

Climate Trauma and Activism. The Social Media Coverage of Climate Crisis and Its Effects. An Overview

Abstract: The aim of the article is to provide a reflection on the multiple and often opposing effects of climate crisis and trauma from a cultural point of view. In the first part, it will consider climate change and its effects, such as anxiety, depression and pre- and post-traumatic stress disorder. It will then focus on public reactions and the possibility of positive engagement fostered by social media platforms like Instagram and TikTok. It argues that by informing the public about the physical and mental consequences, social media can raise awareness and shape public opinion, inspiring action. Thus, anxiety and activism may emerge as contrasting outcomes of media coverage on climate change. The article provides a reflection on this coexistence and its causes, and speculates on future developments.

Keywords: *climate crisis, climate trauma, social media, psychoterratic states, climate activism*

1. Introduction

The concern for the well-being of our planet and its correlation with human activity has a lengthy history. As early as the end of the 19th Century, following the advent of the industrial revolution, environmentalist movements such as the *Conservation Movement* in India and the *Coal Smoke Abatement Society* in England began to take shape. However, it was during the latter half of the 20th Century that the topic gradually entered the public domain. In 1962, American biologist Rachel Louise Carson authored the renowned essay *Silent Spring*, which unveiled the destructive effects of human intervention on the natural environment and became a key manifesto of the international ecological movement. Few years later, in 1970, the United Nations established the *Earth Day* to commemorate the planet and stress the significance of environmental protection. At the end of the seventies, as is well known, William Rueckert coined the term ‘ecocriticism’ in his essay *Literature and Ecology: An Experiment in Ecocriticism* (1978), marking a field of study that examines the relationships between culture, knowledge, narrative, and the environment through humanistic and scientific sources.

Nonetheless, for a long time, this extensive history was largely relegated to the background. Despite the availability of studies, analyses, predictions, and warnings on the well-being of the Earth's ecosystem, the subject rarely took center stage in public discourse and interest, whether from informative, political, economic, or artistic, literary, and narrative perspectives.

However, in recent years, the situation has undergone a significant transformation. Many environmental issues that were previously on separate paths have been subsumed under the overarching concept of climate change. Climate change has arguably become the primary topic of our time, so much so that references to it are ubiquitous in contemporary discourse.¹ Bibliometric analysis shows that research on the subject has grown exponentially in the current decade.² Furthermore, the existence and

¹ Peter Smith, *Climate Change and Cultural Heritage: A Race against Time* (New York: Routledge, 2015).

² Najibah Suhaimi et al., “A Bibliometric Analysis of Climate Change Literacy between 2001 and 2021”, *Sustainability*, 14.19 (2022).

findings of such studies have transcended the boundaries of scientific specializations to become a topic of public discussion. Climate change has become pervasive across various sectors, from traditional and new media to politics, economics, cinema, and literature, appearing as news, topics, images, or plots. While Amitav Ghosh's essay *The Great Derangement: Climate Change and the Unthinkable* (2016) criticized the scarcity of climate change in contemporary fiction only seven years ago, as of today the trend has significantly reversed.

This shift can be classified as an epistemological passage: from analysing and discussing causes, we have moved towards analysing and comparing effects. The occurrence of wildfires in California, floods in Australia, and droughts in northern Italy, among other climate-related events, are no longer viewed as hypothetical phenomena that may arise *due to* certain factors. Rather, they are now recognized as concrete and tangible effects *resulting from* identifiable factors. This transformation is evident in the language used to describe the subject, where the term 'Climate Crisis' is increasingly favoured over 'Climate Change'. The choice to use the former term is in fact strategic. It signals the impossibility of avoiding the issue: if a danger can be ignored, a crisis must be addressed. Moreover, this choice also entails a shift in the modes of action and communication: during a crisis, the ways we act and communicate differ from the norm because they have to respond to the exceptional nature of the situation. At the same time, the ways in which actions and information are received and processed also take on distinct characteristics because people have to cope with such an abnormal and frightful state of things. Furthermore, unlike other crises, the climate crisis operates on a longer time scale and demands a level of tolerance towards this so to speak 'emergency vocabulary' that is markedly different from usual. All this makes it an issue that is extremely difficult to address, especially from the perspective of those who will be most impacted by the crisis. It is therefore not coincidental that discussing the climate crisis increasingly involves grappling with something akin to a trauma.

The aim of the article is therefore to provide a reflection on the multiple and often opposing effects of climate crisis and trauma from a cultural point of view. In the first part, it will consider climate change and its effects, such as anxiety, depression and pre- and post- traumatic stress disorder. It will then focus on public reactions and the possibility of positive engagement fostered by social media platforms like Instagram and TikTok. It argues that by informing the public about the physical and mental consequences, social media can raise awareness and shape public opinion, inspiring action. Thus, anxiety and activism may emerge as contrasting outcomes of media coverage on climate change. The article provides a reflection on this coexistence and its causes, and speculates on future developments.

