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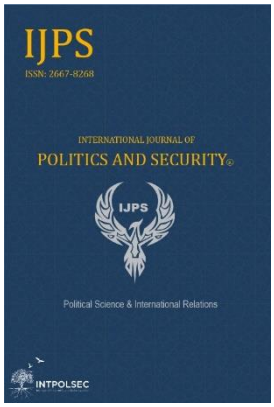

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Revisiting the Environmental Security Concept: Climate Change as a Security Issue

Emirhan ALTUNKAYA*

Abstract

Despite being an oft-used concept within the security studies sub-discipline, environmental security stands as a controversial term because of diverging interpretations on its meaning. This study aims to devote a theoretical investigation of the environmental security concept and to provide a descriptive analysis of its various meanings by reconsidering debates within the security studies research agenda since the 1980s. The research objective of the study is to understand why the environmental security concept has such diverging interpretations and to interrogate the relevance of this divergence for the framing of climate change as a security issue. In this regard, first, it focuses on debates on the redefinition of the security concept through the 1980swithin discipline and reviews its implications for the emergence of the environmental security concept. Then it examines controversies over the meaning of the concept by providing a comparative analysis of the various interpretations of the relationship between environment and security. The third part discusses the significance of this theoretical investigation for the framing of climate change as a security issue on the international political agenda.

Keywords: *Climate Changes, Ecological Security, Environmental Security, Human Security, Security Studies.*

Çevresel Güvenlik Konseptinin Yeniden Tartışılması: Bir Güvenlik Sorunu Olarak İklim Değişikliği

Özet

Çevresel güvenlik kavramı, güvenlik etütleri alt-disiplini içerisinde sıklıkla kullanılmasına rağmen, anlamı üzerine birbirinden oldukça farklı yorumlamalar sebebiyle halen tartışmalı bir kavramdır. Bu çalışma çevresel güvenlik kavramı üzerine teorik bir inceleme yapmayı ve güvenlik etütleri içerisinde 1980'li yıllardan bu yana süregelen tartışmaları da dikkate alarak kavramın farklı anlamlarına ilişkin tanımlayıcı bir analiz sunmayı hedeflemektedir. Araştırmanın amacı, çevresel güvenlik kavramına ilişkin farklılaşan yorumlamaların neden ve nasıl geliştiğini anlamak, ve bu farklılıkların iklim değişikliğinin bir güvenlik sorunu olarak ele alınmasına etkilerini sorgulamaktır. Bu bakımdan, çalışma ilk olarak, disiplin içerisinde 1980'li yıllarda yaşanan güvenlik konseptinin yeniden tanımlanmasına ilişkin tartışmalara odaklanmakta ve bu tartışmaların çevresel güvenlik kavramının oluşmasındaki etkilerini gözden geçirmektedir. Sonrasında, çevre ve güvenlik arasındaki ilişki üzerine farklılaşan yorumlamaların karşılaştırmalı bir analizini sunarak, kavramın anlamı üzerine süregelen muğlaklığı incelemektedir. Üçüncü bölümde ise, bu teorik sorgulamanın, iklim değişikliğinin uluslararası politik ajandada bir güvenlik sorunu olarak ele alınması açısından önemini tartışmaktadır.

Anahtar Kelimeler: *Çevresel Güvenlik, Ekolojik Güvenlik, Güvenlik Çalışmaları, İklim Değişikliği İnsani Güvenlik.*

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1. Introduction

The relationship between the environment and security is an area of research that has been part of security studies relatively for a long time and attracted wide attention both from scholars and policymakers. With the emergence of several environmental problems since the 1950s[1], which are inherently transnational and which threatens the security of individuals, the link between environment and security became an essential area of research within the security studies literature. Early discussions during this period had occurred without referring explicitly to the term "environmental security." With the broadening agenda of security studies in the 1980s, the term "environmental security" emerged as an oft-used concept in both academic and political spheres. However, the newly founded concept of "environmental security" stands as a controversial and ambiguous concept, because of the diverging perspectives over its meaning. While some scholars are entirely neglecting the place of environmental threats within security studies, some others pay the utmost attention to them as an underlying source of vulnerabilities. While some are focusing on the importance of natural resources for the security of states, others emphasize the safety of individuals in the face of environmental problems and natural disasters. Therefore, there is no consensus on the relevance of environmental issues in the agenda of security studies, neither on its interpretation as a security threat.

This paper aims to investigate the emergence of the "environmental security" concept, changes within its interpretations over time, and its different meanings up to date. It will help us to understand how the environmental issues have challenged the traditional concept of security and how diverse perspectives within the International Relations (IR) discipline attempted to construct an understanding of the relationship between security and the environment. Moreover, the study aims to examine the relevance of this theoretical debate for the framing of climate change as a security issue within the international political agenda. In this regard, it argues that different interpretations of the environmental security concept enable different ways of comprehending the climate change – security relationship, which in turn has implications for the means and ends of the global climate change action. Thereby, this study is arranged as follows. The first part, it starts briefly by investigating the

[1] To cite some of them; 1952 London's Killer Fog, 1956 Minamata Disease Disaster, 1976 Milan Seveso Disaster, 1984 Bhopal Gas Leak, 1986 Tcherynoble Nuclear Plant Explosion, 1989 Alaska Crude Oil Spill.

phenomenon of *widening* and *deepening* in the research agenda of security studies in the 1980s, primarily focusing on the introduction of the environment as a new security dimension. This part will allow us to examine how environmental problems necessitated a new conceptualization of security, beyond conventional thinking and understand the historical background of the environmental security concept. Then in the second part, the study focuses on the theoretical debates about the environmental security concept within the academic literature. In this respect, it aims to reveal diverging interpretations of the concept according to the different perspectives within the discipline. Finally, in the third part, the study discusses how these different interpretations of the concept interact with the framing of the climate change – security relationship. Overall, the study aims to analyze the relationship between environment and security and to observe the change related to the concept of security since the 1980s under the impacts of growing environmental challenges in world politics. Moreover, it will reveal the different aspects of the environmental security concept for a better understanding of shifting discourses on climate change – security relationship in the international political agenda. In this way, it presents a descriptive analysis of the environmental security concept and argues for its significance in the recent climate security debates.

2. Emergence of the Environmental Security Concept

The traditional concept of security, which stems from the realist perspective within the IR discipline, focuses on the security of the states, and primarily on military threats against them. During most of the Cold War, this was the dominant paradigm within the security studies, and researches were focused on issues around control, threat, and use of force. As states are primary users and targets of the force, this approach is inherently state-centric, and the field of security studies explored related subjects such as arms control, nuclear deterrence, military capacity. Nevertheless, in the 1970s and 1980s, due to the multiplication of transnational problems such as economic crises, environmental disasters, and health hazards, scholars within security studies have begun to challenge this traditional perspective of security studies. The conventional military–state–centric security approach, has been criticized and challenged by a post-realist security scholarship that seeks to widen the agenda to include non-military risks and deepen the scope to include different referent objects rather

than states.[2] The introduction of environmental problems as a new security dimension and the emergence of the environmental security concept are closely related to these debates within the security studies discipline. Moreover, those debates have originated diverging security perspectives that approach environment – security relationship in different manners; they differ, especially on the questions of the referent object, the nature of the threat, levels of analysis for understanding the relationship. Therefore, in this first part, we will try to analyze the introduction of the environment as a new security dimension into the agenda of security studies regarding those emerging non-traditional security perspectives.

