CHAPTER ONE

Introduction

This thesis constitutes an inquiry into the representation of climate change and the Anthropocene in select literary works – Romesh Gunesekera's *Reef* (1998), Uzma Aslam Khan's *Trespassing* (2003), Amitav Ghosh's *The Hungry Tide* (2004), Minoli Salgado's *A Little Dust on the Eyes* (2015), Arif Anwar's *The Storm* (2018), Shubhangi Swarup's *Latitudes of Longing* (2019), and Amitav Ghosh's another novel *Gun Island* (2019). This research delves into the archive of South Asian literature, tracing an avenue that explores the multifaceted dimensions of climate change as portrayed in these works. It also analyses how such representations may contribute to the development of a burgeoning literary genre called "Climate Fiction" or "Cli-fi". This study is grounded on the premise that analysing the portrayal and a strong focus on the theme of climate disasters in literature can provide an itinerary for exploring the authors' efforts in moving beyond mere plot progression towards grappling with intricate issues of historical, societal and cultural significance.

In this discussion, the utmost importance of acknowledging the increasing occurrence of climatic events has been asserted advocating for a reevaluation of the conventional understanding of the novel's portrayal of catastrophic circumstances. This research probes into the critical issues associated with catastrophe, the Anthropocene and climate change, focussing on the analysis of the portrayals of environmental crisis and the profound impact of ecological degeneration in South Asian nations. Fiction thus plays a crucial role in facilitating a transformative change in our perception, which is essential for navigating the ever more demanding circumstances of existence in the Anthropocene. Fiction serves as a valuable instrument for readers to gain insight into the intricacies of living amidst crisis, enabling them to become familiar with different possibilities and scenarios without subjecting themselves to excessive risk. It is argued that South Asian novels hold significant influence in shaping the current imagination about climate change. This is primarily due to their adherence to plurality of scope, multiplicity of people and culture interacting with each other, themes of historical and contemporary relevance, and their dedication to the portrayal of the mundane aspects of

everyday life. These characteristics make South Asian novels particularly suited for the task of recontextualising catastrophic events as pivotal occurrences within the modern global landscape.

The concept of the "Anthropocene", originally introduced by the ecologist Eugene F. Stoermer in the 1980s and later promoted by an atmospheric chemist Paul J. Crutzen at the onset of the twenty-first century, has gained substantial momentum in recent years. It emphasises the significance of human actions in assuming the role of a geological force and also highlights the escalating negative consequences stemming from anthropocentric activities on earth. Some experts contend that these impacts are significant enough to indicate the recognition of this new geological epoch. This geological epoch, marked by the profound influence of human activities on the planet's delicate ecosystems, continues to be a topic of conflict among environmentalists and geologists. Nevertheless, the undeniable impacts of change in the climate, the catastrophic depletion of diverse flora and fauna, and the commonplace pollution of water, air and soil stand as a testimony to the significant influence exerted by human beings on our planet's ecological systems.

The Anthropocene is a highly debated and extensively researched topic in contemporary academia, particularly in the field of environmental humanities. Its multifaceted and occasionally conflicting implications have garnered significant attention and it demands additional inquiry. At the threshold of the millennium, Eugene Stoermer and Paul Crutzen initially introduced the notion of the Anthropocene, a geochronological period, to the community of scientists. In his book, Clive Hamilton (2017) writes about the profound shift observed by earth scientists, who assert that our planet has shifted from the Holocene epoch (spanning 10,000 years, characterised by a temperate and stable climate that fostered the growth and prosperity of human civilization) to a new epoch known as the Anthropocene. Hamilton argues that the primary catalyst behind this paradigm shift lies in the alarming surge of carbon dioxide concentration within the earth's atmosphere. This unprecedented increase in CO₂ levels has initiated a chain reaction of interconnected and far-reaching consequences throughout the complex web of the earth system. The inclusion of acidification of the oceans, extinction of species, and alteration of the nitrogen cycle as significant factors further strengthens the argument for the transformative impact of these forces on the system. The detectability of human interference on the climate system can be traced back to the advent of massive coal-burning during the Industrial Revolution. The

escalation of atmospheric CO₂ levels exhibited a gradual trajectory over a span of approximately 150 years. However, the end of the Second World War marked a significant turning point in the rise of carbon dioxide levels, as a discernible shift took place. It was during this period that the rate of carbon dioxide increase underwent a notable acceleration. The trend of global economic growth, resource utilisation, and waste generation has exhibited a noticeable surge subsequent to the end of the World War II, a phase aptly labelled as the "Great Acceleration" which persists even today. Due to this reason, contemporary expert consensus has shifted commencement of the new epoch from its initial proposition in the late 18th century to a more recent timeframe, specifically around 1945. So, the year 1945 signals a significant juncture in the chronicles of earth, wherein the geological trajectory of the planet deviated from a course dictated solely by impersonal natural forces to one that became subject to the agency of a conscious and decisionmaking entity – a new human-geological force. Humans have engaged in the redistribution of carbon, a crucial element within the earth system, which exerts a profound influence on the climate. The discourse surrounding this concept of the Anthropocene has not been limited to a mere description of the phenomenon. Rather, it has involved a conscious effort to contemplate the normative implications of humanity's influence over the entire system of earth.

The comparative analysis of artistic expressions that are distinguished by their cultural, normative, and geographical variations, yet aligned by a shared preoccupation with the human transformation of the earth's ecosystems, - or the Anthropocene – holds great potential for enriching the environmental humanities. This interdisciplinary domain is increasingly recognised as an essential element of the arts and contemporary literary praxis. Across various historical periods, cultural activities, particularly works of fiction, have displayed a capacity to engage with and respond to a range of crises, including war, ecological disasters, and other forms of societal upheaval (Ghosh, *Great Derangement* 14). The emergence of narrative form is intrinsically linked to the prevailing concerns of a given era, as well as the contextual factors that shape its creation (Bruner 16). As per Jerome Bruner's statement, it is not a prerequisite for a narrative to have a resolution to the conflict it presents. The purpose of narrative is to encompass the idea of the uncanny, rather than to provide a solution for it. Narratives may not provide a sense of closure or resolution, but rather seek to illuminate the struggles of its characters in a way that renders them more understandable and thus more bearable. As they provide a means of comprehending and thus tolerating threatening situations, narratives are thought to be a natural

response to adversity. This above discussion points to the significance of fiction as an artistic medium that creates, contemplates, and develops narratives that impact our perception and everyday existence. This statement posits that there is an expectation for works of fiction to address contemporary societal concerns, with a particular emphasis on the paramount issue of change in climatic conditions in the Anthropocene. Keeping this in mind and with the understanding of the significance of literature in shaping public perception, this study focuses on novels that deal with the theme of climate change explicitly or obliquely. These fictional works demand a closer examination due to their potential to effectively raise awareness about this fundamentally scientific issue among the common public.

In *The Great Derangement* (2016), Amitav Ghosh has raised a critical concern regarding the insufficient response of current literature in addressing the themes associated with climatic shifts. He argues that the literary world has failed to acknowledge the gravity of this global crisis and has not done justice by avoiding it in contemporary fiction:

In a substantially altered world, when sea-level rise has swallowed the Sundarbans and made cities like Kolkata, New York and Bangkok uninhabitable, when readers and museumgoers turn to the art and literature of our time, will they not look, first, and most urgently, for traces and portents of the altered world of their inheritance? And when they fail to find them, what should they – what can they – do other than to conclude that ours was a time when most forms of art and literature were drawn into the modes of concealment that prevented people from recognizing the realities of their plight? Quite possibly then, this era, which so congratulates itself on its self-awareness, will come to be known as the time of the Great Derangement. (Ghosh, *Great Derangement* 14-15)

The assertion that literature addressing the topic of climate change is non-existent is an inaccurate claim. Indeed, the exploration of this subject matter can be discerned in various literary texts dating back to the 19th century. *Darkness* (1816), a poem by George Gordon Byron was composed as a response to the climatic phenomenon commonly referred to as the "year without a summer". The work portrays a world plunged into darkness as the sun disappears from sight, resulting in widespread famine and fatalities. *The Purchase of the North Pole* (1889), a

work by Jules Verne narrates a tale of a venture aimed at altering the earth's axis to facilitate the extraction and trade of coal that is presumed to be existing beneath the frozen surface in the North Pole. The work's underlying theme of unscrupulous capitalism is one that remains pertinent in contemporary times.

The emergence of the fascinating form in contemporary literature, known as "Cli-fi", primarily deals with works of fiction that incorporate the theme of climate change into their plot. Margaret Atwood (2013) has aptly defined "Cli-fi" as an umbrella term for books where "an altered climate is part of the plot". The increasing prevalence of such works is indicative of the growing concern and awareness regarding climatic shifts in modern times. The claim that fiction about climate change is not as mainstream as anticipated is a challenging one to disregard. On the other hand, it is not difficult to encounter literary pieces in which the topic has been approached with the gravity it warrants to be 'serious fiction'. Regardless of the ambiguous response from critics and scholars, contemporary fictions offer valuable perspectives on how society confronts the complex scientific issue of climate vagaries. Therefore, this research attempts to explore a diverse selection of fictional texts that centre on the theme of climate change. The major objective of this study is to look deeper into the diverse approaches employed by South Asian fiction in tackling this pressing issue. The study aims to investigate the artistic merit of these works in dealing with the issue and explore the underlying stance which these works convey. This study has examined selected fictional works from South Asia that help consolidate the idea that literature of this region has also contributed in this genre. The purposeful inclusion of fictions containing geographically diverse settings serves the objective of reviewing a varied range of novels by writers from India, Pakistan, Bangladesh and Sri Lanka. These novels exhibit realistic elements, address the subject of climate change in both overt and subtle ways, and cater to a culturally heterogeneous readership.

A Brief Historical Background of Popular Fiction about Climate Change

Although it is uncertain when the acronym "Cli-fi" first appeared, journalist Dan Bloom undoubtedly had a significant influence on its popularity, as his insightful website *The Cli-Fi Report* reveals. Cli-fi narratives are primarily concerned with exploring the potential consequences of shifts in climate patterns and its impact on human existence. These works of literature may be situated in various temporal contexts, including the historical past, present, or

imminent future. The significance of the setting cannot be undervalued in the context of climate fiction. Frequently employed locations include endangered towns or cities, coastal regions, islands, and distant Arctic territories. The flow of these storylines tends to be expedited and marked by crucial stages of crisis. This sense of crisis brings a feeling of unease and trepidation, prompting a fixation on the precariousness of entities and the fluidity of existential demarcations between human and nonhuman.

In their work, Danielle Clode and Monika Stasiak (2014) present a useful classification. The initial phase of climate change literature is characterised by a "pre- and early scientific" era, wherein a range of mythological stories are explored to address this phenomenon (Clode and Stasiak 3). Mythologies across cultures incorporate the concept of cyclical damage wherein the world experiences a sequence of catastrophic occurrences, such as flood, storm, or fire, succeeded by rebirth. The persistent influence of archaic mythologies centred on punishment, redemption, and apocalypse remains a pivotal force in influencing our imaginative and ethical responses towards acknowledging the importance of contemporary climate change fiction. Narratives of this kind frequently offer religious or mythological justifications for ecological disruptions such as great floods, earthquakes, volcanic eruptions and storms. It is plausible that a significant number of mythologies have their origins in cultural recollections of prevailing calamities. The Epic of Gilgamesh (c.2150-1400 BCE) is a well known instance of a flood myth.³ The Hindu mythology features a narrative of a significant flood, known as "manvantarasandhya", which is documented in texts that include the Satapatha Brahmana (c. 6th century BCE) and the Puranas. According to the story, the Matsya incarnation of the deity Vishnu forewarns Manu, the first man, regarding an imminent deluge. The Hawaiian deity Pele, known for her association with volcanoes, is often depicted as a figure prone to fits of rage that manifest in the form of volcanic eruption.⁵ The word "hurricane" is widely used to denote a tropical cyclone in the northeastern Pacific Oceans and the Atlantic. This nomenclature is derived from the name of the Central American god of wind, Huracan.⁶ The portrayal of the apocalypse in various myths often attributes its occurrence to divine intervention. However, it is noteworthy that these myths also suggest that humanity bears a significant degree of accountability for these cataclysmic events. It also proves that narratives describing catastrophic events caused by climate change are not very new to humans.

