ethic of exploitation, in all societies, seemed as inevitable as it was disastrous. It was from such pressures, internalized, that this story resulted: forced out, in a sense, against my conscious resistance (Le Guin, 1972, 7).

Le Guin was part of the feminist critical movement of her time, as an activist and as an artist. She described her novels as «thought experiments» (Le Guin, 1976b)¹⁵ on the deepest cultural «natural» and «innate» aspects within Western culture, and considered imagination to be one of the most important existential, other than political, tool: «the use of imaginative fiction is to deepen your understanding of your world, and your fellow men, and your own feelings, and your destiny» (Le Guin, 1989, 38).

The novel is set in the Hainish universe¹⁶, in a far future on an exoplanet dominated by forests called Athshe. The humans that inhabit it, the Athsheans, are small and covered in a soft green fur. Their society is deeply pacific, conflicts are solved in ritual dances, there is no violence and kill another human is unthinkable. In the community women are the social leaders, while men that practice «dreaming» are the spiritual one. A group of humans – «Terrans» – invaded Athshe creating a colony to harvest wood, which has become the most precious resource on Earth since trees have completely disappeared due to exploitation. Reproducing the most common features of colonialism, Terrans claims Athsheans to be inferior creatures and enslaved them. The character of Raj Lyubov, an anthropologist who learns Athsheans' language and culture, stands in the middle of the two populations. The novel tells the story of the indigenous' resistance against colonizers: by learning to fight and kill with a guerrilla tactic and taking advantage of the Terrans' underestimation, Athsheans manage to win and isolate the survivors in a small colony. Meanwhile, a spaceship arrives on the planet, bringing two emissaries of the interplanetary community from Hain and Tau Ceti, and introducing a new communication technology, the ansible¹⁷. Thanks to this invention it become possible to communicate immediately with other planets. In this manner, the colonizers learn that not only on the Earth, but in the entire galaxy, colonialism and slavery are now forbidden. The delegation forces

¹⁵ On such «experiments» of imagination in a philosophical and political perspective has worked the philosopher of science Isabelle Stengers (2021).

¹⁶ This universe was introduced with the novel *Rocannon's World* (1966), followed by *Planet of Exile* (1966), *City of Illusion* (1967), *The Left Hand of Darkness* (1969), *The Word for World is Forest* (1972), *The Dispossessed: an Ambiguous Utopia* (1974), *Four Ways to Forgiveness* (1995), and *The Telling* (2000).

¹⁷ Which is the focus of Le Guin's following novel, *The Dispossessed*.

the last Terrans to leave the planet, which will be no longer visited by other species without the Athsheans' permission. The story is told from two different perspectives: the one of Selver, leader of the indigenous rebellion, and Davidson's, a racist and violent Terran captain that raped and killed Selver's wife.

Both the Western exploitation and imperialism, especially embodied by Davidson, and the Vietnamese guerrilla, fought by the Athsheans, are easily recognizable. The novel, therefore, can be read as a narrative heterotopia where – thanks also to the international community's support – the forest's indigenous people win and the colonizers are banished. However, I would like to advance an additional ecofeminist layer of analysis, one that perhaps goes more into those Le Guin's storytelling «unconscious» aspects that she considered the cradle of her writing¹⁸. I will also explain why I compare this novel, that seems to have no apocalypse at all, to the openly apocalyptic ones of Shelley and Atwood.

My theory is that Ursula Le Guin transcends the core structure of Naturalism to focus on developing the axes of an alternative cosmology and society's structure. The building brick of this new system is interrelation, her «worlding» works deeply with continuums rather than with scissions. This study will outline four aspects.

Firstly, like in the previously analyzed novels, *The Word for World is Forest* represents a critique of Naturalism' *Weltanschauung*. The peculiarity of Le Guin's narrative, however, is a reversed *Gestalt*. Unlike Shelley and Atwood, her «worlding» is not focused on describing and debunking Naturalism. On the contrary, such *Weltanschauung* is represented as an old cosmology that belongs to a past of ignorance, racism, capitalistic exploitation and colonialism. The present time is way different: it embraces a universal – literally – perspective of multiplicity, many planets, ecosystems, cultures, and many species of humanity. Naturalism and its

