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The Graphic Novel and Climate Change

How Ecocritical and Postcolonial
Graphic Novels influence their
Readers.

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Abstract

In the present work I provide an investigation on the potential of the graphic novel as the ideal literary medium to approach the climate change debate. Since the undeniable relevance the current climatic crisis has in our lives, which is questioning every aspect not only of our social, political, and economic systems, but also of our cultural constructs, the question is: What is the role of literature? What can be its function in the present uncertain global scenario? How can it affect the readership and stimulate awareness and action?

In this dissertation I collected one of the possible answers to all these questions. Indeed, my attempt is to bring my testimony that literacy has still something to say in the compelling climate change debate through the graphic novel. After a brief presentation of the genre, its evolution and development through history, its newly acquired academic interest, I discuss its ecocritical and postcolonial implementation. For this reason, mention will be made to relevant examples already analysed by the critics, in order to contextualise the analysis here performed and based on my personal reading experience of some recent works from the British-influenced world: *The Roles We Play* by Sabba Khan and *The H2O Problem* by Vidyun Sabhaney. In the conclusion, I report my final considerations about my hypothesis.

Prologue

“Literature will save us from extinction” (Benedetti, 2021). It was with this catchy title that I was induced to read the essay wrote by the Italian essayist Carla Benedetti. As a student of literary studies, these words raised in me the hope that not everything is lost, after all. Literature might have a role in the crisis that is affecting our lives, even today, during hard times for the slow rhythm of printed words. But how?

After reading some of Benedetti’s and Amitav Ghosh’s works – *The Great Derangement*, *The Nutmeg’s Curse*, *La letteratura ci salverà dall’estinzione* - I immediately felt their preoccupations about the positioning of literature in the complexity of the contemporaneous global scenario, where not only the future but even the present seems to be compromised by the climate change. The interest for the global warming, with its causes, and its consequences, I must admit, is shaped by my motherhood experience, because for the first time, I identify the future through names and faces. Our children are able to elicit in us the most terrific fears for what will happen in the years to come, and they trigger the most primitive and urgent need to protect them at all costs. The birth of my first child coincided with the moment when the climate change debate became more popular, riding the wave of Greta Thunberg’s strikes and speeches, the rise of dissident movements like Fridays for Future or Ultima Generazione, thus fostering the popular acknowledgement of the undeniable tangibility of the crisis. However, among all the scientific dissertations, data, and educational books, I found myself wondering – as well as Amitav Ghosh in his *The Great Derangement* – what were the issues the rest of the literary world was writing about, while the most extreme effects of the global warming, so far known, were knocking at our door? In other words, why mainstream literature doesn’t seem preoccupied to include the climate change crisis, or the environment at large, in its narrations?

For this reason, I will propose a hypothetic answer to the faint hopes of Ghosh’s book last pages for “a renewed art and literature” able to effectively represent the current crisis, implementing fiction narrative. My hypothesis will push further than this, trying to prove that not only a

literature of this kind already exists, but also that the more intense reading experience promised by it can positively affect the reader. This literature is the graphic novel. It is an evolution of comics, which combines drawn images with text, performing a rich and involving reading experience. Indeed, for its highly engaging properties, the graphic novel has all the premises to host and transmit all the possible future scenarios our imagination can produce. And since we are the cause of the current crisis, we can be the solution too.

Chapter I – Introduction

As the Earth is facing a crisis without known antecedents in history, where the rapid climate changes are modifying every aspect in our lives and the balances of the entire environment are compromised, the title of Benedetti's essay *Literature will save us from extinction* (Benedetti 2021) raises two important questions: the first regards the kind of literature that could possibly fulfil the task; the second concerns our supposedly mass extinction and it leads to further interrogations about whether we consider the crisis as a *humanity crisis* or as an *Earth crisis*. One should ask him/herself, if our preoccupations are exclusively for the human species or for the entire planet as a whole. In her dissertation, Benedetti appears to take an anthropocentric point of view, especially when she shares her fears for the future generations, through Greta Thumberg's words, at the Katowice Conference of 2018:

If I have children maybe they will spend that day with me. Maybe they will ask me about you. Maybe they will ask why you didn't do anything while there still was time to act. You say you love your children above all else, and yet you are stealing their future in front of their very eyes. (Greta Thumberg, COP24 Katowice)

Moreover, her concern for humankind's destiny is visible since the essay's title, for the accent put on the 'us', and when she addresses the dangers for the future living beings on the planet, she makes references especially to humans. In the first pages, she recalls the empathy we should feel for the future generations, an empathy which is supposed to stimulate some kind of activism in all of us. Benedetti develops the first chapter of her text precisely on the concept of empathy for the humans of the future, a concept taken from Günther Anders, the German philosopher. In fact, he conceptualized the idea of the 'time acrobat' (Anders, 2016, 59), that is a human being able to feel what our children and grandchildren will feel in the future. It is the greatest exercise of empathy while living in this very moment the future sufferance of the environmental disaster at

our doorstep (Benedetti, 2021, p. 9). Before the evident failures of politics and economics to feel this kind of empathic feeling or to act in this sense, Benedetti makes reference to Martha Nussbaum, the American philosopher, who believes that literature and philosophy are more apt to instil the precise kind of empathy necessary to stimulate altruistic thought. In fact, in her book *Poets as Judges: Judicial Rhetoric and the Literary Imagination* (Nussbaum, 1995), she states that only literature, philosophy and history can provide a kind of narrative imagination which is a compassionate one, and which is an important component for the development of an altruistic ethical position (Nussbaum, 1995). What is more, is the fact that philosophy, literature, and political theory intertwine together and cross one another through the ecocritical approach, which I brought here as a methodology of reading some graphic novels.

At the end of her book, Benedetti advocates to a radical metamorphosis in the human thinking, a whole transformation of our mental construct, that can only be fostered by the imaginative exercise elicited by literature. The kind of literature she has in mind doesn't talk about apocalyptic scenarios, terrible destructions, and hopeless forecasting, but rather a sentimental literature, which could possibly induce the reader to feel *with* the future generations, and thus fostering a desirable activism for changing our current state of things and imagining alternative ways of inhabiting our planet.

The next chapter will provide with an overview of this state of things. I will briefly present the concept of Anthropocene and the climate change implications for our time. This information constitutes the background of the present dissertation, and it is vital to the following discussion.

Climate Change and the Anthropocene

After the hottest summer in recorded history in 2023 (data provided by Copernicus Climate Change Service), some of us may still find it difficult to cope with this information, even if the global warming is a phenomenon acknowledged by most of the population since the 2000s, but scientists from all over the world are spreading their concerns for the inescapable greenhouse effect since the 1980s (Chakrabarty, 2009). Now we are well accustomed to hearing or to reading through our media a terminology, once belonging only to the scientific community - such as CO₂ emissions and greenhouse gases - or to seeing materialised the most terrific prophecies about devastating natural events - cyclones and tsunamis -, and even to believing to apocalyptic predictions about the melting of the pole caps or the increasing sea-level. Even the most sceptical people, in the last years, had to surrender to a new reality made of extreme events, following one another, all around the globe. Because, as we are learning, the consequences of global warming are everywhere and will, sooner or later, touch everyone. What is perhaps most shocking about it is the fact that the responsibility of what is happening is entirely ours. Along with the paralysing awareness of the cataclysms passing across the planet, there is the anguish of our guilt. The humankind has modified the environment at such a rate, that it has acquired the status of geological force (Oreskes, 2007). This means that the humans are much more than simple biological agents. The human activity in the last 250 years has altered the chemistry of the atmosphere, generating an unprecedented and irreversible series of consequences for all the biodiversity and the planet itself. Since the Industrial Revolution in the Western countries, the technological progress and the seeking for a wealthier life have demanded a sacrifice in terms of resources exploitation - often non-renewable, like fossil fuels - wild modification of the territory – deforestation and soil degradation -, thus destroying the food chain and leading to the extinction many other species¹. Together with the human activity, another element of our responsibility is the increasing number of our population, a fact which multiplies these effects on the planet, since

¹ Will Steffen, director of the Centre for Resource and Environmental Studies at the Australian National University, quoted in “Humans Creating New ‘Geological Age,’” and Shabin, 2008, in Chakrabarty 2009.

an average person on Earth has a carbon footprint of 4 tons of carbon dioxide per year (data referred to 2017 and provided by OurWorldInData.org).

Before the steadily alteration of the Earth's biological systems by humans, the Dutch scientist Paul Crutzen – who studied the variations in the chemistry of the atmosphere – proposed the introduction of a new term to refer to our current geological epoch, that is Anthropocene. He first introduced this term in 2000 in an article cowritten with Eugene Stoermer with the aim to emphasize 'the central role of mankind in geology and ecology' (Crutzen & Stoermer, 2000). Crutzen finds the beginning of this new geological era with the starting of the Industrial Revolution, in the second mid-18th century, more precisely with the invention of the steam engine in 1784. The term Anthropocene is supposed to represent the historical phase dominated by humans, where their actions have a tangible impact on the Earth, mostly negative.

Sometimes I personally struggle to cope with the sense of guilt I feel, when thinking of the Anthropocene. I often find myself asking, how people cannot think about it constantly, or why this isn't the main topic in talk shows, podcasts, or books. Perhaps there is not a public interested in it, or maybe authors are not prepared to include it in their works. How does literature confront with the theme of the Anthropocene and with the climate change at large?

In the next section, there will be presented a brief overview of the relationship between literature and environmentalism.

The Graphic Novel

The graphic novel is a literary genre which saw its major development during the 1980s with a considering proliferation, but which has its deep roots in the last mid-18th century and which at present gives no sign of crisis. Denis Mellier goes deep into the antecedents of the graphic novel, up to the invention of the comic strip in the last mid-18th century. He acknowledges that the proper graphic novel emerged along the 1970s, but he adds the fact that it actually pulls together older historical devices belonging to the comics history. For this reason, in his paper, Mellier leads the beginning of the graphic novel back to the inventor of the comic strips, the Genevan Rodolphe Töpffer, and in part to Gustave Doré. In his work, Mellier quotes David Kunzle's *The Early Comic Strip: Narrative Strips and Picture Stories in the European Broadsheet from c.1450 to 1825*, where, commenting over Töpffer, even if he refuses to label his works as graphic novels, he admits that it 'is exactly what Töpffer[’s comic books] are.' He states that they differentiate from the traditional comic books because of their 'length, unity of theme, and a real moral focus.' (Baetens, et al., 2018)

The term 'graphic novel' is today recognised as a shorthand for adult-oriented, long, serious strips, even if there is still some discordance among scholars of the field, who prefer referring to it as "comics for adults" or "graphic narrative". The same discordance can be found in the historical periodisation of the graphic novel as well, since there isn't still an accepted version about it, given the rapidity of the events following one another on which the periodisation is based. With the term 'graphic novel', we generally refer to the hybrid literary genre, where the reader finds images and text combined through it all, in a sort of comics-like form, but with consistent differences, that will be explored further. The term appeared for the first time in the paperback edition of Will Eisner's book *A Contract with God: A Graphic Novel*, published in 1978. Eisner's book was significant in establishing the term use, even if *A Contract with God* wasn't a proper graphic novel, but rather a short stories collection. There are still discordances among critics on the Eisner phenomenon, or better, on 'the Eisner distortion', as well argued by Matteo Stefanelli in the Italian comics blog *FumettoLogica* (Stefanelli, 2015). However, the first ever to suggest the use of this

terminology was Richard Kyle, an American comics editor, critic, and historian, who proposed it in an article published in 1964 in the CAPA-Alpha fanzine. (Kyle, 1964) Here, he argued that the term “comic-book” was limited and antiquated, and that the term “graphic story” and “graphic novel” suit best to refer to “artistically serious” comic books (Kyle, 1964, p. 4). In this thesis, the terms “graphic novel” and “graphic narrative” will be used alternately to refer to the same work, since both describe a narration developed through images and text without any consistent difference.

In the late 1970s the comics-world saw an internal revolution, that was reflected by a change in types of works, with the consequent expansion of the readership groups, and a new higher cultural status. In the US the enthusiasm for the new graphic-novel format was promoted by Byron Preiss in particular, who published three digest-sized long-length comics addressing them with the term ‘graphic novel’ and he contributed to the spread of the European-sized albums. They were *Schlomo Raven, Starfawn and Red Tide* (Duncan & Smith, 2018). The Franco-Belgian publishers were the first to publish serialised stories (that is the *bande desiné*) in magazines and later to collect them in albums. Among the most famous albums there were Tintin and Asterix, later translated and imported in in Britain and in the US. (Duncan & Smith, 2018) Sabin argued that the availability of this kind of albums in the US and Britain constituted the first example of ‘adult graphic novel’. (Sabin, 1993, p. 238). The real turning point, however, arrived exactly in 1986. In fact, that year coincides with the first publication in New York of Spiegelman’s *Maus* by the publisher house Pantheon in the USA and by Penguin in the UK. The work was a book-length volume, created by the American cartoonist Art Spiegelman, in which he serialised his father’s story as a Polish Jew during the Holocaust. In the same year DC Comics published some notable titles in a single book-length edition as well, that is Alan Moore and Dave Gibbons’ *Watchmen* and Frank Miller’s *Batman: The Dark Knight Returns*. These three works have passed history as the Big Three and have remained in print and on bookstore’s shelves ever since. These events marked an evolution in commercial and underground comics-making.

The comics world cannot be put entirely aside in the present discourse, since the borderlines between the graphic novel and comics sometimes blur, with influence and borrowing going in each direction, and because the revolution in comics for a new and more serious work partly prompted the emergence and development of the graphic novel through the 1980s. As a matter of fact, there was a call for a new medium more apt for the processing of political and personal narratives, for the coping with the horrors of terrorism and national political division. The more events – often tragic or disruptive – occur, the more material for new works emerge. It seems like the human being searches for the progressively more adequate medium to elaborate the most complicate, dark, or terrific situations happening in life. It's not a coincidence that the graphic novel hosts chiefly autobiographies and memoirs, history and historical fiction, or news reportage:

The combination of historical and political themes woven through autobiography or eyewitness testimony raise both culturally specific myths and also touch on our understanding of universal concerns. (Baetens, et al., 2018, p. 9)

What is expressed in these few lines is key for this dissertation, because it explains how the graphic novel has the great potential to approach the reader with complex, uncomfortable topics, often through first-hand experiences of the same authors and artists. The 1980s are significant also for the popular return of comics in the film industry: an example is *Riders of the Lost Ark* by Steven Spielberg is an example, a chapter of the fortunate *Indiana Jones* series, which is largely inspired by Hergé's *Tintin* books of the 1930s. This statement was released by the film director Spielberg when promoting the film in France (Baetens, et al., 2018, p. 5). Fostered by the increasing popularity of comics material, the 1980s and the early 1990s were the first period approaching the graphic novel – and comics at large - with academic interest. With a new critical eye investigating on the sociological and literary aspects of the emergent adult comics, faculties, publishing houses and some major scientific literary periodicals engaged in the field. With this regard, it is appropriate to signal Joseph Witek's *Comics as History* (1989), Roger Sabin's *Adult Comics* (1993).

Comic studies in a broad sense began since the 1940s, with research on the effect of comics reading on children's literacy and behaviour, published in the *Journal of Educational Sociology* in 1944 and 1949 (Baetens, et al., 2018, p. 371). In the 1960s academic contributions about comics appeared for the first time in the anthology *The Funnies: An American Idiom* edited by David Manning White and Robert W. Abel in 1963, in which nine essays out of twenty-two were written by university professors. Their work brought into analysis newspaper comic strips from various perspectives (Baetens, et al., 2018, p. 372), and the editors conclude arguing for the continued study of comics as 'cultural force and a powerful form of communication' (Manning & Abel, 1963, p. 4).

In those years, books meant for the fandom started to appear profusely in the US, and they included not only comics' collections, but also reviews. This happened to be the very first gateway to this form of art for the readership. The comic-book fans soon developed a participatory culture well represented by the rise of different APAs (Amateur Press Alliance), which collected in single booklets all the individual zines produced and then distribute them to all the members. Later, some APA's affiliates would eventually evolve and became some of the most influential comics critics and historians, or comics professionals: this is the case of the above-mentioned critic Richard Kyle and the comics author Art Spiegelman (Baetens, et al., 2018, p. 374). The shift from mere reviewing to critiquing was rapid and the 1970s was the decade welcoming this change. In fact, starting from this period, Comics Studies entered the academia, largely thanks to David Kunzle's work, who was an Art historian and who situated comics as a product of print culture; his major work was an analysis of the comics' origin tracing its evolution from the European broadsheet from 15th century to the 19th century (Kunzle, 1974). As a consequence of this new interest in the field, the importation of long-form comics from Europe in the US increased, as well as the production of brand-new graphic novels. At the academic gatherings and comics conferences the focus, thus, was more and more on the graphic novel. The market was growing, the readership expanding, and the critical response was shooting back. On this point, it is worth mentioning the introduction during the 1990s of the Japanese manga, which became a growing presence in US

bookstores. This kind of comics attracted the female audience to the comics world, which was predominantly male until this moment (Duncan & Smith, 2018, p. 378). The critical feedback initially came exclusively from the fanzines-world, which was acquiring a considerable role in the literature critic panorama, thanks to passionate and scrupulous analysis of comics. As a confirmation of this, Christopher Pizzino, contemporary literature professor at the University of Austin, recognizes that in the 1980s and 1990s ‘the most influential organ of serious comics critics’ was *The Comic Journal* of Gary Groth (Pizzino, 2016, p. 39). The journal was indeed the most critical voice questioning the industry’s practices and trends on a regular basis. Given the stability and the central position of this fanzine, Groth began asking for some academics to contribute to his project, and such voices as John Lent, Bart Beaty, Charles Hatfield, or Robert C. Harvey proved to be some of the most powerful in the new-born Comics Studies field. The same desire for a deeper approach to comics at large, came from artists as well, and the most relevant example of the same period is perhaps *Understanding Comics* (1993) by Scott McCloud, who very cunningly uses the medium to explain the medium. In his work McCloud draws his personal reflections on the formal elements of comics, and for this reason was worthy to be noted by Groth’s *Journal* and reviewed by the above-mentioned academics in the April issue of 1999 (Duncan & Smith, 2018, p. 379). Not only the status escalation of the first fanzines signalled the new cultural prestige of comics, but also the many emergent comics conferences featuring important universities in the US. As a matter of fact, some universities embraced the comics field of study since the 1980s: the flagship academic institution was the Ohio State University, which began hosting an increasing collection of comic strips and cartoons, thanks to the determination of Lucy Carwell (Robb, 2017). Starting from 1992, with the first Comics Arts Conference in San Diego, other academic institutions began to engage in such events: for instance, The Georgetown University featured and hosted the International Comic Art Forum in 1995. Furthermore, there is a particular example, which is momentous for the history of the graphic novel: in 1998 the University of Massachusetts introduced “The Graphic Novel: A Twentieth Anniversary Conference on the Emerging Literary and Artistic Medium”. The temporal allusion is to Eisner’s book, which is taken as progenitor of the graphic novel just because thus is described by the author

on the paperback. However, the attention must be led instead to the last part of the conference title, since it reflects the desire of acceptance and the claim for respectability for comics. This belief is embodied in the graphic novel, a promising genre, perhaps the most suitable to lead the entire comics-field towards a higher cultural status.