The period subsequent to the 'pre-scientific' age is characterised by the advent of the initial phase of climate analysis, which transpired between 1800 and 1930 and during this era the phenomenon of climate change "was relatively rapidly accepted, but the causes of that climatic change took longer to establish" (Clode and Stasiak 4). This period is marked by a collection of non-fictional works authored by important figures like Joseph Fourier, James Croll, John Tyndall, T. C. Chamberlin, and Svante August Arrhenius, among others. These works explore the subject matter of hazardous climate change, attributing it to various factors including deforestation, comets, atmospheric impacts on global warming, the release of CO2 as a byproduct of industrial activities in the context of rising temperature, cyclical alterations in solar energy, periodic changes in the shape, size and orientation of the orbit of our planet, and numerous other causative agents. The emergence of fictional portrayal depicting global changes in climatic conditions can be traced back even to this early evolutionary period of this genre. Richard Jefferies' After London (1885) serves as a compelling illustration of the impact that extraterrestrial and atmospheric influence can have on earth's climate. In this literary work, Jefferies introduces the concept of a mysterious 'dark planet' that disrupts the delicate balance of the planet's climate, subsequently plunging society into a state reminiscent of the dark ages. These literary works mirrored the prevailing scientific theories and concerns of the time. The relationship between the fluctuation of solar energy and climatic shifts is explored in Gabriel de Tarde's Underground Man (1896), the consequences of geological unsteadiness on climate is depicted in Sydney Fowler Wright's Deluge: A Romance (1927), and the influence of variations in the axial tilt of the earth is examined in William Wallace Cook's Tales of Twenty Hundred (1911-1912). Such fictional portrayals of climatic changes may not adhere strictly to scientific accuracy or complete plausibility. However, they undeniably arise from and are built upon ongoing scientific discussions (Clode and Stasiak 4). The true inspiration for such fiction during the nineteenth and early twentieth centuries came from nature instead of scientific and technological advancement. By the year 1816, the literary contributions that gained considerable recognition amidst the climate abnormalities known as "the year without summer" were Lord Byron's poetic composition titled *Darkness*, which appeared in 1816 and *Frankenstein* (1818), an exceptional work by Mary Shelley. These two works shed light upon the atmospheric phenomena of darkening sky and diminished temperatures, which resulted in extensive agricultural setbacks, societal unrest in the form of protests for food, and severe famine across

the northern part of the globe. The authors of these two literary masterpieces were unaware of the Tambora eruption of 1815. But, the adverse climatic conditions resulting from this cataclysmic event played a significant role in shaping their artistic ingenuity. This influence was further augmented by their profound fascination for contemporary natural philosophy and their personal visits to the landscapes surrounding Geneva. Academic experts have duly acknowledged the significance of the global climate predicament that ensued after the Tambora volcanic eruption. This climatic upheaval, in turn, exerted a discernible influence on the literary works produced by the Shelleys, as well as their friend Lord Byron, during the year 1816 (Higgins 56).

The scientific community in the beginning of the 20th century primarily focused on investigating the differences of opinions that existed between atmospheric and geological signs of climate change. Researchers were particularly intrigued by the contrasting findings and observations derived from these two distinct sources of evidence. During the 1930s, Milutin Milanković postulated that the occurrence of ice ages could be attributed to cyclical variations in the earth's orbital elements (Fleming 108). As early as in 1938, G. S. Callendar posited a compelling argument that the consumption of fossil fuels and consequent CO₂ emission had engendered a discernible augmentation in the earth's temperature, thereby instigating the phenomenon of greenhouse warming. According to Clode and Stasiak (2014), the period spanning from 1930 to 1960 witnessed a perplexing trend in public perception regarding climate change, despite the gradual buildup of evidence supporting its existence (5). They further state that during this period, the trajectory of scientific inquiry was undeniably shaped by the profound impact of the Cold War and World War II. They maintain that the field of climate change fiction remained relatively scarce, primarily owing to the inclination of fictional narratives to mirror the anxieties of the era, with the foremost concern being the peril of global nuclear explosions. However, between 1930 and 1940, the Great Plains region of the United States and Canada bore witness to a distressing ecological disaster. This catastrophe manifested in the form of an extensive array of dust storms, commonly known as the Dust Bowl due to its pronounced prevalence within the geographically defined, bowl-shaped expanse. The impact of this ecological catastrophe found its expression in various works of fiction, such as The Grapes of Wrath (1939) by John Steinbeck and Whose Names are Unknown written by Sanora Babb in 1939, but published in 2004 (Alexander and Nugent 53).

The advent of a distinct era, as identified by Clode and Stasiak (2014), can be traced back to 1960 and continues to the present day. This particular period is identified by the appearance of stories centred on the idea of anthropogenic climatic shifts within the realm of fiction. During the latter part of the 1950s, there was a growing acknowledgement of the significance and potential hazards associated with the escalating concentrations of CO₂ in the earth's natural environment, as shown by the Keeling curve. The popular press was also raising concerns regarding climate change, the consequential increase in sea levels, the depletion of habitats, and the changing nature of agricultural lands. Towards the late 1960s, a series of pioneering studies emerged, presenting the initial indications of a plausible scenario in which the glacial ice sheets could face a collapse, thereby instigating a calamitous surge in sea levels. The mounting apprehensions surrounding environmental deterioration, and the associated peril of population explosion and environmental pollution, experienced a remarkable rise. The appearance of non-fictional works such as Silent Spring (1962) by Rachel Carson and an autobiographical work by Edward Paul Abbey titled Desert Solitaire: A Season in the Wilderness (1968) served as apparent manifestation of an intensifying environmental activism. During the 1960s, a renewed interest in the climate change theme in fiction became apparent, effectively mirroring the phenomenon of global warming and its consequential rise in sea levels. In Brian Aldiss' novel *Hothouse* (1962), the author presents the notion that the greenhouse effect is a result of a modification in the way the earth rotates. James Graham Ballard's novel The Drowned World (1962) delves into the impacts of radiation from the sun on the melting Arctic ice caps, leading to a rise in temperature across the globe. Furthermore, Ballard's novel The Burning World (1964) delves into the repercussions of water scarcity triggered by the contamination of the oceans.

During the 1980s, it became increasingly evident that human activities were the primary contributors to carbon emission and the problem of global warming, both in the present and in future projections. This realisation prompted the formation of the Intergovernmental Panel on Climate Change (1988), which aimed to address and study the intricate details of changing climate around the globe. Furthermore, this period witnesses an increase in the politicisation of environmental discussion, accompanied by the inception of endeavours aimed at juxtaposing personal reactions to climate change with prevailing political and societal influences. The manifestations of climate change themes in various initial novels of this time revolve around the effects of erratic weather patterns and rising sea levels. These themes are particularly prominent

in literary works that employ the concept of changing climate as a means to show far-flung dystopian futures, such as Richard Cowper's novel The Road to Corlay (1978) and George R. Turner's The Sea and Summer (1987). The growth of dystopian vision pertaining to future risks heralds the commencement of fears emblematic of the 20th century: unrestrained advancements in technology and science, alongside political misconduct and manipulation, and an upsurge of totalitarian authority (Franková 212). H. G. Wells, along with Jules Verne, assumed a significant role in pioneering the concept of speculative fictional utopia, in which the demarcation between fantastical utopian ideals and tangible reality became progressively indistinct. This convergence of genres subtly foreshadowed the emergence of cautionary dystopian narratives. The advent of the 20th century witnessed a significant change in the trajectory of utopian thought as the longstanding tradition of envisioning ideal societies took an unexpected turn towards the portrayal of a dystopian world. David Brin's renowned novel, Earth (1990), delves into a dystopian future where the ominous visions of rising sea levels and heightened storm events loom large. These environmental phenomena, woven into the narrative, serve as harbinger of a world plagued by ecological turmoil. Brin's masterful storytelling also explores other pressing concerns that afflict the bleak future, including the pervasive presence of eco-terrorism, the relentless burden of overpopulation, and the haunting reality of the extinction of species. Local manifestation of climate change is addressed by Michael Bruce Sterling in Heavy Weather (1994), which vividly portrays the catastrophic impact of tornadoes.

The literary works of the 1990s aptly represent the burgeoning intricacy inherent in the realm of climatology, as well as the fervent societal and political discourses surrounding this pressing issue. Adam Trexler and Adeline Johns-Putra (2011) are of the view that the discourse surrounding climate change has transcended its initial confines within scientific and environmental spheres and has assumed a more expansive purview encompassing social, cultural and political domains (187). In parallel, climate change fiction has likewise evolved beyond the confines of science fiction, embracing a diverse array of literary genres.

The emergence of cli-fi can be attributed to various factors, but it is necessary to acknowledge the genre's association with significant non-fictional writings in the pastoral style, particularly Henry David Thoreau's *Walden* (1854) and Carson's *Silent Spring* (1962). Thoreau's *Walden* is a renowned work that blends allegory, social satire, and meticulous

evaluation of his surroundings, thereby carving out a distinct genre for itself. His book has inspired works by later writers like Annie Dillard's Pilgrim at Tinker Creek (1974), and Terry Tempest William's Refuge (1991); a distinct category of non-fictional nature writing emerged focussing on the introspective observations of a solitary witness in remote setting in the vein of Thoreau. The genre of climate fiction expresses a commonality with non-fictional work in its exploration of individual and collective human reactions. In this similar vein, the confused, wounded, and psychologically distressed protagonists of Marcel Raymond Theroux's work Far North (2009), T. C. Boyle's San Miguel (2012), and Nathaniel Rich's novel Odds Against Tomorrow (2013) focus on the location and emotional atmosphere of the scientist's secluded dwelling, which appears to have been heavily influenced by the works of Thoreau. Simultaneously, additional attributes of the post-apocalyptic settings, which are extensively ubiquitous in climate fiction, can be attributed to Carson's Silent Spring. Her work presents a poetic analysis of the influence of industrially produced pesticides on the migration pattern of birds. The book envisions a desolate and silent season that would ensue from the extinction of species if measures are not implemented to avert it. The catastrophic consciousness is characterised by two gestures: first, a retrospective analysis which imposes the cause of a catastrophic event upon human activity; and second, a forward-looking anticipation of a desolate future. Numerous authors like Margaret Atwood, Paolo Bacigalupi etc. have expressed an avid fascination in exploring the notion of human liability and the possibility of potential threat that could persist in a world that has been impacted, constrained and irreparably harmed. J. G. Ballard's novel *The Drowned World* is recognised as a significant contributor to the development of fiction about changing climate, particularly due to its exploration of "post-diluvian imaginary" (Irr).

The incorporation of flood scenes within cli-fi literature has a notable impact on the genre's temporality, effectively diverting it from its traditional future-focused or alternate present-oriented trajectory commonly found in science fiction. In cli-fi, it is quite common for the protagonists to be deprived of the opportunity to prevent the adverse impacts of climatic shifts, and even less frequently are they able to modify the circumstances that lead to such outcomes, which is in stark contrast to the majority of science fiction narratives. Climate fiction presents the consequences of a past event that may have been overlooked, yet its impact continues to reverberate in the future as well as the present. In addition, literary realism has

undeniably piqued the interest of writers, who continue to explore its origins, benefits, and adaptability to contemporary needs. Some works by Barbara Kingsolver, Amitav Ghosh, etc. deal with the non-traditional spatial and temporal dimensions, propelling the imagination towards an innovative contemporary manifestation of the realist paradigm in contemplating the human condition in relation to the planet.