Environmental issues have initially been introduced into the academic literature of security studies in the 1970s.We can argue that authors such as Richard Falk (1971) and Lester Brown (1977) are among the first ones to question the link between environment and security in this respect. Richard Falk's *This Endangered Planet: Prospects and Proposals for Human Survival*,[3] was one of the first comprehensive attempts to display the relationship between environment and security that laid the foundation for later works to redefine security in the context of environmental degradation. A few years later, Lester R. Brown, American environmentalist and founder of World Watch Institute, became one of the pioneer scholars for the inclusion of environmental issues into the security agenda. In his article titled *Redefining National Security,* published in 1977, he criticized the military-state-focused character of the traditional security understanding and argued that environmental problems should become an important part of the national security agenda. He underlines that the concern over military threats in national security thinking had become so pervasive that other threats to the security of nations, including environmental problems, had often been ignored. *"The overwhelming military approach to national security is based on the assumption that the principal threat to security comes from other nations. But security threats may now arise less from the relationship of nation to nation, but more from the relationship of man to nature."*[4] Brown, in his article, emphasizes several emerging environmental problems of the period, such as the dependency of economies on depleting resources, deterioration of the earth's principal biological systems by excessive human use, and global food insecurity. He

[2] Barry Buzan and Lene Hansen, *The Evolution of International Security Studies*, (New York: Cambridge University Press, 2009), 188.
[3] Richard Falk, *This Endangered Planet: Prospects and Proposals for Human Survival*, (New York: Random House, 1971).
[4] Lester R. Brown, "Redefining National Security," *World Watch Institute, World Watch Paper,* no.14 (1977): 4.

indicates that with the expansion of the world's population and intensification of economic activities, the "capacity of charge" of the world's biological systems is being ignored and outstretched.[5] For Brown, this should become a common security concern for all states because it can put national interests in conflict and cause disputes among nations; hence efforts to preserve the environment should be developed to ensure national and international security.[6] He emphasizes that these environmental problems can underpin political, social, and economic conditions in the world, thus have strategic importance for national security as well. Therefore, we can argue that he proposes a broader understanding of security that should include environmental factors as threats to national, international, and global security. In this regard, he is an early pioneer for the environmental security concept that underlines the relationship between environmental problems and traditional threats to the security of states. He was followed by others who recognized the need not only to broaden the boundaries of national security thinking but to address environmental concerns in these deliberations. In this respect, another initial scholarly contribution to identify environmental threats as a part of the security agenda came from Richard Ullman in his article *Redefining Security*, published in the International Security journal in 1983. Ullman argues that *"the assumption that is defining national security merely (or even primarily) in military terms conveys a profoundly false image of reality,"* and he examines the question of *"security versus what?"* to be able to offer a redefinition.[7] He criticizes the realist military-state-focused Hobbesian perspective over security. He argues that a threat to national security should be identified as *an action or sequence of events that threatens drastically and over a relatively brief span of time to degrade the quality of life for the inhabitants of a state.*[8] Therefore, he emphasizes natural disasters as direct threats to US security. He also underlines that threat posed to the capacity of the world by growing population and overuse of resources as an indirect threat to US national security, which should be assessed carefully. In this regard, he emphasizes the growing environmental problems, such as droughts, floods, natural disasters, which in turn can create an indirect threat for the US national security via migration, social instability, competition, and conflict over resources. We can argue that his study is also essential by

[5] Ibid., 18.
[6] Ibid., 19.
[7] Richard H. Ullman, "Redefining Security", *International Security* 8, no. 1 (1983): 129.
[8] Ibid., 133.

creating two linkages that are crucial for the environmental security concept: environment-development and environment-conflict linkages. A few years later, similar points were also emphasized by Jessica Matthews in an article with the same title, published in *Foreign Affairs.*[9] Barry Buzan, a well-known scholar within the discipline, is also amongst one of the pioneers that established a linkage between environment and security back in the 1980s. He pointed out that the concept of security is *"too narrowly based*" and argued for *"broadening the concept"* to include diverse problems, including environmental ones.[10] His goal was to offer a broader security framework to include new dimensions that were not previously part of the security puzzle and to extend the scope of security studies to different levels of analysis, such as individual, state, regional, and international. This view to include individuals as a part of the state's physical base has led Buzan to describe new threats aside from military threats to national security. He classified these non-traditional threats into five categories; military, political, economic, social, and ecological.[11] For this paper, we focus on the ecological sector defined by Buzan, which is aiming to create a link between security and the environment. According to Buzan:*" ecological threats have traditionally considered as natural and therefore not part of national security concerns. Earthquakes, storms, plagues, floods, droughts, and such-like might inflict war-scale damage on a state, as in Bangladesh in 1970, but these were seen as part of the struggle of man against nature, and not in terms of competition among men."*[12] In this regard, he emphasizes that as the scale, diversity, and pace of human activity increase, environmental events induced by these activities became critical threats to the security of citizens within a state and therefore, should be included in the national security understanding. Moreover, he draws attention to the transnational nature of the environmental threats and underlines some of them as global threats such as greenhouse gas (GHG) effects (climate change) that should be a concern of all nations. We can argue that Buzan, even in his first works, attempted to reveal the relationship between environment and security, thus contributed to the emergence of the environmental security concept. In this regard, later works of the so-called Copenhagen School of Security Studies also hold crucial importance for this redefinition of the concept of security to include non-military sources of

[9] Jessica T. Mathews, "Redefining Security", *Foreign Affairs* 68, no.2 (1989): 162-177.
[10] Barry Buzan, *People, States, and Fear: The National Security Problem in International Relations,* (Brighton: Harvester Press Group, 1983), 9-10.
[11] Buzan, *People, States, and Fear*, 75.
[12] Ibid., 82.

threats to widen the scope of the research. The well-known book of Buzan, Waever, and de Wilde, *Security: A New Framework for Analysis* published in 1998, still stands as one of the most comprehensive contributions for this "widening" phenomenon within security studies.[13] In this book, authors have coherently developed an understanding of the security concept through five sectors or five different sources of threats – military, political, social, environmental, economic-based on their previous works and related debates within the academic literature since the 1970s, such as different levels of analysis, intersubjectivity, and securitization. In this book, they also refer to another important debate around the environmental security concept, which is related to the referent object of security. They argued that the range of possible referent objects is extensive for the environmental sector, which enables different conceptualizations and causes fluctuations in environmental threat perceptions.[14] In this regard, we can argue that these authors have underlined the difficulty of a coherent conceptualization for environmental security, and they are skeptical of too broadened understandings of the environment – security relationship.

We can note that these earlier contributions focused on widening the concept of security by including new threats such as environment to national security thinking. Although these researchers have emphasized the importance of introducing different levels of analysis, we can argue that their point of view stayed somehow related to the state-centric perspective. They mostly linked environmental factors to traditional notions of security, such as intra or inter-state conflicts, competition among states over resources, the environmental vulnerability of state capacity. Thierry Balzacq, notes that this "old camp" is one of those who agree on the relevance of a connection between environment and national security but do not differ in the object of security, adhering to a relatively traditional perspective on the idea of state security matters.[15] On the other hand, in the late 1980s, some researchers felt the need to move beyond the centrality of state for a more comprehensive definition of security. These new contestations to traditional security understanding, often emphasize the importance of levels of analysis below and above state level to offer a more in-depth scope for security studies. Notably, the so-called Welsh School of Critical Security Studies argued that the individual

[13] Barry Buzan, Ole Waever and Jaap de Wilde, *Security: A New Framework for Analysis*, (London: Lynne Rienner Publishers, 1998).
[14] Ibid.., 71.
[15]Thiery Balzacq, "Qu'est-ce que La SécuritéNationale?", *Revue Internationale et Strategique*, no.52 (2003): 41.

level should be the focus of security concern and that the well-being of the individuals is the very essence of the security issue. At this point, the concept of emancipation, developed by Ken Booth and other scholars associated with this school, plays an essential role in the understanding of environmental security based on individual well-being. For Booth, security is defined as *the absence of threats,* referent objects of security should be individuals rather than states. He argues that states should be means for freeing people (individuals and groups) from their constraints, or basically for emancipation.[16] They emphasized the need to discuss the relationship between environment and security with a focus on the well-being of individuals or populations. In this respect, scholars who argued for the deepening of the concept of security questioned the centrality of the state in security studies and proposed a transition between traditional security concerns and individual security concerns. Among the multiple contributors to this phenomenon, we can cite authors such as Ken Booth, Norman Myers, and Simon Dalby, who focused on the relationship between the environment and the security of individuals. These scholars have advocated for a new understanding of the environmental security concept, with a focus on the impacts of environmental degradation on individual and global vulnerabilities. They argue that an environmental factor poses threats to the ecosystems and to human well-being that transcends the interests of states and national security concepts. This perspective led to the emergence of a new reflection on the concept of security, which goes beyond national thinking and which is expressed by the authors through various notions such as *comprehensive security, common security, human security, ultimate security.*[17] These interpretations, which move away from the concept of national security, proposed a new perspective on the relationship between security and the environment that focuses on the humanitarian aspects.