The Graphic Novel as World Literature

What is particularly relevant for this dissertation, is the fact that the graphic novel's emergence isn't linked only and specifically to the Anglophone world – The United States in particular – as one may think. On the contrary, a large part of the phenomenon came external to it, and one should only think about the Japanese or the Franco-Belgian realities, with their own comics tradition. The same birth of comics in the broader sense is to be found in Switzerland, with Töpffer, as proved by David Kunzle. Europe has proved to be among the most prolific areas in the world, referring to comics, and the eventual translation into English of many works fostered the exportation and affected the very evolution of comics, as briefly illustrated in the previous paragraph. The Franco-Belgian context, with the *bandes dessinées*, has acknowledged from the beginning a higher status to the comics art form, if not directly comparable to literature or the plastic arts, at least at a respectable level (Ball, 2018, p. 595). Regarding the Japanese reality, manga are part of a vast and specific tradition, belonging to Japan. After the translation and exportation of them in the US and Europe, there occurred an inevitable influence in each direction between manga and western comics, which influenced the ascension of the graphic novel in the world panorama, as seen before. The graphic novel is a world literature because it has touched every continent in the world through the years: not only France and Belgium in Europe, but also the *fumetti* tradition in Italy and the *historietas* in Spain, and more recently the thrilling comics production from Eastern Europe or Scandinavia. East and Southeast Asia demonstrate to be active comics scene, from Korea, to Hong Kong, as well as the South Asia is hosting some of the most compelling authors emerging. A particularly famous example from the Middle East is the literary case of Marjane Satrapi's *Persepolis*, which is just one of the graphic narratives produced in this area. The African continent is not excluded from this list and counts on a significant and

increasing production of graphic narratives, which gives a fascinating hint on post-coloniality, and hosts significant themes linked to cultural identity, sense of displacement, and post-imperialism. South America can likewise rely on a consistent comics tradition, often contaminated from other realities overseas, and which reached the global audience, beyond the Spanish-speaking world. Last but not least, Oceania continue to have a considerable impact on world literature, and many are the cases both from Australia and New Zealand (Ball, 2018). It is exactly the extension of the territories touched by this great revolution in comics and the consequent shift towards the graphic narratives, that promote the genre into a vaster world literature, and it is valuable to note, that all the significant changes in comics happened almost simultaneously in different countries, in a period when the networking technologies were just about to develop – the 1980s and the 1990s. This deviation was firstly perceived by Harvey Kurtzman, an American cartoonist and editor, when commenting over Spiegelman's *Raw* in 1987. He commented in the section *Comics Sans Frontières* published in *The Comics Journal* about the comics magazine edited by the Swedish cartoonist Art Spiegelman and the French editor Françoise Mouly and published in the US between 1980 and 1991 (Groth, 2006, pp. 29-42). The magazine was to provide an outlet for the kinds of comics that had difficulty finding a publisher in the US, in particular younger cartoonists who fit neither the superhero nor the underground mold, and European cartoonists who did not fit the sex-and-sci-fi appetites of *Heavy Metal* fans, another comics magazine of that time.

The graphic novel seems to be the most adequate medium to elaborate and convey strong themes to the global readership, thanks to new technologies of communication and a grown-up network of translation and distribution. This is one of the points often remarked by Baetens, Frey, and Tabachnik in the introduction to their work. The graphic novel has originated from the need to interpret and express more serious questions, or better, all those themes once repressed by the literary and comics mainstream, such as politics, social inequities, neo-imperialism, and post-colonialism. This is precisely one of the founding argumentations of the present hypothesis, which sees the graphic novel as the best medium to discuss, elaborate and push the public debate to the

climatic crisis. As there will be discussed in the following chapters, there are some specific features of this literary genre, like fiction narratives, its hybridity with images and graphics, and its capability of reaching a wider public, which make it the breaking point between climatic crisis and literature resistance to this theme. Considering all these characteristics, the graphic novel seems to appear as the possible answer to Amitav Ghosh's hopes, when he writes:

So, if it is the case that the last, but perhaps most intransigent way the Anthropocene resists literary fiction lies ultimately in its resistance to language itself, then it would seem to follow that new, hybrid forms will emerge and act of reading itself will change once again, as it has many times before. (Ghosh, 2016, p. 84)

The Indian author experimented himself a hybrid form of literature, and this is the case of *Jungle Nama* written in collaboration with the artist Salman Toor, which integrates the traditional narration with evocative illustrations. However, it is not a story directly concerning the climate change or global warming, even if the background environment of the storytelling is a mangrove forest with all its perils.

The Relationship between the Graphic Novel and Ecocriticism

What is ecocriticism in its essence is well summarised in *Ecocriticism* by Greg Garrard, which is a comprehensive handbook even for outsiders. The author quotes *The Ecocriticism Reader* by Cheryll Glotfelty:

“What then is ecocriticism? Simply put, ecocriticism is the study of the relationship between literature and the physical environment. Just as feminist criticism examines language and literature from a gender conscious perspective, and Marxist criticism brings an awareness of modes of production and economic class to its reading of texts, ecocriticism takes an earth-centred approach to literary studies.” (Glotfelty & Fromm, 1996 in Garrard, 2004, p.3)

One of the central points of this dissertation is the ecocritical evaluation of the graphic novel as a genre followed by the analysis of the works *The Roles We play* by Sabba Khan, *The H2O Problem* by, and *Blue* by. As principal source of reference I will lean on the research conducted by Adele Haverty Bealer and Sidney I. Dobrin on this theme. As a matter of fact, some research on the interweaving between comics and ecocriticism has already been carried out, even if “very little work has taken up the rich potential of a comics studies / ecocriticism engagement” (Dobrin, 2020, p. 9). Bealer investigates on the representation of the environment in graphic narratives – specifically in some graphic novels - whereas Dobrin, with the contributions of other scholars, analyses some of what he calls “eco-comix”, that is comics with a clear (or not) environmental engagement. Adele Bealer remarks in her introduction, how close the two disciplines are, sharing many features of their paths and allowing an almost natural interdisciplinary reasoning. Or better, the feeling is that of an instinctive connection between ecocriticism and literature (comics studies), since the many congruences: Dobrin, for example, reminds us that the two research fields emerged and acquired institutional acknowledgement in the same period, in the 1990s (Dobrin, 2020, p. 9); he continues, underlining that both discipline is rooted in texts that pre-date their

academical affirmation and, lastly, that both have intellectual alliance with English studies, composition studies, semiotics, and cultural studies. Another interesting fact, which unites the history of Comics Studies and Ecocriticism, is the discordance about the terminology to be used among their practitioners and authors, which still remains today within their circles. As a matter of fact, the very term 'ecocriticism' - as already explained regarding 'graphic novel' - arises some perplexities about its validity. One of the dissenters is Lawrence Buell, who argues that the description environmental criticism "approximates better than 'eco' the hybridity of the subject at issue". His intention is to suggest that the "eco" prefix "still invokes in some quarters the cartoon image of a club of intellectually shallow nature worshippers". (Buell, 2009, p. viii). The many similarities are visible even from the early texts, and Dobrin follows indicating how the majority of the first comics present a strong environmental engagement: one must only think about the multitude of anthropomorphic characters which populate the comics panorama, or the vastity of superhero possessing ecomorphic powers. Dobrin makes a quite explicative list of many anthropomorphic characters taken from the most famous comics of ever. He names Spiderman, Black Widow, Antman, Batman, Catwoman, just to report a few. Many are the characters gifted with superpowers which remind to the natural elements: Aquaman, Storm, Poison Ivy, Swamp Thing, and so on. (Dobrin, 2020, p. 7) Despite the many similarities, the ecocritical exploration do not present a satisfying engagement with the graphic novel, which Patrick Murphy notes to be one of "the many ways of representing the human engagement with the rest of nature in literary forms that do not descend from natural history, that are not written in prose, that are not nonfiction [and] that are not rhetorically structured as essays" (Murphy, 2000, p. 2). However, while fulfilling the aim of establishing comics studies as innately ecocritical pursuit and acknowledging the wide influence of comics studies on ecocriticism through their shared focus on the interplay between visuals and words, the risk is to oversimplify the vast potential for both fields to inform and influence each other in a more nuanced and interconnected way. The reciprocal benefit between the two fields is both in terms of methodology and of discipline. Analysing comics from an ecocritical point of view cannot be regarded as a merely identification of images and text that depict the environment. As a matter of fact, the various forms of visual storytelling - comics,

graphic novels, web comics, cartoons, and animations - engage in ecocritical thought, not only depicting the nature and the environment, but also shaping our perception and understanding of nature and the environment. (Dobrin, 2020, p. 10)

Adele Bealer concentrates her attention particularly on the hybridity of graphic narratives and ecocriticism, where literature and the environment, text, and image, coexist at the same time. She very cunningly defines both disciplines with the concept of *quasi-object* theorised by Bruno Latour (Bealer, 2014, p. 1), who envisages every hybrid combination of blending elements from opposing ends coming together in a sort of equilibrium: nature and culture, image, and text. Indeed, these are polarities which seem to never come together, but on the contrary, to repel each other.² Greg Garrard in his *Ecocriticism*, while introducing the birth of the early environmentalist movements, reminds us that until the publication of Rachel Carson's *Silent Spring*, little concerning the environmental issue was left to literature. Every problem linked to the environment was considered scientific material to be treated by more technical disciplines – “It may seem obvious that ecological problems are scientific rather than objects of cultural analysis” (Garrard, 2004, p. 5). But it was precisely the literary qualities of Carson's work that helped bring awareness to her audience of certain objective and factual data concerning pesticide use in the 1960s. Garrard continues his argumentation about whether or not literature is competent to deal with scientific arguments by quoting John Passmore. Passmore proposes a distinction between “problems in ecology” and “ecological problems”, where the first are strictly scientific matters, while the latter are “features of our society, arising out of our dealings with nature, from which we should like to free ourselves, and which we do not regard as inevitable consequences of what is good in that society” (Garrard, 2004, p. 5). The hybridity quality affects even the methodological approach that ecocriticism and comics studies imply, since they integrate for example with eco-composition, animal studies, post-humanism, post-colonialism, ecofeminism, queer ecology, semiotics, visual rhetoric, media ecology, eco-media, just to name a few.

² On this, I would like to quote Virginia Woolf and her *Orlando* “Nature and letters seem to have a natural antipathy; bring them together and they tear each other to pieces”, where I think it is manifest the distance that is put between culture and the environment.

Moreover, this very aspect remarks once again the uniqueness of this methodological approach among the other literary theories, given its close and direct relationship with the science of ecology. To conclude, ecocriticism wants to evaluate through its methodology texts, seen as cultural expressions of our perception of all those ecological problems, of which we are aware. To fulfil this purpose, we must enlarge the very definition of text, expanding it to almost every form of cultural expression – textual and visual. Richard Kerridge in his *Writing the Environment* suggests that:

The ecocritic wants to track environmental ideas and representations wherever they appear, to see more clearly a debate which seems to be taking place, often part-concealed, in a great many cultural spaces. Most of all, ecocriticism seeks to evaluate texts and ideas in terms of their coherence and usefulness as responses to environmental crisis. (Kerridge, 1998, p. 5)

The ecocritical interpretation of literacy goes from how nature is represented, to how humans interact with the natural world, and then further to the relationship between human and non-human. In his book, Dobrin points out another fundamental aspect, which is particularly relevant for the final aim of the present dissertation: similar to other types of literary criticism rooted in social and political ideologies (such as feminism, Marxism, or postcolonialism), ecocriticism also carries a mission of promoting awareness. It seeks to demonstrate how literature, when analysed through an ecocritical lens, can influence human engagement with the natural world and ecosystems. Adele Bealer, in her PhD dissertation, holds the ideal that the graphic novel is the most suitable medium for creators to express this kind of concepts, right because of its interdisciplinary nature. The combination of authorial text and artistic image often brings out the physicality of the elements used by the graphic novel, the same term graphic can refer to sexual and violent themes. According to Bealer, it is precisely this, sometimes raw, physicality that makes it the ideal ground for generating ecocritical material concerning the analysis of the relationship between human and non-human, nature, and culture. Scott McCloud in his “Understanding Comics” wrote that “comics’ silent dance of the seen and unseen” and their ability

“to go hand in hand to convey an idea that neither could convey alone” (McCloud, 1993, pp. 155-156) is the result of both a combination of distinct elements and a functioning system in its own right. The ecocritical analysis of the graphic novel should consider the ability it entails of kindling our environmental imagination, that is our ability of imagining other, possible, future scenarios, where we creatively confront the current climatic crisis. This is possible thanks to the relation between the graphic novel and its reader. As a matter of fact, the reader is asked to be an active participant of the reading experience, and not a passive observer; the reader must implement their “both visual and verbal interpretative skills” (Eisner, 2008, p. 2) in order to connect the various elements of the panels in a comprehensive whole. This concept is sustained by Scott McCloud as well, when he holds that our capacity for *closure*, is an almost evolutionistic response, allowing the human beings to survive in our “incomplete world”. The ability of closure is the ability of making connections between actions and consequences. A natural instinct, which somehow allows us to *get* the picture, and not just see it (McCloud, 1993, p. 63). According to Douglas Wolk, within the immersive reading experience proposed by comics there a real pleasure in “filling in all the blank spaces beyond each panel” (Wolk, 2007, p. 132), which results in a form of navigational reading that charts the correlation between text and its execution.

[Comics are] full of enticing blank spaces, in both space and time, for readers to decorate...but what they look and feel like when we flesh them out isn't the same way we perceive our own environments. (Wolk, 2007, p. 133)

In his statement Wolk wants to underline that what we see in a comic's pages, instead of being a direct reflection of our own world, rather it is a portrayal of a different world by someone else. Comics reader enter the graphic environments and make them their own through their very aesthetic and intellectual performance of closure. After this, we can say that the graphic novel's reader is what the French critic Jaques Rancière defines an “emancipated spectator” able to “translate what she perceives in her own way” (Rancière, 2009, p. 16). Thus, through what Wolk calls a “metaphorical representation” of our own “image-world”, it is not the graphic novel itself as a medium that performs the reading performance, but the reader is an active participant in it,

who performs a unique and unrepeatable experience of closure, realizing his or her own perception of the graphic world. The reader lives the graphic environment both as spectator and as participant, contributing to the ecology of its state of being beneficiary (or victim) of those actions. Through its technical features, the graphic environment challenges the reader to reflect upon our relationship with the environment around us. Bealer reports an effective example taken from the Concrete comics series by Chadwick, especially from an episode titled “Think like a Mountain” (156) where it is possible to appreciate an explicit invitation for the reader to rethink our relationship with the environment, and “suggests that while saving the rainforests will not be a walk in the park, “it will be worth it”...for the environment’s sake and for our own” (Bealer, 2014, p. 19). The powerful blend of ecological awareness and imaginative storytelling resides within the graphic novel, revealing the potential of an ecocritical mindset (Bealer, 2014, p. 19). The graphic novel – as any comics - is made by artistic drawn images, and not by photorealistic representation of the reality. As a matter of fact, as Wolk suggests, the graphic novel provides with an interpretation or translation of the world, with aspects that are willingly exaggerated, adapted, or invented (Wolk, 2007, p. 20). And it is this suggestion mediated by the drawings that, according to Tim Morton, “make us question reality” (Morton, 2010, p. 8). Further on, Adele holds the belief that graphic narratives are a perfect medium for revealing deeper insights into how we perceive and interact with our surroundings, as well as the influence we have on them. These narratives aim to awaken our consciousness and encourage us to notice the countless small moments that often go unnoticed in our everyday lives (Bealer, 2014, p. 20). Somehow, it animates all those issues, which Ursula Heise suggests being interrogated in an ecocritical exploration of the “natural, urban, [and] virtual” environments that we encounter in our everyday life (Heise, 2002, p. 166). Although the graphic novel runs the risk of running into recognisable representations of human conduct through the use of stereotypes, popular mythologies, and in depoliticisation (as indeed is the case with any graphic and visual medium), it nevertheless remains the ideal medium for transgressing its own limitations. These texts welcome the inherent uncertainty needed to create a beautiful experience that encourages the exploration of different identities, active self-awareness, and diverse opinions. This experience allows for the possibility

of political growth. The ability of graphic novels to cultivate this artistic and political environment is worthy of analysis from an ecocritical perspective. In the conclusion Bealer hopes that the graphic novel not only invites the reader to make experience of the world through other senses, but also the sense of *Other*. It recreates a virtual world in the present, while tending to an alternative future. All of this is possible thanks to what Amitav Ghosh so desperately hopes for, that is the creative use of fiction to improve our imaginative ability to think of other possible worlds, way of living, and solutions to the environmental challenges we are confronting with. Turning our look upon alternative forms of art and actively engage them in the environmentalism debate, helps us, as Tim Morton holds, to escape all those categorisations which prevent us from seeing all the possible, creative alternatives (Morton, 2010, p. 60).