2. The Loss of Mother Earth

Throughout the narratives of Indo-European communities and beyond, the Earth has consistently been endowed with the symbolic role of a maternal figure. Various cultures have defined the Earth as a maternal identity, such as the *Tellus Mater* or *Terra Mater* of the Romans, the *Gaia* of the Greeks, the *Ki* or *Ninhursag* of the Sumerians, and the *Bhumi* and *Prithvi Mata* of Hindus and Buddhists.³ Thus, tasked with nurturing and supporting her children, the Earth has often been portrayed as a figure of strength. Even when Western poetic aesthetics recast her as a wicked stepmother or, more recently, as a vengeful force in the so-called disaster movies punishing humanity for failing to respect her delicate balance, the Earth has maintained her symbolic role of a strong maternal figure. Perhaps it is no accident. Psychoanalytic studies following the Lacanian framework suggest that cruelty is more readily accepted in a maternal figure than fragility. The notion of maternal fragility challenges the fundamental

³ See Gordon Campbell, *Strange Creatures: Anthropology in Antiquity* (New York: Bloomsbury, 2006), 3-14.

ontological assumptions of the child, necessitating a role reversal that is not always manageable for the latter.⁴

The current climate crisis and its narrative seem to point towards this complex and paradoxical reversal of roles: it is now evident that Mother Earth is unwell, and that the behaviour of humanity, representative of the child, is responsible for this state of health. Furthermore, the fragility of the Earth goes hand in hand with her progressively unrecognizable state. Environmental transformations, whether local or distant, appear to be increasingly apparent, narrated, and thus experienced. As a consequence, there is a resulting sense of uprooting, a strangeness akin to the experience of exile discussed in Freudian studies. The overall result is the transformation of our planet from a familiar and domesticable element to an unpredictable and disturbing one.

These psychoanalytic readings are not entirely new. In the 19th century, the Romantic aesthetic already considered Nature as an element capable of surprising and frightening human beings. However, the current situation has decidedly specific characteristics that extend beyond theoretical and cultural interpretations. In recent years, a considerable number of new pathologies related to the climate crisis have been observed and recorded demonstrating dynamics comparable to one of the most studied experiences in psychology: trauma. The word trauma is etymologically rooted in the medical field, specifically in the concept of injury and wound. It is therefore not surprising that Michael Richardson characterizes the climate crisis precisely in terms of a distinctive type of wounding, one that is experienced in the present but whose most concerning causes and effects are linked to the future dimension:

Already arriving from the future yet only just beginning to unfold, climate catastrophe bears down on and shapes the present. It cannot but be felt in the now: in its micro and macro manifestations, in the threat it poses to existing ways of life, in its upending of entrenched understandings of the workings of the world, and in the injury it does to particular lives and wider ecologies. Climate catastrophe works on ecologies and bodies alike as a kind of wounding, one not simply or solely to the everyday stuff of biological life but to the very constitution of experience and expression. This wounding is not so much traumatic as it is traumatically affecting. It is a wounding that manifests in jarring, rupturing, disjunctive encounters with future crisis in the contemporary moment. While this traumatic affectivity manifests in multiple forms, it has particular consequences for aesthetic expression and its relation to experience itself.⁵

The phenomenon of psychoterratic states, defined as states characterized by psychological discomfort and stress stemming from environmental changes and disturbances, has been the subject of increasing attention from the scientific community. Psychoterratic states pertain to the affective experiences individuals undergo concerning the earth. Coined by Glenn Albrecht, this terminology arose from a discerned necessity for a novel lexicon to articulate the emotional responses evoked by the worldwide deterioration of the planet throughout history.⁶ In particular, recent studies have highlighted the potential for such states to manifest as pathological conditions related to post-traumatic stress disorder (PTSD).⁷ This growing concern is driven in part by the fear of apocalyptic global scenarios that could render the planet uninhabitable, leading to the emergence of a set of "environmental emotions" that have been formally recognized in the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5).⁸ To this end, Glenn A. Albrecht's *Earth Emotions: New Words for a New World* (2019) provides a rich lexicon

⁴ Wendy Wren, *Mother is Dying: A Societal and Trauma Analysis into Climate Change and What You Can Do About It* (Austin: Macauley Publishers, 2022).

⁵ Michael Richardson, "Climate Trauma, or the Affects of the Catastrophe to Come", *Environmental Humanities*, 10 (2018), 1.

⁶ Glenn Albrecht, "Exiting the Anthropocene and Entering the Symbiocene", *Minding Nature* 9.2 (2016), 12-16.