Especially the literature emerging under the umbrella label of Critical Security Studies (CSS), is crucial for this change within the environmental security understanding. Ken Booth, one of the pioneers of this perspective, underlines that the traditional concept of security has

[16] Ken Booth, "Security and Emancipation", *Review of International Studies* 17, no. 4 (1991): 310.
[17] See: Arthur H. Westing, "The Environmental Component of Comprehensive Security", *Bulletin of Peace Proposals* 20, no. 2 (1989): 129-134; Norman Myers, *Ultimate Security: The Environmental Basis of Political Stability*, (New York: W. W. Norton & Company, 1993); Simon Dalby, *Environmental Security*, (Minnesota: University Of Minnesota Press, 2002); Ken Booth, *Theory of World Security*, (Cambridge: Cambridge University Press, 2007); Richard Matthew et al. (ed.), *Global Environmental Change and Human Security*, (Massachusetts: The MIT Press, 2009).

already experienced growing discomfort during the 1980s, which expressed itself in a frequent call for the "widening" of the concept. He argues that the traditional perspective does not guarantee common and stable security. As the traditional perspective seeks the security of the state by privileging the power, it can never form real security, because it implies insecurity for all the others.*"The trouble with privileging power and order is that they are at somebody else's expense (and are therefore potentially unstable)."*[18] According to Booth, "*emancipation, freeing of people from physical and human constraints which stop carrying out what they would freely choose to do*," should replace the centrality of power and order in our security thinking.[19]Taking individual humans as the primary referent object for security thinking, he asserts that poverty, poor education, political oppression, environmental issues appear as much more constraining threats than wars.[20] Therefore, Booth proposes a security concept that must include global vulnerabilities, including environmental degradation. Although he doesn't refer directly to the environmental security concept in his works, we can argue that his views on the centrality of individuals in security thinking had considerable influence on the emerging concept of environmental security. Simon Dalby, for example, affirms that Booth's attempt to reformulate the concept of security is a significant turning point for reflection on environmental security.[21] Dalby, an Irish scholar who has published extensively on the relationship between environment and security, has been sharply critical towards the state-centrism of security studies during the previous decades. He criticizes the attempts to redefine security during the Cold War period for remaining in state-centric perspectives. He emphasizes that the inclusion of the environment into the field of security studies was firmly related to geopolitical views at that time and guarded the state as the central referent object to understand security.[22] He argues that the concept of security broadened by these authors in the 1980s has not really changed the privilege of states in the field and still does not include many social and environmental threats towards individuals. For Dalby, "*security needs to encompass the interests of people, rather than just states, in gaining access to food, shelter, basic human rights, health care, and the environmental conditions*

[18] Ken Booth, "Security and Emancipation," 310.
[19] Ibid., 319.
[20] Ibid., 318.
[21] Simon Dalby, "Security, Modernity, Ecology: The Dilemmas of Post-Cold War Security Discourse", *Alternatives: Global, Local, Political* 17, no. 1 (1992): 119.
[22] Ibid., 103.

that allow these things to be provided into the long-term future."[23] In this respect, Dalby argues for a reconceptualization of security that will focus on the well-being of individuals. In his view, the concept of environmental security must be redefined to focus on the insecurities of the most vulnerable individuals, such as access to food and water, environmental degradation, and pollution caused by the economic activities of others. He also argues that environmental security thinking cannot be limited to the borders or citizens of a state. Security is not common when the resources of citizens of a state are brought elsewhere, degrading the environment and the livelihood of people living in the country of origin. Therefore, Dalby defends a global understanding of the environmental security concept that will focus on the vulnerabilities of people in various parts of the world. Moreover, he advocates for an intergenerational understanding by stressing that environmental security must ensure that today's economic activities should not leave security problems for future generations.[24] He argues that the concept of environmental security should also encompass ecological durability. In a sense, Dalby offers a new way of thinking about the connection between security and the environment through these ideas. He advocates not only a deepened understanding that will encompass the security of vulnerable populations but also an interest in maintaining global ecosystems for future generations. Norman Myers, a British ecologist, and scholar, in his book *Ultimate Security: The Environmental Basis of Political Stability*, published in 1993, develops a similar idea. Myers argues clearly that human well-being must be at the center of the concept of environmental security because he asserts that what is threatened is not an abstraction like the state but individuals.

> *"Security applies most to the level of the individual citizen. This corresponds to human well-being: therefore, security means not only protection against damage and injury but also access to food, water, shelter, health, employment, and other basic needs that are due to every person on earth. It is the sum of these needs that should figure prominently in the vision of security […]The whole community of nations, indeed the whole of humanity, must enjoy security in the form of acceptable environments, environmental goods such as water and food, as well as an atmosphere and a stable climate".*[25]

From this perspective, we can argue that Myers advocates for a global understanding of environmental security that will consider humanity as the primary object to be secured. He

[23] Simon Dalby, "Security, Modernity, Ecology," 117.
[24] Ibid., 117
[25]Norman Myers, *Ultimate Security: The Environmental Basis of Political Stability*, (New York: W. W. Norton Press, 1993), 31.

mainly emphasizes that environmental problems such as climate change do not have geographic boundaries and that the *World is environmentally independent*.[26] So, when we think about environmental security, we should consider all humanity. He also examined the relationship between climate change and security in his subsequent works. He describes this relationship as a *common security* problem to which all nations contribute, by which all will be affected and against which no government can deploy effective measures on its initiative.[27] Therefore, according to Myers, climate change and related environmental problems should be considered as human security problems and cannot be limited to the national vision of security. Myers has played an essential role in recognizing the importance of a view that includes global vulnerabilities in the environmental security concept. At this point, we must also distinguish the eco-centric perspective, which focuses on the security of the environment itself, in the face of the systematic destruction of ecosystems by human activities. We can argue that Dalby's idea based on ecological durability takes the global ecosystem and its subsystems as the central referent object to be secured and reveal the human responsibility for their preservation. In his later works, he further developed this perspective, which is influenced by the deep ecology movement.[28] He criticizes anthropocentric views towards the environment and advocates for a shift to *ecological security* thinking, which will focus on the preservation of ecosystems from environmental security thinking.[29]

Later works, which have analyzed these developments within the security studies throughout the 1980s and 1990s, divided these challenges to traditional security understanding into two sub-categories: "wideners" and "deepeners." The first category of studies - wideners - enabled the introduction of new sources of threats to the understanding of security with their pioneer works. They argued for a widened concept of security to include non-military types of threats, such as environmental, economic, and social threats but kept the state as both the referent object and the provider of security. While the second category -

[26]Ibid., 32.
[27]Norman Myers, "Environmental Security: What is New and Different?", *The Hague Conference on Environment, Security and Sustainable Development*, (Hague, 2002).
[28]Deep ecology is the environmental philosophy and social movement based on the belief that humans must radically change their relationship to nature from one that values nature solely for its usefulness to human beings to one that recognizes that nature has an inherent value. Encyclopedia Brittanica, https://www.britannica.com/topic/deep-ecology.
[29] Simon Dalby, "Ecology, Security, and Change in the Anthropocene", *Brown Journal of World Affairs* 13, no. 2 (2007): 159.

deepeners - focused on different referent objects to be secured and proposed new analytical frameworks through which security can be analyzed. Instead of taking states as the primary referent object, this perspective enabled a more comprehensive agenda to tackle diverse threats towards individuals or global commons. The table below visualizes this difference between the two categories of studies. It reveals the change that occurred within the security studies in the 1980s and 1990s by the introduction of new threats and levels of analysis. For example, investigating different conceptualizations of security, Liotta concludes to a similar table, arguing that through the 1990s traditional concept of security is broadened and deepened.[30] Moreover, Liotta argues that while the environmental sector has an essential influence on all referent objects mentioned on the table, for national security thinking, it is mostly overlooked because of the state-centric perspective.[31]In this regard, we can argue that the interaction of the environment with different referent objects of security became an important debate for the research agenda because it enables different conceptualizations of environmental security.