The sub-genre concerning speculative fiction, which is commonly perceived to possess greater reach than science fiction, persistently offers an influential portrayal of changed climate conditions. Notable examples include Margaret Atwood's The Year of the Flood (2009), and also The Windup Girl (2009), a debut novel by Paolo Tadini Bacigalupi. The multifaceted nature of climate change has made it a prominent theme in various sub-genres of fiction, encompassing social, political and cultural dimensions. It is ingeniously employed as a multidimensional tool, serving as both a backdrop and an inducement for various narrative developments. Furthermore, it is strongly embraced as a prevailing theme, explicitly explored and scrutinised within the literary landscape. In the analysis conducted by Clode and Stasiak (2014), it is observed that there is a significant transition of focus from a futuristic world, the "novum", which is a defining element of science fiction, to the present reality of our existent planet (6). This transition is of particular significance as it marks a departure from the speculative realm of the future and brings the narrative closer to the familiar and relatable context of the present through literary realism. The focus has moved away from the examination of external factors such as the origins and effects of climate change, and instead, it has turned towards exploring the intricate dynamics of human interaction, societal responses and psychological effects in the face of environmental catastrophe. The diverse sub-genres exploring the climate themes have sparked a lot of serious consideration in contemporary literature, resulting in the emergence of modernist, realistic fiction. Notable early instances of this sub-genre include Maggie Gee's *The Flood*, published in 2005. The motif of climate change also manifested itself within the arena of thriller novels and young adult literature, as exemplified by the work of Steven Gould and Laura J. Mixon's publication entitled Greenwar (1997), as well as Saci Lloyd's captivating series known as The Carbon Diaries (2015-17). In more recent years, writers like Ian McEwan and Barbara Kingsolver have also contributed to this subgenre with their respective works Solar (2010) and Flight Behaviour (2012). In his work, Dipesh Chakrabarty (2012) asserts that there exists a body of literature dedicated to the pressing concern of global warming. These works have contributed

to the fostering of a heightened collective awareness regarding the ongoing environmental crisis. This crisis, Chakrabarty argues, is undeniably influenced by the disparities inherent in capitalist growth (1). However, it is important to note that this crisis is not limited to any particular group or region, but rather poses a challenge to humanity as an entirety.

Contemporary Approaches to Climate Change in Fiction (In the Context of South Asia)

The world of fiction has long been a fertile ground for exploring and envisioning the potential risks that humanity may encounter. It is crucial for writers, researchers, and policymakers to collectively engage in the task of not only revisioning these risks but also to conceptualise and articulate the solutions. This shared responsibility necessitates such a multidisciplinary approach, where the insights and expertise of policymakers, scientists and fiction writers converge to address the complex challenges that we face today. By harnessing the power of imagination and creativity, contemporary authors have collectively contributed to the development of the genre of climate fiction which offers possible scenarios demanding a more secure and sustainable future. The prevailing theme of inescapability and despair is a prominent feature found in contemporary literary works that explore the issue of climate change, regardless of their specific sub-genre. In climate change narratives, the portrayal of human agency as the ultimate solution to this global predicament is a rarity. The prevailing narratives surrounding this issue tend to downplay the role of human intervention in effectively addressing and mitigating the negative effects of climatic shifts. In this period, there has been an increasingly evident manifestation of human impact on the earth's climate. This realisation has prompted the inception of the term the "Anthropocene", which, as mentioned earlier, denotes a distinct geologic epoch defined by the cumulative influence exerted by humanity upon the planet. While the official recognition of the concept remains under review, its impact on the arena of literature and criticism is already seen through the proliferation of publications incorporating the term within the titles they contain. Significantly, the current era is characterised by a growing recognition that the underlying factors contributing to climate change are predominantly cultural in nature: "Climate change now occupies a primary position not just on political and scientific agendas but in the wider cultural imagination" (Trexler and Johns-Putra 185). Undoubtedly, a plethora of responses, among other intellectual pursuits can be frequently discerned within the vast field of literature. Therefore, this thesis has focused on selecting South Asian literary works from the late 20th and

early 21st centuries. These works directly or obliquely incorporate the dynamic phenomenon of climate change within their narrative frameworks. This analysis will not steer away from exploring the profound social, cultural, political and ecological impact climate change exerts on humanity and beyond.

Literature is anticipated, if not to directly alter human conduct, then, at the very least to furnish a narrative framework that enables us to comprehend and navigate our path within this ever-evolving world. Numerous theorists and authors have put forth the notion that fiction dealing with climate change does not conform to a singular genre, but rather manifests as a multifaceted literary response to the continually shifting climate dynamics. Therefore, this study analyses the realistic approach employed by the authors to portray the impacts of changing climate by means of different socio-cultural and psychological motifs such as ecological transformation, climate-induced migration, gender concerns, and climate trauma.

The genre of Western climate fiction has shown an obvious inclination towards adopting South Asia as a backdrop for its exploration of significant themes. Various authors from the Western literary tradition have effectively conveyed through their use of language, location and accounts that South Asia provides a significant backdrop for exploring key concepts within the current climate action. For example, in his famous work of climate fiction The Ministry for the Future published in 2020, American writer Kim Stanley Robinson chooses to commence his narrative in India. Stephen Markley's *The Deluge* (2023) explores the consequences of climate change through epic narration consistently alluding to the vulnerability of the countries like India, Bangladesh and Pakistan. In his recent novel, Cloud Cuckoo Land (2021), Anthony Doerr explores speculative fiction writing, presenting readers with a vision of a futuristic Mumbai. However, it has also been noticed that this tendency often leads to the portrayal of ill-informed viewpoints within the narratives. The rise of fiction exclusively tackling climate-related themes by South Asian authors have contributed significantly to introducing readers with climate anomalies in recent years, offering unique perspectives and narratives that shed light on the environmental challenges faced by their respective societies. Including Amitav Ghosh, Rajat Choudhury, and Saad Z. Hossain, many authors have emerged as influential figures within the literary movement which seeks to employ the theme of climatic changes.

In the pursuit of gaining valuable insights and engaging in thoughtful contemplation regarding our collective future, the exploration of climate fiction emerges as a unique avenue. Within this field of literature, it becomes imperative to acknowledge and duly credit the South Asian authors who have not only made remarkable contributions to the genre but also possess the potential to redefine the environmental crisis. By employing imaginative narratives and often speculative scenarios, these works offer unique perspectives through which the consequences, challenges, and opportunities prompted by the climate crisis can be examined. Within the expansive landscape of climate fiction, South Asian writers have emerged as significant voices, enriching the genre with their distinct perspectives and subtle style of writing. By intertwining cultural nuances, historical contexts, and socio-political dynamics, these writers have infused their narratives with a rich tapestry of insights that resonate with readers across borders. In contrast to the portrayal of widespread mortality and readily apparent calamity commonly found in the literary works of Western writers, the narratives originating from South Asia present nuanced perspectives on the conditions of individuals confronting the impacts of the climate crisis. These narratives acknowledge the presence of catastrophic events in everyday lives of inhabitants, revealing their resilience in the face of environmental challenges.

Throughout the literature composed in South Asia since centuries past, the presence of environmental catastrophe has consistently cast a foreboding shadow. Various manifestations of such disaster, such as unpredictable monsoon, droughts, pollution, famines, industrialisation, and conflicts arising from water scarcity, have served as recurring themes. These tropes have permeated the literary landscape, offering a reflection of the region's enduring concern for the environment. Kamala Markandaya's novel *Nectar in a Sieve* (1954) has portrayed devastating storms, floods due to excessive monsoon rain and drought due to the failure of monsoon. Although published in the 1950s, the concerns that have surfaced in the text are relevant even today as their present-day cumulative occurrences add new dimensions to environmentalism and climate change discourse. In the novel *The City and The River* (1990), Arun Joshi skillfully portrays the complex issues of that time, offering a thought-provoking exploration of various themes that resonate deeply with our present time. Joshi's novel acts as a remarkable precursor, foreshadowing the concerns associated with environmental conservation, water conflict and capitalist ambition that have come to define our society. In numerous dystopian narratives, the symbolic significance of water bodies, particularly rivers, cannot be overlooked. This is rooted in

the historical reality that human civilisation and settlements have traditionally emerged in close proximity to water resources. The recurring theme of floods, which submerge historic towns, adds to the association between dystopian fiction and water. Additionally, the essential role of water supply as a vital resource for sustaining communities further reinforces the metaphorical existence of water as the lifeline traversing through the plotlines of these narratives.

The postcolonial environmental fictions from South Asia possess a remarkable ability to incorporate the complex history of colonialism which has shaped the region. These narratives reveal the underlying structures that have facilitated the exploitation of both humans and the environment. Moreover, they serve as warnings, illustrating the dangers that arise during the process of shifting from one socio-cultural form to another. In doing so, these narratives effectively integrate climate science, providing a plausible foundation for their arguments. They offer a vision of a more inclusive and sustainable future, envisioning a world where social and environmental justices are prioritised. The novels *Shadow from Ladakh* (1966) by Bhabani Bhattacharya and *Jasmine* (1989) by Bharati Mukherjee offer a platform to explore and uncover the complexities surrounding the pursuit of economic progress, the anguish caused by displacement of human beings, and the concerns regarding environmental deterioration. These works also aim to foster and interrogate the idea of hope in sustainable development, thereby pointing to the evolving perspectives surrounding this theme.

In the post-millennium scenario, Indra Sinha's work *Animal's People* (2007) unfolds during the backdrop of the Bhopal Gas Tragedy of 1984 and its impact on the environment. Within this novel, Sinha portrays a sense of apocalyptic effect that permeates the text, functioning as a tangible and living entity. This apocalyptic force propels the story forward, while also serving as a constant reminder of the victim's condition due to corporate indifference and the impacts of globalisation. In Kiran Desai's *The Inheritance of Loss* (2006), and Uzma Aslam Khan's *Thinner than Skin* (2012), the occurrences of natural disasters such as landslides and earthquakes are represented, shedding light on the consequences of the depletion of vegetation and land erosion in their respective settings of India and Pakistan. Writers from Pakistan like Mohsin Hamid, Kamila Shamsie, Mohammed Hanif, and Uzma Aslam Khan have incorporated environmental issues like "overpopulation and massive food consumption, physical and psychological health of human beings living in urban spaces, value systems of people in

relation to natural surroundings, the bond between humans and other forms of life, urban built spaces, and the culture of mindless consumption" (Yaqoob 249). The analysis of contemporary fictions in English from Pakistan reveals a reflection of the distressing environmental circumstances prevalent in the nation. The writers demonstrate a heightened sense of environmental awareness through their depiction of the mounting urbanisation and industrialisation, which consequently leads to the degeneration of the natural environment and its assets. Moreover, these adverse effects extend to human settlements and communities, causing significant harm. Mohammed Hanif's Our Lady of Alice Bhatti (2011) and Mohsin Hamid's How to Get Filthy Rich in Rising Asia (2013), are representatives of those fictional works that deal with the theme of the degradation of environmental elements. In his graphic novel All Quiet in Vikaspuri (2015), Sarnath Banerjee explores a dystopian vision of the future, in which the city of Delhi is confronted with the dire consequences of the Water Wars, resulting in a severe scarcity of water resources. The novel presents a compelling correlation between the desiccation of the Yamuna river and the consequential implementation of water rationing in the southern region of Delhi during the summer months. In his 2018 novel, The Butterfly Effect, Rajat Chaudhury explores the concept of escalating temperatures in tropical nations. Chaudhury aptly examines the potential correlation between rising temperatures, overburdened tropical nations struggling with scorching summers, agricultural setbacks, and the likelihood of armed conflicts intensifying.

Saad Z. Hossain, a prominent literary figure from Bangladesh, has explored the theme of a climate-altered future. Hossain, in his novella *Kundo Wakes Up* (2022), employs a fantastical lens to explore the consequences of environmental upheaval. His narrative set in a submerged futuristic Chittagong skillfully combines elements like technological advances and age-old myth. In her novel, *The Immortal King Rao* (2022), Vauhini Vara, a Canadian writer of Indian descent, sheds light on yet another South Asian community through the lens of a Dalit protagonist. Vara's perspective on climate change presents a narrative wherein the phenomenon of global warming escalates to an uncontrollable extent. Through this portrayal, Vara emphasises the relentless and catastrophic progression of both technological advancements and the adverse effects of climate change. More recent works like dystopian novel *Leila* (2017) by Prayaag Akbar, *Black River* (2022) by Nilanjana Roy, and *Everything the Light Touches* (2022) by Janice Pariat demand a

thorough evaluation of these literary compositions through the lens of climate change and the corresponding affliction endured by humanity as a result of its ominous consequences.

The growing trend of non-English climate fiction in the South Asian context has also become a noteworthy event in contemporary literature. One such example is the Tamil author Ayesha Era Natarasan's novel *Kaalanilai Agadhigal* or *Climate Refugees* (2023). This work represents a significant development in the literary landscape, as Natarasan offers a distinctive viewpoint on the consequences of changing climate and its effects on vulnerable communities. The author effectively underscores the pressing necessity for immediate response to combat the global crisis. The South Asian literary corpus encompasses a multitude of fictional works that delve into the realm of environmental issues and climate change. However, these narratives have thus far remained relatively unnoticed by both readers and scholars, awaiting the recognition they deserve.