Postcoloniality in the Graphic Novel

As seen in the previous paragraph, the graphic novel is an ideal medium to host ecocritical literacy and, since ecocriticism is developing an increasing interest in postcolonial theory, in the following section there will be argued how the two disciplines can find a fertile ground of discussion in the graphic novel. This literary form is not only a hybrid medium itself but can prove being a suitable arena of negotiation between ecocriticism and postcolonial theory. That these two apparently remote fields can interweave with each other, and dialogue is sustained by Rob Nixon and Adele Haverty Bealer in their works (Nixon, 2011, p. 231, Bealer, 2014, p. 49). Moreover, Lawrence Buell already recognised this disciplinary encounter as typical of the ecocriticism's third wave (Buell, 2011). Ecocriticism and postcolonialism both address the same problems of colonial domination, including racism, sexism, and cultural exploitation. These issues have real consequences for both the colonised and the colonisers in today's environment. The colonized are often depicted as impoverished, people of colour, women, animals, plants, or even as mere objects and resources to be exploited by those in power. These would be a key element of debate in the analysis of the three graphic novels chosen within the present dissertation. Each one deals with the consequences in the aftermath of the colonization both for people - the colonised – and the environment, delivered through the individual's stories. With the phrase “postcolonial literature”

we refer to every form of text from any culture affected by the imperial process from the moment of colonisation to the present day. In it, it is represented the tension between the colonised and the imperial power and most of the times the differences from the assumptions of the imperial centre are emphasised, in order to regain independence on the cultural and identitarian level above anything else. One of the main features of postcolonial literature is the relationship with the place and the displacement, which can occur after phenomena of migration, enslavement, or transportation for labour. The result is the erosion of the sense of self, the alienation of vision and the crisis of the self-image. These themes are dominant in the graphic novel by Sabba Khan *The Roles We Play*, where the author shares her family's story and her biographical journey through time and space to find her own identity. As I argue in Chapter III, the author-artist experiences a sense of displacement given by her condition of second-generation-migrant, who even if born in the host country – the UK - still, she cannot recognise it as her home, and more importantly, she struggles with her self-image, neither Pakistani nor British (Ashcroft, et al., 1989). The graphic novel by the Indian author Vidyun Sabhaney *The H2O Problem* treats the theme of colonisation and the sense of displacement felt by children of migrants and refugees, who cannot feel integrated because of the traumatic memories passed to them by their parents or fore-parents. Another important aspect to emphasise here, as shared concern between ecocriticism and postcolonial theory, is the fact that both are interested in the visibility that the “marginalised voices” can gain through literature – in this case through visual literature. For instance, Nixon identifies the challenge of visibility in representational strategies that confront with the complex and long-lasting effects of slow violence on the environment (Nixon, 2011, p. 5). Further on, he continues wondering how we can portray the gradual and prolonged disasters caused by private, corporate, national, and international actions that contribute to global climate change. He questions how we can effectively recount the stories of these "long emergencies of slow violence" in a way that will evoke public emotions and justify political involvement in today's world (Nixon, 2011, p. 3). Postcolonial ecocriticism demands a keen artistic sensitivity to its urgent political and representational essence. Huggan and Tiffin, two important postcolonial critics, highlight its “utopian ambitions: to make exploitation and discrimination of all kinds, both human and

nonhuman, visible in the world; and in so doing, to help make them obsolete” (Huggin & Tiffin , 2010, p. 6). An aesthetic that combines politics, postcolonialism, and ecocriticism has the power to make us reconsider how we tell stories that shape our perception of the environment and influence our responses. This type of aesthetic asks art and literature to go beyond simply depicting what is already visible, but to bring attention to what has been ignored or marginalized (Bealer, 2014, p. 53). Huggin and Tiffin highlight the ongoing importance of the imagination and creative literature in postcolonial ecocriticism. They emphasize that the aesthetic decisions made in this collaborative critique should be seen as a unique approach to interpretation, rather than a fixed set of texts (Huggin & Tiffin , 2010, pp. 12-13). Expanding the definition of text is the way to encounter more significant mediums, which in the present context is embodied by the graphic novel. It seems appropriate to quote Scott McCloud, when he states that “cartooning isn’t just a way of *drawing*, it’s a way of *seeing*” (McCloud, 1993, p. 31). It is a way of seeing different things, differently. In her PhD thesis, Bealer’s purpose is to examine how the graphic novel can act as an artistic vantage point, allowing us to see how the portrayal of nonhuman beings – she focuses particularly on animals - in a postcolonial ecocritical context maintains its uniqueness, while also prompting readers to disregard species distinctions when confronting cultural and environmental exploitation (Bealer, 2014, p. 54). After having introduced the powerful connection between ecocriticism and postcolonial theory, the issue turns to the question: how does it connect with comics studies? The aim of this paragraph is to explore the great potential of expression embodied by the graphic novel, producing significant postcolonial-ecocritical literacy. To introduce the premises on which building up the argumentation in favour of the comics form, as most suitable host medium, I would rely on Binita Mehta and Pia Mukherji’s research. The two scholars take particular interest in recent comic-books produced in Anglophone and Francophone settings – ex colonies - and in how they relate to their postcolonial histories. In their introduction, they hold the increasing significance of postcolonial comic

culture in “the context of a newly global and politically recomposed landscape” (Mehta & Mukherji , 2015, p. 2). Moreover, they highlight how postcolonial texts engage with colonial discourse in a way that dismantles it, existing within its uncertainties and divisions. This leads to an ongoing exploration of the boundaries of representation itself and the representation of Western modernity (Slemon, 1994 in Mehta & Mukherji , 2015, p. 2). Once again, those boundaries can be overcome by the graphic narratives, which empowered by a variety of meaningful tools, can be seen as a powerful form of "postcolonial textuality." By highlighting the lasting impacts of colonization and reimagining identities that have been overlooked or distorted, these narratives bring attention to specific historical and cultural backgrounds (Mehta & Mukherji , 2015, p. 4). The postcolonial comic provides an ideal platform for presenting revolutionary and forward-thinking alternatives to the concept of outdated authenticities. In doing so, it serves as a means of bearing witness, testifying, accusing, and archiving (Mehta & Mukherji , 2015, p. 3).

Chapter II - Why the Graphic Novel Could be the Key

In the next paragraphs I present the characteristics that I find are the most important in the graphic novel and that would make it the most suitable literary genre to include in the climate change debate. The characteristics I identified are exposed with the purpose of bringing arguments in favour to my hypothesis, while at the same time of highlighting the limitations which exist at the present moment for different reasons. Indeed, this is a field which requires further investigations in terms of empirical studies, which could be definitive to prove the effectiveness (or not) of the concepts I theorised.

The first element I put my focus on is the fictional dimension of the plot. I question the differences and the consequences of reading a fiction or a non-fiction graphic novel for the readers. While the graphic novel was born out of the need to narrate autobiographical stories, historical events, and more serious issues, there is also the power of imagination to reshape and invent reality, the latter an ideal quality for experimenting with possible future scenarios of climate change. Precisely in order to best investigate the differences and respective advantages of these two types of plots, in the next chapter I have chosen to analyse both an autobiographical and a fiction graphic novel. Next, I expound on how the use of images is a very powerful resource, as well as being the primary feature of a graphic novel. In fact, the effect that images have on our neurological system plays an important role in the affective response that the reader has during and after a reading experience. I argue that this element can be crucial in representing the effects of climate change in a way that generates a certain empathic response from the reader.

As mentioned in the introduction, it is precisely the search for an intense and deeper empathic response that is desired by the literary world and that perhaps finds its repository in the graphic novel. A cultural product that has the ability to generate a physical - neurological - response in the reader that is visible and measurable, I argue that it can consequently be the ideal platform to bring the more complex issues that dominate contemporary debate - foremost among them precisely the global climate crisis.

Finally, the last aspect that I think is interesting in this context is the great popularity that the graphic novel is gaining. As I illustrate in the last paragraph, not only has the consuming public of graphic novels increased, but the number of works that are produced each year has also increased. In my analysis, I bring the example of the Italian market to give a local idea of the size of the phenomenon, although the success of the graphic novel is a worldwide phenomenon: not only in Western countries, but also in many postcolonial realities, the graphic novel has become a cultural product widely used to address social, political, and economic issues. This element coupled with the inclusive nature of this literary genre has the potential to increase its audience and thus bring complex issues effectively to a growing number of people, with the hope of generating in them that much hoped-for empathy for future generations.

Fiction vs. Non-Fiction: Which is more effective?

“Fiction is the great lie that tells the truth about how the world lives!”

(Abraham Verghese – The Covenant of Water)

The first aspect to take into exam is the distinction between fiction and non-fiction readings, since in the introduction there was already mentioned the preoccupations and hopes of the writer and intellectual Amitav Ghosh, who interrogates himself - and his audience - on the position of literature in the current climatic crisis debate. Thus, he expands the climatic crisis in a cultural crisis too, and boldly he admits:

I have come to recognize that the challenges that climate change poses for the contemporary writer derive ultimately from the grid of literary forms and conventions that came to shape the narrative imagination in precisely the period when the accumulation of carbon in the atmosphere was rewriting the destiny of the earth. (Ghosh, 2016, p. 7)

What he suggests is the fact that forms are not neutral, they already dictate the kind of content they are going to deal with. Every different literary form gives the reader the parameters for their reading experience, primarily through its genre label. About this aspect of open declaration of their own form from the different genres, it appears interesting to report the concept of *paratext*, which is the text accompanying the story. It is exactly the genre labels on the book covers, such as “novel” or “autobiography” (Genette, 1997). In their article, Markus Appel and Barbara Malečkar argues that the paratext can have an influence on narrative persuasion (Appel & Malečkar, 2012). In this sense, the genre labelled to be the realm of fiction is the novel, a genre which takes its origin right when the world economy comes to be dominated by carbon fossil fuels. In a novel the writer is free to make up worlds, characters, and events, following their imagination. On the other hand, we cannot forget how the novel is embedded in its own time of conception, that is how it mirrors and express the features – the problematics – proper of its time.

For this reason, given the very nature of the novel, Ghosh (as a novelist himself) admits the failure of it to register and represent credibly the magnitude of climate change.

The first question is whether fiction, the imaginative exercise of an author, can be effective in striking the readership writing about a topic, which apparently partakes the scientific field. As already mentioned, this kind of interdisciplinary approach is possible in literature. Nonetheless, the reliability of a fictional account on the current state of things and its capacity to affect the reader, not only by increasing their awareness on the theme, but also – and mostly – by generating some kind of positive activism is questioned. To put it in simple words, why and how fiction could modify the reader's behaviour – towards a more environmentalist point of view – compared to non-fiction literacy?

The contrast between fiction and non-fiction is significant for the preset thesis because of the specific features of the graphic novel, which is born out of the need of dealing with more serious – or even tragic – themes, usually via autobiographic or realistic stories. However, the current development of this literacy and its roots in the comics world could provide a different path to convey a meaningful story through fictional visions. Indeed, fiction can not only be a meaningful experience but could also influence the reader, somehow positively, and on this issue different scholars have debates and conducted research studies. Among them, it seems appropriate to report the research made by Helena Hollis, who investigated into the relationship between fiction and non-fiction reading exposure, and factors of critical thinking (Hollis, 2023). Her findings suggest that fiction reading experiences are connected with critical thinking in a distinct way compared to nonfiction. She relies on Currie's definition of fiction and nonfiction to conduct her study, which places the classification in the intentions of the author, and the reader's recognition of those intentions (Currie, 1985). Fiction is that which invites make-beliefs, and by contrast nonfiction invites belief (Root, 2004). Readers make judgements on authors' purpose and differentiate between texts that are meant to be believed or make-believed (Sutrop, 2002). This distinction has some empirical limitations, since the two segments are sensible to frequent overlaps (a more colourful nonfictional storytelling, or a fictional story providing factual data) (Hollis, 2023).

Fiction is often appreciated for its literary value and is presented in educational contexts as a source of profound material for interpretation and analysis. This aligns with broader arguments advocating for the arts and humanities, which encourage critical thinking (Dumitru, 2019 in Hollis, 2023). Beyond the realm of literature, it has been contended that reading fiction has advantages in expanding our cultural horizons by introducing us to the lives of characters who exist beyond our personal encounters (Hakelmulder, 2001 in Hollis, 2023). Psychological research has discovered connections between reading fiction and the development of our capacity to envision alternate scenarios and understand others' viewpoints through mental simulations (Oatley, 2011 in Hollis, 2023). It appears logical to state that the *others'* perspectives can potentially include the point of view of humans and non-humans, of other species on our planet, or of the planet itself. Since engaging with different perspectives (Kuhn, 2019 in Hollis, 2023), and imagining alternative possibilities are fundamental abilities for critical thinking (Byrne, 2016 in Hollis, 2023), Hollis assumes that fiction reading may enhance the critical thought in the reader because one of the key features necessary for critical thinking is empathetically engaging with the viewpoints of others (see the research by Mar, et al., 2006 and then replicated in Mar, et al., 2009, Fong, et al., 2013, Mumper & Gerrig, 2017, Stansfield & Bunce, 2014, Tamir, et al., 2015). Fiction readers have been found to have increased levels of empathy and greater ability to model the minds of others. Reading fiction is also linked to a heightened ability to creatively envision various situations and scenarios (Oatley, 2011 in Hollis, 2023), as well as being receptive to considering different possibilities in hypothetical reasoning (Black, et al., 2018 in Hollis, 2023). It is thought to offer these advantages by offering a form of realistic training for real-life interactions (Zunshine, 2006 in Hollis, 2023). The ability of fiction to transport us to different worlds and make us feel as if we are experiencing events firsthand has been likened to using a flight simulator (Mar, et al., 2008 in Hollis, 2023). Through reading fiction, individuals are able to imaginatively put themselves in the shoes of others and see the world from their perspective. This allows them to develop a greater understanding of different viewpoints and become more receptive to alternative opinions. Additionally, reading fiction helps to cultivate a broader imagination, enabling individuals to explore various scenarios and envision the potential

outcomes of different possibilities (Hollis, 2023, p. 20). The increasing of the empathy levels could represent a significant argument in favour of the use of fiction in the graphic novel, especially to enhance this ability towards the understanding of what is happening right now in other parts of the world to other populations, and subsequently to increase the ability to imagine solutions and alternatives to our current (Western) lifestyle. Moreover, the same critical thinking is crucial when we reflect upon our habits and behaviours, when we make choices over our consumerism. This hypothesis will be verified in the analysis of one of the texts selected, which is a sci-fi graphic novel dealing with the dystopian scenario of a polluted and corrupted world of the future.

On one hand there has been found true that fiction reading influences positively the readership if we assume that the enhancing of empathy levels and an increased critical thought are beneficial for the reader. These consequences have been thoroughly analysed by Helena Hollins in her research, through different empirical studies, which represents reliable evidence for this argument – together with much previous research conducted by other researchers. However, as the same Hollins admits, there are some limitations in the study, which require a deeper investigation and which entail for instance the borders between fiction and non-fiction, the kind of fiction the reader deals with, and the individual disposition to critical thinking (Hollis reports an experiment she made on this second point in her article published in 2021). On the other hand, there has been little evidence, if none, on the development of this enhanced critical thinking into positive activism/altruism, that is into a positive action in favour of *others*. In the present context the *others* regard the human and non-human, people and whatever other species, and the planet at large. On the doubts about the real influence of reading fiction it appears useful to report Susan Keen's work on the relation between empathy and the novel, where she concludes her research affirming that there are many different obstacles to the fulfilment of the myth of the beneficial effects of reading fiction. First of all, the empathy deriving from the character identification can occur “even when the character and the reader differ from each other in all sorts of practical and obvious ways” (Keen, 2007, p. 70), that is to say that it is unpredictable towards what kind of character or

situation the reader might develop a feeling of empathy. Moreover, following her research – based on readers’ testimony - Keen formulates another hypothesis, which is that the “empathetic responses to fictional characters and situations occur more readily for *negative* feeling states, whether or not a match in details of experience exists” (Keen, 2007, p. 72)³. This to underline how “self-reported readers’ empathy appears to be unpredictable and sporadic” (Keen, 2007, p. 75) and that, to date, the most accredited factor of influence is the reader’s disposition. On this, Michael Steig suggests in *Stories of Reading: Subjectivity and Literary Understanding* that “Because of personality and experience, some readers are capable of more original and deeper understanding of emotionally puzzling aspects of particular literary works than are others; and such understandings can be conceptualized by such a reader through a reflection upon the emotions experienced and upon personal associations with those emotions” (Steig, 1989, p. xiv). To conclude, it seems that fiction reading can potentially increase the levels of empathy and lead to a more critical thinking the reader, even if one should consider its limitations and the unpredictability of the target of that empathy. Compared to a non-fictional story, fiction seems to grant a safer ground to experience alternatives to the real state of things.

³Italic is mine.

The power of images

“Graphics-driven literature...[is] more visceral than the unadorned printed word”

(Francisca Goldsmith - YA Talk: Graphic Novels)

As the previous quote suggests, the language of the images is something which strikes more deeply than other kind of language. As a matter of fact, the first form of written expression was visual, made out of pictorial representations of a scene, or of an idea – the most ancient evidence date back to prehistory with the cave paintings. The very first prototypes of alphabet were based on pictograms, or hieroglyphs, which with their stylised design were nonetheless loaded with meaning.

That of images is a primordial language that has existed as long as man has existed. image is a vehicle of meaning that can reach a potentially absolute audience, given its immediate nature of fruition. An image can be "read" without being able to read. And this in truth has been the mass medium of communication used by man for almost all of his own history, at least until a level of literacy to a revaluation of verbal language that affected the twentieth century. Well, to consider the contemporary digital revolution as a precursor in bringing the image to the forefront of languaging forms would be a mistake. It is perhaps more a return to a deeper form of transmitting meaning, one that touches the deepest chords of the soul of those who enjoy its contents. In the contemporary semiotic landscape, it is true that the imperative of web-oriented communication users is to consider each language in the stergue of an icon-text that prevents the dominance of one code over the other and forces the reader into frequent short circuits, reading images in the light of the verbal text and the latter according to the orientations of the images (Punday, 2011).

However, the combination of image and text today has also changed their very nature. Stefano Calabrese in his essay suggests that the way we read an image may be more complex than we think. He makes mention of how the most accredited theories of visual studies and neuroscience have affirmed the primacy of the mind over the eye: in fact, we see what we see at first glance

only thanks to the brain and the visuo-motor cortex, which perceives the individual signs of reality, unifying them only later into a coherent image (Calabrese, 2020, p. 4). According to neurobiologist Semir Zeki, there is no longer any doubt that images respond to the laws that regulate brain operations (Lumer & Zeki, 2011, p. 201) and several empirical experiments have been conducted on this point, proving that, for example, adults categorize emotions from facial expressions (Hogan, 2011, p. 118). Calabrese speaking of the graphic novel states that neuroscientific tests have shown that when a user flips through one he sees first the colour, then the shape, and finally the movement of what he perceives (Calabrese, 2020, p. 4).