Table 1: Widening and Deepening of Security Concept[32]

Referent Object (Deepening)	**Security Sectors (Widening)**				
	Military	Political	Economic	Social	Environmental
National / State	Traditional Perspective	➔ **Widening**			
Global	↓ **Deepening**				
International					
Regional					
Individual					

In sum, we can say that these researchers emphasized the need to rethink the concept of security to encompass individual vulnerabilities in the face of environmental threats. They advocated for a much-broadened content for security than the one that the ax of wideners proposes. The traditional security concept, which solely focuses on military threats against states, was first challenged by wideners to include non-military risks, such as the

[30] Peter H. Liotta, "Boomerang Effect: The Convergence of National and Human Security", *Security Dialogue* 33, no. 4 (2002): 478.
[31] Ibid., 479.
[32]Thiery Balzacq, "Qu'est-ce que," 43.

environment, then challenged by deepeners to include different referent objects than states. With the widening axis, the environment gets involved in the field of security, regarding its relationship with state power. Then, with the axis of deepening, the relationship between environment and security was questioned through different levels of analysis, such as individual or global ecosystem. Therefore, not one but various interpretations on the relationship between environment and security have appeared over time. In this respect, although the environmental security concept is widely used and debated in academic literature since the 1990s, we can observe that there is no consensus on its definition. These differences in the definition and significance of the concept, have been emphasized by various scholars during 1990 and they have categorized different interpretations of the concept in their studies. In the second part, we will try to distinguish different aspects or different interpretations of environmental security, through examination of these studies. This will enable us to discuss different framings of climate change as a security issue within the international political agenda, within the last part of the study.

3. Various Aspects of Environmental Security Concept

In the 1990s, environmental security became an important research area in security studies, drew public and media attention, and grew into an essential subject of the expanding international environmental governance through the United Nations. In this respect, the well-known report of the World Commission on Environment and Development, *Our Common Future*,[33] marks the first entry of the concept into the international agenda.[34] However, assessment of the environment as a security issue took different shapes under the influence of various points of view within the field of IR. It seems that there is no consensus even on most basic questions, such as "what qualifies as an environmental threat", among researchers or policymakers. However, they often use similar terms to describe different events or problems. Researchers have discussed various aspects, different security implications of environmental issues, and have directed attention towards varying levels of analysis discussed above. Some of them considered environmental issues as the most critical security challenge of the 21st century for humanity, while some simply focused on the geopolitical outcomes for national

[33] World Commission on Environment and Development, *Our Common Future*, (Oxford: Oxford University Press, 1987).
[34] Maria Julia Trombetta, "Environmental Security and Climate Change: Analyzing the Discourse", *Cambridge Review of International Affairs* 21, no.4 (2008): 585.

security and international order. Some underlined the preservation of ecosystems as the primary objective while others questioned the designation of the environment as a security issue. Therefore, the concept of environmental security covers a broad question, ranging from ecological consequences of human activities to the effects of environmental degradation on social well-being or its indirect implications on the self-sufficiency of states. In this part, we will attempt to understand these different interpretations of the concept, by analyzing the works of researchers who have tried to reveal different approaches towards it. In conclusion, we will try to regroup these various aspects under the main theoretical perspectives within security studies.

Different interpretations that the concept of environmental security has been analyzed very clearly by a Norwegian researcher, Carsten F. Ronnfeldt. Ronfeldt argues that the concept of environmental security has changed through three stages and proposes a clear division of the concept into three-generation that allows us to follow the prevailing trends of researches. According to Ronfeldt, the works in the 1980s focused on two main problems; the competition between states around resource shortages and cross-border environmental problems that causes international disputes between states.[35]This first-generation, argues Ronnfeldt, consists of an interdisciplinary debate in the academic and political community on whether and how environmental issues should be integrated into national security concerns. Marc Levy also identifies a similar first generation of environmental security research. He points out that although some authors have produced convincing arguments on the direct physical link between resource shortages and national security, they did not support these arguments by rigorous analyzes. Thus the results of this first generation's works remained a conceptual debate within the academic sphere.[36] Thomas-Homer Dixon criticized this first wave of research as being anecdotal and lacking empirical analysis to generate reliable analytical conclusions or policy outcomes.[37] His works with the Toronto University Research group during the 1990s tackled this empirical analysis gap and became one of the pioneers of the second generation of environmental security research. This second-generation, which has

[35] Carsten F. Ronnfeldt, "Three Generations of Environmental Security Research*", Journal of Peace Research* 34, no. 4 (1997): 474.
[36] Marc Levy, "Time for a Third Wave of Environment and Security Scholarship?", *Environmental Change and Security Project Report*, Woodrow Wilson Center, no. 1 (1995): 44.
[37] Thomas Homer Dixon, "On the Threshold: Environmental Changes as Causes of Acute Conflict," *International Security* 16. no. 2 (1991): 76-116.

emerged in the early 1990s, focused on empirical research to determine whether the environmental problems could affect national security and international order via triggering violent conflicts. This generation has responded to the critics towards the first generation about their lack of scientific evidence, by limiting the scope of research to the environmental conflict area.[38] Homer-Dixon has developed and combined ideas about the relationship between resource scarcity and violent conflict by analyzing a series of case studies since the 1950s. Moreover, the model and the database developed by this research group gained notable attention and influenced various other works in the upcoming decades. This environmental stress – violent conflict linkage was popularized by Robert Kaplan's famous "The Coming Anarchy" article published in 1994, presenting an alarmist scenario in which environmental problems trigger violent conflicts and wars.[39] Levy also pointed out the importance of this second generation, which has proposed a better analytical framework than the first by exploring the links between environmental stress and violent conflict from case studies.[40] Lastly, Ronnfeldt underlines that since the late-1990s, the third generation of research has emerged intending to criticize the state-centric approach of previous works and to promote a more human-centric approach to analyze environmental security.[41] According to Ronnfeldt, this third generation is characterized by the deepening phenomenon of the concept of security. It aims to include human vulnerabilities and the search for a theoretical framework that allows the analysis of human-environment relations. The third generation of environmental security research, with its focus on the humanitarian aspects, requires a global understanding of security and encourages the resolution of ecological crises and problems through international cooperation, in particular through international regimes.[42] In these regards, we can say that this third generation is widely influenced by the works of Ken Booth cited in the first part of this study. Ronnfeldt himself also advocates that the concept of environmental security should be interpreted with a human security perspective and position himself within this third wave of research.

[38] Ronnfeldt, "Three Generations," 475.
[39] Robert Kaplan, "The Coming Anarchy", *Atlantic Monthly* 273, no.2 (1994): 58.
[40] Marc Levy, "Time for a Third Wave of Environment and Security Scholarship," 44.
[41] Ronnfeldt, "Three Generations," 477.
[42] Ibid., 479.