⁷ Annika Walinski et al., "The Effects of Climate Change on Mental Health", *Dtsch Arztebl Int.*, 120.8 (2023), and Tara Crandon et al., "The Clinical Implications of Climate Change for Mental Health", *Nature Human Behaviour*, 6 (2022).

⁸ [https://www.appi.org/Products/DSM-Library/Diagnostic-and-Statistical-Manual-of-Mental-Di-\(1\)?sku=2576](https://www.appi.org/Products/DSM-Library/Diagnostic-and-Statistical-Manual-of-Mental-Di-(1)?sku=2576)

of what he terms Negative psychoterratic statuses, including ecocide, ecoanxiety, biophobia, ecophobia, environmental generational amnesia, solastalgia, global dread, nature deficit disorder, ecoparalysis, tierratrauma, topoaversion, toponesia, meteoranxiety, terracide, and terrafurie. This terminology is so broad, varied, and interrelated that it is often complex to navigate and clearly distinguish the specific emotional state at hand. With this in mind, Csilla Ágoston provides an exhaustive overview of the field:

Albrecht suggested that chronic stress on ecosystems is likely to produce chronic stress in humans, which results in certain ‘psychoterratic’ or earth-related mental health syndromes, such as eco-anxiety, ecoparalysis, solastalgia, and eco-nostalgia. Eco-anxiety is a special type of stress and worry, which is related to the ecological crisis, and can be interpreted in the framework of existential and psychodynamic psychology as well as social sciences. Worry about climate change is very common among children and young people (84% of them expressed at least moderate worry in a large-scale study) Eco-paralysis is characterized by the inability to meaningfully respond to the climatic and ecological challenges, and it can stem from either the sudden emotional shock caused by the threat or cognitive dilemma of having too many and sometimes conflicting options for action. Another important phenomena is eco-guilt that occurs when people realize they have violated personal or social standards of behaviour and eco-grief, which is a response to ecological loss that can be related to the loss of physical environment, anticipated future losses and the disruptions to environmental knowledge systems, which leads to the feeling of loss of identity. Solastalgia is a concept akin to eco-grief; it describes the anguish or despair we feel when we realize that the place we live in and love is chronically deteriorating, and the comfort—or solace—we derive from the current state of our home environment is gradually disappearing. Compared to solastalgia, where people have a “lived experience” of the change process, eco-nostalgia is experienced when people return to a location that has been entirely transformed in their absence due to development or climate change.⁹

As seen above, these emotional states of stress and discomfort can arise from a variety of situations related to the climate crisis. Recent studies have shown that extreme weather events, while undoubtedly important, are not the only factors affecting human mental health in relation to climate.¹⁰ The mere warning of the gradual increase in temperatures or the deterioration of air quality are capable of transforming the personal perception of the problem into an increasingly distressing experience. Each of these syndromes is clearly experienced at an individual level, but it can also be shared among many individuals. In fact, if the experience of the climate crisis can be framed through the category of trauma, it must be a collective trauma. This is not only because it is an event that concerns everyone, but also because it is now well known that a collective trauma is not only the consequence of a personal experience, but can also be generated by the introjection of anxieties and worries that, in their symbolic reification in the unconscious, end up besieging the ego in a phantasmatic form.

The framing of the climate crisis in terms of collective trauma is certainly useful from a medical perspective for diagnosis and treatment: only by naming and knowing a specific pathology is it possible to defuse its most negative effects. At the same time, approaching the climate crisis in terms of collective trauma can also be useful in a broader perspective of intervention towards the climate crisis itself. Zimmerman in *Trauma and the Discourse of Climate Change: Literature, Psychoanalysis, and Denial* (2020) argues that our great and long-standing blindness towards the danger of an environmental crisis is due precisely to the failure to recognize the traumatic dynamic. According to this reading, the refusal to accept the fact that “our home was on fire” and the indulging in the mere memory of a Mother Earth would have been the products of a typical traumatic repression. Instead, Zimmerman argues that only by recognizing the climate crisis as a kind of collective trauma can we find the tools to fight it. He is not alone. More and more experts and scholars insist on referring to the category of collective trauma

⁹Ágoston Csilla, “Identifying Types of Eco-Anxiety, Eco-Guilt, Eco-Grief, and Eco-Coping in a Climate-Sensitive Population: A Qualitative Study”, *Int J Environ Res Public Health*, 19.4 (2022), 2.