Calabrese goes on to quote Antonio Damasio and points out that the production, reprocessing, and storage of images are part of an intellectual evolutionary process specific to humans (Damasio, 2018, p. 61 in Calabrese, 2020, 6). They are thus the result of a refinement of the nervous system with evidence that is measurable and quantifiable today. Also, according to Damasio, the very idea of reality would depend on a visual re-elaboration that is not only made up of iconic elements but makes use of all five senses and goes beyond the mere activity of the eye. In conclusion, for Damasio, the nervous system is the architect of the reality mapping process, and images are the main food of the mind.

This premise was necessary to bring out that everything we consume visually has a measurable impact in the reader's brain and remains the most primitive and immediate form of communication. As such, then, images lend themselves to being adapted and shaped precisely according to the meaning the artist wishes to express. In the case of the graphic novel, it is relevant to delve into how images are used to direct the reader's affective response to a specific character or situation. As Elena Zagaglia illustrates in her essay, each graphic choice made by the artist in creating a panel goes to make up the final message to be conveyed. and in this way, the size, layout, gutters, shapes, and colours used in the pages of a graphic novel are each bearer of a precise meaning chosen by the artist.

Not surprisingly, the panels can be analysed using film terminology, which specifies their angles and shots, assigning a meaning to each: close-ups, panoramic shots, overhead points of view,

fields and counter-fields, American planes (Zagaglia, 2020, p. 20). Sean P. Connors for this reason suggests a shared vocabulary widely based on the cinematographic one, in order to provide teachers - in his case - with appropriate tools to debate exhaustively on a panel with their students (Connors, 2011). For example, he bases his analysis on three key points: the shape, the perspective, and the left-right structure of a given panel (Connors, 2011, p. 81).

Zagaglia continues the cinematic comparison by comparing the *mise en page* of the graphic novel with the *mise-en-scène* of a cinematic frame, where both are based on the "unspoken-but-shown," according to an elliptical procedure that omits certain verbal elements which thus go by implication. Narrative chronology is thus unhinged in favour of simultaneity, rather than linear development (Zagaglia, 2020, p. 21). In this way, the reader's role is central in reorganizing the perception of events and their order in the space-page, in which the direction of reading is not necessarily vector-like. Full authority is thus given to the reader, who becomes an interpreter and "inferencer" (Zagaglia, 2020, p. 21).

Through the use of changing perspective and different forms of framing, the graphic novel often becomes a platform for expressing the language of emotions. The emotional lives of characters are depicted with evocative close-ups that zoom in on faces repeatedly allowing the reader to take the time to experience a character's emotions (Zagaglia, 2020, p. 21). The result becomes "an imaginative bond with characters, particularly facing contagious emotions [...], makes the positioning of emotion a literary tool that blurs the boundary between the fictional world and reality, further encouraging the reader to consider different ways of viewing their own world", as Li describes it. It is therefore plausible to say that the artist realizes faces and postures of his characters in a deliberate manner such that the reader's emotional responses are guided (Li, 2016, in Yi-Shan, 2018, p. 475). The visual encoding of human emotions is summarized by Keen under the term strategic narrative empathy (Keen, 2011, in Yi Shan, 2018, 476), and particularly in the graphic novel, the use of close-ups framing facial expressions are a widely used tool to convey to the reader all the inner conflicts experienced by the characters that are effective precisely in inducing an affective and empathic response. Antononoka describes this phenomenon as

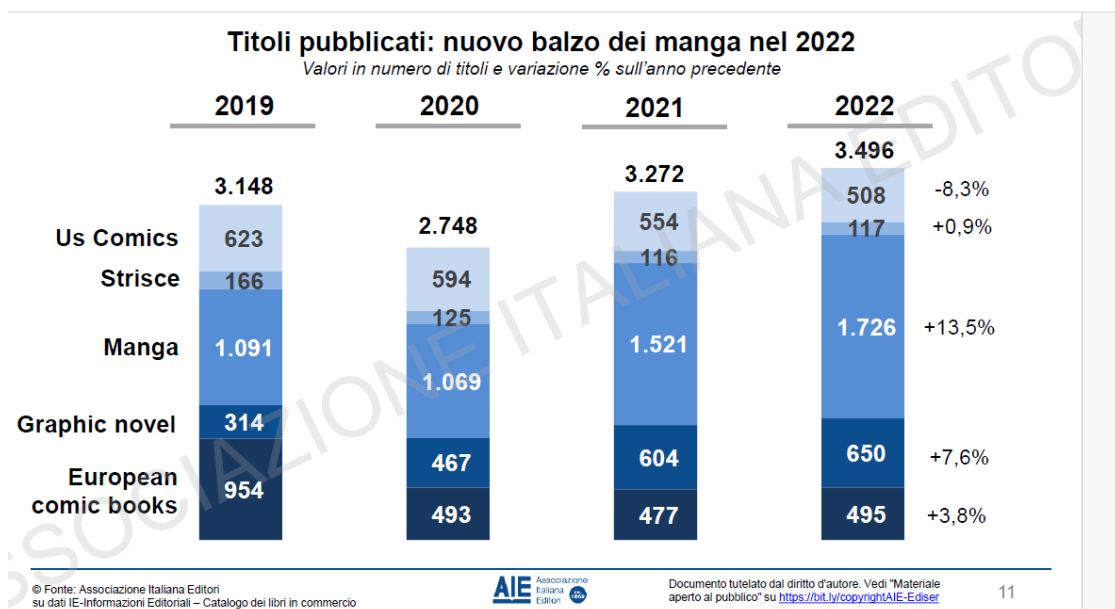
externalizing interiority and making characters-even antagonists-"anchors for empathy" (Antononoka, 2016, in Yi Shan, 2018, 477).the image of the characters depicted alone, but the design of the entire page contributes to it; panel design, layout, lettering, a careful choice of lines, shapes, colours, shadows, spaces, angles, distances, frames, and symbols used by the artist with a defined purpose (Zagaglia, 2020, p. 22).

Thus, the strength of the graphic novel lies precisely in the combination of images and text, which are arranged and created by the artist with the aim of conveying to the reader the hidden interiority of the characters. The representation of subjectivity is what has the power to trigger empathy in the viewer (Zagaglia, 2020, p. 22), managing to create identification with other points of view, different perspectives on the world and things, and a deep connection with the narrative. The remarkable thing is that this phenomenon would not just be a hypothesis, but as Zagaglia reports, cognitive science today confirms that the reader tends to relive the character's emotions in the first person according to a mirroring mechanism also called embodied simulation. The processes in our brains as we see a panel can be compared to those of an imitation of these positions in the sensorimotor systems that prepare the action. Zagaglia defines it as "an echo of the character's experience" (Zagaglia, 2020, p. 24). During the embodied simulation we reuse some of the neural resources we normally use to interact with the world. We reuse our mental states or processes, represented in a body format, to functionally attribute them to others. By processing narratives as complex as icon-textual narratives are, the reader activates hot cognition, enacts mind reading, and takes on different perspectives. The reader of a graphic novel is an active actor and an integral part of the whole reading experience. he can make use of the graphic novel as a training ground for empathy.

In conclusion, as we have seen, the role of the image is central to this reading experience, which differs in a more suggestive transmission of meaning. This hybrid form seems to communicate directly to our nervous system, stimulating real brain activity that leads to the development of cognitive skills such as problem-solving, hot cognition, empathy and change of perspective.

The potentiality to expand the readership

The last argument in favour of the use of the graphic novel as host of the climate change debate is its popularity as a format and the capacity to expand its readership. The interest towards the comics world is raising and spreading all over the world, and in order to make a reliable example of its success I will report the data of the *Associazione Italiana Editori* about the evolution of the Italian comics market in the last few years. Following their statements, in Italy comics readers have increased of the 17,5% of the total in just one year, and since 2019 until 2022 the number of copies sold seems to hold a positive trend; however, the statistics do not distinguish clearly between graphic novels and comics, and it appears difficult to have an authentic portrayal of the sale and diffusion of the graphic novel. Nevertheless, the comics market demonstrates not only a considerable success among readers at date, but also a prolific authorship. As the *AIE* statistics report, there has been an increase in new titles printed and offered in bookstores and retailers, and the number of new graphic novels printed and placed on the market is doubled in about four years.



Following my experience, I argue that the popularity the graphic novel is gaining in these last years is due to its hybrid character. This feature brings with it many advantages. The first one – which I find the most important in the contemporaneous Western society – is the short amount of time required to read an entire graphic novel. In fact, a graphic novel can be read in about two

hours; in this short time the reader experiences an entire story; in about two hours one has the opportunity to look out another window on the world. This feature contributes to make this format of story-telling more accessible and immediate. The second element of strength linked with the hybridity of text and images, is the use of a multimodal language, which renders this genre – once again – accessible to all those readers with learning disorders. As a matter of fact, the graphic novel conveys meaningful messages either via text or via images, thus the reader can get the meaning of the panel from both the textual and the visual code. In this way, a wider range of readers could be included in the potential audience of the graphic novel. Moreover and consequently, it entails the potential to communicate complex themes easily and straightforwardly to a broader audience, thus demonstrating its inclusive nature. On this, it seems appropriate to report the article by V. N. Scalcione, P. D'Antonio, and C. D'Antonio who investigated on the beneficial effects of using multimodal languages to convey information to pupils with dyslexia (Scalcione, et al., 2020)

Chapter III – Case Studies

There are already many significant examples of successful and meaningful graphic novels dealing with the climatic crisis or, at large, with environmental issues. One of the most popular is *Ducks: Two Years in the Oil Sands* by the Canadian author Kate Beaton and published in 2022, who gained the Eisner Awards for her graphic novel in 2023 as best graphic memoir (Anon., 2023). Another remarkable example is the graphic narrative *Saison Brune* by Philippe Squarzoni and published in 2012 (in English is published under the title *Climate Changed: A Personal Journey through the Science*), which is already a case of study in some universities and is one of the most compelling ecomix of our times (Dobrin, 2020). However, in the present context there will be examined three works generated in the British sphere of influence, namely works realised by authors from the United Kingdom or its previous colonies, since this research is part of the English Studies department. The graphic narratives selected have been chosen because of their availability, their recent time of publication, and their postcolonial point of view. Indeed, the two of them share the theme of migration, each one with a different point of view and with different narrative techniques: the first is a graphic memoir (non-fiction), while the second is a sci-fi fiction. Every analysis will eventually debate on the issues of postcolonial environmentalism explained previously.

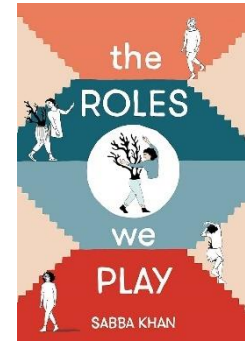
The methodology used to analyse the two works will focus on five main aspects, in order to fulfil the purpose of this thesis. The aspects taken into consideration are:

1. The characterization of the fictional or non-fictional plot.
2. The text: the narrator and the language chosen and used.
3. The image: the quantity of images, the typology, and the semiotic techniques chosen and used.
4. The ecocritical message implied.
5. The postcolonial discourse implied.

For the present context it appears sufficient to concentrate the inquiry into these feature of the graphic novels chosen, even if there is the full awareness – and the hope – for a deeper and broader investigation on this issue.

The Roles We Play by Sabba Khan

The first graphic novel is written and illustrated by the same author, Sabba Khan, who is a second-generation Kashmiri Muslim migrant based in London. Her work was first published in 2021 and, in the same year, it won the Broken Frontier Awards as Best Graphic Non-fiction. Indeed, it is an autobiographic exploration and search of herself: through her memories and reflections, she travels in space and time in order to re-build her



identity. As a second-generation migrant, she struggles to recognise herself neither as a fully Pakistani woman, nor as a fully naturalised British one. She retraces her parents' history of migration, to collect pieces of her ancestral identity, while, at the same time, she deals with the city-life demands and standards. The background story is the mass displacement and migration from Mirpur in Azad Kashmir, a portion of Pakistan which was submerged by the waters of a dam built after Partition. This is an example of non-fiction graphic novel, the prototypical kind of work in this sense, which handles autobiographical material, but at the same time it talks about vaster socio-political dynamics. The narration is divided into thirty chapters collected in three different parts and covers 287 pages. Every chapter starts and is linked to a specific song to be listened to while reading. For this purpose, the author at the beginning of the book gives the link to the Spotify playlist completed with all the chosen songs. It is a graphic novel which can be read in a few hours and in the following analysis I provide the reasons why I chose it as case study.

Non-fictional plot

In this autobiographic graphic novel, the author-artist navigates her memories to find her own identity. Through her drawings she evokes moments of her childhood, of her present, or she depicts her inner reflections. As a second-generation immigrant in the UK, she struggles to interiorize a true sense of belonging. Notwithstanding the recalling of her personal past, the narration is often punctuated with historical data, which are useful to explain the political situation in her motherland – Pakistan – and later the political and social tension that she experienced in

certain periods of her life in the UK. For instance, she gives account of the Partition, of the 9/11 terroristic attacks, and of The Jyllands-Posten Muhammad cartoons controversy, as visible in the following pictures.

Figure 1.1 p.73

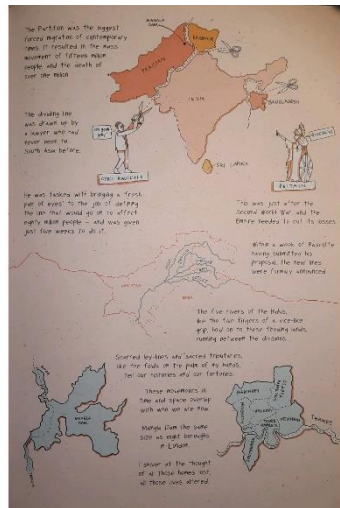
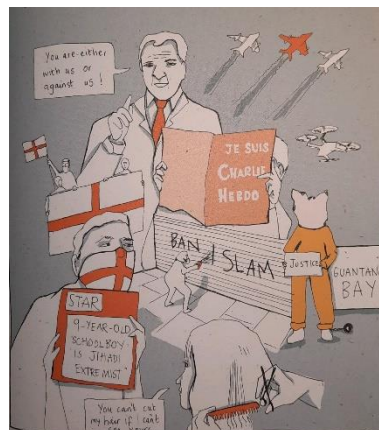


Figure 1.2 p.135



Figure 1.3 p.163



These historical coordinates help the reader get a sense of the actual historical period in which the events occurred. They are also events that have marked the history of the whole world and have become part of a global culture. Reason why, by seeing this kind of real information related to a recent past known to an average reader, the process of empathizing with the author's story is definitely fostered.

As a matter of fact, I find that one of the pros about the non-fictionality of the book is the authenticity. The information given by the paratext, that is *a priori* knowing that it was an autobiographical book, influenced my expectations and my affective responses to the reading. To

be aware that what is narrated (might) have happened for real to a real person – the person holding the pen – has enhanced my willingness to dive into her story, to know more about her life, to take her perspective onto the world, and at times to feel her same feelings. Another aspect which resonated my empathy was the multiple images of herself and her relatives, real people living in real places, depicted to come closer to the reader. Another aspect which made the experience feel real, was to listen to the playlist created by the author to accompany the reading of the graphic novel. This added other sensorial perceptions: I was invited by the author not only to see and read her life, but also to listen to it. This entails in that interdisciplinary and multisensorial work praised by many critics, vital to redefine the role of literature.

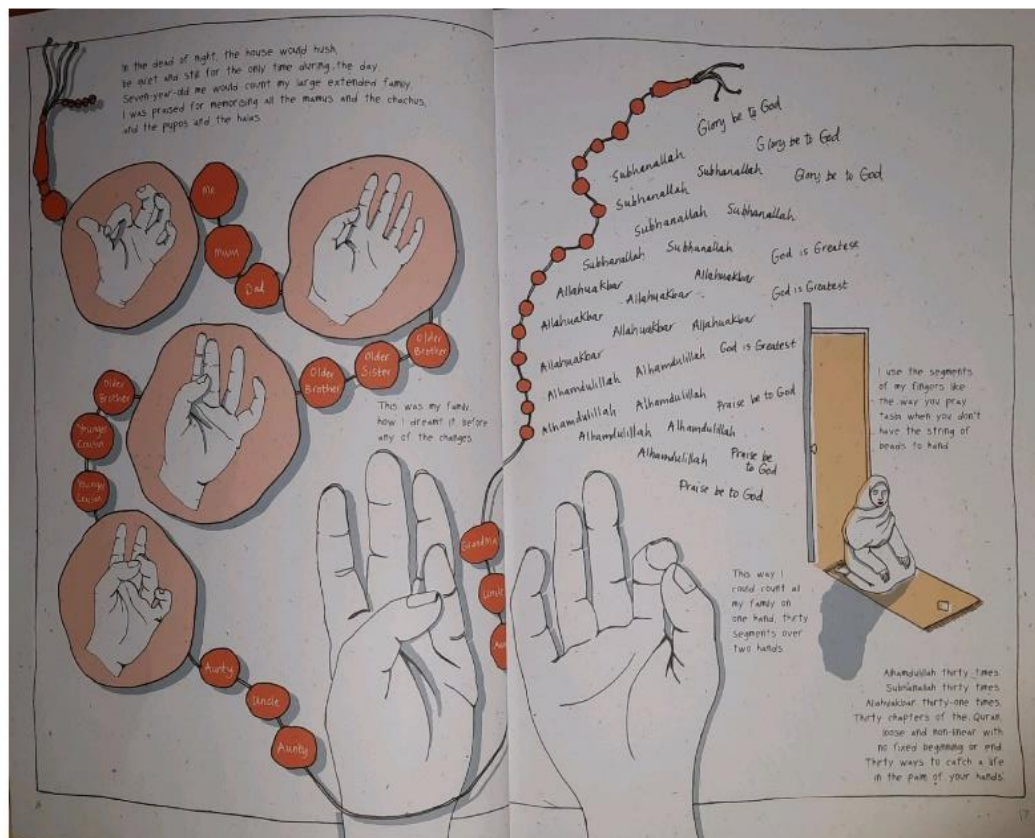
Figure 2 p.5 - The Spotify Playlist



The cons I found regard the same realness that I praised earlier. Being too realistic, at times, sounded like being destined to a small group of ideal readerships, who could truly relate with her story. The linguistic choices in the texts and the depictions of particular situations may give the impression to exclude a non-Muslim reader from the events reported. However, the author manages to overcome this cultural barrier with a glossary at the end of the book reporting the translation of the foreign expressions used. The inclusion of some very specific Muslim prayers or rituals at the beginning of the story, for a non-Muslim reader without a knowledge of this

religion, could be a reason of detachment at a first reading. Nonetheless, and especially towards the end of the graphic novel one might sense the purpose of this heavy entrance into a foreign cultural world and the impression on the last page is of enrichment. Thanks to the insider's perspective, a non-Muslim or non-Pakistani reader can gently access the *other's* way of thinking, way of perceiving the world, way of living, sometimes they may discover affinities or otherwise enriching differences. In this sense, I found magistral the artist's ability and elegance in disclosing her inner world to the reader. Representing her emotional sensation, she opens the doors to her reality, in which one may find similarities with their own and foster their empathetic response.