Climate Change, the Anthropocene and Catastrophe: A Review of Literature

This particular section of the research entails a meticulous analysis of the existing body of literature that pertains to the portrayal of climate change in fiction. Its primary objective is to analyse the previous studies that have employed theoretical frameworks akin to those employed in this study. Climate change as a global concern has not only captured the attention of scientists and policymakers but has also emerged as a prominent theme in the literary world. In this context, the Anthropocene, a geologic epoch characterised by human impact on the earth's ecosystems, has assumed immense significance for contemporary writers. The identification of the Anthropocene as a defining era has provided a fertile ground for literary exploration and reflection on the intricate connection between human beings and the environment. Although it may appear that climate fiction has little to do with politics or policy-framing, it offers a glimpse into what Manjana Milkoreit (2017) refers to as the "climate imaginary" (3) – the stories, the symbols and ideas that serve as representations of and attribute significance to climate change.⁷

The concept of anthropogenic climate change brings about a discernible attention to the overall climate patterns across the globe, which can be attributed to the increase in the level of carbon dioxide in the atmosphere. This phenomenon results in rising sea levels, the escalation of atmospheric temperatures, the disturbance to seasonal patterns, alterations in the distribution of

rainfall, the heightened frequency of dry-spells, water scarcity, and extreme weather events like storms. The determinants largely accountable for climate change are "GHG emission, ozone depletion, global warming, rapid deforestation and large-scale haphazard urbanization" that have made South Asia "a hotspot of almost all hydro meteorological and geographical disasters" (Srivastava 3).

In her insightful essay, Sumana Bhattacharya (2010) mentions the geographical areas that will bear the brunt of the detrimental consequences of changing climate and the socio-economic transformations that are currently unfolding:

Most of the area in the South Asian region, namely, Afghanistan, Bangladesh, Bhutan, Nepal, Pakistan, Maldives, Sri Lanka and India, lie in temperate and tropical regions that are influenced predominantly by the monsoons. The physiography of the region is diverse ranging from the Himalayas in the North, the long coast line, a vast desert and tropical forests with rich biodiversity reserve. In the recent years, huge losses have been incurred due to climate related hazards and recovering from such shocks has not been easy as socio-economics of the region is characterised by large population and high levels of poverty and unequal development within the countries mainly due to the non-attainment of its development goals such as eradication of poverty, universal education and a sustainable environment. (327)

The shocks of climate change are penetrating through the social, political, cultural and economical arena of nations as pointed out by Bhattacharya and also making the impacts of the Anthropocene visible both locally and globally. These are the reasons that the concept of the Anthropocene has gained significant attention and recognition within the realm of literary studies.

The purpose of novels is not typically to serve as a means for behavioural change. However, works of fiction that address the topic of climate change are frequently evaluated based on their ability to convey a particular message, often resulting in unfavourable critiques. Critics frequently denounce the expression of understandable climate change messages for its perceived polemicism, failure of appealing narrative, and flawed composition. On the other

hand, when authors place a greater emphasis on the narrative components over the climate change content, they frequently encounter criticism for their lack of precision and factual correctness. These criticisms reveal a noticeable conflict between the artistic demands of such novels and the instructional standards of the theme of climate change, as noted by Axel H. Goodbody in 2013.

Numerous investigations, encompassing theoretical frameworks such as ecocriticism, have been undertaken to analyse the complex connections between literature and the representation of this geological epoch. Adam Trexler, in his comprehensive analysis of numerous novels of the Anthropocene titled Anthropocene Fictions: the Novel in a Time of Climate Change (2015), has explored the ways in which literature addresses the current issues associated with climate change and environmental degradation. He claims that the most exemplary novels of the Anthropocene era do not exclusively prioritise the development and portrayal of characters. Instead, he emphasises the importance of not oversimplifying climate concerns by reducing it to a singular event like the commonly referred "Great Storm" (26). His argument is against the tendency to view climate change as a single, isolated occurrence, and at the same time highlights the complex and multifaceted nature of this phenomenon. He advocates for a more comprehensive holistic understanding of climate change that takes into account its various dimensions and interconnected factors such as "ocean currents, tigers, viruses, floods, vehicles, and capital" (26) and their profound impact on the human condition which these forces relentlessly shape. However, Trexler's investigation centres on the exploration of generic innovations, primarily focusing on their occurrence within the domain of popular science fiction. On the other hand, his study also emphasises the significance of the novel as "a privileged form" (27) in defining environmental issues. By examining Anthropocene novels, he explores how these literary works convey "cultural narratives, create detailed speculation, incorporate diverse points of view, and hold a multitude of things, from species to machines, places to weather systems" (27). Birgit Neumann (2019) later suggests that Trexler's study serves as a remarkable example of how Anthropocene novels in the present era envision tangible endeavours and political alliances that have the potential to spur political engagement. Significantly, in his book, Trexler places great emphasis on the political legitimacy of literary works and states that its diverse kinds and generic features possess the capacity to offer "weighty answers" (Neumann $97).^{8}$

By employing unique storytelling techniques, authors are able to craft compelling narrative fictions that engage readers on an emotional and intellectual level, leading to a transformation in their understanding of complex environmental issues. In her scholarly work, Karen Laura Thornber (2012), a renowned environmental humanist and literary scholar, highlights the profound impact of fiction on individuals' understanding and interpretation of the world. Thornber underscores the immense power of stories, asserting that they hold pivotal positions in shaping people's perceptions. She emphasises the significance of narrative in influencing our understanding of reality. The construction of our perception of reality and our comprehension of our identity and connections to the world are primarily shaped by stories rather than by quantitative information. This is why stories about climate change shape our perception about the present reality of the world.

Danielle Clode and Monika Stasiak (2014) claim that climate change poses a formidable challenge that has captured attention of scholars, scientists and policymakers alike. The issue has been the subject of extensive research and analysis, with experts seeking to understand the complex interplay of factors that contribute to its occurrence and impact. The contemporary scientific inquiry has yet to fully comprehend the origins and outcomes of climate change, let alone devise effective measures to control its origins and alleviate its effects. The primary obstacle that must be overcome is that of effective communication, which entails persuading both the people and their elected officials of the pressing need for prompt intervention and the imperative to modify our conduct in order to minimise the immense hazards that loom ahead. Clode and Stasiak put forth their view that in order to fully grasp the magnitude of the issue, it is necessary to employ a manner of communication that not only appeals to individuals on an intellectual level, but also evokes an emotional and imaginative response. Exploring the emotional perspective of alternate realities is an initiative that is commonly undertaken by authors of fiction. Writers artistically compose stories as a means of reconciling with that which is otherwise unbearable, inexpressible, or inconceivable (den Heyer and Fidyk 14). The topic of climate change has undoubtedly surfaced as a prominent motif within a diverse array of contemporary artistic expressions (Yusoff and Gabrys 520).⁹

In her book about climate change and the contemporary British novels, Astrid Bracke (2018) expounds upon a parallel notion, positing that narrative serves as a vital tool for humanity

to comprehend and navigate the intricate web of ecological crises and the nuanced dynamics between humans and the nonhuman world. The human encounters with the climate crisis, along with the accompanying viewpoints, accounts, and ideas, are all depicted through narrative means. Acknowledging this reality entails an understanding of the repetitive motifs of stereotypical depictions and the familiar structures that shape these narratives. The stories and the "act of narrating", Bracke asserts, are "central to the human experience of the world" because "humans make sense of the world around them, of relationships and events, by telling stories" (10). Following Bracke's analysis, it becomes evident that South Asian narratives also hold a significant place as these narratives not only serve as "representations of climate crisis, but also function as frameworks" (11) that shape individual's interpretations of the world. These novels possess dual purposes: offering both a reflection of the environmental challenges and a means for readers to make sense of their surroundings.

The genre of fiction presents a unique avenue for individuals to perceive the world in a fresh light thereby opening up the potential for reevaluating their connections with the nonhuman environment. This process of reevaluation serves as a fundamental initial stage in the transformation of collective perspectives on environmental susceptibility. In this regard, Lawrence Buell (2005) is of the opinion that: "For technological breakthroughs, legislative reforms, and paper covenants about environmental welfare to take effect, or even to be generated in the first place, requires a climate of transformed environmental values, perception, and will. To that end, the power of story, image, and artistic performance and the resources of aesthetics, ethics, and cultural theory are crucial" (vi). According to Buell, fiction possesses a unique ability that articles or scientific reports on climate change lack. He argues that fiction has the power to influence individual's perspectives on climate and catastrophe, consequently preparing them to effectively address environmental crises. In her compelling analysis, Ursula Kluwick (2014) posits that narrative serves as the sole possible means through which one can truly comprehend the nuances of the climate crisis. This assertion stems from the recognition that human perception of the climate crisis is inherently "tied to narrative strategies; whether or not we are aware of it, when we read and hear about climate change, we are offered not just facts and models but stories" (503). For instance, Amitav Ghosh's novels about the climate crisis help further expand the reader's perception about human experience through the art of storytelling. In fact, Astrid Bracke (2018) also asserts that the novel possesses unique qualities that make it an ideal medium for engaging with and addressing climate change. She highlights the significance of the novel's capacity to stimulate the imagination and shape perception, thereby enabling it to effectively intervene in the discourse surrounding it:

In novels, past and present can be revisited, different futures can be imagined, and responses and experiences tried out. Hence, in a time of global climate crisis novels function as experimental spaces in which actual and imagined circumstances are played out, in which ethical and moral dilemmas are considered and in which the world can be understood. (Bracke 7)

Bracke maintains that novels offer a crucial platform for the contemplation and examination of the climate crisis, offering a unique and expansive realm of imagination. This "imaginative space", as Bracke aptly terms it, allows for a deeper consideration of the multifaceted implications of the changes in climate conditions (8).

The complex manifestations of the climate crisis have given rise to various consequences, one of which is the emergence of an increasing population of climate migrants and refugees. In the course of climate change, the year 2005 marked a significant juncture as it witnessed the emergence of the climate change refugees. Among them, the inhabitants of Carteret, an island nestled in the South Pacific, found themselves compelled to abandon their homeland. The catalyst for this exodus was the relentless encroachment of rising ocean levels, an obvious consequence of the earth's changing climate. It is evident from the scientific data that nations in South Asia, which have been struggling with political and economic challenges, are expected to experience the most severe consequences and will "bear the brunt of flooding, loss of agricultural productivity and the spread of climate-related diseases" (Whitehead 7). Therefore, the issue of climate refugees has drawn considerable attention within the context of contemporary literature. As a serious issue that has captured the attention of the global community, the refugee crisis has resulted in a significant number of individuals finding themselves in a state of limbo on foreign borders, anxiously awaiting recognition and admission. Apart from socio-political factors, such as armed conflicts, persecution, and economic instability, climate change has also contributed in forcing individuals to flee their homelands in search of

safety and a better way of living. As a result, these displaced individuals find themselves in a precarious situation, grappling with uncertainty and vulnerability as they navigate the complex web of international borders and immigration policies. The demand of attending to this crisis has inspired the authors to craft stories that depict the plight of migrants who are compelled to abandon their native lands due to environmental factors. Manifesting typically as a collection of visual depictions lamenting their condition of being uprooted, a fresh comprehension of the refugee encounter, of their silenced odyssey, ought to be brought to the forefront. This is precisely why literary figures such as Amitav Ghosh have deliberately engaged with this matter in his novel, Gun Island. In the field of scholarly discourse, the predicament faced by refugees is commonly examined through two distinct lenses: the collective perspective, which portrays them as an underrepresented group subjected to dehumanising treatment, and the individual perspective, wherein refugees are frequently stigmatised as potential bearers of maliciousness and threats to national security. The act of giving voice to refugees involves recognising their inherent humanity, the hardships they have endured, and, most importantly, their entitlement to share their stories. In this context, Lava Asaad (2020) claims that the "dehumanizing image of refugees as less than human and indistinguishable mass impels us to turn to literary depiction as a way to counteract the dominant negative rhetoric" (2). The topic of refugees and their representation in literature is not solely the concern of refugee writers. Rather, it is the responsibility of every writer, regardless of their background, to address the theme of displacement and its multilayered nature in their works. Asaad, thus, further argues that the more "writers truthfully engage with this humanitarian crisis, the deeper the crisis entrenches itself in literature" (67). In order to establish the credibility of the stories detailing the ordeals endured by refugees, Asaad highlights the significance of the current situation in which large numbers of people pushed by circumstances such as "war, famine, climate change, corruption and abuse" (78) find themselves confronted with the forceful response of nation-states. This response is manifested through the implementation of physical barriers such as barbed wires, the deployment of security guards, and the practice of deportation. Asaad's perspective aligns with the belief that literature serves as an instrument to envision a future that transcends fantastic and dystopian outlooks, countering the prevailing influence of news media and political discourse.