¹⁰ See Matteo Innocenti, *Ecoansia* (Erickson: Trento, 2022).

as a way of explanation and intervention: “I can no longer, in good conscience, refer to this accelerating threat as ‘global warming’ or ‘climate change.’ Climate Trauma is emphatically a more descriptive, and notably more useful, term for what we are now experiencing”.¹¹

What the traumatic interpretation would allow is a radical rethinking of the way we tell and narrate ourselves in relation to the planet, and parallelly, the way we act and react. Not only because, as Zimmerman would say, it allows us to remove the repression, but also because, at a deeper and perhaps more productive level, it allows us to overturn the perspective that puts us as the only victims of a changing world and to frame ourselves instead as a factor that can contribute to worsen or improve the situation.¹² The elaboration of the loss of mother earth leaves room for the recognition that we are not her only children. The climate crisis, as is well known, does not coincide with the total end of the habitability of the planet, but with a narrower hostility towards human life on the planet. Becoming aware of this means abandoning a totally anthropocentric approach that, applied to the climate crisis, can only produce feelings of victimization, paralysis, and inaction.

Trauma is both a personal and cultural experience linked to place (Michelle, 2008). In fact, Caruth has advanced a contagion theory of traumatic experience, according to which we become implicated in each other’s traumas. In the newly christened anthropocentric age out of which the climate crisis has emerged, the Anthropocene (see, e.g., Waters et al., 2016)—an age marked by the advent of instant global information and rampant social media communication—one can now readily observe a kind of social contagion effect. Against a backdrop of culturally reinforced psychosocial defense mechanisms, what we see is that the more chaotic our climate system becomes, the more these elevated levels of chaos are reflected in the cultural and political expressions of group pathology.¹³

The increasing discomfort associated with concerns over the balance of the planet stems from the anxiety of not being able to fully control the equilibria of a planet that has been regarded for centuries as a conquered land and not as a hosting ecosystem, as an object acted upon and not an acting subject. This places emphasis on how humans must learn to live on the planet as its inhabitant, but not as its owner, and to do so, they must begin to speak about it differently.

To enhance awareness, it is crucial to consider eco-anxiety not only as an individual ailment but as a community symptomatology that can transform dialogue into action through confrontation. Thus, it is necessary to fully comprehend this type of symptomatology, looking at the new lexicon coined to understand it, and then to devise winning strategies that start from self-care and lead to care for the entire community and planet, avoiding eco-paralysis that arises from what may be defined as eco-aphasia. The loss of motivation and hope generated by the anxiety of questions such as *what good will it do to talk about it?* might degenerate into depressive states where one is convinced that any word, and consequent action, is now futile. It is therefore evident that effective communication plays a pivotal role in building an adequate awareness of the planetary crisis and devising an appropriate response. Merely discussing the issue is insufficient, as the quality of the discourse is of paramount importance. The initial risk that must be averted is the replication of what occurred during other major collective traumatic events, like terrorism or pandemics, in which the initial indescribability of trauma led to a widespread dissemination of images and stories that served to reopen wounds without leading to constructive reflection or action. In the specific case of the climate crisis, there is a risk of perpetuating a vicious cycle, where heightened attention to the present and future consequences of the crisis may contribute to the emergence of the aforementioned pathologies. The mass media bears the greatest responsibility in this regard due to its

¹¹ Woodbury Zhiwa, “Climate Trauma: Toward a New Taxonomy of Trauma”, *Ecopsychology*, 11.1 (2017), 3.

¹² Edward Blaine, “Fostering Student Activism About the Climate Crisis Through Digital Multimodal Narratives”, *Journal of Sustainability Education*, 25 (2021).

¹³ *Ibid.*, 5.

inherently pervasive yet elusive nature. In fact, despite having become a ubiquitous term in contemporary discourse, it is not straightforward to define what is meant by mass media. Potter, among other scholars, articulates a sophisticated definition based upon specific conditions inherent in both poles of communication: the sender and the receiver.

The sender of messages must be (1) a complex organization (2) that uses standardized practices to disseminate content (3) while actively promote itself in order to attract as many audience members as possible and (4) condition those audience members for habitual repeated exposures ... Also, the audience is important because it must be composed of people who are (1) are widely dispersed geographically, that is not all in one place, (2) are aware of the public character of what they are seeing or hearing, and (3) encounter messages in a variety of exposure states but most often in a state of automaticity.¹⁴

This definition subsumes both traditional media outlets such as radio, TV, newspapers, and contemporary social platforms such as Facebook, Instagram, Twitter, and TikTok. As of today, this composite mass media galaxy is responsible for conveying the majority of verbal and visual information related to the climate crisis. This coverage has now become nearly ubiquitous but it does not always employ effective communication strategies that are appropriate for the issue or the traumatic aftermath that may ensue. As a matter of fact the media's perspective often fails to account for the global context as it focuses on the national and regional one. This contributes to a lack of information that could lead to the belief that the climate crisis is less severe than it is. Furthermore, sensationalistic alarmism tends to characterize media coverage of the climate crisis, which may attract attention but could also arouse reactions of disbelief, denial or desperation.