Figure 3 pp.16-17 - Tasbeeh Prayer



Text

The written parts cover the panels in balance with the images. At times, especially when the author interrupts the narration of her personal memories to give historical hints (i.e. the Partition) or to narrate some mythological stories, the text covers most of the space, whereas in other moments the text seems to follow the drawings' directions: it accompanies the pictorial hints without take away the focus from them.

Figure 4.1 p.50 - Example of panel with a long text.

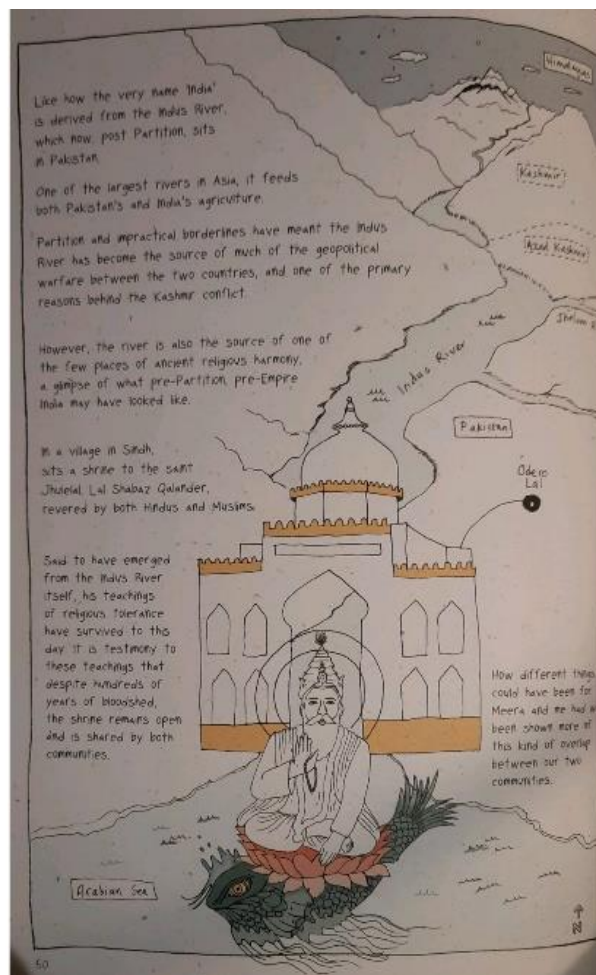
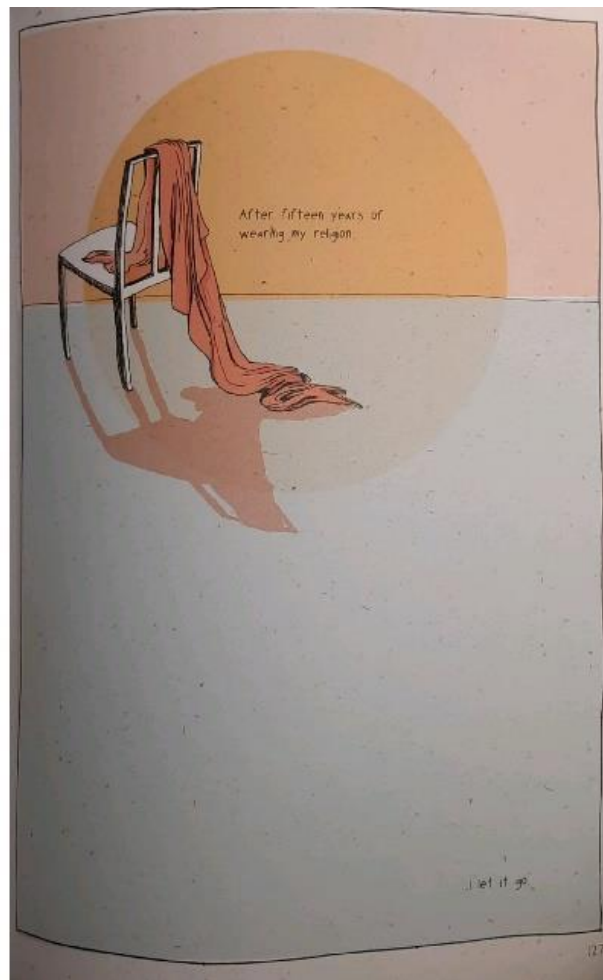


Figure 4.2 p.127 - Example of panel with short texts and focus on the image.



The written contributions along the reading made my understanding easier, since many panels are centered around the artist's inner life, personal reflections, or the specificities of her original culture. Indeed, without some written explanation, some chapters feel alien to an average non-Muslim or non-Kashmiri reader. The author tries to make her story accessible for the reader through the glossary at the end of the book and through the historical explanations.

A final consideration on the textual parts of the book regards how the words are positioned in the panels. In fact, the artist includes the words into the visual composition of the page, and I find that this spatial integration between words and images contributes to enter Sabba's world. There is a sense of harmony and integration between text and images, where the texts attend the pictures. Most of the time the texts are written using the same font and the words are usually arranged to

follow the various shapes of the drawings or in order to suggest the reading direction – from left to right and from top to bottom - since many panels are not divided with gutters.

Figure 5.1 p.124 - Example of text integrated in the image.

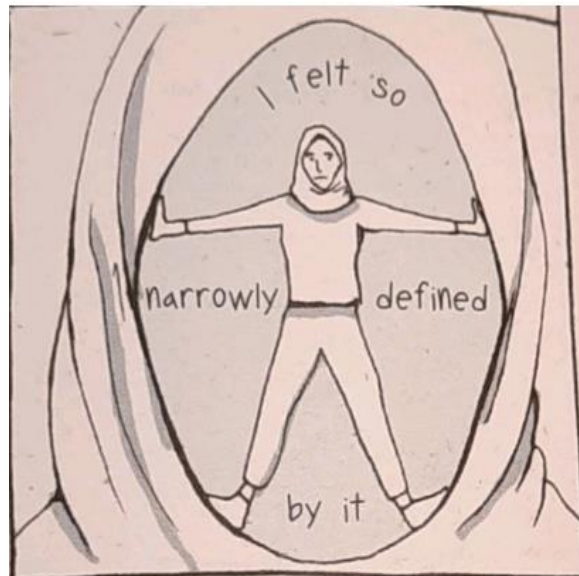
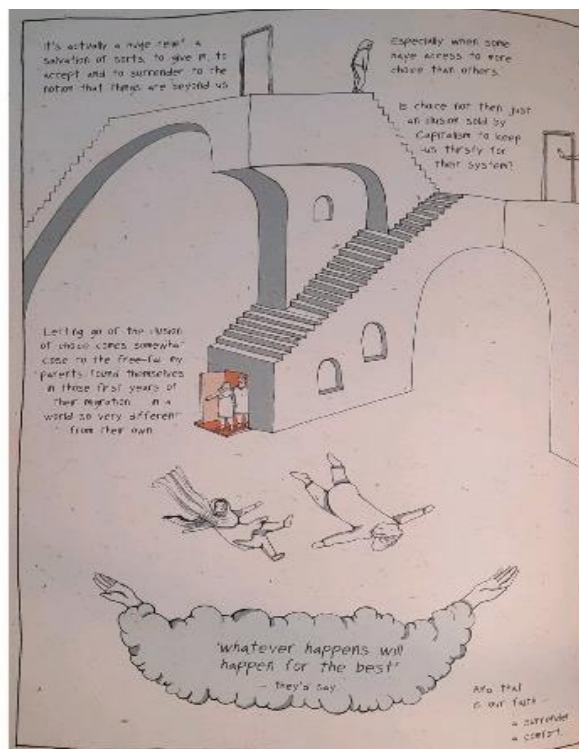


Figure 5.2 p.100 - Example of text suggesting the reading direction.



Image

The use and the type of images drawn by the artist are very linked to her personal story, and this is more and more evident along the narration. Not only I found many self-portraits of the same artist, but I also found the reasons behind her very architectural style, characterised by a massive use of perspective, fine lines, and overlapping layers of drawings, which give the impression of seeing an architectural draft. Indeed, the artist is an architectural designer. I find that these features mark the uniqueness of the artist's style and document once again how personal her book is. Another significant aspect of her style is the use of colours: the author selected a limited range of colours, pastel shades of blue, orange, and yellow; she uses red to highlight details.

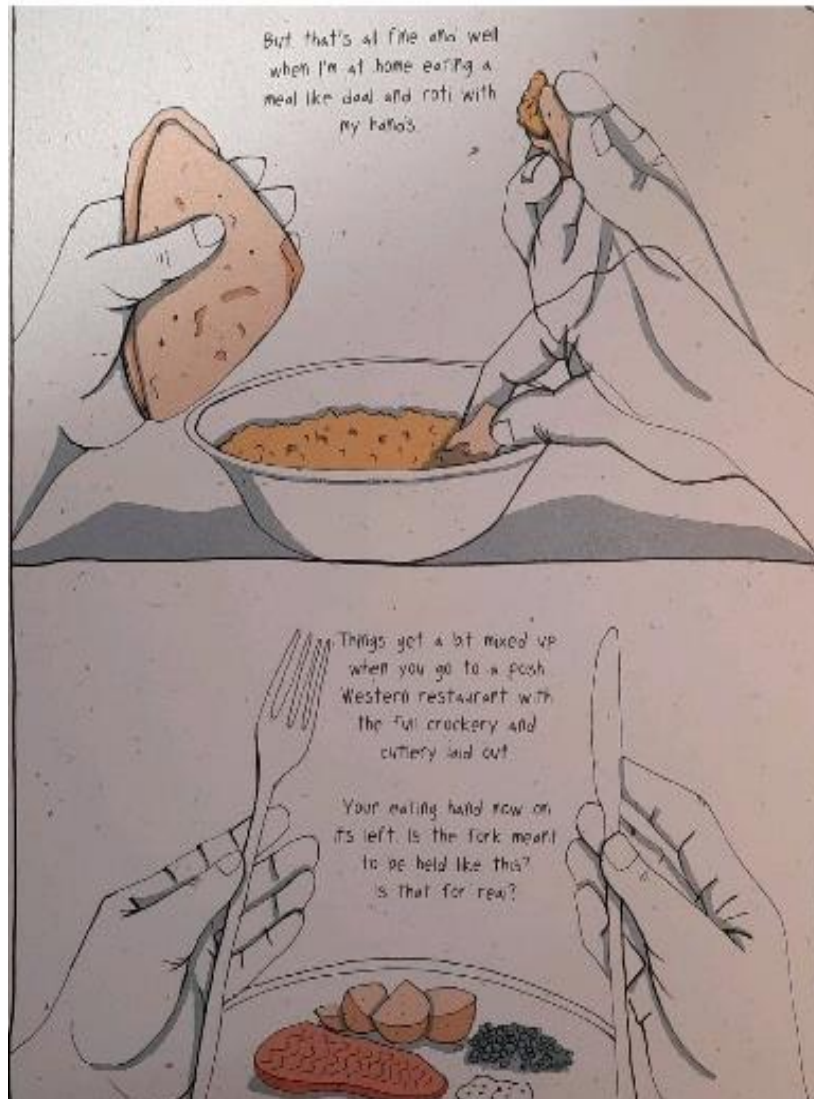
Figure 6 p.35 - Example of image with red details and architectural design.



The drawings are made out of essential lines, fine and precise; they often depict faces, bodies and hands. In many panels, indeed, there are the hands of the same artist portrayed in different situation, a thing that I found once again very efficient to inspire identification in the reader, since I had the impression that those hands were mine. These close-ups are indeed part of the emotional language used by the artist to inspire in the reader the same feelings of a character. It elicits the

reader's identification in a character open onto a different perspective, a different way to see the world. This emotional and cognitive process entails in what Elena Zagaglia (2020, p.21) considers *mind-reading*.

Figure 7 p.178 - Example of image of hands, which gives the impression of being those hands.



Most of the time every panel appears to be independent from one another, everyone with a different composition, different colours. There is no linearity in this sense. As a reader, I found the reading experience rich and intense, since the pages were very dense of meaning, each one reporting and adding more information along the narration. The pictures were the main form of expression of every metaphorical meaning in the book, which as very introspective relies heavily on graphic representation of the author's feelings and sensations. A spiritual symbolism resonates

all over the graphic novel. Indeed, there is the pictorial representation of every symbol she refers to, while describing her feelings in a given situations. In this way, seeing – and not only reading – a sensation everyone may experience one day, makes the connection with the story more realistic. Every reader in fact may have felt loaded with a ton of rocks at some point of their life and seeing this feeling portrayed recalls quickly to their mind this very sensation.

Figure 8.1 p.115 - Example of image depicting the metaphor of the rocks.

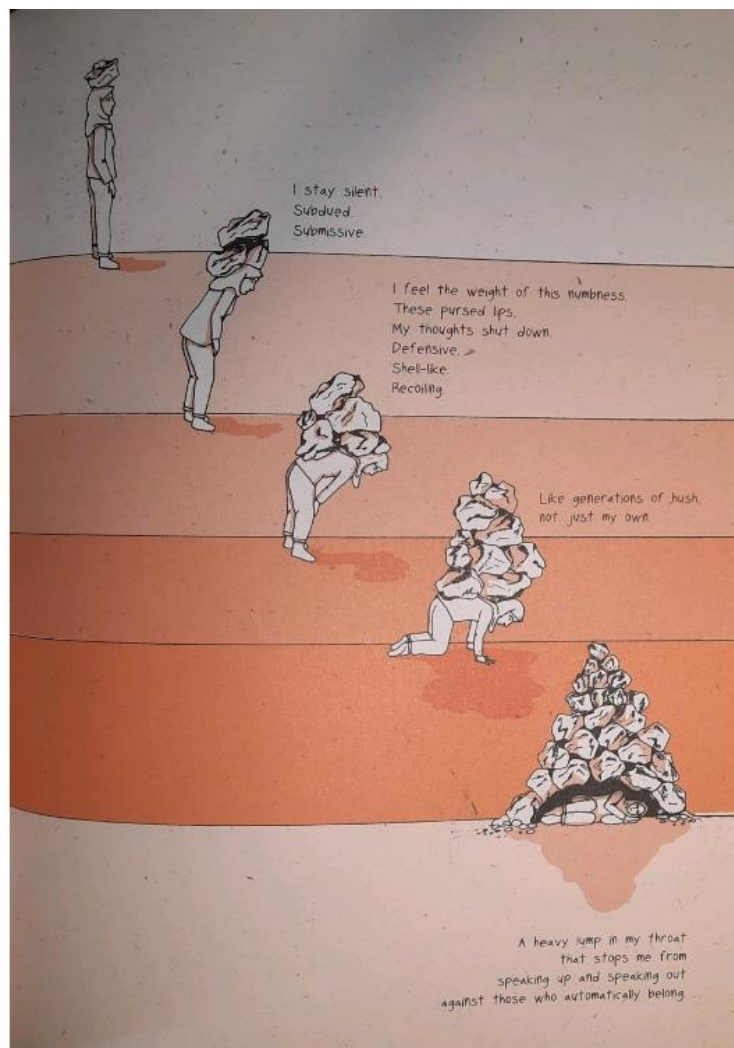


Figure 8.2 p.23 - Example of symbolism. The tasbeeh surround the author's and her mother's bed suggesting protection and belonging.



Ecocritical implications

Although at first glance it may seem that the plot of the book does not deal with much ecocriticism content, I believe instead that there is a part of the story that may be of interest to this topic. It is actually the pages that tell the story of Sabba Khan's mother, especially her childhood in the Kashmir region. I find her account emblematic in combining the ecocritical and postcolonial perspectives. In fact, the mother talks about how after Partition, following Pakistan's signing of the Water Treaty, a huge dam was built right in the Kashmiri valley – the Mangla Dam - which allegedly caused the flooding of two hundreds and eighty villages, including her own. The consequences will be devastating both for people and for the environment since a consistent portion of fertile and lively land must have been drowned. The author relies on three different full panel images to communicate how big the change was, and how violently it transformed the landscape.

Figure 9.1 pp.60-61 - The Kashmiri Valley before the dam.

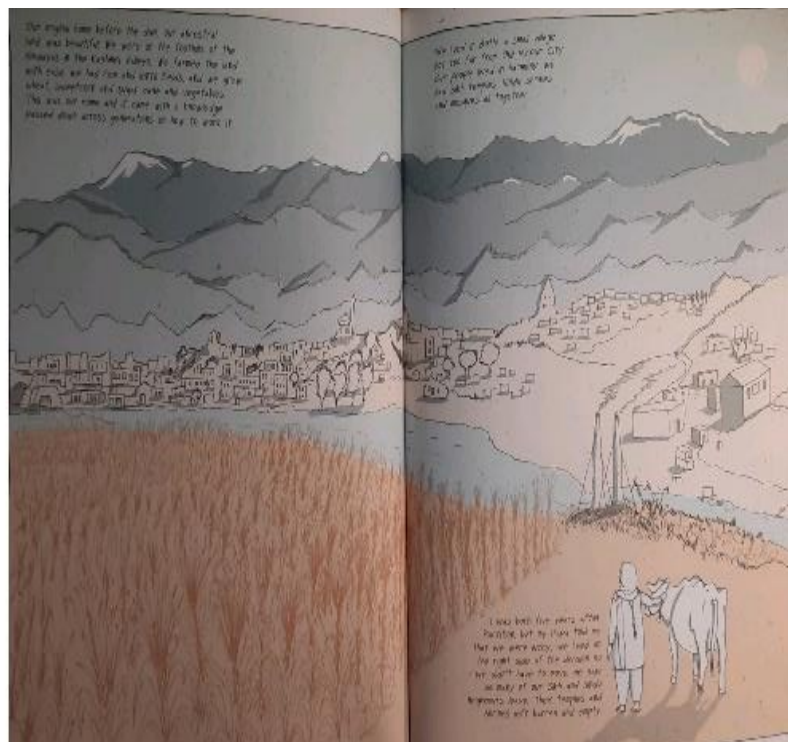


Figure 9.2 pp.62-63 - The building of the dam.