Table 2: Generations of Environmental Security Research[43]

	Perspective	Level of Analysis	Subject Matter
1st generation (1980 - >	State-centric	National	Resource–State Power
2nd generation (1990 - >	State-centric	National&International	Resource scarcity–violent conflict
3rd generation(Mid-1990 - >	Human-centric	Global & Individual	Human vulnerabilities

Branden R. Allenby, an American environmentalist scholar, also proposes a division between different interpretations within environmental security scholarship. For Allenby, environmental issues intersect with security on various levels, from national security level to non-human biological security level.[44] For Allenby, during most of the Cold War main focus was the intersection of environmental issues with the national security problems, and policy-makers were ignoring other intersection levels. He argues that states should focus on other dimensions of environmental security, such as human or biological security, to enhance the well-being of individuals and global security.[45] In this regard, he also questions the uncertainty over the environmental security concept.[46] In his later works, he stresses the importance of differentiating between the global perspective that is concerned with human security or biological security and the national perspective that emphasizes the interest of states in the face of environmental problems.[47] He argues that environmental problems enter the area of both perspectives by its different dimensions and describes four components of the concept of environmental security: resource security, energy security, environmental security, and bio-security.[48] By the category of resource security, he means competition for scarce resources at the local or regional level and the risk of political or military conflicts between states around this competition. The category of energy security involves identifying and maintaining access to energy sources that are necessary for states in the pursuit of economic and military activity. The environmental security component links traditional security thinking with intense environmental disruption in a locality or a region which can create

[43] Ibid., 474.
[44]Branden Allenby, "Environmental Dimensions of National Security", In *Environmental Threats and National Security*, eds. B. R. Allenby, T.J. Gilmartin, and R. F. Lehman, (California: Lawrence Livermore National Laboratory, 1998) 46.
[45] Allenby, "Environmental Dimensions of," 46.
[46] Ibid., 50.
[47]Braden Allenby, "Environmental Security: Concept and Implementation", *International Political Science Review* 21, no. 1 (2000): 17.
[48] Ibid., 15.

problems for national security through large-scale migration or violent conflict. Finally, the biosecurity component refers to maintaining the stability of biological systems whose disruption would create human vulnerabilities. For the biosecurity component, he emphasizes the fact that disruption of the global environment through social-economic activities can create human vulnerabilities across the world and should be a significant concern in the global security agenda. For Allenby, understanding the disruption of biological systems as a global security problem provides an opportunity to develop international mitigation mechanisms that can help ensure ecosystem stability. Moreover, he argues that the aim should be transforming the environmental security concept into operational development programs and projects.[49] So, he also supports establishing a secure link between environmental issues and the concept of development and proposes a broadened conception of security that will include in its definition the global dimension of environmental problems concerning the concept of development. This linkage between development and environmental security derives from a human security approach, which holds a people-centered perspective in dealing with various issues that threaten individuals' well-being. Table 3, enables us to sum up Allenby's categorization on the dimensions of environmental security through different levels of analysis and subject matters to be studied from different perspectives.

Table 3: Dimensions of Environmental Security[50]

	Perspective	**Level of Analysis**	**Subject Matter**
Resource Security	State-centric	National &Regional	Competition over Resources
Energy Security	State-centric	National	Resource – State Power Relation
Traditional Security	State-centric	National & International	Resource – Conflict & Migration Relation
Biologic Security	Human-centric & Eco-centric	Global & Individual	Human Vulnerabilities & Ecosystem Sustainability

Lastly, we can also cite the classification of Jon Barnett, an Australian scholar working on the impacts of climate change on international security, with a focus on human insecurities, and who is also a lead author of the *IPCC Fifth Assessment Report* in 2013. Barnett argues that the concept of the environmental security is treated as a framework

[49] Ibid., 18.
[50] Allenby, "Environmental Security: Concept and Implementation", 15.

concept that covers extensive questioning about the relationship between the environment and security. He proposes a conceptual and theoretical delineation of the concept. He underlines six different interpretations of the concept: ecological security, human security, common security, environmental violence, national security, and green defense.[51] According to Barnett, ecological security and human security interpretations of the environmental security concept challenges the traditional perspective of security studies. Because, most basically they offer different objects to secure rather than the state, therefore urge for a widened and deepened security perspective. In contrast, all other descriptions remain in the state-centric point of view. In this respect, he asserts that interpretations of the relation between environment and security simplified less than three angles; ecological security, human security, and national security. Barnett underlines that environmental security has traditionally been defined in terms of threats to national security that flow directly (resource competition, resource-to-power relation) or indirectly (violent conflict, large-scale migration) from environmental problems. He sharply criticizes this traditional discourse of the concept of environmental security, which conceals both the causes and consequences of environmental degradation and its impacts on human security.[52] He advocates for an alternative perspective of conceptualizing environmental security based on a human-centered approach that aims to meet the security needs of populations. For him, the traditional approach is struggling to identify the security needs of the 21st century. He, therefore, proposes to define environmental security through how the degradation of the environment threatens the security of individuals.[53] Moreover, he asserts that environmental insecurities are the product of structural inequalities in economic development that are becoming a social problem amplified by globalization and consumption patterns. The main reason for the environmental problems experienced in underdeveloped countries is the economic activities of the developed countries. Therefore developed countries are responsible for forming an environmental security discourse based on the human security perspective.[54] Barnett argues that only by identifying environmental change as a human security issue, vulnerabilities of individuals and

[51] Jon Barnett, *The Meaning of Environmental Security: Ecological Politics and Policy in the New Security Era*, (London: Zed Books Press, 2001), 184.
[52] Ibid., 187.
[53] Jon Barnett, "Security and Climate Change", *Tyndall Center for Climate Change Research, Working Paper no.7* (2001): 11.
[54] Barnett, "The Meaning of Environmental Security" 189.

human populations can be addressed. In other words, for Barnett, human security should be the primary framework for examining the relationship between security and the environment.

Table 4: Different Interpretations of Environmental Security[55]

	Perspective	**Level of Analysis**	**Subject Matter**
National Security	State-centric	National & International	resource–power, conflict, migration,
Human Security	Human-centric	Individual	Human Vulnerabilities
Ecological Security	Eco-centric	Global	Ecosystem preservation

Various works have analyzed the relationship between environment and security since the 1980s, and different aspects were highlighted through diverging perspectives. When we examine carefully, we notice that the concept of environmental security has been generally dealt with through three different perspectives within the academic literature: traditional/national security, human security, and ecological security. The traditional/national security perspective is a state-centric view, which can easily be associated with the viewpoint of conventional IR theories to security, such as realism and neorealism. This perspective focuses on the impacts of environmental issues on national security and international order. Therefore, it interprets the environmental security concept through themes such as competition for resources between states, the relation between state power and resource possession, violent conflicts, and large-scale migrations. The human security perspective focuses on the impacts of environmental degradation on human populations and individuals. It aims to reveal and prevent environmental threats and constraints to individuals' life and well-being. Therefore, it is associated with the Critical Security Studies perspective and its emancipatory objectives. It interprets the concept through vulnerabilities of human populations, such as food security, water security, livelihood security, and calls for global action to prevent these constraints on individual security. Lastly, the ecological security perspective reverses the thinking direction and focuses on the impacts of human activities on the ecosystems and their natural balance. In other words, this perspective highlights an eco-centric vision and takes ecosystems as its main referent object to be secured. Preservation of the environment is the main objective in the face of increasing perturbation caused by human activities, thus proposes a radical change in the human-nature relationship. It aims to promote

[55] Ibid., 189.

the sustainability and durability of world ecosystems for the future. In sum, we can argue that these three perspectives evaluate the relationship between environment and security via different subject matters and levels of analysis.