All these communicative deficiencies contribute to generating confusion among listeners, as alarming information (such as *nothing can be done, the catastrophe is inevitable*) is provided in parallel with vague and poorly contextualized information. Due to this communicative approach, listeners may perceive climate change as an abstract entity that has a specific temporal and spatial location and does not manifest itself in any concrete event. This confusion can lead older age groups to lose interest (*I don't understand, so I'm not interested*), but younger age groups, who are more vulnerable to the effects of climate change, are well aware that environmental degradation is compromising a not-so-distant future. They are acutely aware that their generation will be the first to experience the drastic effects of climate change. This awareness reduces the psychological distance between them and the climate phenomenon, exposing them to the potential consequences that can impact their way of living and thinking.

However, as is widely known, while the media continue to hold a central role and wield significant power in shaping public opinion, they are no longer the sole purveyors of information. The focus, understandably, is on the World Wide Web and, more specifically, the most prevalent iteration of the internet in recent times, namely, social networks. Indeed, over the past decade, social networks have received both acclaim and criticism for their role as creators and propagators of information and opinions, thereby signifying their current status as an indispensable node in the domain of communication. Accordingly, it is hardly surprising that the discourse surrounding the climate crisis is widespread, examined, and expounded upon, primarily, if not exclusively, on social media platforms.

3. Climate Trauma and Social Media

Social media today possess a reputation that is, at minimum, contradictory as means of information and communication. In a relatively brief period of time, social media have transformed from tools that appear to support freedom of expression and the advancement of democratic-progressive movements (e.g.,

¹⁴ William Potter, "Synthesizing a Working Definition of Mass Media", *Review of Communication Research*, 1 (2013), 17.

during the Arab Spring) to instruments that seem to promote the dissemination of falsehoods and the success of autocratic-conservative movements (e.g., during the 2016 U.S. elections or the 2021 attack on the Capitol Building). Indeed, the terms ‘fake news’ and ‘post-truth’ owe their current popularity to the role of social media, and numerous academic studies have demonstrated the existence of such phenomena, though consensus has yet to be reached on the underlying motivations.

Fake news and its viral circulation have become a grave concern in the era of social media, where anonymity, user-generated content and geographical distance may encourage fake-news sharing behaviour. While academic research on the dark aspects of social media use, which includes information overload, social media fatigue, fear of missing out and coping strategies, has intensified, the perceptions and behaviours underlying the sharing of fake news are not clear. In fact, little is known about the motives for sharing disinformation on social media platforms.¹⁵

Therefore it is not unexpected that the portrayal of the climate crisis on social media should manifest itself in a similarly contradictory and problematic manner. On various social media platforms such as Facebook, Twitter, Instagram, and TikTok, opposing tendencies coexist whereby the climate crisis may be construed as either an overestimated or even fictitious phenomenon, or conversely, as the gravest and most pressing problem that humanity has ever confronted. As such, social media can engender a wide and heterogeneous range of responses and effects among their users, simultaneously serving as both an obstacle and an opportunity with regard to communicating about the climate crisis and addressing its trauma.

3.1 *Social Media and Top-Down Anxiety*

The majority of studies conducted to date concerning the interplay between social media and misinformation have predominantly focused on the realm of political communication.¹⁶ Within this specific domain, social media platforms have been shown to possess a notable - and at times calculated - capacity to disseminate unsubstantiated or deliberately falsified news in order to safeguard their respective party interests or undermine their adversaries. Nonetheless, this ability to propagate misinformation is extensible to other areas as well, particularly in contexts where issues, like politics, are susceptible to divergent perspectives and interpretations. Indeed, the salience of social media's structure in fostering polarization has become increasingly incontrovertible. “While some concerns have been exaggerated, social media do contribute to increase polarization either by amplifying and escalating social processes that also occur offline or in specific ways enabled by their design affordances, which also make these platforms prone to manipulation”.¹⁷

The scientific community largely agrees on the responsibility for and necessary interventions to address the climate crisis. However, online discourse and other forms of communication often portray the issue as controversial, leading to polarized opinions. As a result, debates centered around the climate crisis often involve the production and dissemination of news and images, serving as a means to establish the validity of one’s standpoint. The issue of polarization is further compounded by the close association between the climate crisis and politics, the sector most susceptible to position polarization and the spread of false information. A 2020 study by Thea Gregersen et al. found that one’s personal political

¹⁵ Talwar Shalini et al., “Sharing of Fake News on Social Media: Application of the Honeycomb Framework and the Third-Person Effect Hypothesis”, *Journal of Retailing and Consumer Services*, 57 (November 2020), 5.