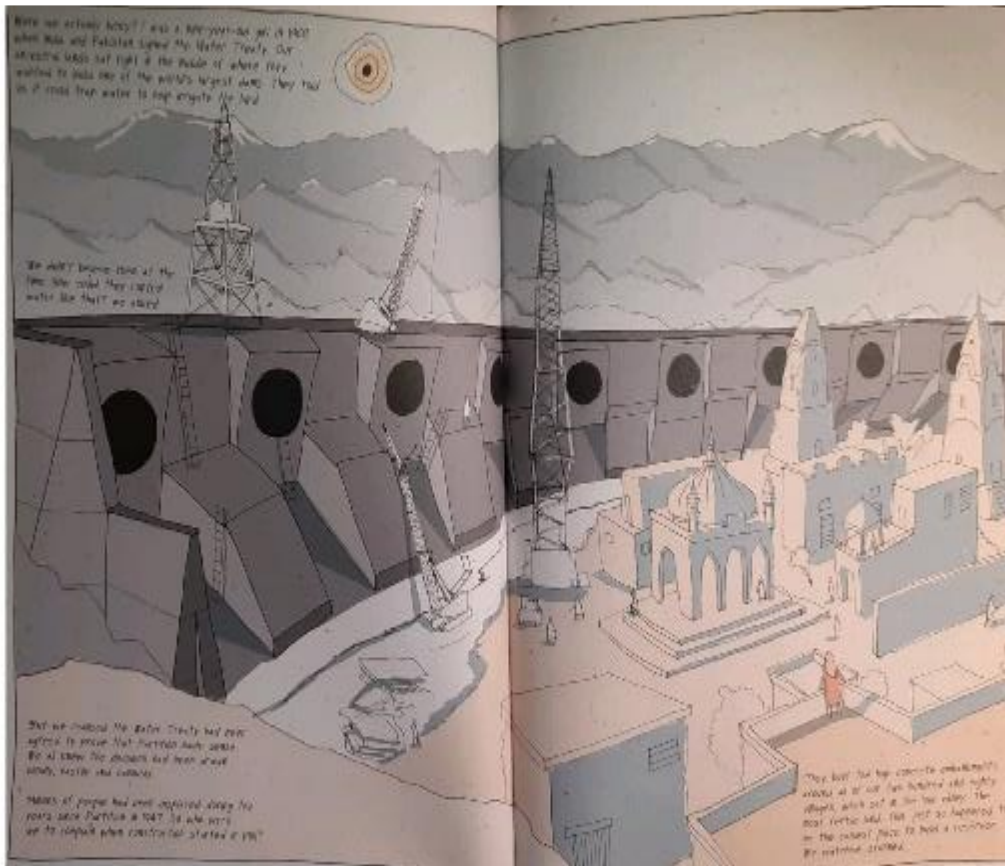
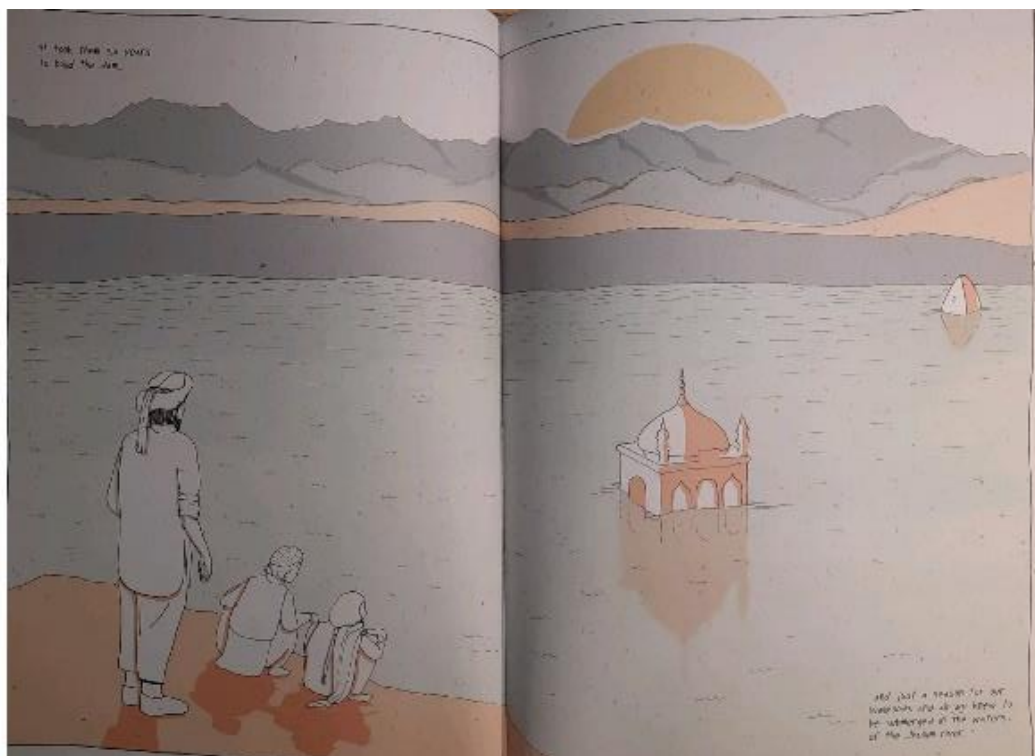


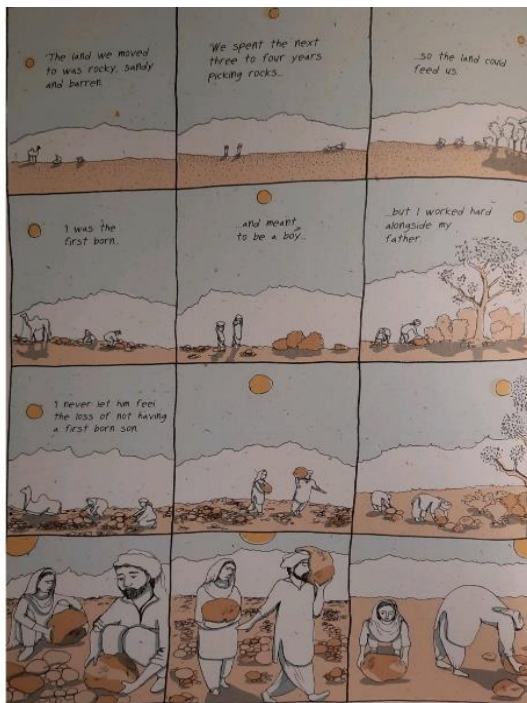
Figure 9.3 pp.66-67 - The Kashmiri Valley drowned.



I find emblematic the author's choice of covering two full pages for each picture, in this way the reader has an idea of the vastity of the event for Kashmir people - and of the project of the dam, which the Sabba Khan explains of being the equivalent of eight London boroughs. In the aftermath of the dam building and drowning of the valley, who didn't flee yet, had to move to other territories, harder to cultivate. Among these people the author's mother's family. In the graphic novel she tells how hard it has been to build a new life in other inhospitable land, which was rocky and dry.

Figure 10.1 p.68

Figure 10.2 p.69



Sabba Khan depicts this moment of her mother's tale with two pages: both have the same grid structure with twelve panels; the narrative begins with the top left frame where the scene is shot from a distance; it then continues by bringing the frame closer and closer, finally coming to focus on the details. The details to which the author gives prominence are the stones carried by her mother, which being the only coloured element acquires three-dimensionality - it almost seems as if one could touch that stone - and finally the hands, a symbol that seems to constantly return throughout the graphic novel; the hands drawn this time are not hers own but are her mother's

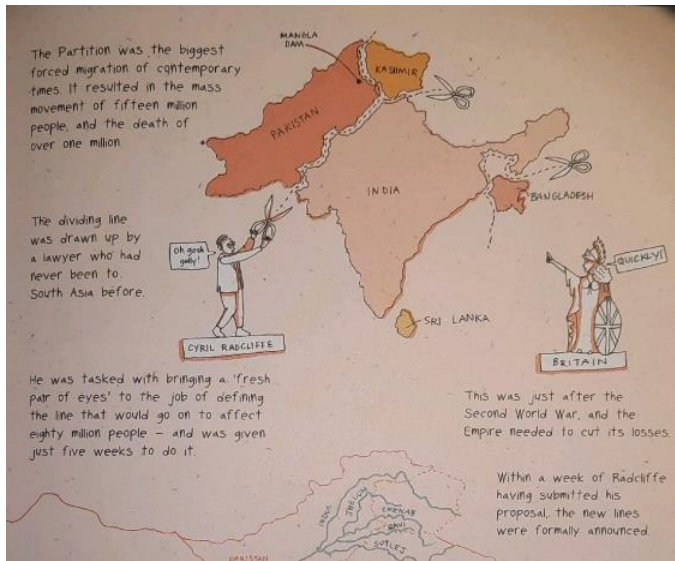
hands covered with blisters and abrasions from carrying the stones. Looking at these images so focused on these details, the accompanying text seems to come alive. During my reading, I had the sensation of feeling the same blisters on my hands as well, identifying with the character's feeling of fatigue, frustration, and sacrifice, feeling all the weight of their past.

Postcolonial implications

The postcolonial thread is dominant in this graphic novel and is centred on the author's sense of displacement. Her identity is split between her family's culture – Muslim Kashmiri – and the Western culture she lives in London, the only one she truly experienced. The author struggles with the concepts of homeland and of belonging to a place; she questions her family's religion, their habits, and their life's choices, but at the same time she cannot feel fully integrated with the Western culture neither.

Her family's story entangles with the Partition, which was a trauma for the south Asian sub-continent, since it can be summed up as “the biggest forced migration of contemporary times” (Khan 2021, p.73). This event moved fifteen million people and caused the death of over one million. The Partition of India in 1947 marked a significant shift in political boundaries and the distribution of resources that occurred when the British Raj dissolved in the Indian subcontinent. This led to the establishment of two separate and independent nations in South Asia: India and Pakistan. The Dominion of India is now known as the Republic of India, while the Dominion of Pakistan, which initially consisted of two regions on either side of India, is now recognized as the Islamic Republic of Pakistan and the People's Republic of Bangladesh.

Figure 11 p.73

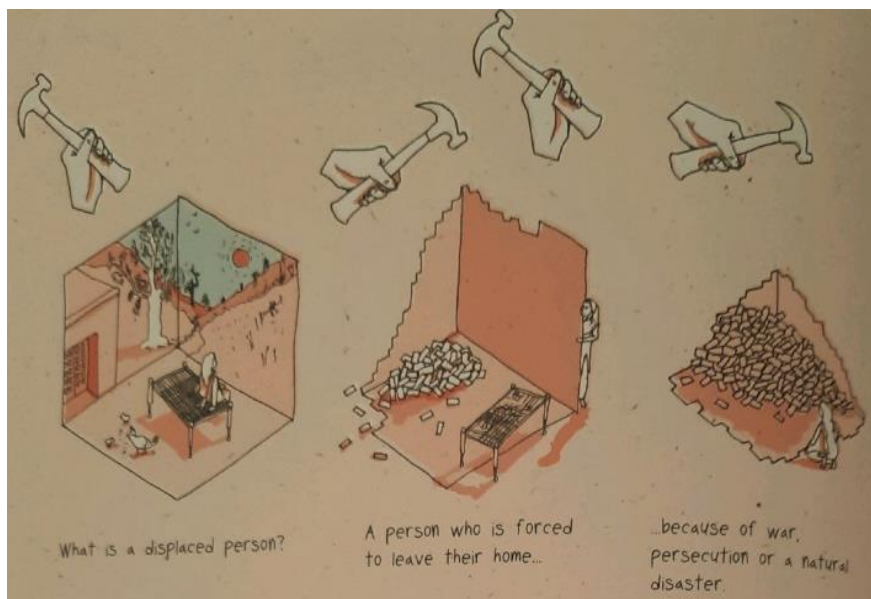


The author conveniently represents this event with the image of the British Empire personification cutting the Indian subcontinent with scissors, as it was a piece of cloth. The reader perceives how alien the intrusion of the Empire is, first because the only two human characters depicted are detached

from the map-cloth, and second because the author didn't draw any Indians or Pakistani people here. As I looked at this image, the message I perceived from the artist is the instrumental use of these territories, without regard for the people who inhabit them and their lives. So much so that in this image no inhabitant is represented in any form.

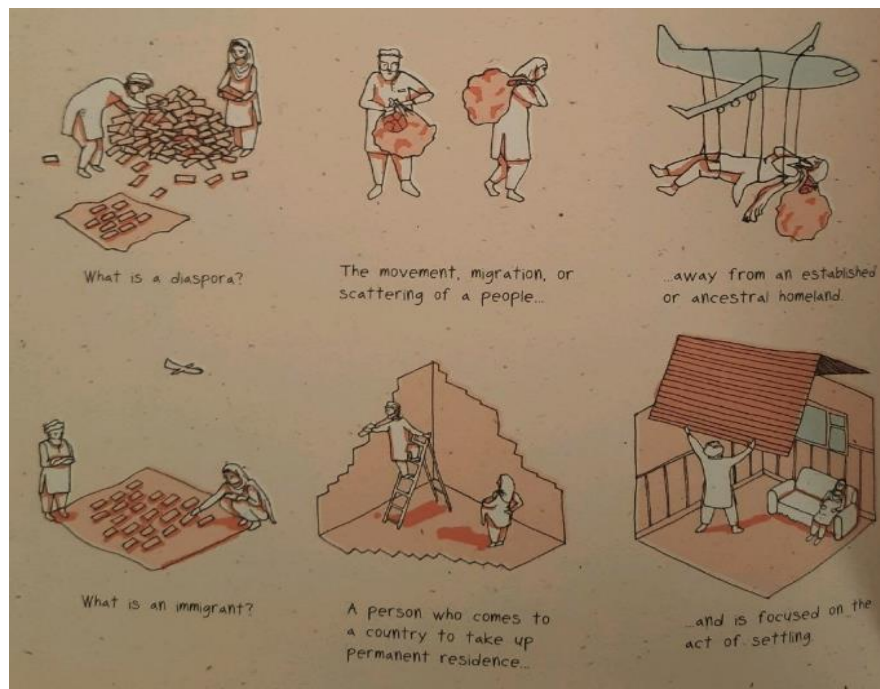
Sabba Khan consequently asks herself what a displaced person is, and she makes it in her own style. She renders in pictures using metaphorical scenes, what people forced to leave their home may feel.

Figure 12.1 p.75 – What is a displaced person.



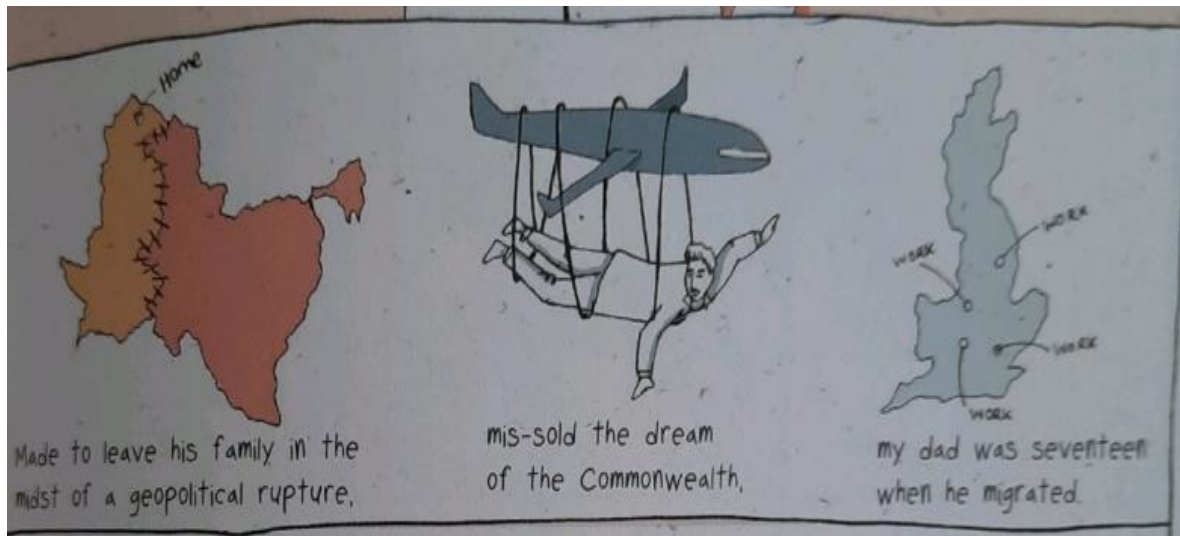
She goes further, questioning what a diaspora is, and finally what an immigrant is.

Figure 12.2 p.75 – What is a diaspora and What is an immigrant.