Overall, we can argue that these developments within the security studies since the 1980s have two underlying concerns that drive research on the relationship between environment and security and gave rise to different interpretations of environmental security concerns. The evident concern was the multiplication of environmental problems – and other security problems that rest beyond traditional security thinking - since the 1970s. This has enabled a perspective that environmental threats should be in consideration of states, notably for traditional security perspective. Today, we can argue that this general point is more or less accepted by all scholars and policymakers. Another concern was to demonstrate that the realist state-military-focused perspective on security studies, is not well equipped to address these new security problems, and therefore there is a need for a widened and deepened security understanding. This was a normative concern to shift the focus on the objects to be secured, and arguably not shared neither among scholars nor among policymakers. Therefore, we encounter different conceptualizations of environmental security, arguably corresponding to different International Relations theories such as neorealism for the traditional approach, neoliberalism for the human security approach, and green theory for the ecological security approach. In this respect, we can admit that the large-scale environmental problems, such as climate change, enabled the emergence of different visions around the referent object to be secured and challenged the conventional security thinking more eloquently. These different visions stand for different interpretations of the environmental security concept. In the last part of the study, we will try to investigate different framings of climate change as a security issue and demonstrate the roots of these framings within the environmental security debates.

4. Environmental Security to Climate Security

Since the last decade of the 20th century, climate change has been widely accepted as one of the most severe environmental problems that our planet faces. Accordingly, the debates on the environmental security concept have been transformed mostly into questions about the relationship between climate change and security, especially since the 2000s. In this respect, we can argue that debates on the link between climate change and security, have their roots in wider discussions about environmental security. However, we can observe that climate

change has been framed as a security issue on the international political agenda, mainly through two different perspectives on environmental security that we have mentioned in the previous part of the study; human security and traditional security. On the other hand, we can argue that the third perspective, the ecological security perspective, is only echoed by environmentalist NGOs and activists, but not reflected much within the national or international policy discussions on climate security linkage. Accordingly, we can observe that while the first two perspectives we mentioned above had practical implications on the international political agenda and resulted in some policy initiatives, the third one stayed relatively as a radical philosophical movement echoed solely in the ecological conferences. In this last part, tracing the reflections on policy documents and international discussions, we will first try to demonstrate these two different framings of climate change as a security issue within international politics. Then we will briefly examine the scholarly debates on the securitization of climate change by two diverging perspectives and lastly, we will try to examine possible contributions of an ecological security perspective for this debate.

We can argue that climate change first appeared on the international political agenda primarily as a development issue under the human security perspective. Especially, in the 1990s, throughout the United Nations (UN) climate regime, climate change was framed as an emerging human security concern due to its livelihood impacts on human populations, such as food security, access to clean water, desertification, natural disasters, and so forth. Consequently, the human security perspective led discussions to be carried out mainly around the sustainable development concept. This perspective was readily observable in the discourse of founding texts of the UN climate regime, such as the Brundtland Report and the UN Framework Convention for Climate Change (UNFCCC). Brundtland's report argued that *"the whole notion of security as traditionally understood in terms of political and military threats to national sovereignty - must be expanded to include the growing impacts of environmental stress - locally, nationally, regionally, and globally. There are no military solutions to 'environmental insecurity"*.[56]It has emphasized the 'sustainable development' concept as the main solution to tackle this environmental insecurity. In this respect, we can argue that this report has popularized the idea of sustainable development, but also was one of the most effective international initiatives to pave the way for the human security approach on

[56] World Commission on Environment and Development, *Our Common Future*, 24.

discussing the link between climate change and security. This perspective has also shaped published results of the 1992 Rio Conference -the UNFCC, the Rio Declaration, the Convention on Biological Diversity, and Agenda 21 -as they all emphasize the relationship between environmental insecurity and development. For example, The UNFCCC, which can be considered as the founding text of the UN climate regime, specifies that climate change "is a matter of concern for all humanity" and that "humanity risks suffering from its various impacts on ecosystems".[57]One of the main objectives of UNFCCC is *to prevent the adverse effects of climate change on human health and well-being*.[58] We can argue that this claim is totally in line with the human security perspective on the environment – security relationship. The concept of human security and its relation to climate change gained definitive recognition with the United Nations Development Program's (UNDP) Human Development Report (HDR), published in 1994. According to this report, environmental security is one of the fundamental dimensions of human security given the various threats posed to human life by environmental degradation.[59] In this regard, the main objectives of the concept of human security, such as the right to life, health, shelter, and food, are fundamentally threatened by the impacts of climate change.[60] In the publications of the United Nations Environment Program (UNEP) as well, human vulnerability to the impacts of climate change has been highlighted in detail. For example, in the second publication of the Global Environment Outlook (GEO) report, UNEP considered climate change to be the most severe human security issue of the 21st century, especially in terms of its interactions with other environmental problems.[61] UNEP has reserved an entire chapter for assessing the impacts of climate change on vulnerable human populations in the third edition of the GEO report.[62] In a similar vein, Commission on Human Security (CHS), established in 2001, in its first published report (2003), underlined that the impacts of climate change pose serious threats to

[57] United Nations, *United Nations Framework Convention on Climate Change*, FCCC/INFORMAL/84 (1992): 2.
[58] Ibid., 4.
[59] United Nations Development Program (UNDP), *Human Development Report*, (New York: Oxford University Press, 1994): 28
[60] Ibid., 35-36
[61] United Nations Environment Program (UNEP), *Global Environmental Outlook 2* (London: Earthscan Publicatons, 1999): 13.
[62] United Nations Envirnonment Program (UNEP), *Global Environmental Outlook 3* (London: Earthscan Publications, 2002): 301-319.

the values that the concept of human security seeks to promote.[63] Arguably all these publications and policy initiatives have framed climate change first and foremost as a human security problem. From this perspective, framing climate change as a human security issue refers to human populations' vulnerabilities in face of climate change impacts such as natural disasters, food security, water security, livelihood security, etc. This perspective has enabled us to frame climate change mainly as a development issue throughout the 1990s. In this respect, we can argue that it takes support from individual emancipation-focused, human security understanding of the environment – security linkage.

However, we can observe that climate change – security nexus from a traditional security perspective has gained momentum quickly during the mid-2000s. It is noticeable that various reports and publications have started to discuss climate change as a more conventional security issue - instead of a development issue - emphasizing its knock-on impacts that threaten international security and peace. In this respect, one of the first documents to trigger the debates was a twenty-page study prepared in 2003, for United States (US) Defense Department titled "An Abrupt Climate Change Scenario and its Implications for United States National Security". This alarming report by Pentagon has leaked to the press and gained public attention as it has suggested that climate change can have a catastrophic impact, leading to violent conflicts, social unrest, and even inter-state wars due to resource constraints.[64] In 2006, the famous Stern Review, prepared for United Kingdom (UK) Government, also portrayed a similar picture emphasizing potential impacts of climate change for triggering large-scale migration and violent conflict, thus threatening national and global security.[65] In 2007, the German Advisory Council on Global Change (WGBU) also published a report regarding the possibility of violent conflict induced by climate change. The WBGU study, one of the most detailed reports on the security impacts of climate change, lists and discusses in detail the threats corresponding to both narrow and broad conceptions of security.[66] This study's main message is that climate change will strain the adaptive capacity

[63] United Nations Commission on Human Security, *Human Security Now*, (New York: UN Publications, 2003): 17.
[64] Peter Schwartz and Doug Randall, "An Abrupt Climate Change Scenario and Its Implications for United States National Security", *Global Business Network - Report* (2003): 2.
[65] Nicholas Stern, *The Economics of Climate Change: The Stern Review*, (Cambridge: Cambridge University Press, 2006).
[66] German Advisory Council on Global Change (WBGU), "World in Transition: Climate Change as a Security Risk - Summary for Policy Makers", (London: Earthscan Publications, 2007): 2.

of many societies in the decades to come, and without counter-action, it could lead to violent conflicts compromising national and international security.[67] Various American think-tanks have published similar studies on the relationship between climate change and traditional security implications around the same period. Similarly, they have emphasized that climate change can become an issue for US national security in the upcoming decades.[68] This trend has continued and accelerated in the 2010s, as we can note that climate change with this traditional security dimension has become an inseparable part of national security documents for major actors on the international scene in recent years.[69] According to an estimation, %, 70 states that have released national security strategy documents since the 2010s have identified climate change as a threat to their national security.[70] All these documents and events arguably are reflections of framing of climate change as a traditional security issue since the 2000s, by various domestic security documents and research institutions.