¹⁶ Sadiq Muhammed et al., “The Disaster of Misinformation: A Review of Research in Social Media”, *International Journal of Data Science and Analytics*, 13 (2022).

¹⁷ Luca Iandoli et al., “The Impact of Group Polarization on the Quality of Online Debate in Social Media: A Systematic Literature Review”, *Technological Forecasting and Social Change*, 170 (2021), 7.

positioning on the left-right or conservative-liberal axis often corresponds to a different approach towards the climate crisis:

Another factor known to be associated with climate change perceptions is political orientation, which, according to McCright et al. (2016), constitutes one of the most important and consistent predictors of climate change perceptions such as worry and concern. A common approach to measuring political orientation is to ask people to position themselves on a liberal versus conservative (in the United States; e.g., American National Election Studies) or a (political) left versus right (in Europe; e.g., European Social Survey) dimension. Research has found that left-leaning or liberal individuals are more likely to believe in the reality and anthropogenic nature of climate change, and to be worried about it, than those who identify themselves as right-leaning or conservative.¹⁸

The frequent presence of online content aimed at reducing or denying the climate crisis is thus easily explained. Such content may take various forms but often consists of more or less faithful reproductions and interpolations of news from traditional media outlets. It should not be overlooked that current social media platforms embody the convergence culture theorized and analyzed by Henry Jenkins since the 2000s¹⁹, in which bottom-up and top-down content coexist and hybridize. In the context of the climate crisis, this means that the same dynamics and shortcomings of so-called traditional media often re-emerge on social media precisely because the content is often identical or nearly so: reposts of newspaper and magazine articles, images and videos from television, or more banally, posts, tweets, stories, and reels by journalists. The fundamental difference lies in the mode of consumption, which is much faster, shallower, and more abundant than traditional media consumption. As may be easily surmised, this can lead to a further predilection for particularly alarmist and sensationalistic content capable of attracting the ever-decreasing attention of users. However, as previously mentioned, the continuous and rapid exposure to particularly alarming and sensationalistic content is not healthy. Experiencing news, images, and videos of catastrophic events related to the climate crisis does not promote awareness or action but instead generates feelings of anxiety and paralysis, even on a physical level. Trauma processing and subsequent action strategies do not arise from the continuous and fragmented re-emergence of traumatic events. If the Self is passively bombarded with images depicting disasters without these being understood as processes with causes and solutions, the way in which that content is stored in memory will be similar to the way in which memory stores trauma: it is not processed and the Self becomes blocked. As a matter of fact, individuals who have undergone traumatic experiences frequently grapple with intrusive thoughts that manifest as intensely negative core beliefs about their own identity. These beliefs may encompass convictions such as "I will never regain the ability to experience normal emotions again", "I no longer recognize my own identity," or "I have undergone irreversible negative changes". Somatic repercussions of trauma have garnered increasing attention in recent research, indicating that it can lead to enduring physical manifestations as somatic disturbances significantly affecting the individual's sense of self. Moreover, individuals with PTSD reported somatically-based alterations concerning self-experience, exemplified by expressions such as "I feel emotionally numb," "I sense detachment from my body," "I feel a lack of ownership over my own body," or "I perceive a loss of boundaries around my body." These accounts underscore the vulnerability of the sense of self in the aftermath of trauma, where both cognitive and somatic disturbances are believed to stem from remnants of the traumatic past experienced by individuals with PTSD.²⁰

¹⁸ Thea Gregersen et al., "Political Orientation Moderates the Relationship between Climate Change Beliefs and Worry about Climate Change", *Frontiers in Psychology*, 20 (2020), 2.

¹⁹ Henry Jenkins, *Convergence Culture: Where Old and New Media Collide* (New York: New York U. P., 2006)

²⁰ Ruth Lanius et al., "The Sense of Self in the Aftermath of Trauma: Lessons From the Default Mode Network in Posttraumatic Stress Disorder", *European Journal of Psychotraumatology*, 11 (2020), www.ncbi.nlm.nih.gov/pmc/articles/PMC7594748/#cit0054

Drawing upon recent scholarship that delves into climate change as a manifestation of *slow violence* perpetrated by humanity upon the environment, the theory posited by the esteemed media scholar E. Ann Kaplan in her essay *Climate Trauma* (2015) explores the escalating prevalence of dystopian future-themed news and images.²¹ Kaplan investigates how these contents may present an opportunity for constructive engagement with our anxieties, by offering a seemingly prophetic glimpse of the alarming future selves we must strive to avoid becoming. Flooding, hurricanes, earthquakes, heat waves, etc., if not thought of as various sad pieces of a much more complex mosaic, only become shocking events that leave us space for eco-mourning. To process trauma and plan action, different modes of communication are needed, which social media fortunately allows for.