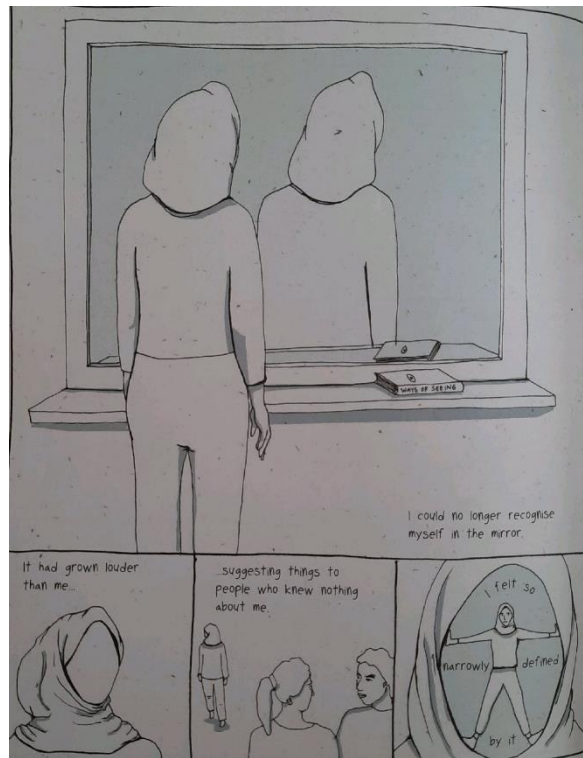
Her parents were forced to marry each other and to move to the UK because of the building of the Mangla dam, which rendered the lands inhabitable or pushed their families to tougher territories. First, her father emigrated and worked in British factories “doing jobs that the whites thought themselves above” (Khan 2021, 71). Then her mother joined him. And finally, their “brother and sisters were later to join [them] in this foreign land, this third space that strangely, despite its hatred towards [them], came to be where the clan reunited once more” (Khan 2021, 71). Her parents passed through all the three conditions questioned by her before: displaced, crossed by a diaspora, and lastly immigrants.

Figure 13 p.143 - Sabba's father story



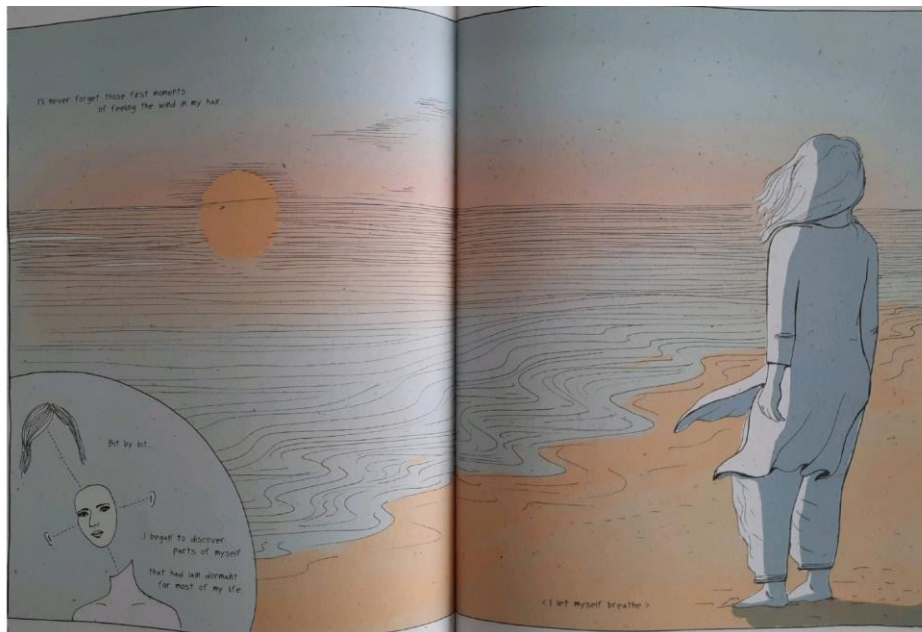
If on the one hand there is the story of her parents, who immigrated to the United Kingdom after the diaspora of Pakistan, on the other hand there is the reality of Sabba, that is, of a daughter born and raised in London who has to confront on the one hand the closed and traditionalist community - i.e., the Kashmiri Muslim community - of her family, while on the other hand the demands of integration of London. In addition to reporting several episodes of racial or cultural discrimination, the author talks mainly about her difficulty in identifying and accepting her own identity. One of the most significant events and one that repeatedly returns in the graphic novel is her decision to stop wearing the hijab, a painful decision but one which is due to a sense of frustration she feels towards the Western world, in which she does not feel fully integrated. I personally found it very striking how the author depicted the sense of constraint felt in wearing it, the sense of freedom then in no longer wearing it, and a certain sense of regret later in difficult times. In fact, her choice to abandon the veil is due to a sense of rejection of certain traditional values in which she no longer recognizes herself, but it is also an abandonment of a sense of security that she will greatly miss at certain times.

Figure 14 p.124-



In this sequence of frames, the artist renders the concept that the hijab is masking her identity, suggesting prejudices to others and it is an obstacle for her personality expression.

Figure 15 pp.128-129



In these two full-page panels, the artist expresses the freedom “of feeling the wind in [her] hair” (Khan 2021, p.128), a sensation which is easy to recall since the average reader may have felt the

same at least once in their life. However, the reading direction is once again suggested by the panel composition, where the bottom left part of the first page suggests what is then realised in the adjacent page: namely herself actually without the hijab.

The artist often depicts the blurring between her two cultural identities; thus, she shows graphically to the reader her inner turmoil. I report hereafter the panels I found most communicative and impressive.

Figure 16.1 p.151



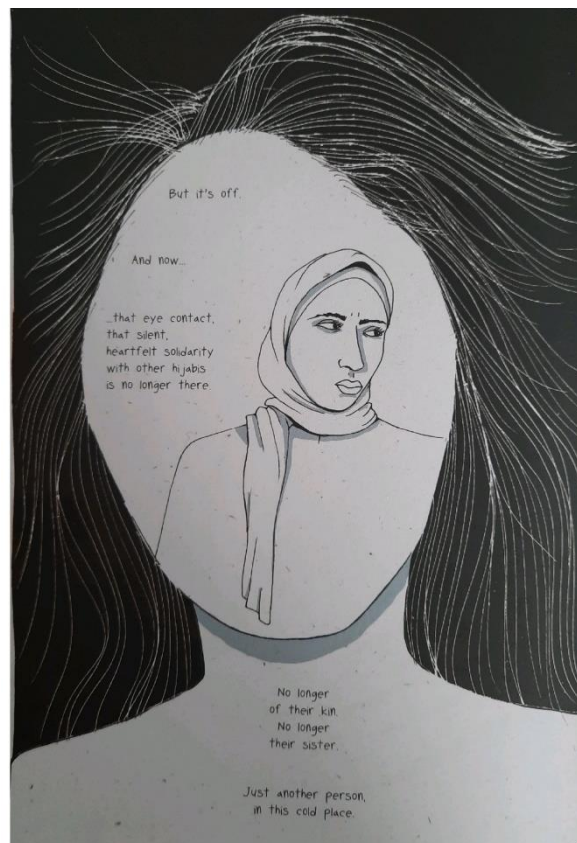
Figure 16.2 pp.164-165



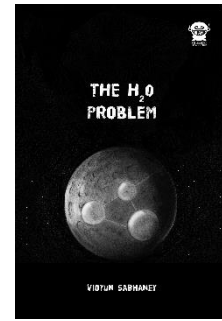
Figure 16.3 p.193



Figure 16.4 p.194



The H₂O Problem by Vidyun Sabhaney



The second graphic narrative I analysed and compared is a fictional story written and illustrated by the Indian author Vidyun Sabhaney. I consider it as a *cli-fi* graphic novel, even if with some reserve about the form it presents. The story was published in 2019 by an independent publishing house and it is the most recent work signed by the author. It is written in English, and apart from the Indian setting, it does not include any indigenous terms or reference. The plot goes around a dystopian future, where the climatic crisis and pollution have intoxicated the waters of the planet *Terra* – Earth – thus life there has become a matter of survival. There are two main characters along the story and the point of view switches from one to the other: the book is divided into four parts each of them narrated under different perspective. This work is a peculiar form of graphic novel because it counts only 32 pages. Nevertheless, it is presented by the Blaft Publications as a graphic novel, and I maintain that it is worth a critical evaluation.

Fictional plot

The H₂O Problem is a *cli-fi* graphic novel, which tells about a dystopian future scenario in which humans have colonised the Moon first and the planet Ceres later to find new water disposals. In fact, the waters on the Earth are so contaminated that drinking water has become a scarce resource. The narration takes place in 2619, when the protagonist Jamuna is almost landing on Terra to take an important mission for the Natural Life Incorporated – the company for which she works. As the story goes on, the reader comes to know that the events are located after a period of devastating war between governments and companies to take control over waters on the planet. This has caused the death of millions of people and the following Departure to colonise planet Ceres.

From 2200 to 2400, erstwhile governments and companies of Earth secretly ran mines on the Moon to harness water from ice. The water was used to create energy for ships that were used in the Departure. (Sabhaney, 2019, p.6)

Only who could afford the expenses of the departure could settle in Ceres, whereas the others have to stay back on the Earth coping with desertic lands, poor biodiversity, and water rationing. Undoubtedly this book belongs to the sub-genre *climatic fiction* – a sub-genre of the *scientific fiction* – since it deals with the climate change quite directly, while it uses a fictional story. This fictional story suggests a possible future scenario, where one of the most important resources for life on the Earth is contaminated with toxic pollution made out the human activity on the planet. The first element of interest is exactly the fictional plot. It gives the opportunity to safely experience a future possibility of what is already being broadcasted by experts and scientists. In the story, today's predictions seem to come true: biodiversity is reduced to just a few animal species, among which mostly insects manage to survive and proliferate; what is now considered everyone's carbon footprint becomes, in the narrative, a debt to be repaid; reproduction is no longer a right but is strictly regulated; water is rationed daily and distributed at fixed times for a limited period. This is a simulated future for the entire globe, and I personally empathise with the fictional future generations of humans: the Ceresians have never seen real animals and they have to submit to the leadership of the greater companies or the AI; the Terrans have never dive in a sea or in a lake, they cannot access to rights which we consider inalienable today, and what they do is merely surviving. This kind of empathy for a distant future, to which I don't belong, recalls what Benedetti cherishes in her essay. As a matter of fact, thinking of what could be of my grandchildren existences on the planet, is something which touches me deeply. It seems like I can realistically imagine how their lives would be overshadowed by the only need to survive. This interest for the future generations is visible in the book as well, where the author refers to last few inhabitants of the Earth:

The rest stay behind to ration whatever little clean water there was amongst themselves and the generations to come (Sabhaney, 2019, p.6)

For the first time there is the manifest interest to preserve the future human lives on the planet.

A rather grey and bleak scenario, even from the way it is described and then depicted in the images. Although there are few graphic representations, they still manage to communicate through monochrome the desolation of the planet.

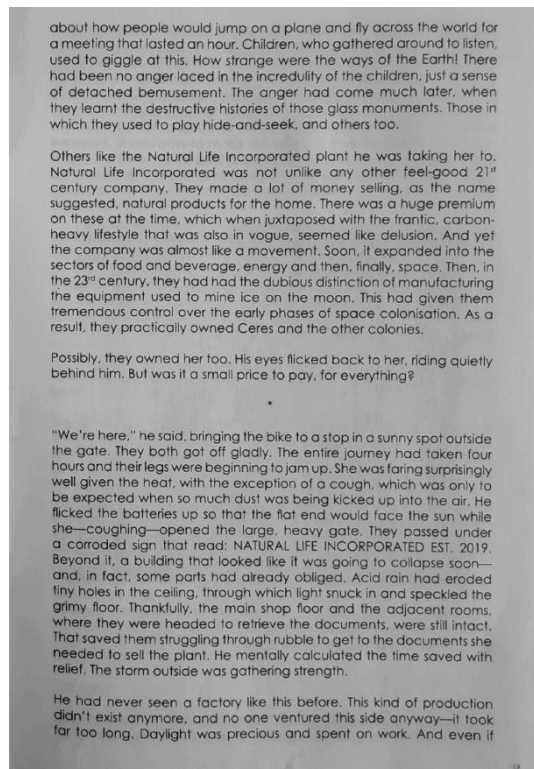
However, this apparent and total hopelessness is then transformed into hope toward the end, when it turns out that “after two hundred years of low carbon emissions, things are beginning to...improve. The aquifers are beginning to regenerate in a few places” (Sabhaney, 2019, p.30). Arriving at this point in the narrative, I thought back to Amitav Ghosh's words and to his wish towards a fiction genre capable not only of showing the tragic consequences of the phenomena we are unleashing today, but also - and above all - of proposing solutions and conveying a message of hope toward a future that can still be changed. I think it is the imagery behind the fiction plot that is the greatest strength of this work. Even if the solution proposed is not perhaps the easiest to imagine or to accept – that is centuries of austerity and a radical change of lifestyle for all the humankind – it is a message of hope, which contributes to see an opportunity for redemption for the human species.

Text

The textual parts in the book are prominently present, in fact the graphic novel is almost entirely composed by written pages, with only few images. Even if the publish house claims it to be a graphic novel, I must admit that I was sceptic when I first saw it. However, this work entails a great potential.

The text is written in a rather small font, using low line spacing. All this visually conveys a sense of heaviness and I must admit that it does little to entice reading. It appears as a short story format, even if I argue that it can be considered more than this.

Figure 1.1 p.19 - Example of page layout.



The author separates the different points of view of the story or the different scenes by separating them into paragraphs divided by a star key. This graphic device helps to give the pages breathing room. Moreover, Sabhaney uses italics to highlight the flashback memories of the protagonist, another graphic device useful to separate the different textual sequences.

To conclude, in one hand the text is the principal part of this graphic novel, the narration is fluent and efficient to capture the reader's attention. On the other hand, this aspect questions the very nature of the format, where even the dialogic sequences are excluded from the images.

Image

The images contained in the book seem to accompany the text rather than being integrated with it. At first glance there seems to be a lack of that form of union between text and image typical of a graphic novel. In fact, it is true that text and images are separate and never seem to be integrated into each other. Rather, the artist's drawings seem to be graphic representations of some of the elements described in the text.

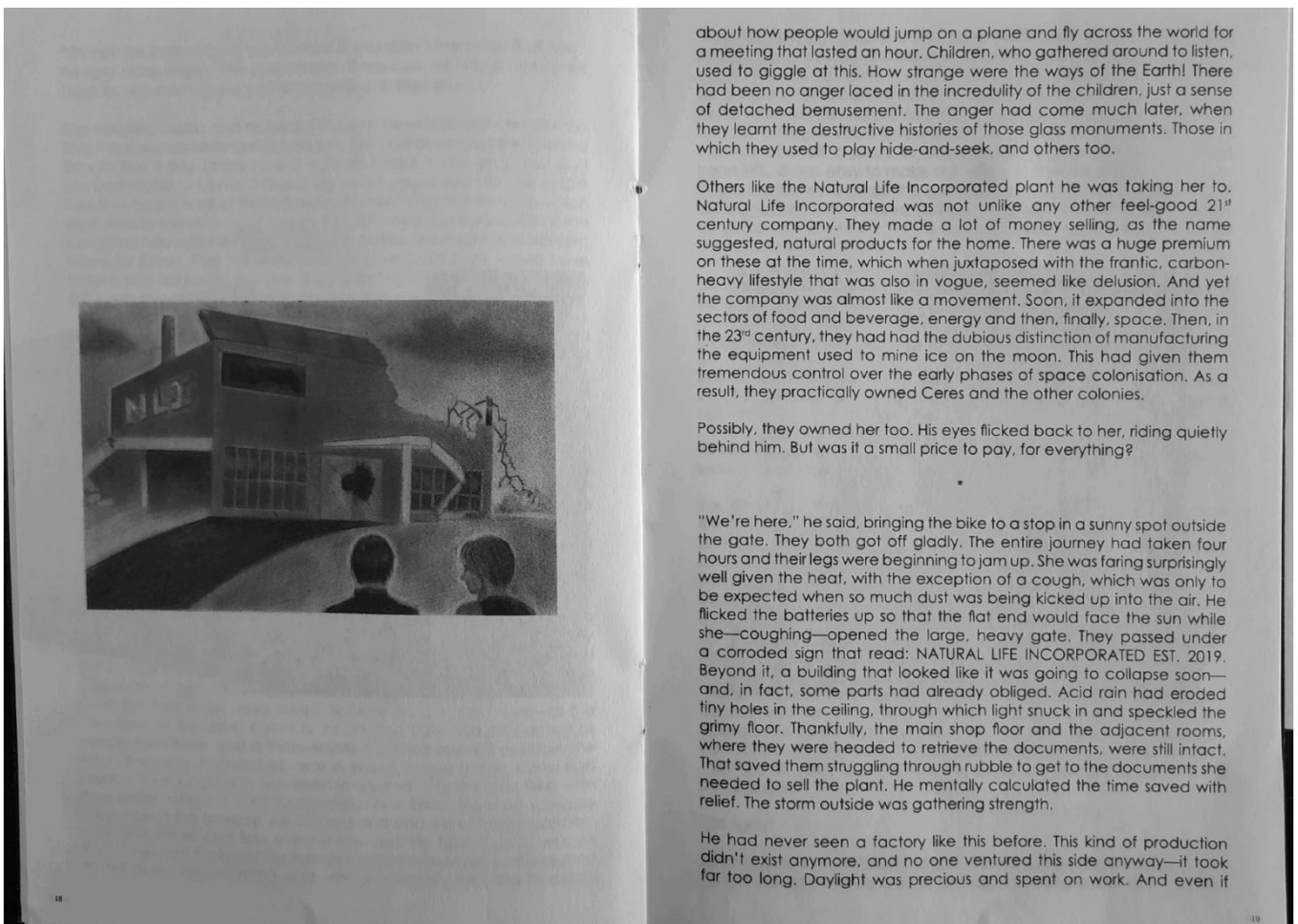
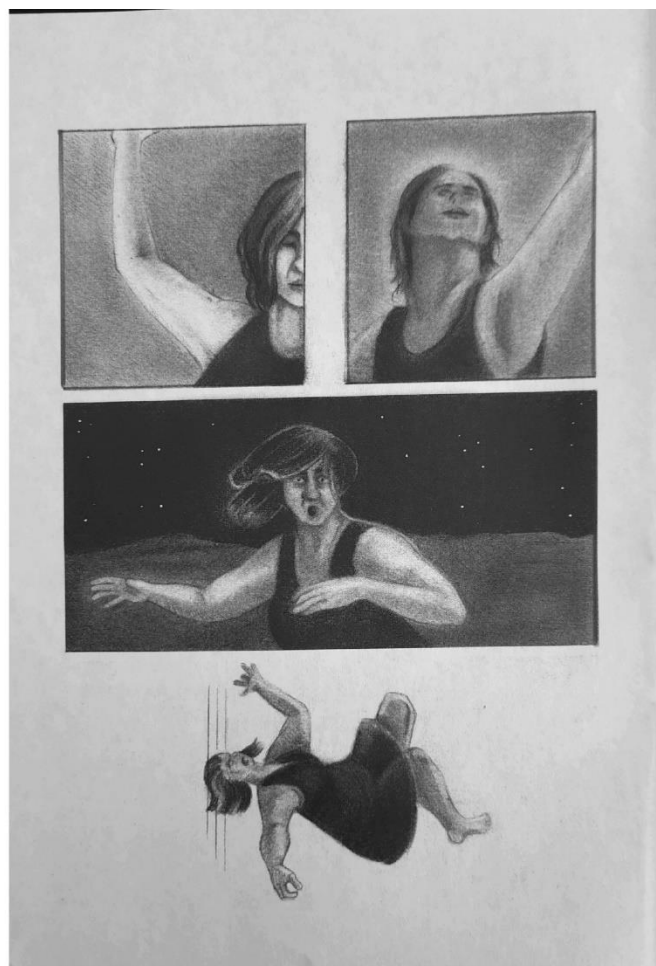


Figure 1.2 pp.18-19 - Example of image and text integration.