Claudia Sadowski-Smith (2021) has further developed the notion and depiction of climate migrants in fiction, by introducing the term "climate migration fiction" (111) to describe

fictional narratives that explore the experiences of people affected by climate-induced displacement. By coining this term, Sadowski-Smith seeks to categorise and analyse a specific genre of literature that addresses the diverse aspects of climate migration. She argues that climate migration fiction adds a special focus on migration to emphasise "on a warming climate that has informed a growing number of Anglophone literary productions, the so-called climate fiction (cli-fi)" (111).

In addition to the aforementioned arguments, Ben De Bruyn (2020) asserts that the literary works of contemporary writers trigger contemplation about thematic elements such as climatic shifts, species migration, and the function of literature itself. These works, according to De Bruyn, prompt us to reconsider and reimagine what he terms as the "great displacement" (1). The issue of migration has been a focal point of inquiry for many intellectuals and writers. In The Great Derangement (2016), Amitav Ghosh has discussed the topic of migration, specifically focusing on his own ancestral roots in Bangladesh. Ghosh highlights the significance of this personal connection as he embarks on a thought provoking exploration of the subject matter by stating about his ancestors who "were ecological refugees long before the term was invented" (4). In his analysis, Ghosh additionally incorporates the insights of Christian Parenti to elaborate the anticipated reaction of western societies in the face of future turbulence caused by human dislocation: "The tasks of the nation state [...] will be those of keeping 'blood-dimmed tides' of climate refugees at bay and protecting their own resources [...] The outlines of an 'armed lifeboat' scenario can already be discerned in the response of the United States, United Kingdom and Australia to the Syrian refugee crisis" (192-193). The predicament at hand, nevertheless, is built around the undeniable reality that the pervasive influence of climate change is currently affecting every corner of the globe. The dynamic fluctuations in climatic conditions and the disruptions they induce within societies cannot be effectively resolved by the mere reinforcement of artificial borders. In accordance with the analysis provided by David Wallace-Wells, Ben De Bruyn (2020) perceives the European migrant crisis, which reached its pinnacle in 2015, as a significant cautionary event. This perspective is particularly noteworthy when considering the projections put forth by organisations such as the United Nations and the World Bank. These projections indicate a substantially higher influx of ecological refugees in the future, with figures as high as 140 million to an astounding one billion displaced individuals originating from places like sub-Saharan Africa, Latin America, and South Asia (2). These projections are set against a

backdrop of a world that is expected to be less accommodating and receptive to such displaced populations.

Storming the Wall (2017) by Todd Miller inquires into the subject matter with an organised approach, presenting an investigative narrative that explores the intersection between ominous visions of migration caused by environmental factors and the rise of an authoritarian world. Miller argues that the convergence of climate events, mass displacement, and the militarisation of borders altogether illustrate the lived experiences of countless people belonging to the contemporary era (26). Through his careful examination of various interviews and case studies, it becomes evident that the trend of securitised borders is rapidly gaining momentum on a global scale. This expansion is not limited to outward boundaries of nations, but also extends inward, encompassing the monitoring of vulnerable areas within nations. The implementation of advanced surveillance technology plays a pivotal role in this process, as it enables the identification and tracking of both undesirable domestic individuals and foreign nationals. Scholars in the field of social sciences, including Giovanni Bettini and Andrew Baldwin, advocate for a measured approach when engaging in discussions about climate migration. They argue that it is crucial to exercise caution and prudence in our discourse on this subject. Giovanni Bettini (2013) posits that the climate science "does not provide any formula for how to connect ecological conditions to migration" (67), therefore, it becomes apparent that "the relation between climate change and human mobility is open to wide interpretation and, thus, a relation that can be, or better yet *should be*, contested, debated and challenged" (Baldwin 525).

Graphic portrayal of the displacement caused by environmental factors has emerged as a matter of interest among contemporary novelists, prompting them to address this issue through various narrative approaches. This thematic engagement is not entirely new, as it can be traced back to the literary contributions of authors such as Octavia Butler and John Steinbeck. Specific contemporary literary works, whether they centre around internal or cross-border migration, exhibit an inclination for either realistic or fanciful narrative structure. In doing so, they remind us of the tribulations faced by people like, for example, Pacific Islanders, Dust Bowl victims, and Syrian refugees. These narratives imaginatively depict worlds that are profoundly influenced by the consequences of climate change, while simultaneously portraying characters that are moulded by the tough biopolitical circumstances they encounter.

The condition of refugees does not represent the sole discernible threat stemming from the climate crisis. The presence of gender bias during catastrophic events inevitably produces a cohort of victims. Women emerge as the most severely afflicted victims of climate catastrophe. In confronting formidable circumstances such as storms, droughts, and floods, it becomes imperative to emphasise the active engagement of various segments of society, with a particular emphasis on the essential function of women. While describing women's role in disaster response and mitigation, Chandni Joshi and Mihir R. Bhatt (2009) assert that it has been observed that women are not only more susceptible to the adverse impacts of disasters but they also tend to be marginalised and excluded from the decision-making processes involved in the planning and execution of recovery and reconstruction efforts. One key aspect that emerges from the literature is the differential impact of disasters on women: "Women in South Asia tend to be more affected by virtue of their lower economic and social status and tremendous gender discrimination. Besides their physical vulnerability, they have less access to resources and fewer opportunities to be part of decision-making processes or to actively participate in recovery planning" (Joshi and Bhatt 305).

Limited opportunities for women to actively participate in decision-making activities demand a reassessment of gender roles while considering the climate crisis. This entails recognising the invaluable traditional knowledge possessed by women. The exploration of women's lived experiences and their constant struggle against the challenges posed by nature is a prominent theme in contemporary literature. This issue is subtly expressed through the portrayal of women characters, who serve as conduits for conveying the universal struggle against adversity. The ethics of "care" is generally assigned to women for their close bonding and concern for nature. Adeline Johns-Putra (2014) opines that one aspect that is frequently overlooked is the complex entanglement of care relationships within intricate power dynamics, which requires an in-depth assessment before advocating for them as a paradigm for political engagement (131). Numerous works of dystopian literature centred around climate change present valuable insight into the importance of environmental empathy. These narratives propose that love, in its various forms, holds the key to our ability to preserve, endure, or even find refuge from a planet that has been severely impacted by ecological degradation. In the analysis of humanity's shared hubris, these novels suggest that our lack of concern has been a significant factor, and that the path towards progress necessitates a greater level of compassion and care.

Carolyn Merchant has introduced the concept of "earth care" as a central concept in her work. This concept, which Merchant (1996) articulates with great clarity and conviction, serves to further understand her perspective on environmental concern: "Human's, who have the power to destroy nonhuman nature and potentially themselves through science and technology, must exercise care and restraint by allowing nature's beings the freedom to continue to exist, while still acting to fulfil basic human material and spiritual needs" (xix). Merchant's assertions regarding the necessity of increased care and reduced destruction may appear to be rooted in common sense. However, a closer examination reveals that this claim overlooks certain complex aspects. This observation holds true not only for Merchant's arguments but also for numerous other environmentalist appeals to foster a sense of concern. In this inquiry, it is imperative to raise a series of questions that highlight the complex nature of caregiving. These questions revolve around the individuals responsible for providing care and the recipients of such care. It is crucial to examine the power dynamics involved in decision-making regarding caregiving, as well as the various models of human-to-human care that may be employed. It is also essential to scrutinise the effectiveness of care as a moral, political, and psychological standpoint. Adeline Johns-Putra (2014) posits that it is crucial to pose inquiries regarding the current corpus of climate change novels. In her work, she has interrogated the concept that care, in and of itself, can serve as a valuable environmentalist ethic and nuanced gender roles surrounding the notion of care. By "care", she means "a feeling - translated into an ethos - of concern for and consideration of the needs of others whether human or nonhuman" (129). The frequent erasure of the differentiation between the act of caring for humans and the act of caring for the nonhuman environment is a notable aspect that is often overlooked. This oversight occurs despite the apparent celebration of a commendable moral code centred on reciprocity and compassion. Within the realm of environmental ethics, one instance of elision can be observed in the work of Carolyn Merchant (1996), who introduces the concept of earthcare being synonymous with the "partnership ethic" which denotes that "both women and men can enter into mutual relationships with each other and the planet independently of gender and does not hold women alone responsible" for "cleaning up the mess" (217) created by male-oriented activities like scientific inquiry, technological advancements and other forms of profit-driven endeavours.

Partnership ethics tries to eliminate the disparity that bestows the allocation of obligation, voice, action, and care to a singular faction while neglecting the other. This disparity can be

identified as an unequal distribution of power. Johns-Putra (2014) argues: "[flor relationships of care risk exploiting either or both carer and cared-for; the role of carer is often maintained within the norms of self-sacrifice, and, equally, that of cared-for easily defined by powerlessness" (130). The limited scope that care emphasises on the interplay between the carer and the recipient of care has a distorting impact not just within this particular dynamic, but also in its interactions with other relationships. These problems are further exacerbated when, as is frequently observed in discussions within the realm of environmentalism, the caring gesture is deliberately associated with traditional gender roles. Johns-Putra is of the view that intentional association of gender with the environmentalist principle of care can be aptly described as "ecomaternalism" (131). This concept entails the portrayal of women as biologically predisposed to motherhood, leading to their identification with the natural world through the symbols of nurturing and fertility: "In the wide-ranging discourse of ecomaternalism, 'nature' and 'women' share everything from caring responsibilities for all species, to the status of victimhood at the hands of apparently masculinist technologies, to an exclusive relationship akin to a motherdaughter bond" (131). The fictions examined in this thesis reveal prevalent themes that frequently emerge in both public and environmentalist discourses. These themes revolve around the notion that womanhood bestows a profound understanding of environmental issues, serving as a symbol of longing for a bygone era or as a representation of humanity's tendency to exploit nature. The prevalent belief of ecofeminism assumes that eco-maternalism operates under the notion that the fundamental traits associated with womanhood align with those attributed to nature. In the initial writings of the ecofeminist movement, there is an appeal for women to embrace a unique connection with nature. This connection is often depicted through accounts of ancient matriarchal religions, highlighting the foundation of this relationship. At its core, this bond is strengthened by a mutual ability to establish connections - a sense of ecological interrelatedness. Women are believed to possess an inherent and longstanding empathy towards others, further reinforcing their affinity with nature. In subsequent years, the emergence of ecofeminist writings shifted the focus of discourse from spiritual considerations to cultural and political dynamics. This branch of feminist thought emphasises the structural interconnectedness between women and the natural world, attributing this relationship to the detrimental effects of patriarchal dominance.

The structural drawback experienced by women allows them to form a unique perspective on the dynamic that exists within the relationship between nature and humanity. In comparison to their relatively privileged male counterparts, women are able to perceive these dynamics with heightened clarity. Amidst the various branches of ecofeminism, it is evident that despite the existence of differing viewpoints among its proponents, there remains a prevailing unity in the movement's emphasis on the interconnected state of women and the natural world. This unity is fundamentally based on the opinions about the concept of care, which can be understood as either a natural feeling of compassion or as a consequence of socio-political oppression. The concept of an "ethic of care" proposed by Carol Gilligan (1982) holds significant importance in the field of cultural feminism. Ecofeminism and ecomaternalism, deeply rooted in this notion, argue that women undergo extensive psychological conditioning to prioritise caregiving roles throughout their lives. This conditioning begins during girlhood and continues as they assume the roles of wives, and most significantly, mothers. Consequently, this conditioning is believed to contribute to women's heightened environmental consciousness. However, a predicament emerges as the notion continues to propagate a deeply ingrained association between women and the natural world, thus reinforcing a convention that portrays females as inferior or lesser beings in comparison to their male counterparts. The emphasis placed on a direct connection between women and nature in ecofeminism has exposed it to the accusations of essentialism, or what Chris J. Cuomo (1998) aptly terms "false universalization" (117). Cuomo indicates the tendency to oversimplify and homogenise the concept of femininity and the experiences of women. In this study, the authors like Merchant, Gilligan, and Cuomo offer a critical and thoughtful lens to further assess the role of women. They propose that 'care' should be viewed as a variable and debatable element of an ideological position. These critical perspectives greatly enrich the interpretation of fictional narratives that explore the complexities of gender politics within a changing society influenced by factors such as climate change, technological advancements, etc. In this context of climate disasters, it becomes necessary to prioritise the voices and lived experiences of women when formulating adaptive policies. The discourse surrounding ecofeminism presents divergent standpoints, yet it is widely acknowledged that women maintain a deep connection with the natural world, which has endowed them with a unique understanding of its functioning. As a result of this connection, it is evident that women, too, bear the brunt of the psychological impacts stemming from

experiencing climate catastrophe, as they bear witness to the widespread devastation caused by such occurrences.