¹⁸ It was one of the topics that she wrote most frequently about when speaking of creating her worlds and stories, and she referred also to Jung's psychoanalysis to explain her interpretation. «The great fantasies, myths and tales are indeed like dreams: they speak *from* the unconscious *to* the unconscious, in the *language* of the unconscious – symbol and archetype. Though they use words, they work the way music does: they short-circuit verbal reasoning, and go straight to the thoughts that lie too deep to utter» (Le Guin, 1974a, 57). She refers to the relationship between writing and the unconscious also in the introduction of *The Word for World is Forest* (Le Guin, 1976, 5-10).

developments are represented as a bubble of primitive and uncivilised behavior within a universe of pacific relationships. Something that has already become obsolete and inconceivable¹⁹. Moreover, the «original» human species whence all the others descend from is not the one from Earth – Terrans people – but the Hainish one. Millions of years before, Hainish people, following a colonialist vision that they forsook later, left «seeds» which evolved in different human species on different planets. In the present, no colonialist action is allowed anymore. The anthropocentric and ethnocentric Western approach, then, is completely decentralized.

The second aspect is the most directly related to the Modern roots of Naturalism: in Athsheans' culture the logocentric structure – the scission between *res extensa* and *res cogitans*, which considers only the second as a source for knowledge – simply does not exist. The Athsheans' practice of «dreaming», a deep oneiric state different from pure sleep and reached in wakefulness to find connections between elements out of the conscious logic, is considered essential to have a reliable understanding of reality. Abstract logic is believed to make people blind to wider perspectives and to the emotions involved. Wakefulness and open-eyes sleep are not separated. A dreamer can meet a person in «dream-time» or in «world-time», and both the encounters are «real». It is interesting that such practice actually existed among the Senoi people of Malaysia, as the author recalls in her 1976 *Introduction* – however, she did not know when she wrote the novel.

The Senoi dream is meaningful, active, and creative. Adults deliberately go into their dreams to solve problems of interpersonal and intercultural conflict. They come out of their dreams with a new song, tool, dance, idea. The waking and the dreaming states are equally valid, each acting upon the other in complementary fashion (Le Guin, 1972, 9).

This epistemological model, characterized by the recognition of the permeability between conscious and unconscious in experience, was developed as an alternative to the Modern rationalist model by Western

¹⁹ Le Guin's work on temporalities to represent a decolonizing and revolutionary point of view has been examined in detail by Stone, Lee and Gene-Rowe (2021).

feminist theorists, particularly from the Second Wave on. The Italian tradition from Diotima's Feminist Philosophical Community has called it «feminine realism» and it is still working on it from the '90s (Diotima, 1990; 2009; Zamboni, 2020). In Le Guin's novel, people and their habitat are interrelated too, it is no coincidence that «the word for “world” is “forest”». Forests name both what in Naturalism are considered the «natural» space and the «urban» space, where the community lives. As there is no opposing paradigm between logic and the emotions, there is also no cartesian splitting between Mind and Body, Culture and Nature.

The third aspect of Le Guin's alternative paradigm is the one that goes most directly against war, its patriarchal roots and its connection to Naturalism. It is also the aspect that is mostly related to the fiction of the Apocalypse. In every war's propaganda both the concepts of «enemy» and «homeland» have to be constructed as static entities, characterized by features that are unchangeable and usually opposite. Without this contraposition, ideologic contrast and the different levels of dehumanization to legitimize the aggression toward the «enemy» would be impossible. As an example, the anthropologic research of Raj Lyubov on Athsheans' culture and language is not used as a tool to create a cultural mediation but to better dominate the indigenous population. By the moment that Terrans understand that violence and murder do not exist in their culture, the treatment of Athsheans grow even more violent. The reason is, on the one side the disdain toward nonviolence, interpreted as weakness in the patriarchal frame of Naturalism; on the other, the lack of fear for a reaction. However, Athsheans learn from Terrans how to use weapons and kill, and how to organize an army. Terrans' ideologic belief of cultural unchangeability is key to the power balance's overturning between the two population, and the victory of Athsheans.

The fourth aspect is strictly connected to the third. Le Guin «worlds» cultures and societies as constantly changing systems. The ideological view of cultures as static expressions of innate features is debunked by the novel's events, both cultures are irremediably changed and «destroyed». The narrative of war as an interaction that ends with the validation of one of the contenders, the victory of the «superior» culture on the «inferior» one, vanishes. Terrans face massacre: only few survivors get the chance to

leave the planet, and their culture on Athshe is wiped out. Athsheans' culture is perverted in its very foundations, violence and murder are now a part of it. This is the reason why I consider this novel to represent a fiction of the Apocalypse, even though it is an utopian narrative.