3.2 Social Media and Bottom-up Activism

The climate crisis, as has been repeatedly emphasized, constitutes a collective trauma. Nevertheless, whether through newspapers or screens of televisions or smartphones, it is often experienced at an individual level, which amounts to passive exposure. From this perspective, social networks present communicative potentialities that can involve and make groups of people feel involved. Social media has fundamentally disrupted established communication hierarchies by diminishing the influence of traditional gatekeepers like large media corporations, political parties, and scientific institutions. Simultaneously, it has empowered individuals to reach unprecedentedly large audiences and the rapid rise of social networking sites and platforms has captured the public's imagination, generating significant interest and motivation for research in this domain. This has been witnessed in another collective crisis, that of the COVID-19 pandemic, where social communication has enabled the creation of communities for discussion and mutual support, offering solace from isolation and sensitizing individuals to common good practices in a moment of fear. This effect has been extensively discussed in the early days of online communication, as exemplified by Lévy's concept of collective intelligence²² or Rheingold's virtual communities²³, and it has persisted even in the era of social media. In their study on the formation of collective identities on Instagram, Brünker, Deitelhoff, and Mirbabaie investigate the potential interactions and effects between groups and individuals in the current digital landscape.

Collective identity combines the bases group cohesion, emotional attachment, and solidarity (Polletta and Jasper 2001). These three bases might show up on social media in several ways. However, even in heterogeneous networks which are loosely connected are these three bases important for identity formation and maintenance during a social movement (Melucci 1988; Miller et al. 2016). In the context of social movements, social media provides individuals self-verifying capabilities by various participation patterns such as liking, commenting or connecting with others (Miller et al. 2016). Subsequently, evolving personal networks could drive individuals to support the collective. This can be motivated by emotional attachments on social media (Melucci 1988; White 2010). However, several influencing factors might form collective action and drive participation in social movements as the social identity model of collective action (SIMCA) suggests.²⁴

The bottom-up aspect of social media is characterized by the production and dissemination of content created by users, as well as interaction among them. When applied to the climate crisis, these two elements challenge the risks outlined in the analysis of collective trauma. A collective effort to narrate the trauma can mitigate the danger of individual melancholic stagnation and instead open up the

²¹ Ann Kaplan, *Climate Trauma: Foreseeing the Future in Dystopian Film and Fiction* (New York: Rutgers, 2015).

²² Pierre Lévy, *L'intelligence collective: Pour une anthropologie du cyberspace* (Paris: Editions La Découverte, 1994).

²³ Howard Rheingold, *The Virtual Community: Homesteading on the Electronic Frontier* (Boston: MIT Press, 2000).

²⁴ Felix Brünker et al., *Collective Identity Formation on Instagram – Investigating the Social Movement Fridays for Future*, Australasian Conference on Information Systems (2019), 305.

possibility of a joint process of elaboration. This approach can defuse the syndromes of eco-paralysis and eco-aphasia, and enable individuals to reclaim time impacted by the shocking experience of ecological disaster. The next step is to seek solutions together, namely by engaging in participatory actions aimed at slowing down and stopping the crisis. It is therefore necessary to establish communities of activists and activist communication, which are frequently present on social media, especially on Instagram and TikTok, the platforms most widely used by young people. After all, activism, social media, and the climate crisis are topics that primarily concern younger generations. This is supported by the research undertaken by Basch, Yalamanchili and Fera, who conducted an in-depth analysis of climate crisis-related video content on TikTok. Their findings revealed the significant informational and discursive value inherent in these videos, particularly as they resonate strongly with the younger cohorts:

Current day youth have an important role in climate activism, as the decisions and policies made now will have long lasting impacts on the climate and sustainability. Having constructive outlets for expression of dissent may reduce the risk of youth moving toward withdrawal, inaction, or anger directed toward other marginalized people such as economic migrants. Increased activism and change in the future may be possible by having accessible climate change education available to youth through various sources including social media. Social media platforms also have unlimited reach for obtaining knowledge, spreading awareness, as well as rallying support for movements, which has been seen through various other successful movements such as “March For Our Lives,” which was youth-led. Due to the widespread reach of the audience, social media platforms have been popular for discussing various health topics. A platform emerging in popularity is TikTok, which, as of August 2020, had over 2 billion app downloads globally. The value of emerging social media platforms such as TikTok in disseminating public health information is beginning to be studied. Public health officials and organizations have sought to use social media platforms and/or influencers from these platforms to spread awareness regarding important health topics, yet this is not the norm.²⁵