The terrifying experiences resulting from the climate catastrophe require a relentless struggle for survival on the part of individuals of all genders. In contemporary discourse, the mental health consequences of climate change come into focus as a significant subject of inquiry drawing considerable attention alongside socio-political concerns of the refugee crisis and gender issues. The escalating effects associated with a rapidly warming planet have rendered these psychological impacts like climate trauma increasingly difficult to overlook. In an in-depth investigation conducted in 2017, supported by ecoAmerica and the American Psychological Association, it was revealed that changing climate conditions have a profound influence on mental health, giving rise to a range of immediate and acute psychological effects. These effects encompass a variety of manifestations like "increases in trauma and shock, post-traumatic stress disorder (PTSD), compounded stress, anxiety, substance abuse, and depression", as well as more persistent impacts like "higher rates of aggression and violence, more mental health emergencies, an increased sense of helplessness, hopelessness, or fatalism and intense feeling of loss" (Clayton et al. 7). 10 On the other hand, Timothy Clark (2015) introduces the concept of "Anthropocene disorder" as a psychological ailment that arises from the recognition of a dissonance between the limited scope of human existence and the immense spatial and temporal dimensions of the era called the Anthropocene. It can be said as an ailing "state of mind likely to become more widespread as the biosphere continues to degrade" (140), and also hints towards "a new kind of psychic disorder, inherent in the mismatch between familiar day-to-day perception and the sneering voice of even a minimal ecological understanding or awareness of scale effects; and in the gap between the human sense of time and slow-motion catastrophe and, finally, in a sense of disjunction between the destructive processes at issue and the adequacy of the arguments and measures being urged to address them" (140). The phenomenon of experiencing an uncertain failure of a sense of relative importance gives rise to intense feelings, including emotions of hopelessness and anger. It is worth noting that these emotional responses are often perceived as "disproportionate and imbalanced" (140) by the dominant societal norms. In his analysis, Clark asserts that the Anthropocene disorder exhibits a perpetual inclination to manifest itself "always ready to break out", highlighting "the unique dilemma" faced within this distinct era of human existence (171). He characterises the predicament of this epoch as a paradoxical

conundrum, wherein individuals are compelled to engage in limited modes of thinking that they are aware, on some level, are inadequate or potentially indicative of a form of denial that has yet to be acknowledged.

In the field of investigation into the psychological outcomes of environmental shifts, a notable term has captured the interest of researchers studying cultural trauma - i.e. 'pretraumatic stress disorder'. This particular phrase has emerged as a significant focal point within the scholarly discourse surrounding the mental distress induced by environmental transformations. The term is purportedly attributed to Lisa Van Susteren, a distinguished psychiatrist renowned for her expertise in the realm of psychological impacts stemming from climate change. In their work, Dorthe Berntsen and David C. Rubin (2015) draw attention to the fact that the anticipation of adverse future occurrences has become a natural response given the classification of Post-Traumatic Stress Disorder as a disorder causing anxiety (663). It is obvious that individuals with this condition experience apprehension towards potential adverse outcomes in the future. According to Berntsen and Rubin, "The term pretraumatic stress reactions here designates disturbing future-oriented cognitions and imaginations as measured in terms of a direct temporal reversal of the conceptualizations of past-directed cognitions in the PTSD diagnosis" (663). Their proposition seeks to broaden the conceptual boundaries of PTSD, acknowledging the potential impact of pre-existing psychological distress on an individual's subsequent response to traumatic events.

The central premise explored in *Climate Trauma: Foreseeing the Future in Dystopian Film and Fiction* (2016) by E. Ann Kaplan is the hypothesis that the apprehension and fear surrounding climate change can be linked to a pre-traumatic stress syndrome. This significant contribution to the field of cultural scholarship explores dystopian fiction and film, examining how these mediums serve as a means to anticipate and deal with the impending consequences of the climate crisis. Kaplan analyses the concept of pre-trauma as a psychological state in which individuals experience a profound and often unconscious sense of anxiety regarding future events. This state of "anticipatory anxiety" (xix), as Kaplan suggests, can be linked to a prelude to trauma, in which people are already burdened with the weight of distress before any actual traumatic event occurs. In contrast to the more commonly known condition of PTSD, which is "triggered in the present by past events" (xix), pre-trauma indicates psychological distress that

arises prior to any actual occurrence. Kaplan notes the limited attention given to this psychological impact, despite its growing prevalence. She posits that the conceptualisation of pre-traumatic stress syndrome, also referred to as "PreTSS" presents a new perspective that can contribute by offering a "new lens for an expanded trauma theory" (4). Rather than immobilising viewers and readers with fear, she suggests that dystopian scenarios portrayed in films and fictions can function as cautionary tales, urging individuals to take action to avert the apocalyptic consequences that are depicted. Stef Craps (2020) is of the view that there is "an explicit ethical dimension to Kaplan's project of analysing dystopian fictions" (279). Kaplan investigates futurist disaster narratives, exploring their purported ability to deal with pre-traumatic stress. This analysis encompasses a diverse array of both literary and cinematic works, providing a nuanced understanding of the phenomenon at hand. Anil Narine (2015) postulates that nature "sustains and endures trauma as a human victim would, only its scarred body can never be made to disappear", and, as a result, "a traumatized earth begets traumatized people" (13). This is why lamenting for ecological losses also includes "reckoning with our complicity in environmental degradation – indeed, we are often implicated in these processes, if only by virtue of being inhabitants of the Anthropocene" (Craps 282).

Writers like Lawrence Buell (2005), Roman Bartosch (2019) acknowledge the necessity of multiple ways of reading climate fiction because "an awareness of relative incommensurability together with the experience of relative harmonisation in the process of narrative emplotment tells us important things about the stories of the Anthropocene" (Bartosch 33). Adam Trexler (2014) says: "Melting ice caps, global climate models, solar technologies, and tipping points are actively altering the formal possibilities of the novel, but to understand how involves a close reading of things" (207). When a novel effectively incorporates climate change as a central theme, seamlessly integrating the scientific phenomenon into its narrative structure, it not only transforms the literary landscape but also expands the potentialities inherent within the genre.

This study, hence, is an attempt to analyse the representation of climate change in South Asian fictions in English by contemporary writers – Amitav Ghosh, Romesh Gunesekera, Minoli Salgado, Shubhangi Swarup, Uzma Aslam Khan, and Arif Anwar. These authors are all renowned figures in the realm of contemporary literature, having earned well-deserved acclaim

for their valuable contributions to the genre of South Asian fiction in English. Ecocriticism, trauma theory, and gender criticism are just a few of the critical lenses through which climate change and the Anthropocene have been analysed. These writings mentioned here serve as a few examples that exhibit an acute preoccupation with the concepts of the climate crisis, place, ecology and the Anthropocene within the field of fictional literature during the 20th and 21st centuries.

Contemporary literature has shown a notable interest in representing the environmental crisis of various regions such as America, Britain and Latin America (to name a few). Numerous books and scholarly articles have examined climate change within these contexts. However, it is worth noting that there is a dearth of research specifically dedicated to exploring the representation of South Asian fictions having climate change as a theme in contemporary literature. This gap in the existing body of work highlights the need for further investigation and analysis in this area. Carlos Fonseca's The Literature of Catastrophe: Nature, Disaster and Revolution in Latin America (2020), looks at the representation of radical landscape, catastrophe and epidemics in the novels of writers like Ricardo Piglia, Reinaldo Arenas, etc. In his analysis, Fonseca explores the temporal dimensions that are unveiled and portrayed through various natural catastrophes. Additionally, he investigates the narrative surrounding the emergence of revolutionary forms of subjectivity, which are shaped by the distinct characteristics of political events. Another work, David Higgins' British Romanticism, Climate Change, and the Anthropocene: Writing Tambora (2017), addresses the question of "how global catastrophe is rhetorically produced" (1). This book focuses on the profound impact of the Tambora crisis on various communities, shedding light on the emergence of collaborative writing as a response to this cataclysmic event. Through an exploration of this collaborative writing, the book examines how it envisioned and conceptualised new modes of community formation.

In the book *The Writing of the Disaster* (1995), Maurice Blanchot contemplates on the paradoxical nature of writing within the backdrop of the catastrophic events that plagued the 20th century. With a keen focus on the human-made disasters that unfolded during this era, Blanchot explores the dualistic essence of writing, oscillating between its superfluity and its indispensability. Although the primary focus of the book does not revolve around ecology, it does present perspectives that can be applied to the understanding of phenomena commonly

referred to as natural disasters. The book, *The Writing of Natural Disaster in Europe, 1500* – 1826: Events in Excess (2023), edited by Sandhya Patel and Sophie Chiari considers 'poetics of disaster' and how literature constructs understanding of disaster caused by past harmful initiatives against nature in the early modernised England. The book broadly reports disaster narratives spanning over two centuries, from the 16th to the early 19th centuries. It has examined catastrophic events such as storms, plagues, earthquakes, floods, and great frosts.

In *Ecocriticism and Early Modern English Literature: Green Pastures* (2011), Todd A. Borlik employs ecocritical theories to analyse early modern English literary works. The book portrays how various environmental hazards such as energy consumption, pollution, deforestation, man-made climate change, contagious fogs etc. have been dealt with by writers like Sidney, Spenser, Shakespeare, Marlowe, Donne, Drayton, Milton and many others. The contributions made by these writers, according to Borlik, show how many Elizabethan and Jacobean authors were anxious and concerned about Nature's ageing, detrimental effects of human actions on the earth and human-nonhuman relationship.

The expanding corpus of literary works exploring climate themes exemplifies the recognition of the heightened likelihood of extreme events. By representing the narratives of those directly or indirectly impacted by the climate crisis, this growing network of literature contributes to a deeper understanding of the broader societal and cultural significance of this global issue. This thesis is, therefore, an attempt to analyse the representation of climate change through various sub-themes in the works of writers from India, Pakistan, Bangladesh, and Sri Lanka. Drawing upon the existing scientific and creative literature, an analysis has been conducted to discern the underlying motivations of these authors in addressing relevant issues through their fictional works. This research, hence, aims to establish a cohesive understanding of the author's inclination towards exploring contemporary themes that resonate with the current global landscape.

Relevance of the Study

As previously stated, in South Asia, the insufficiency of literature in addressing the imminent threat of changing climate has been a matter of criticism. A number of criticisms have been developed concerning the fiction on climate change, suggesting that it may be lacking in

substance, unable to adequately address the magnitude of the issue, or lacking in aesthetic excellence. These conjectures overlook the existence of a widening corpus of narratives that directly or obliquely address climate change theme, and disregard the truth that this topic has been explored in literature for quite a while. Additionally, these presumptions neglect to analyse the reasons why the currently existing texts are perceived as insufficiently serious or aesthetically unproductive. They avoid analysing the cognitive processes and nuances surrounding the issue, as well as the underlying themes and concepts that are reinforced through the narratives, especially from South Asia. Therefore, rather than exploring a singular facet of climate change within a given literary work, this study endeavours to adopt a more comprehensive perspective by scrutinising an eclectic combination of South Asian fictions. The objective is to discern the central approach to climate change and the Anthropocene, evaluate fiction's efficacy in tackling these issues, and gauge its artistic value.