It is interesting to point out, however, that the book opens immediately with a series of silent panels depicting a series of close-ups on what later turns out to be a flashback of the protagonist. I found that the beginning in *medias res* conveyed by silent images, very evocative, which are not easily decipherable, but which stimulate interest in continuing the story.

Figure 2.1 p.2



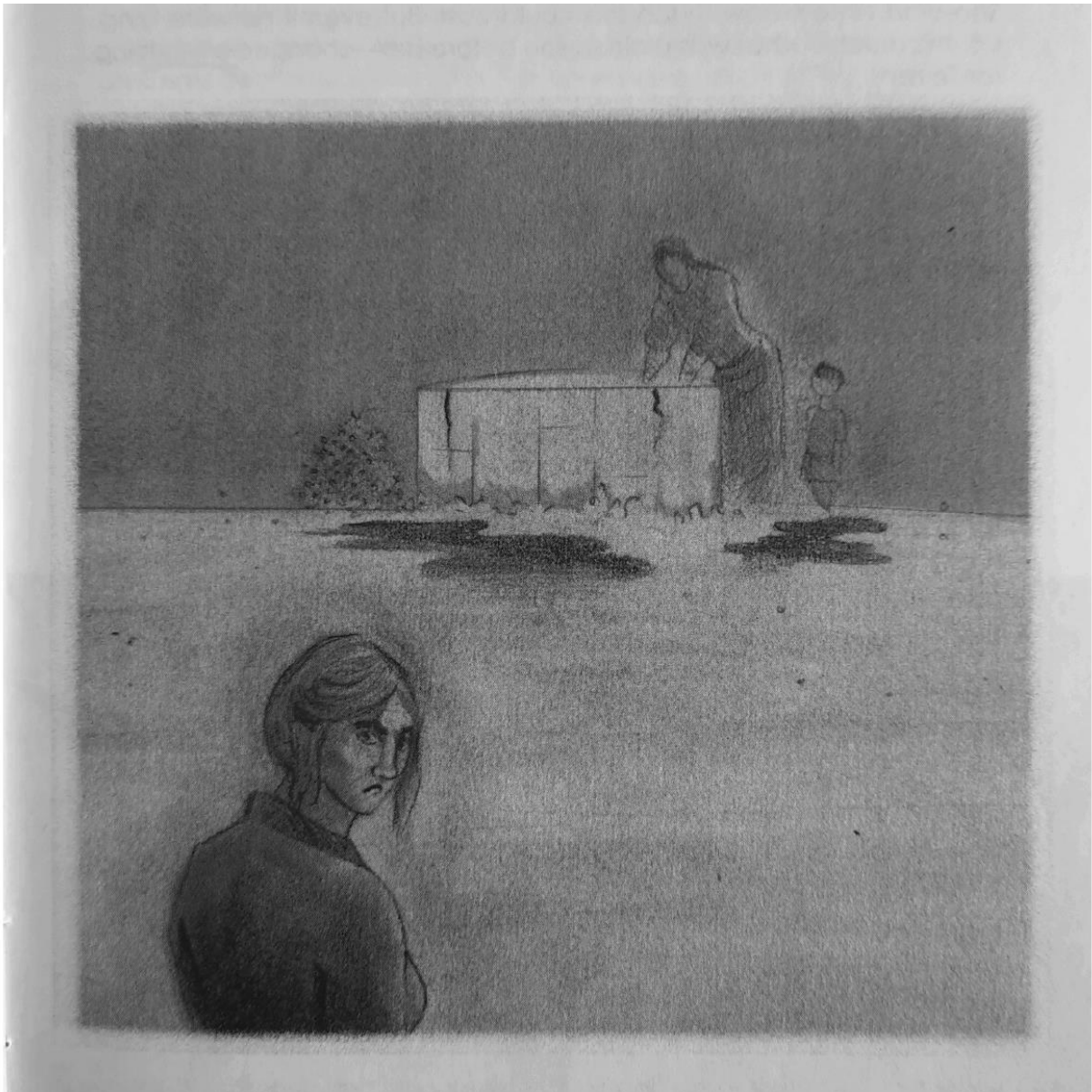
Since it is a flashback, I think the choice not to use colours in the panels also makes sense, although the poor artistic quality of the drawings may lead to devalue their meaning. Indeed, the third image seems to have a caricatured tone.

Figure 2.2 p.2



As we continue reading, the rest of the images are also rendered in shades of black and grey, an aspect that gives the imagery created in the reader's mind a rather grim tone. This colour choice may help to perceive a sense of hopelessness that forms the background to the first part of the story. However, toward the end, when it becomes clear that on the planet Earth is returning drinkable water and thus the possibility of a return of life, as a reader I would have appreciated a colour change to highlight this particular scene. Indeed, the artist portrays a mother and her son drawing drinking water from a well. I feel, however, that graphically this scene falls by the wayside, missing a great opportunity to convey a message of hope.

Figure 3 p.29



Ecocritical implications

The ecocritical implications here are many being *The H₂O Problem* precisely a *cli-fi* graphic novel. References to climate change and its human origin are many: the author posits some of the predictions made by experts in recent years. The Earth of the 2600s is a highly polluted planet, in which the aquifers are either dried up or contaminated; the seas and oceans are empty and so toxic that they cannot even be navigated; every human being left on Earth carries a carbon debt on them that they must pay off in order to have children or buy equipment. "In the aftermath of itself," (Sabhaney, 2019, p.16) *Terra* appears to be a planet where plant- and animal-biodiversity are severely deteriorated, the temperature is extremely high and the oxygen level low, many territories are desert, and the oceans have submerged the coasts of the continents. This scenario simulates a verisimilar reality, and it is made even more tangible by the use of real geographical references, such as the city of Delhi, the Jamuna River – the protagonist is named after it -, or the district of Okhla.

Along the story I found many references to the Anthropocene and here following I report some of them:

Cotton. Even the word felt strange on her tongue. She was told the lust for this material turned Terra red with blood several times over (p.10)

In the sentences I quoted, I saw a veiled reference to the fast fashion industry, which is considered one of the most polluting human activities in the world.

The global return to a pre-industrial life [...] meant that the production and maintenance of technology on Earth was strictly on the basis of need (p.10)

Above, I reported a possible future scenario, where the humanity may have to deal with a radical change in the – Western – lifestyle, returning to a pre-industrial way of living. Substantially, the author preached a return to the conditions ante-Anthropocene.

there was no such thing as private transport anymore on Earth, unless you had an old solar vehicle. [...] it was less polluting to organise public transport than to produce lakhs of solar vehicles. (p.11)

This quote describes another futuristic vision, where public transport would be the only option available.

She crossed a few carbon traders' establishments, whose visitors invariably looked woebegone. Outside these were instructions for those who had worked off their debt and were now allowed to have children or buy equipment" (p.14)

Terrans didn't have much communication technology since it was too polluting to make it anymore. (p.23)

These last quotes are once again expression of what the author imagine the future if humanity will be in the aftermath of the Anthropocene.

The last aspect I point out is that the ecocritical perspective taken by the artist is quite anthropocentric. In fact, she mentions how the human life has changed on the planet and what consequences for the human beings the climate change has brought, but little mention is made about what has happened to the other species. She describes how the environment has changed since the 21st century, how "barren, yellow and dry" the lands are (p.27), how "the temperatures were soaring" (p.6), and "the toxicity turned [the ocean] into emptiness" (p.25).

Postcolonial implications

I first identify the postcolonial implications in this graphic novel right in the context of the book's origin. In fact, it was authored by an Indian author, writing in English, a work that is nevertheless published locally. The reason that may have prompted the author to use the English language can be found in an undeniable cultural heritage in Indian culture due to its past as a British colony. However, this choice could also be justified by a desire to reach a wider audience, given the strong contemporaneity of the topic - namely climate change.

However, I find that another subtle postcolonial thread can be intercepted within the story, even if I interpret it conversely. In fact, when the author mentions the human colonies of the planet Ceres, these are more advanced technically with higher standard of living, while on the “motherland” – planet *Terra* – for who remained the only possible achievement is survival. Thus, it appears that the colonisation of Ceres is something elitist only destined to whom could afford the journey economically. For all the others who couldn't sustain the expenses this was never an option. On this basis, the kind of colonialism preached by the author is not only a matter of survival, but it becomes a status symbol, only achievable for the upper class. In this case, the form of imperialism depicted in the book is economic: the Natural Life Incorporated company owns the resources and the meanings to save humanity and transport it to another “uncontaminated land”, but the company sells dearly this opportunity only to a part of the humankind, leaving the others periling or dying.

Natural Life Incorporated was not unlike any other feel-good 21st century company. They made a lot of money selling, as the name suggested, natural products for the home. There was a huge premium on these at the time, which when juxtaposed with the frantic, carbon-heavy lifestyle that was also in vogue, seemed like delusion. And yet the company was almost like a movement. Soon, it expanded into the sectors of food and beverage, energy and finally space. Then, in the 23rd century, they had had the dubious

distinction of manufacturing the equipment used to mine ice on the moon.

This had given them tremendous control over the early phases of space colonisation. As a result, they practically owned Ceres and the other colonies.

(Sabhaney 19)

In conclusion, however, I think the richness of the plot loses value the moment it is not well represented graphically. The lack of true integration between image and text is a missed opportunity to bring a fictional story with great relevance not only to a larger audience, but also more effectively.

Here following, the only graphic references to the Natural Life Incorporated.

Figure 4 p.20

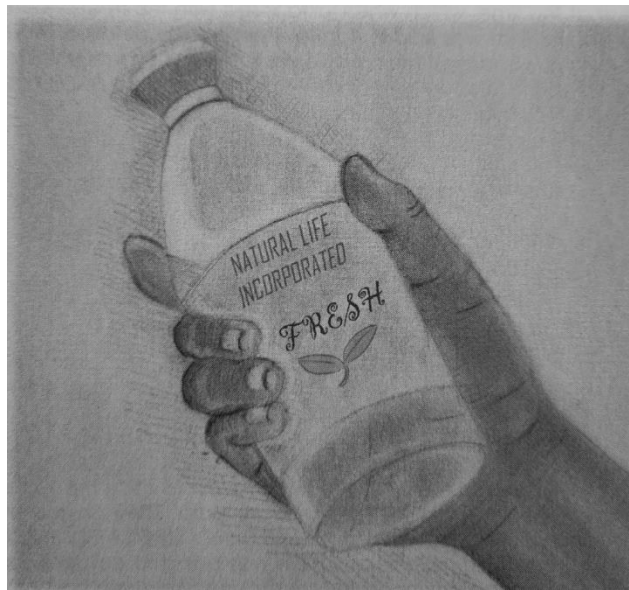
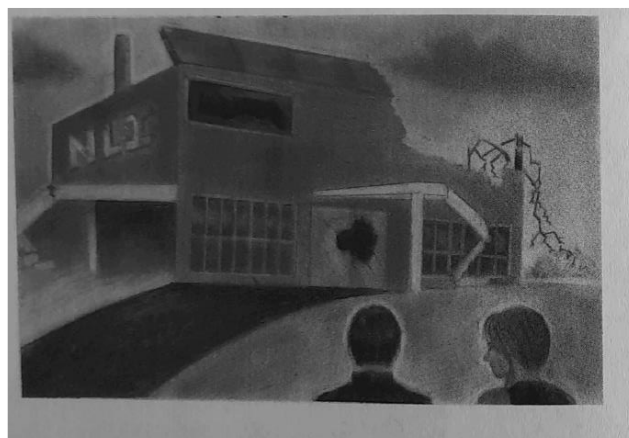


Figure 5 p.18



Chapter IV – Conclusions

In this final chapter I draw some final conclusions on the relationship between the climate change debate and the graphic novel. As seen previously, the graphic novel entails a huge communicative power: thanks to its hybrid nature I argue that it has the great ability to communicate efficiently with the readership. The tight relation between text and images, the combination of visual and textual stimulus, can provide a unique experience of immersion in the reading. In the previous chapters, I illustrated how the graphic novel is born out the need to find a new format more suitable for hosting more thoughtful topics but, at the same time, in a more pleasurable and direct way. The language of the images is a primordial way of communicating, to which we perhaps are hopefully returning. Images have the power to speak straight to our emotional brain generating an affect response, which could turn into empathy for others.

In my analysis of the two works by Sabba Khan and by Vidyun Sabhaney I tried to transmit the impressions of my personal reading experience. Apart from the partiality of the findings, influenced by my studies and by my personal disposition towards the topics and the subject matter of this thesis, I find that my response to the reading of them was different from the reading of a novel or of a journal article. As a matter of fact, while thinking of Sabba Khan's graphic novel, I can still recall to my mind some of the most striking images drawn by the artist. What's more, is that I see those images not only as representative of the author's intentions, but I also attach to them my personal feelings, my sensations, and my personal experiences. On one hand, the images which impressed me the most, were usually those in which I could see a part of myself, of my personal story; I empathise with the depiction of something which in some part I already knew – a feeling, a sensation, a metaphor, a symbol. On the other hand, I had the opportunity to empathise with situations I never lived. In particular, I could take the perspective of a displaced person, of an immigrant family, of the future generations.

Here following I put in comparison the two graphic novels discussing the differences or the analogies they share about the fiction/non-fiction plot, the text, the images, and the ecocritical or postcolonial implications.

Fiction or non-fiction plot

The two graphic novels analysed present two different kind of plot. The first was a non-fiction autobiographical graphic narrative, while the second was a fictional story set in a dystopian future. Which of them had demonstrate a stronger empathetic effect? I must admit that I hoped for a better experience with the book by Vidyun Sabhaney, since it was the fiction example. As I reported in the previous chapters, fiction is a great source of inspiration, it can suggest an infinite variety of possibilities and solutions, in a few words everything is possible. In addition to this, I explained how fiction can enhance the reader's critical thinking and empathy, taking the other's point of view. In *The H2O Problem* the fictionality provides a possible future that we can easily imagine thanks to the author's ability: in fact, she manages to represent through her words and style a suggestive vision, which strikes the reader's mind and target efficiently. However, this occurs mainly via words and less via images, lacking the great opportunity to wide its effectiveness. Apart from this lack in the format, the fictional plot makes me actually wonder what it will be of the future generations living on the Earth, and although this was a personal concern of mine from the beginning, I felt it more real thanks to what this graphic narrative prompted me to imagine.

The autobiographical work by Sabba Khan was, however, the most impressive and the one I felt more empathy with. As a matter of fact, its realness, and the premises about the truth of the facts narrated has put me in the condition of believing what I was reading without questioning. In fact, I began to read the book knowing a priori that everything inside it was actually happened to the author. Every panel was a piece of memory digested and depicted for the reader to allow them to fully access her own perspective on the world. Thanks to her very personal and artistic style, I entered her interior world and I saw what she sees around herself and her family. I could feel her

struggles to find her place in the world. Finally, I empathise with her painful inner struggle when she questions her cultural identity, her family traditional habits, and her guilt.

All in all, it is hard to define what kind of plot could be more efficient to bring the climatic or postcolonial debate to the audience. If on the one hand fiction is the territory of the infinite possibilities and is a simulator of scenarios, on the other hand the biographical hints help to enter the others' inner world and perspective.

Text and images

The aspect worth of being remarked is that the combination of text and images enhances the reader's affective response and gives them an active role of interpretation that makes each reading experience unique and personal. This was particularly true for the reading of Sabba Khan's *The Roles We Play*, where there is a real dialogue between words and drawings. The panels' composition invites the reader into the author's mind, living her memories visually. When she highlights some detail, we experience her memories the way she does, we wear her vision of the world, as it was a pair of glasses. In this way I experienced her displacement through the metaphorical images she creates. As a matter of fact, I find her unique visual symbolism the strength of her work. Even the few images present in the second graphic narrative by Sabhaney help the reader to enter the imagery to the book, to perceive the atmosphere of a deranged planet, or the gloomy reality of Ceres' colonies.

To sum up, it is right the hybrid character of the graphic novel to make it a desirable format to handle complex topics. This combination helps the reader to quickly get into the discourse, to access other worlds, without previous knowledge. The graphic novel is a direct and easy medium, which engages the reader deeply, without demanding hours of focused reading.

Ecocritical and postcolonial implications

For all the reasons above discussed, I conclude that the graphic novel is a valuable ground for the climatic crisis debate. This format demonstrates to be flexible to different kind of narration, it

adjusts its form to achieve its communicative goal. The authors mould every aspect of a graphic novel, from the page-layout to the font, in order to strike the reader deeply and to transmit their message efficiently. As I argued early during my analysis, the graphic novel successfully manages to represent the complexities even of the most committed topics in a simple and straightforward way, which impresses the readership and - hopefully – wide their awareness. The graphic novel provides a unique perspective on other's point of view, it gives the opportunity to *see* how the others see the world and experience what others experience. Through the language of images and of insightfulness, this format validates itself as an efficient platform for discussing and bringing to knowledge what is happening right now in our planet, what some populations are already experiencing and what the future perspectives could be. However, always in a disengaged, effortless, and primitive way of communicating.

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