Reality does not stand still, it changes constantly. Sometimes its changes are so deep that the cultural representation of what is «real» has to fill a void, a new imagery must emerge and it can radically twist previous beliefs. Le Guin describes it by writing that what was previously on the dream-time has passed on the world-time, personified in a «god». Dream-time is the place of things that could happen, of foretelling and possibilities. A «god» represents a translator, an intermediary from one world to another. In other words, it represents the concrete embodied form taken by the pressing forces of experience, reality, and interpretation.

“All men’s dreams” said Coro Mena, cross-legged in shadow, “will be changed. They will never be the same again. I shall never walk again that path I came with you yesterday, the way up from the willow grove that I’ve walked on all my life. It is changed. You have walked on it and it is utterly changed. Before this day the thing we had to do was the right thing to do; the way we had to go was the right way and led us home. Where is our home now? For you’ve done what you had to do, and it was not right. You have killed men. [...]”.

“He is a god,” Coro Mena said.

Torber nodded, accepting the old men’s judgment almost with relief.

“But not like the others. Not like the Pursuer, nor the Friend who has no face, nor the Aspen-leaf Woman who walks in the forest of dreams. He is not the Gatekeeper, nor the Hunter, though he comes in the world-time like them. We may have dreamed of Selver these last few years, but we shall no longer; he has left the dream-time. In the forest, through the forest he comes, where leaves fall, where trees fall, a god that knows death, a god that kills and is not himself reborn” (Le Guin, 1972, 33-34).

Le Guin’s representation of cultural change is significant because it focuses on the continuum from the realm of likely possibilities to the one of reality. This has a political consequence. The reader is invited to look deep into its own dream-time, its imaginary, to look at what is prefigured there that could flow to real-time. What are the possibilities that are being

considered, which kind of world our culture is building? Which are the political imaginaries involved?

Literature represents one of the privileged accesses to imagery. As Ursula Le Guin puts it, «we like to think we live in daylight, but half the world is always dark; and fantasy, like poetry, speaks the language of the night» (Le Guin, 1976c). By deeply modifying the tracks of Western culture' structural interpretation through the representation of an alternative Le Guin takes the most revolutionary attitude. A position that throws Naturalism's *Weltanschauung* – considered from its deepest foundations to its most recent developments – to the past, and makes the reader ground its feet in a «present» world built on the interrelations and continuums between past and present, *res cogitans* and *res extensa*, reality and imagination.

Conclusions

As it can be drawn from this study's first part, to build fictions of the ending that refuse compliant, conservative positioning and imagination, and seek better alternatives, solutions and utopias, it is necessary to criticize the cultural foundations – other than the economic, social and political ones – that led to the crisis. Ecofeminist philosophers identified in the Western patriarchal logic of dualistic opposition the *Ur-sprung*, the archetypal paradigm, of cultural structures as anthropocentrism, androcentrism, sexism, ethnocentrism, and racism. The dualistic opposition of Nature and Culture that comes from it, radicalized by modern Rationalism, led to the exploitative ethic of Capitalism and to nowadays TINA's neoliberal narratives.

Therefore, if the political aim of nowadays Science Fiction is to actively contribute to counter-hegemonic voices and movements that try to shape a way out from the climate crisis by building utopic and alternative fiction of the ending – for example, the newly born Solarpunk genre – a deep critique of cultural roots is essential. Only by pushing the most creative attempt to the axes of our *Weltanschauung* to step out of it, our «worldings» will build, as Serenella Iovino has put it, «strategies of survival» for our times (Iovino, 2006).