The underlying premise of this study is that the representation of climate change and the Anthropocene in fictional works from South Asian countries such as India, Bangladesh, etc. will possess a distinct significance due to the region's exceptional geographical location, rich biodiversity, varying tropical climate change hotspots, and its status as an area increasingly affected by various calamities. The South Asian regions have been witnessing a surge in ecological catastrophes, surpassing previous occurrences (Mandal et al. 15). This can be attributed to the changing climate, which is characterised by a rise in extreme weather events like floods, extreme heat, severe rainfalls, sea level rise, snow avalanches, tropical cyclones, dust storms and more. These climatic events have exerted immense pressure on the ecosystems, leading to a continuous decline of resources and the overall sustainability of livelihoods in these places. So, the concepts of 'climate change' and 'the Anthropocene' hold immense significance in the context of South Asia, where ecological shifts and calamitous occurrences have become matters of conflict among nations as these contentious matters revolve around determining the true origins of the problems and requisite measures to address these disasters. Moreover, the region itself has experienced a multitude of devastating consequences following its transition from a tradition-oriented society to a technologically and scientifically progressive terrain.

The coastal regions of India, Sri Lanka, Bangladesh and the Maldives are confronted with an alarming danger due to the rise in sea levels. This rise in sea levels caused by global warming has the possibility of resulting in the infiltration of saltwater into fresh water sources, the uprooting of human settlements, and the loss of valuable agricultural lands and swamps. Moreover, these regions are experiencing adverse effects on their economic activities, particularly in the tourism and fishing sector.

Undoubtedly, climate change is now regarded as the greatest challenge that the South Asian nations are dealing with in their pursuit of achieving sustainable development goals. ¹¹ This challenge becomes even more serious due to the region's wide range of extremes that include diverse topography, ranging from towering mountains to expansive deltas, coral reefs and islands. The region also experiences varying levels of precipitation, from dry landscape to vast plains that are prone to unpredictable flooding and drought. Additionally, the environment spans from glacial areas to tropical regions, most of which hold a prominent place in the works of South Asian authors, as evidenced by numerous mentions of the picturesque setting in their fictional writings. The alterations in the environmental landscape of these nations have been triggered by a multitude of factors, including but not limited to colonialism, postcolonial developments, technological innovations, industrialisation, migration and globalisation. The peninsular South Asia, a region which was under the control of the British Empire, has a troubled history marked by instances of colonial exploitation and the indiscriminate plundering of natural resources to support their growing trade and industrial sectors.

The novels under study predominantly emphasise the realistic portrayal of the human condition amidst a transforming planet. The authors adeptly blend a realistic writing approach with a profound awareness of ongoing catastrophe. Although some may argue that the level of experimentation in their works is insufficient to appease all critics, it cannot be denied that their contributions introduce a diverse range of plotlines dealing with climate change. Such plotlines have traditionally structured environmental writing since the era of Thoreau (Irr). These novels deviate significantly from the conventional portrayal of the scientist-hero and instead offer a unique perspective that sheds light on the various locations, interests, and conflicts of the climate impact hotspot South Asian region. This portrayal is crucial for ensuring the continued significance and power of the genre, despite criticisms that question the persistent absence of substantive climate fiction originating from the area.

Frederick Buell, in the Preface to the book From Apocalypse to Way of Life (2003), notes that the world we currently occupy has undergone a profound transformation, challenging our preconceived notions and assumptions about its nature: "No longer an apocalypse ahead, critical environmental problems and constraints help construct society's sense of daily normality. Far from going away, environmental crisis has become a regular part of the uncertainty in which people nowadays dwell" (xiv). Although Buell's writing explores the theme of apocalypse rather than ecological catastrophe, there exists an alignment with my own perspective in recognising the impossibility of reverting to a period prior to ecological damage. Buell acknowledges that contemporary individuals are not just anticipating an impending ecological crisis, but rather find themselves immersed in a state of "uncertainty" within this very crisis (183). By means of evaluating a sequence of occurrences transpiring within a defined timeframe, stories unveil the true nature of extraordinary calamities, demonstrating that they are, in fact, commonplace occurrences within environments characterised by sustained ecological deterioration. Embedded within the fabric of the characters' everyday existence, stories from South Asia incorporate themes based on shifts in the environmental conditions and devastating ecological disasters. The novels evaluated in this study aim to redirect the perception of environmental catastrophe and climate change from being unthinkable occurrences in the field of literature to ones that are firmly situated within the context of life in general. By doing so, these fictions create space for reconsidering improbable environmental events as vital components of mundane existence in the present era.

The suitability of novels as a medium for narrating climate change has been a topic of argument among scholars. On the other hand, novels are also considered to be the most popular genre of literature, making it an important medium to communicate the obstacles and to envision feasible remedies associated with the climate crisis. The literary works of authors such as Amitav Ghosh, Romesh Gunesekera, and others, offer a rich exploration of South Asia, encompassing its natural, social, cultural and political dimensions. Through the exploration of works of these authors, readers are presented with a unique opportunity to gain a deeper understanding of the region and its diversity. It is also equally important to evaluate the available narratives and give due consideration to the voices of developing communities, including those from the global south. The texts have been chosen keeping in mind tropes being used in these novels that help to illustrate how climate change is imagined and portrayed in these works.

This research addresses the mounting need for scholarly inquiry into the correlation between the theme of climate change and narrative representation, as highlighted by both Adam Trexler and Amitav Ghosh. By doing so, it establishes the foundation for exploring new directions of investigation within the field of environmental humanities. The foundation of this research project revolves around three interconnected elements that serve as guiding principles: artistic imagination of climate change, depictions of environmental catastrophe and the unique role of novels in addressing socio-cultural and psychological consequences in the Anthropocene. By exploring the convergence of these elements, this research seeks to further investigate the complex interplay among environmental issues, artistic imagination, and the profound impact of ecological crises on both society and the human psyche. The scope of the research has been restricted by the choice of texts that predominantly focus on South Asian regions as their settings. This selection is based on the shared presence of ecologically sensitive areas within this region, which renders them particularly susceptible to potential environmental deterioration in the present and the future as well.

The purpose behind selecting this particular topic is to emphasise the potentiality of these novels, specifically their ability to provide a rich and multifaceted platform for analysis. The author's innovative approach possesses the ability to transport the reader's imagination to the very essence of contemporary catastrophe-bound life in the 21st century. Upon a thoughtful reading of specific novels from South Asian literary corpus, it has been observed that a cohort of contemporary authors have skillfully represented the theme of climate change in their works. It has become evident that these literary luminaries employ a multilayered approach, with some opting for a direct exploration of this pressing issue, while others choose a more covert and nuanced approach. The convergence of a conventional critical framework and an intriguing interdisciplinary subject reveals the need for an enhanced understanding of these novels through the lens of present environmental issues. Despite their current level of recognition, these literary works warrant a more in-depth examination within this particular context.

Methodology

The present study draws upon Amitav Ghosh's idea of "serious fiction" as a conceptual framework while exploring the theme of the climate crisis and its effects represented through the genre of realistic South Asian fiction. Ghosh's analysis highlights the existence of a discrepancy

arising from the distinct forms of resistance encountered in addressing climate change through literary narratives. In this study, the notion of South Asian fiction dealing with climate themes is expanded upon, building on Ghosh's concept. The argument posits that the literary heritage of the region encompasses a rich variety of artistic expressions that have long engaged with the theme of climate change. If critics posit that these fictions lack the absolute features to be called 'cli-fi', they can definitely be acknowledged as unique narratives having shown the essential features of the Anthropocene through the portrayal of the climate crisis and the impact of human activities. The primary objective is to identify and analyse specific instances that depict the effects of environmental change, focusing on the periods preceding, during, and following these changes.

The foundation of this study regarding climate catastrophe is firmly rooted in the field of environmental studies. This academic discipline is deeply committed to the analysis and study of the profound changes in climate and ecology that have precipitated the current process of sociopolitical and cultural reorientation. By examining the portrayal of catastrophic events and human experience from the perspective of environmental criticism, one can uncover the underlying human causes of current ecological crises. Hence, this approach has established a connection between climate change and the immediate and prolonged ecological outcomes it entails. It has enabled this research to analyse various literary works that tackle different ecological catastrophes in relation to each other. This is particularly relevant as the selected novels explore the enduring effects of ecological transformations specific to their respective regions.

The methodology employed in this study is primarily centred on a meticulous and concentrated analysis of specific excerpts extracted from these novels. The study has employed primary data in the form of selected novels. This close reading approach is complemented by a comprehensive analysis of how the themes and concerns presented in these literary works mirror broader environmental challenges and cultural matters as expounded upon in secondary sources. These secondary sources include a range of materials including scientific articles, research papers by scholars, academic presentations, non-fictional works, as well as reports and records by governmental or non-governmental organisations. The application of a close reading method to secondary literatures is also employed to unveil patterns and similarity of ideas that exist between the novels and these secondary sources. The preference for close reading is rooted in the

recognition of novels' unique capacity to render comprehensible processes that unfold across spatial and temporal dimensions, such as the Anthropocene and the human condition as a whole. This literary approach allows for the identification and analysis of specific textual instances where these phenomena become discernible and intelligible. The act of filtering immensely destructive environmental occurrences and gradual ecological shifts through narratives and characters serves to make this phenomenon identifiable and intellectually comprehensible. The selection of novels has been deliberately curated to exemplify the depiction of interconnected climate issues as it was perceived during the 1990s, as well as in the 21st century. Moreover, they have been selected for their adept execution of the established conventions of the novel as a literary form. These narratives seamlessly blend these issues into the characters' experiences, making them appear both plausible and realistic. At the same time, the novels also capture the impact of such violent events, reflecting the trauma they inflict on people and society as a whole. This study has duly acknowledged all utilised sources by means of in-text citations and including them in the reference list.

One crucial aspect to consider prior to embarking on this thesis is the rationale behind the selection of the particular literary works presented in this introductory section. Climate change fiction, as a literary genre, extends beyond its conventional classification. The prevailing consensus regards it as a literary expression that encompasses multiple genres while responding to the unprecedented alterations in climatic conditions. Owing to this specific reason, the effort of choosing an assortment of works that can be deemed exclusively exemplary becomes challenging. Choosing the most exceptional examples of such literature from South Asian literary corpus is also a challenging task. Therefore, this study has refrained from engaging in either attempt, opting instead to direct attention towards fictions that can be regarded as representative of such works that focus on specific concerns in the context of climate change. The thesis has been structured in a manner that allows the discussion on each issue in its own separate section, at the same time, weaving the climate theme as the underlying force for each of the issues.

In order to elaborate the diverse approaches and subtleties employed in representing multifaceted environmental concerns in these novels, with a particular emphasis on the theme of climate change, this study draws on the theoretical frameworks of environmental criticism and climate fiction as provided by writers such as Adam Trexler, Adeline Johns-Putra, Matthew Schneider-Mayerson, Lawrence Buell, Timothy Clark, Slavoj Žižek, Antonia Mehnert, Margaret Alston, Mark Pelling, Lava Asaad, etc. This study seeks to establish the fact that in these select South Asian novels, the writers have strategically adopted the motif of the climate crisis and the occurrences characteristic of the Anthropocene as intriguing themes in their respective works. The research is primarily driven by the notion of the Anthropocene, which functions as a central impetus for this study. The impacts of climate catastrophe are primarily described by means of the encounters of the protagonists. By positing climate change as the central determinant force which influences the issues such as transformation, migration, gender roles, and climate trauma, this research attempts to illustrate that the authors of these novels have incorporated these concerns to enhance South Asian literary corpus.

Apart from reading the texts critically, the research attempts to understand the concept of climate change by drawing from the insights on ecocriticism, environmental studies, trauma etc. put forward by Greta Gaard, Naomi Klein, Amitav Ghosh, E. Ann Kaplan, Gregory White etc. This research is informed by the theories on environment and the climate crisis offered by the above-mentioned critics and writers with an objective to explore the representation of nonhuman connection in the novels being analysed. Amitav Ghosh's book *The Great Derangement* has emphasised the imaginative and cultural failure among writers in producing serious fictions addressing the theme of climate change within the context of contemporary global crisis. Hence, his claim has not only influenced the analysis of climate issues and catastrophic implications in these chosen novels but has also guided the exploration of other factors associated with this crisis. The authors, by employing climate change motifs in their fictional works, have challenged the prevailing notion regarding the scarcity of novels that address the subject of climate change, which affects their respective nations and beyond.