On the other hand, especially since 2007, the relationship between climate change and traditional security notions has gained ground within the international political agenda – especially within the UN framework -,as the issue has entered into the agenda of the UN Security Council several times.[71] In 2007, several important events have shaped discussions on framing climate change as a security issue, from a conventional perspective. In this respect, Garcia argues that *"2007 was a pivotal year for the prominence of the security dimension of the climate change debate."*[72] The first event was that the United Nations Security Council (UNSC) held its first meeting to discuss climate change's security implications. In a background paper prepared for this meeting, UK representatives have argued that climate change can threaten international peace and security through its effects on violent conflict, border disputes, migration, resource shortages, and humanitarian crises.[73] The

[67] Ibid., 6.
[68] See: Kurt M. Campbell et al., "The Age of Consequences; The Foreign Policy and National Security Implications of Global Climate Change", Center for New American Security (CNAS), Center for Strategic & International Studies, (2007); Joshua Busby, "Climate Change and National Security: An Agenda for Action", Council on Foreign Relations, *Council Special Report* no. 32, (2007); Center for Naval Analyses (CNA), The CNA Corporation, "National Security and Threat of Climate Change", (2007).
[69] For a comprehensive list, see; The Center for Climate and Security - Climate Security 101 Project, https://climatesecurity101.org/climate-security-resource-hub/.
[70] Shirley Scott, "Implications of Climate Change for the UN Security Council," *International Affairs* 91, no. 5 (2015): 1330.
[71] For a detailed study see; Shirley Scott. "Implications of Climate Change for the UN Security Council"
[72] Denise Garcia, "Warming to a Redefinition of International Security: The Consolidation of a Norm Concerning Climate Change", *International Relations* 24, no.3 (2010): 290.
[73] Nicole Detraz and Michelle Betsill, "Climate Change and Environmental Security: For Whom The Discourse

meeting has not resulted in a concrete statement, but it can be seen as an important development that climate change has entered into the agenda of the UNSC for the first time. The second major event in 2007 was the introduction of security implications of climate change into the fourth assessment report of the Intergovernmental Panel on Climate Change (IPCC). This fourth assessment report emphasized concretely the relationship between climate change and violent conflict, especially around degraded natural resources.[74]Another important event was that the publication of the UNEP report, which clearly emphasize the link between climate change impacts and violent conflict in Darfur. Most basically, the report argues that violent conflict in Darfur was influenced by climate change, and even names this conflict as the first climate war.[75] In a subsequent report, UNEP pointed out that at least eighteen violent conflicts have been fueled by the exploitation of natural resources as a result of the climate change impacts since the 1990s.[76] In 2009, the UN General Assembly adopted a resolution to "invite all UN organs, within their respective mandates, to consider the possible security implications of climate change".[77] Consequently, a report prepared by UN Secretary-General emphasized increasing vulnerabilities of human populations in face of impacts of climate change, but also highlighted threats related to security in more conventional forms, such as violent intra and inter-state conflicts, border disputes, and others.[78] In this respect, we can argue that climate change is more commonly recognized as a "threat multiplier" for international security from a traditional perspective. Similarly, Rothe also emphasizes that there is a consensus within the international political agenda that climate change is a threat multiplier for international security.[79] This second perspective, framing climate change as a national or international security issue refers to possible indirect implications of climate change to trigger international migration, intra or interstate conflicts, border and territory disputes among states. In this regard, it takes support from a state-military-focused understanding of environmental security, and it focuses on threats to nation-states and

Shift", *International Studies Perspectives* 10, no. 2 (2009): 306.
[74]Ragnhild Nordas, Nils Petter Gleditsch, "Climate Change and Conflict", *Political Geography* 26, no. 2 (2007): 630.
[75] United Nations Environment Program, "Sudan: post-conflict environmental assessment" (Nairobi: UNEP, 2007): 8.
[76] United Nations Environment Program, "From Conflict to Peacebuilding: The Role of Natural Ressources and Environment", (Nairobi: UNEP, 2009): 30.
[77] United Nations, General Assembly, Resolution A/RES/63/281.
[78] United Nations, General Secretary Report, "Climate Change and possible implications on security", A/64/350.
[79]Delf Rothe, *Securitizing Global Warming: A Climate of Complexity*, Abingdon, Routledge, 2016: 131.

international order caused by climate change. Accordingly, climate change which used to be a development issue on the international political agenda translates into a more conventional national and international security problem as well.

In recent years, various academic works have analyzed these two diverging framings of climate change as a security issue on the domestic and international political agendas. Arguably, the theoretical and normative divergence among the two discourses has some critical reflections, as they encourage different practices varying from national adaptation plans to globally oriented mitigation efforts. At this point, it is possible and might be useful to distinguish between proponent and opponent scholars for securitization of climate change. Proponents of this securitization argue that it would lift climate change to a high political issue and it would acquire more attention from policymakers. On the other hand, opponents of this securitization argue that it risks leading states to undesirable solutions such as the militarization of the issue or legitimization of undemocratic decisions through a traditional security perspective. However, we can argue that most scholars, no matter if they are opponents or proponents, agree that the securitization of climate change through a human security perspective is an affirmative development for global climate action. But they vary on their opposition level to the securitization of climate change through a traditional security perspective which might encourage inappropriate measures to tackle a global environmental problem. For example, in their study, Detraz and Betsill focus on a discursive analysis of climate change securitizations, and categorize the diverging approaches under two emerging discourses on climate change – security nexus; environmental security and environmental conflict discourses.[80] They argue that environmental security discourse, which is the human security approach, is still the dominant discourse for the climate security debate. They take this as a positive development for global climate action.[81] Similarly, Micheal Brzoska, analyzing the four major think tank reports that link climate change with more traditional security concerns, argues that these reports use traditional security language to arrive at recommendations on human-security perspective-based solutions.[82] In this respect, he shows that the securitization of climate change did not directly translate into traditional security

[80]Detraz and Betsill, "Climate Change and Environmental Security", 305.
[81]Detraz and Betsill, "Climate Change and Environmental Security", 316.
[82]Micheal Brzoska, "The Securitization of Climate Change and the Power of Conceptions of Security", *Sicherheit und Frieden* 27, no. 3 (2009): 143.

countermeasure recommendations, at least for these reports. But he agrees that *"the framing of climate change as a security issue carries the danger to strengthen those who see the need to strengthen traditional security instruments to manage its consequences."*[83] Rita Floyd also emphasizes this danger in her works; "*the literature shows that those that speak security to climate change often mean entirely different, even opposing things, and that – from an environmentalist perspective – climate security is not always a desirable concept as it may inhibit much-needed cooperation between countries."*[84] Moreover, she warns that securitization usually takes place in favor of the securitizing actor, not the referent object; therefore securitization can hinder the international cooperation on climate action by shifting the focus away from the main referent objects such as human populations and ecosystems. Overall, we can argue that most scholars emphasize the importance of framing climate change as a security issue, but only through a human security perspective. In this respect, most scholars – even the opponents of the securitization of climate change - are mostly against framing the issue through traditional security lenses, but they do not oppose that climate change has apparent human security implications.