Bibliographic references

- Aristotle, *Poetics*, translated by G. Whalley, ed. J. Baxter and P. Atherton, Montreal&Kingstone, McGill-Queen's University Press, 1997.
- Atwood Margaret, *Strange Things: The Malevolent North in Canadian Literature*, Oxford, Clarendon Press, 1995 (1991).
- *Oryx and Crake*, ed. N. A. Talese, New York London Toronto Sydney Auckland, Doubleday, 2003.
- (2004a) «“The Handmaid’s Tale” and “Oryx and Crake” in Context», in *PMLA*, n.119 (2004): Science Fiction and Literary Studies: The Next Millennium, pp. 513-517.
- (2004b) «Writing “Utopia”», in *Moving Targets: Writing with Intent 1982-2004*, Toronto, House of Anansi Press, 2004, pp. 245-267.
- «Writing “Oryx and Crake”», in *Writing With Intent: Essays, Reviews, Personal Prose 1983-2005*, New York, Carroll & Graf, 2005, pp. 284-286.
- Bachmann Ingeborg, *Frankfurter Vorlesungen: Probleme zeitgenössischer Dichtung*, München, Piper Verlag GmbH, 2011.
- Bianchi Bruna, «Guerra, pandemia e cambiamento climatico nell’*Ultimo Uomo* di Mary Shelley (1826)», *Il bollettino di Clio* 14 (2020), pp. 93-106.
- Bould, Mark, Andrew M. Butler, Adam Roberts, Sherryl Vint (eds.), *The Routledge Companion to Science Fiction*, London, Routledge, 2009.
- Claeys, Gregory, *Dystopia: a Natural History. A Study of Modern Despotism, Its Antecedents, and Its Literary Diffractions*, Oxford, Oxford University Press, 2017.
- Clute, John, «Science Fiction from 1980 to the present», in *The Cambridge companion to Science Fiction*, eds. Edward James and Farah Mendlesohn, Cambridge, Cambridge University Press, 2003, pp. 64-78.
- Clute, John, Peter Nicholls, David Langford (eds.), *The Encyclopedia of Science Fiction*, New York, St. Martin Press, 1993.
- Cudworth, Erica, *Developing Ecofeminist Theory. The Complexity of Difference*, Houndmills : New York, Palgrave Macmillan, 2005.
- Davis Rogan Alcena, Madeline, «Utopian Studies» in *The Routledge Companion to Science Fiction*, eds. M. Bould, A. M. Butler, A. Roberts, S. Vint, London, Routledge, 2009, pp. 308-316.

- Descola Philippe, *Beyond Nature and Culture*, Chicago, University of Chicago Press, 2013.
- Diotima Comunità Filosofica Femminile, *Mettere al mondo il mondo. Oggetto e oggettività alla luce della differenza sessuale*, Napoli, La Tartaruga, 1990.
- , *Immaginazione e politica. La rischiosa vicinanza tra reale e irreale*, Napoli, Liguori, 2009.
- Federici, Silvia, *Caliban and the Witch. Women, The Body and Primitive Accumulation*, New York, Autonomedia, 2004.
- Ferns, Chris, *Narrating Utopia: Ideology, Gender, Form in Utopian Literature*, Liverpool, Liverpool University Press, 1999.
- Fisher, Mark, *Capitalist Realism: Is There no Alternative?*, London, Zero Books, 1996.
- Gaard, Greta, «Living Interconnections with Animals and Nature», in *Ecofeminism. Women, Animals, Nature*, ed. G. Gaard, Philadelphia, Temple University Press, 1993.
- Haraway, Donna J., *Staying with the Trouble. Making Kin in the Chthulucene*, Durham and London, Duke University Press, 2016.
- , «Receiving Three Mochilas in Colombia. Carrier Bags for Staying with the Trouble Together», in Ursula K. Le Guin, *The Carrier Bag Theory of Fiction*, London, Ignota Books, 2019, pp. 9-21.
- Hengen, Shannon, «Margaret Atwood and environmentalism», in *The Cambridge Companion to Margaret Atwood*, ed. C. A. Howells, Cambridge, Cambridge University Press, 2006, pp. 72-85.
- Hollinger, Veronica, «Feminist Theory and Science Fiction», in *The Cambridge Companion to Science Fiction*, ed. E. James and F. Mendlesohn, Cambridge, Cambridge University Press 2003, pp. 125-136.
- Howells, Coral Ann, «Margaret Atwood's dystopian visions: "The Handmaid's Tale" and "Oryx and Crake"», in *The Cambridge Companion to Margaret Atwood*, ed. C. A. Howells, Cambridge, Cambridge University Press, 2006, pp. 161-175.
- Iovino, Serenella, *Ecologia letteraria. Una strategia di sopravvivenza*, Milano, EdizioniAmbiente, 2006.
- James, Edward, and Farah Mendlesohn (eds.), *The Cambridge Companion to Science Fiction*, Cambridge, Cambridge University Press, 2003.