The central argument of this study posits that the authors, utilising the medium of imagined experiences of their characters, have undertaken a critical examination of scientific discourses that document the reality of disastrous events. Most of the selected novels for this study predominantly exhibit a narrative structure characterised by the presence of multiple, interconnected plotlines and settings. This deliberate choice by the authors serves as a means to effectively capture the complex and far-reaching implications of climate change on a global

scale. Additionally, this study also argues that their aim is to raise readers' consciousness and draw support for the rhetoric of sustainable development. Scholarly works on ecological transformation have also been referred to in this research in an effort to understand the multidimensional aspects of the gradual evolution of this global crisis. These works have been analysed to gain insights into how writers from India, Pakistan, and Bangladesh have approached and written about it within the context of their respective nations. Furthermore, this study seeks to argue that by incorporating the perspectives of women victims and migrants, novelists avail the opportunity to offer a fresh viewpoint on the conditions of suffering. This viewpoint is intended to raise awareness about socio-cultural discriminations that are exacerbated by existing biases and a lack of attention to the necessity of implementing effective measures to address these disparities.

This research also seeks to put forth the argument that the selected novels, through the portrayal of the hardships endured by their characters, reveal the psychological distress caused by the circumstances of climate-induced catastrophes. The incorporation of disaster-affected victims' perspectives provides the novelists with an opportunity to vividly portray the distressing and traumatic nature of catastrophic events. Through this research, the attempt is made to project the frequently overlooked aspects of individuals affected by floods or storms, specifically focusing on their experiences as traumatised individuals. These individuals/characters have either witnessed these events firsthand or have heard accounts from others, resulting in them becoming trapped in a state of trauma. As time progresses, their fear and distress intensifies, fuelled by their constant hopelessness and apprehension regarding future calamities. The present thesis includes a chapter that focuses on the portrayal of climate trauma in a selection of novels. Drawing upon established theories of trauma, this chapter delves even deeper by incorporating more radical perspectives. Consequently, these novels can be interpreted as narratives of climate trauma, wherein the protagonists are primarily depicted undergoing various stages of traumatic experiences. The study deals with theorisations on fear and trauma presented by scholars like Cathy Caruth, Kalí Tal, Lars Svendsen, Laurie Vickroy, Dominick LaCapra, Benjamin White, etc. to examine the traumatic experiences as reflected in these novels. In order to attain greater insight into the idea of displacement, this research relies on the theoretical frameworks on migration proposed by writers like Zygmunt Bauman, Stephen Castles et al., John R. Wennersten and Denise Robbins, Essam El. Hinnawi, Katharine M. Donato and Douglas S. Massey, etc. The study also draws on the conceptual frameworks of environmental transformation as offered by Sarah Clement in her book *Governing the Anthropocene: Novel Ecosystems, Transformation and Environmental Policy* (2021). Additionally, this study incorporates the theoretical perspectives on paradigmatic alterations proposed by other scholarly authors. It is informed by the scholarly contributions of Sharae Deckard and Fatma Denton, who have explored the multilayered dimensions of climate concerns within the context of ecocriticism and gender studies, respectively. Deckard explores the understanding of climate change by drawing upon the works of many Sri Lankan writers and their underlying motivations for writing. Similarly, Denton examines the intersection of climate change and gender issues, referencing various authors and their perspectives on the subject matter. These critical voices have significantly influenced this research, enriching its theoretical underpinnings and providing valuable insights into the complex relationship among climate change, literature and socio-cultural dynamics.

Outline of Chapters

This thesis is divided into six chapters, Chapter One, "Introduction" provides an overview of the development of a specific genre of literature called "Climate Fiction" as well as a delineation of the endeavours of contemporary writers to incorporate a unique narrative style, which brings into consideration global issues like climate change and environmental catastrophe. It also introduces the subject matter and establishes the theoretical and methodological basis for the research. It offers a concise account of the historical development of the concepts of climate change and the Anthropocene, gives an idea of the critical theories on climate fiction which have influenced the analysis, a comprehensive review of literature and an overview of the methodology that have been used.

Chapter Two, "Climate Change and the Portrayal of Transformation in Select Fictions" focuses primarily on the collection of seven novels that constitute the foundational basis of this literary analysis. Building on the "Introduction", which highlights the importance of such analysis based on climate theme and asserts the efficacy of the novel as a tool for evaluating narratives concerning catastrophic occurrences, this chapter presents the conceptual framework for investigating the subject of ecological transformation, specifically in relation to the novels selected for this study. It explores the representation of climate change and the Anthropocene in the works of Shubhangi Swarup, Uzma Aslam Khan, Amitav Ghosh, Arif Anwar, Romesh

Gunesekera and Minoli Salgado. The chapter sheds light on the idea of transformation caused by anthropogenic activities and consequent environmental degradation and examines through close reading of the texts if there are discernible traces of this phenomenon in contemporary South Asian English fiction, treating it as a plausible thematic element. This chapter argues that within these select works of fiction, the concept of climate change is explored in a manner that challenges the limitation of conventional notions about its nature which renders it as something beyond the imagination, abstract or improbable. Instead, these narratives establish climate change as a plausible catalyst for socio-cultural, political, and ecological transformations, resulting from the growing frequency of calamities fuelled by unrestrained human actions.

Chapter Three, "Dislocation and Dissociation: the Crisis of Climate Migrants and Refugees in Amitav Ghosh's The Hungry Tide and Gun Island" analyses the representation of another significant outcome of climate change i.e. the ordeals of climate refugees and migrants, as depicted in two novels by Ghosh. Fictions on climate refugees and environmental migration are gaining paramount importance not only because of their palpable way of portraying human suffering, but also due to their socio-cultural bearing. The novels under study deal with the conflict-driven ideas and theoretical complexities associated with the concept of climate refugees and incorporate narratives of dislocation and dissociation. This chapter explores the issue of migration driven by climate-induced circumstances and how this increasingly prevalent occurrence has become a source of global trepidation, as it unveils the profound socio-cultural and political ramifications of climate change. However, climate-induced human mobility need not always be internal, but it can also be what Bryan Yazell (2020) calls "displacement on a planetary scale", as this notion arises from the impact of globalisation, which has transformed mobility into a crucial element for human survival (155). The study of the constructed ecology within a planet facing imminent peril is regarded as pivotal in comprehending various facets of the surrounding milieu, such as human and nonhuman species that dwell within the ecosystem and their interactions with nature, societal norms, cultural practices, ethical principles, and beliefs. This chapter, therefore, focuses on internal and/or transnational migration, demands recognition for the realistic approach employed by the author to tackle an issue lacking in consideration and reminds readers of the troubles of climate refugees subjected to the grave impact of environmental catastrophe. Emphasis is laid on growing concern for refugee

movements and international acceptance of refugees as portrayed in the texts- *The Hungry Tide* and also in *Gun Island*.

Chapter Four, "Micro-narratives of Climate Catastrophe: Locating Experiences of Women Victims" focuses on representation of women victims in the works of Shubhangi Swarup, Amitav Ghosh, Uzma Aslam Khan, Arif Anwar and Minoli Salgado. This chapter will analyse the challenges that changing climate and disasters pose to the women victims due to their close-bonding and interaction on a regular basis with nature. Despite the existing body of knowledge, there still remain numerous unexplored aspects that demand further investigation into women's contribution to the preservation of the ecosystem and the environment. The inherent capacity of women to safeguard, foster and sustain the natural surroundings also renders them vulnerable to the atrocities of climate catastrophes. In this chapter, special emphasis is given on the experiences narrated by the female protagonists whose accounts can be validated as accounts of misery. Some of the woman characters exhibit a remarkable resilience, employing adaptive strategies that have been honed over generations. The chapter elucidates the multifarious encounters of female protagonists with climate disasters, and in certain instances, it explores the protracted strategies they employ to safeguard their loved ones, belongings and the nature around them. The novels show how women confront natural transformation around them and how they prepare themselves to fight a prejudiced society. The novels portray the indispensable role of female characters hailing from various topographical settings such as hills, villages, islands, archipelago and coastal regions. Their experiences highlight the inescapable influence of climate change on every landscape, leaving no terrain unaffected.

Chapter Five, "Climate Trauma: Narratives of Planetary Experience and Psychological Impacts of Climate Change" discusses how mental impacts of the climate crisis affect the lives of individuals to a great extent. In this chapter, it has been argued that akin to numerous Western fictions that explore this issue, South Asian novels have also dealt with the psychological concerns of climate trauma and solastalgia, deftly illustrating their impact on the existence and cognitive faculties of the central characters. The chapter shows that within the realm of climate change fiction, there exists an unparalleled avenue for exploring the emotional domain of humans as portrayed by these literary works. Through the assessment of how individuals react to dire circumstances, we are granted a deep insight into the essence of

humanity. The texts examined in this chapter contain indications of ongoing disasters, manifested in various emotional forms that intensify the connection between the human and the crisis of experiencing and expressing the trauma caused by climate catastrophe. Instead of the conventional idea of trauma occurring due to witnessing violence, war or bloodshed, the authors of these novels emphasise on the representation of traumatic experiences originating from calamitous events.

Finally, in Chapter Six, the concluding chapter, this analysis has integrated together the diverse aspects that have been examined in the previous chapters. This chapter summarises the key findings of the study.

Endnotes:

¹ Considering the major and still growing impacts of human activities on earth and atmosphere, Paul J. Crutzen and Eugene F. Stoermer in their essay titled "The Anthropocene" published in IGBP Newsletter 41 in 2000 emphasise the central role of mankind in geology and ecology and propose the term "anthropocene" for the current geological epoch. In spite of alternative proposals, they date the onset of the "anthropocene" as the latter part of the 18th century.

² This definition has been taken from an online article titled "We Must Tackle Climate Change Together" by Margaret Atwood, published in *Huffpost Canada* on Nov, 12, 2013 (no page no. available).

³ See Irving Finkel's *The Ark Before Noah: Decoding the Story of the Flood* (2014).

⁴ See Klaus K. Klostermaier's *A Survey of Hinduism* (2007), 3rd Edition, published by State University of New York Press, p. 97.

⁵ See William D. Westervelt's Hawaiian Legends of Volcanoes (1990).

⁶ See Stuart B. Schwartz's Sea of Storms: A History of Hurricanes in the Greater Caribbean from Columbus to Katrina (2015).

Milkoreit (2017) further defines "socio-climatic imaginary" or "socio-environmental imaginary" as collective visions of the future that include the climate science's view of the natural environment as an agent rather than a mere context. In contemporary times, such systemic imagination, which involves a keen observation of transformations occurring in both the physical and social domains, appears to be primarily confined to the world of artistic expression. She claims that climate fictions explore the consequences of climatic change on various aspects of society. These books not only depict a world that has undergone significant climatic transformations but also delve into the changes experienced by communities, characters, and societies as they confront the challenges posed by this global phenomenon. She writes,

"These fictional accounts of possible futures play an important role in aiding their audiences' imagination processes and offering opportunities to consider and evaluate these visions and their various dimensions of (un)desirability when considered as real-world trajectories" (5).

- ⁸ Birgit Neumann claims that the forms that contemporary climate fictions employ to envision the transformations of the Anthropocene are more diverse than the scholars like Trexler states. These novels offer something different: "new forms that estrange established notions of narrative and narrativity, above all the exclusive focus on human agents and intentions" (97).
- ⁹ Most political and scientific perceptions regarding climate change adopt an epistemological or rational course, avoiding speculative or controversial descriptions of possible futures. This makes it hard to imagine social and natural landscapes that have been destroyed. Yet, fiction serves as a powerful tool that enables us to navigate the landscapes of a transformed world, providing us with a unique opportunity to immerse ourselves in its unsettling realities across various dimensions be it social, cultural, or emotional. The narrative voyage embarked upon by the characters in works of fiction serves as a mechanism for their emotional and social adjustment, as well as for the reader's contemplation of a radically unfamiliar setting.
- ¹⁰ The report asserts, "An extreme weather event can be a source of trauma, and the experience can cause disabling emotions" (14).
- ¹¹ See "Contemporary Issues of Climate Change in South Asia: A Synthesis" in Mausumi Kar, Jayita Mukhopadhyay and Manisha Dev Sarkar (Ed.) *South Asia and Climate Change: Unravelling the Conundrum* (2022). pp. 3-14.

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