There is little doubt that framing climate change as a security issue is a phenomenon that scholars and policy-makers should approach with caution. It might have a positive impact in lifting the issue as a priority to tackle with urgency on the international political agenda. However, the point emphasized by opponents of this framing is worth consideration, especially on the ground that "through which security perspective climate change is securitized". This difference becomes crucial in encouraging certain ways and means that states would tackle the issue. In other words, it is essential to notice that different normative interpretations can lead to varying measures for climate change action. If the human security perspective is promoted as the primary approach, then the issue becomes a human vulnerabilities problem and accordingly requires a global – sustainable - development initiative. In this respect, the human security approach, which promotes an international understanding to tackle human vulnerabilities, would encourage both mitigation and adaptation efforts to protect the most vulnerable communities against climate change impacts. In contrast, if the traditional security perspective becomes the prominent approach, the issue

[83] Ibid., 144.
[84] Rita Floyd, "The Environmental Security Debate and Its Significance for Climate Change", *International Spectator* 43, no. 3 (2008): 63.

becomes national security and international order problem and accordingly requires different sets of measures. Therefore, the traditional security approach can encourage a national understanding to guarantee state and border security in face of climate change indirect impacts, such as violent conflict and climate refugees. In other words, it can lead to ignorance of urgent and long-term mitigation goals, in favor of short-term adaptation or intervention efforts to prevent these knock-on effects. At this point, we can argue that more attention to the ecological security perspective for creating the link between climate change and security, can contribute to lead the global climate change action in a more progressive direction. Among the three conceptualizations of the environmental security concept that we have outlined in the previous chapter, the ecological security approach rested the less consulted one, both for academic debates and international political discussions. To describe it briefly, from an ecological security perspective, the referent object of security in the climate change – security linkage debates, would be *"ecosystems themselves with a focus on their long-term resilience that would enable them to function despite perturbation or change".*[85] Such perspective would require to challenge dominant human-centric discourses of security, to integrate environment in our threat perceptions for its inherent value, instead of its instrumental value for human beings. It would be built on an ecological sensibility that recognizes complex relationships between species – including human beings - within the ecosystems. Therefore it promotes "*the recognition of the moral obligation to other living beings and future generations via the ecosystems upon which they rely upon."*[86] In sum, ecological security discourse advocates for a deepened perspective that would encourage mitigation efforts against climate change, to preserve and strengthen ecosystems for sustaining the conditions of life on the planet.

In this respect, I would argue that a more normatively concerned approach for framing climate change as a security issue, would be to frame climate change as a human security issue and support this framing with the ecological security perspective. The point outlined here argues that framing climate change through an ecological security perspective would contribute to the debate by describing the issue as a direct threat to world ecosystems and promoting a different set of responses as it would prioritize the preservation of the

[85] Matt Mcdoland, "Climate Change and Security: Towards Ecological Security", *International Theory* 10, no. 2 (2018): 168.
[86] Ibid., 169.

ecological wholes. In this regard, we can argue that integrating an ecological approach to the climate-security debates, at least within the academic discussions, would be a progressive contribution. This can contribute to the climate-security debate in two essential ways. First, it might help to avoid the framing of climate change through the traditional security perspective for contemporary political practice. In this respect, it would challenge the traditional security perspective by adding another layer on the question of "whose security is at stake" in the face of a global problem such as climate change. Therefore, instead of appealing knock-on traditional security implications of climate change to lift the issue in the international political agenda, it might be useful to consult ecological security perspective to underline the direct impacts of climate change on world ecosystems. Secondly, it would strengthen our understanding of threats posed to human security via climate change impacts with recognition of humanity's place within the ecosystems. We can assert that climate change's human security implications are rooted in the disruptions of functioning in the ecosystems caused by climate change. On the whole, preserving and strengthening ecosystems functioning and resilience, are interrelated with both human security and traditional security implications of climate change. Therefore, the ecological security perspective can contribute to the global action for mitigation of climate change by focusing on deep anthropogenic reasons of climate change, instead of its implications. Overall, even if it is hard to imagine that the ecological security perspective gains practical relevance on the international political agenda, we can argue that it would be useful if this third conceptualization gains more salience in scholarly debates about climate–security nexus.

5. Conclusion

This study's objectives were to describe different interpretations of the environmental security concept and discuss the framing of climate change as a security issue on the international political agenda, by investigating these different interpretations' reflections. It examined the emergence and various aspects of the environmental security concept and aimed to understand its significance for assessing the relationship between climate change and security. In this respect, it has also examined and tried to contribute to the recent academic debate on the securitization of climate change.

Environmental security stands as a relatively new concept for security studies and, more generally, for IR discipline. It has emerged in the 1980s, during the redefinition of the narrowly founded security concept by various scholars. However, it is observable that several diverging conceptualizations of environmental security have emerged, arguably corresponding to different theoretical frameworks within the IR discipline. Overall, we can argue that the relationship between environment and security has been evaluated through three perspectives: traditional security, human security, and ecological security. Traditional security interpretation of the concept, presented environmental issues as new types of threats for the security of states, by creating links through resource abundance – state power relationships, or through violent conflict and migration triggered by environmental problems. In this respect, it preserves the realist state-military-focused understanding of security and integrates emerging environmental problems within the security scope of states. The human security perspective focuses on direct environmental threats to vulnerable human populations, such as food, water, livelihood security triggered by environmental degradation. In this respect, it pursues a normative concern, by challenging the centrality of the state within a traditional approach, and argues that human populations, their health, and well-being should be the main objectives of security understanding. The ecological security approach pursues arguably a more radical normative concern, emphasizing that the main referent object of security should be the environment itself for its inherent value, instead of its instrumental value for human beings. Accordingly, it advocates for the protection and preservation of world ecosystems from human activities induced degradations. Overall, we can argue that while the first approach only offered an analytical enlargement for the conventional security understanding, the last two have claimed a normative perspective evolvement as well.

Climate change, as a global scale environmental problem requires re-questioning of these diverging interpretations on the concept. Correspondingly, within the last decades, scholarly debates on the environmental security concept have been translated into questions on the link between climate change and security, both in academic and policy circles. However, we have observed that framing climate change as a security issue on the international political agenda is only influenced by two of the above-mentioned environmental security perspectives; human security and traditional security. During the 1990s, especially within the UN climate regime, climate change is framed mainly as a human

security issue. This perspective was readily available in the UN climate regime founding texts and various reports by UN institutions. In this respect, diverse documents have emphasized emerging threats to vulnerable human populations caused by climate change and called for urgent global actions to tackle climate change as a human security problem. However, since the mid-2000s, it is observable that various government agency publications, think tank reports, even national security strategy documents started to frame climate change as a more traditional security issue. In this respect, policy discussions were oriented towards possible knock-on climate change impacts such as violent conflicts, migration, resource wars, etc. Accordingly, climate change is regarded as a threat multiplier for international security and order on the international political agenda. Overall, we can argue that climate change, which used to be a development issue for the international political agenda since the 1990s, has increasingly been treated as a conventional security issue in recent years.

Notwithstanding, the third approach to the environmental security concept, the ecological security approach, is still not much reflected within the international political agenda and did not attract widespread attention outside of environmental activists and NGOs. The ecological security perspective would take ecosystems themselves as the primary referent object of security. It would urge global action to strengthen ecosystems' functioning and resilience in the face of adverse climate change impacts. We can argue that this last point of view, inspired by deep ecology thinking, seems too radical and inapplicable for the international political agenda. Nevertheless, we may observe that it has an indirect effect on the emergence of new values and principles in global environmental governance and some practical action via non-governmental organizations. Therefore, here I make a case for integrating ecological security perspective for the debates on the securitization of climate change, at least within the academic circles. We can argue that this can contribute to pushing discussions on global climate change action in a more progressive way, by avoiding the traditional security framing of climate change and secondly by revealing the roots of human security implications of climate change, focusing on ecosystem resilience.

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