- Jameson, Fredric, *Archaeologies of the Future. The Desire called Utopia and Other Science Fictions*, London and New York, Verso, 2005.
- , «An American Utopia», in AA.VV., *An American Utopia. Dual Power and the Universal Army*, ed. S. Žižek, London, Verso, 2016, pp. 1-96.
- Kermode, Frank, *A Sense of an Ending. Studies in the Theory of Fiction*, New York, Oxford University Press, 2000.
- Le Guin, Ursula K., *The Word for World is Forest*, London, Gollancz, 1972.
- , (1974), «Why are Americans Afraid of Dragons?» in Ursula le Guin, *The Language of the Night: Essays of Fantasy and Science Fiction*, ed. Susan Wood, New York, HarperCollins Publisher, 1989, pp. 34-40.
- , (1976a) «The Child and the Shadow», in Ursula Le Guin, *The Language of the Night: Essays of Fantasy and Science Fiction*, 1976, pp. 54-67.
- , (1976b) «Introduction», in *The Left Hand of Darkness*, London, Gollancz, 1976.
- , (1976c) «Fantasy, like Poetry, Speaks the Language of the Night», in *World* (magazine supplement to the San Francisco *Sunday Examiner and Chronicle*), 21th November 1976.
- Lorde, Audre (1979), «The Master's Tools will never Dismantle the Master's House», in *The Selected Works of Audre Lorde*, ed. Roxane Gay, New York, Norton, 2020.
- Martorell Campos, Francisco, *Contra la distopía. La cara B de un género de masas*, Valencia, La Caja Books, 2021.
- Merrick Helen, «Fiction 1964-1979», in *The Routledge Companion to Science Fiction*, ed. M. Bould, A. M. Butler, A. Roberts, S. Vint, London, Routledge, 2009, p. 104.
- Merchant, Carolyn, *The Death of Nature. Women, Ecology, and the Scientific Revolution*, San Francisco, Harper&Row, 1983.
- Mies Maria, Shiva Vandana, *Ecofeminism*, London-New York, Zed Books Ltd, 1993.
- Moore, Jason W. (ed.), *Anthropocene or Capitalocene? Nature, History and the Crisis of Capitalism*, Oakland, PM Press, 2016.
- Moylan, Tom, *Demand the Impossible: science fiction and the utopian imagination*, London and New York, Meuthen, 1986.

- , *Scraps of the Untainted Sky: Science Fiction, Utopia, Dystopia*, Boulder, Westview Press, 2000.
- Paley, Morton, «Mary Shelley's *The Last Man*: Apocalypse without Millennium», *Keats-Shelley Review* 4 (1989), pp. 1–25.
- Reina-Rozo, Juan David, «Art, Energy and Technology: the Solarpunk Movement», in *International Journal of engineering, social justice, and peace*, vol. 8/1 (2021), pp. 47-60.
- Rigby, Kate, *Dancing with Disaster. Environmental Histories, Narratives, and Ethics for Perilous Times*, Charlottesville : London, University of Virginia Press, 2015.
- Roberts, Adam, *The History of Science Fiction*, New York, Palgrave Macmillan, 2006.
- Robinson, Christopher, L., Sarah Bouttier and Pierre-Lois Patoine (eds.), *The Legacies of Ursula K. Le Guin: Science, Fiction, Ethics*, New York, Palgrave Macmillan, 2021.
- Shelley, Mary, *The Last Man*, edited and with an introduction by Anne McWhir, Peterborough, Broadview Literary Texts, 1996.
- Stengers, Isabelle, «Ursula K. Le Guin, Thinking in SF Mode», in *The Legacies of Ursula K. Le Guin: Science, Fiction, Ethics*, ed. C. L. Robinson, S. Bouttier, P. L. Patoine, New York, Palgrave Macmillan 2021, pp. 121-136.
- Stone, Katie, Eli Lee and Gene-Rowe Francis, «The Language of the Dusk: Anthropocentrism, Time and Decoloniality in the Work of Ursula Le Guin», in *The Legacies of Ursula K. Le Guin: Science, Fiction, Ethics*, ed. C. L. Robinson, S. Bouttier, P. P. Lois, New York, Palgrave Macmillan 2021, pp. 83-107.
- Suvin, Darko, «Science Fiction and Utopian Fiction: Degrees of Kinship» in D. Suvin, *Positions and Presuppositions in Science Fiction*, New York, Macmillan 1988.
- The Sobriquet Magazine*, «Margaret Atwood, Transhumanism, and the Singularity» (2011). URL: < <https://www.sobriquetmagazine.com/2011/02/sobriquet-701-margaret-atwood.html> > (last view 04/05/2023).
- Zaki, Hoda M., *Phoenix Renewed: The Survival and Mutation of Utopian Thought in North American Science Fiction 1965-1982*, Mercer Island, Starmont House, 1988.
- Zamboni, Chiara, *Sentire e scrivere la natura*, Milano, Mimesis, 2020.