4. Conclusion

The importance of social media communication in relation to the climate crisis has been underscored by the world’s most renowned young activist. In her work, *The Climate Book* (2022), Greta Thunberg exposes how traditional media, in their narrative of the climate crisis, have privileged a synchronous perspective over a diachronic one. Rather than being presented as a complex and interconnected phenomenon, the climate crisis becomes a singular event, be it a flood or a tornado, that recurs differently over time. As seen, social media often take up the synchronous account of the climate crisis, fragmenting and accelerating it to extremes, with corresponding consequences. Nonetheless, social media can also communicate differently. On the pages and profiles of environmentalist movements and the most prominent activists, one can indeed find an organic distribution of news, articles, images, discussions that restore to the climate crisis its real, long, and intricate nature. In this way, specialized communicative poles are formed, to which one can refer in order to remain up-to-date and deepen the situation. Thunberg adds that, in this manner, discussing the climate crisis may also imply discussing climate justice, given that the crisis, observed for what it truly is, cannot be thought of as originating by chance: “Justice means morality – and morality includes guilt and shame. But guilt and shame have been officially banished from the western climate discourse by the media, by the communication experts and by the entire greenwashing community- conveniently closing the door on our historic responsibilities and the losses and damages caused”.²⁶ It is evident that Thunberg is not oblivious to the emotional consequences of communication, but rather focuses on different emotions, such as guilt and shame, which she deems

²⁵ Corey Basch et al., “#Climate Change on TikTok: A Content Analysis of Videos”, *J Community Health*, 47 (2022), 164.

²⁶ Greta Thunberg, “We Now Have to Do Seemingly Impossible” in *The Climate Book* (London: Penguin Book, 2022), 357.

more effective in fostering collective action. Such emotions, when collectively experienced, can lead to a collective effort to repair the damage caused.

Another, and arguably more effective, means that social media platforms employ to counter the synchronicity of communication while simultaneously promoting participation is the hashtag. Through the use of hashtags, it becomes possible to link various events that may have occurred at different times and places, thereby attributing them to the same cause. By searching for the hashtag #climatecrisis on platforms such as Instagram or TikTok, one can obtain millions of results, providing a diverse and comprehensive overview of the content encompassed by the climate crisis. For instance, a photograph depicting the melting of ice in Antarctica may be juxtaposed with news coverage of a demonstration in California, which in turn is accompanied by a video emphasizing the need to reduce global intensive farming practices. By employing hashtags, users are directly involved, feeling as though they are part of a community. In this way, environmental activism is capable of creating numerous virtual platforms from which to invite people who frequent their pages and follow their updates to take action. Numerous studies have demonstrated the efficacy of Instagram and TikTok based on these elements:

- Our findings show to what extent the three bases of collective social/group identity arise on Instagram within an opinion-based community (*Friday for Futures*). In order to conceptualise the concept of collective identity and collective action, we derived the proposed model of collective group/social identity of collective action. We plan to test this model in a succeeding study to examine the impact of each dimension on the collective group/social identity as well as the indirect effect on collective action. To this end, we aim to conduct a laboratory study based on the preliminary findings of this research in progress. The findings of this study provide first insights to how each base (Solidarity, Emotional Attachment, and Group Cohesion) occur on Instagram within an opinion-based group.²⁷
- This study examined the role of using social media for news and political ideology in shaping public beliefs about global climate change in 20 countries. Results indicate that social media news use is a positive predictor of pro-social beliefs about global climate change, even after accounting for county differences, as well as a range of demographic and socio-cultural predictors.²⁸

There is a significant body of research that highlights the potential dangers that social media use may have on the cognitive and emotional development of young people. Among the most frequently cited negative effects are compromised attentional abilities, the emergence of addictive behaviours, and the experience of frequent states of stress and anxiety. However, particularly when focused on a shared concern such as the climate crisis, social media use can also help to reverse such effects. By following hashtags dedicated to the climate crisis, one can find images and messages that move beyond the depiction of the Earth as a suffering, diseased planet inhabited solely by humans, and instead showcase the planet's remaining vast splendor and its even vaster variety of life. In this way, the social narrative of the climate crisis can promote a perception of humans as a component within a more complex system that must correct its own function in order to restore the proper functioning of the larger machinery of which it is a part. This would be a shift from the Anthropocene to the Symbiocene, as defined by Glenn Albrecht, the “period in the earth's history where humans symbiotically reintegrate themselves, psychologically and technologically, into nature and natural systems”.²⁹

²⁷ Felix Brünker et al., “Collective Identity Formation on Instagram – Investigating the Social Movement Fridays for Future”, 308.

²⁸ Diehl Trevor et al., “Social Media and Beliefs about Climate Change: A Cross-National Analysis of News Use, Political Ideology, and Trust in Science”, *Digital Geography and Society*, 2 (2021), 3.

²⁹ Albrecht Glenn, *Earth Emotions: New Words for a New World* (New York: Cornell U. P., 2019), 102.