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The Impact of Climate Change on Cultural Security

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The Impact of Climate Change on Cultural Security

Abstract

Climate change is one of the greatest challenges and most pressing issues faced by humanity in the modern era. Extreme weather events, changes to world ecosystems, species extinction, disruption of animal and human migration, resource shortages, socioeconomic concerns, outbreaks and pandemics, as well as domestic and international conflicts represent only a few select potential climate change consequences. Regrettably, when considering the issues pertinent to climate change, one of the oft-overlooked areas is cultural security. Rising sea levels will lead to some of the world's islands and coastal cities essentially being erased from Earth, resulting in the destruction, and possibly even the disappearance, of their cultural heritage. Inhabitants of endangered and unlivable areas are likely to drive mass exodus on a global scale, and forcibly displaced persons who find themselves in a new socio-cultural reality face countless challenges that will hinder their sense of cultural security. The most immediate concerns are related to the potential eruption of local and regional conflicts, emergence of negative social behaviors, disappearance of national language and cultural identity, and statelessness due to a loss of habitable lands, all of which pose severe threats to cultural security.

Introduction

Climate change is one of the most pressing issues facing humanity in the 21st century and it has already led to devastating environmental consequences globally. Scientific evidence of climate change includes increasing global temperature, rising sea levels, extreme weather events, and ocean acidification, amongst many others.2 These negative environmental outcomes have significant downstream effects on many aspects of human life, which if not addressed, will ultimately lead to a loss of security. Consequently, there are numerous publications, which explore the relationship between climate change and human security. Many content experts highlight that climate change, as it continues to worsen, will progressively threaten human security by endangering cultures and identities, negatively affecting the economy, and increasing forced migration. 3 Some publications choose to focus on the environmental consequences of climate change, drawing attention to the resultant environmental degradation or the extreme weather events increasing in both frequency and severity.4 Other studies take this one-step further into the security arena and investigate the correlation between climate change and violent conflicts, recognizing climate change as an exacerbating factor in these conflicts. 5 On the other hand, some take a different approach and link climate change and its affects to broader areas of security, such as national security and security policy development, or the direct and indirect socio-economic consequences.6 However, only a handful of available resources examine climate change from the cultural perspective, but these largely ignore cultural security and focus mainly on sociocultural issues, such as societal resilience, or the protection of tangible cultural heritage. There is a notable insufficiency in the published research and literature regarding cultural security, and consequently, the authors set out to fill this gap in the literature by exploring the potential impacts of climate change within the cultural security framework.

Cultural security refers to a protection of broadly defined culture, including tangible cultural heritage (for example, cultural sites, objects, and artwork) and non-tangible cultural legacy (for example, cultural values, identity, language, religion). Importantly, cultural security concerns cultural rights and freedoms, and relates to the protection of cultural, ethnic, religious, and linguistic minorities. Plausible downstream consequences of climate change constitute a direct threat to cultural

heritage and individuals, and therefore, their cultural security. Due to rising sea levels, many low-lying states are in danger of complete submersion. 9 In addition to the disappearance of these habitable lands, both cultural sites and local populations, particularly indigenous communities, are at risk as well. Additionally, certain regions may become uninhabitable and contribute to the forced migration of individuals, and concurrently, their cultures.10 This mass exodus of climate refugees will lead to new and unplanned cross-cultural encounters, which can have positive or negative consequences for both the incoming and domestic cultural groups. 11 Furthermore, unlivable lands and a resource scarcity due to climate change may become a driving factor for regional instability, terrorist activity, and outbreaks of conflict.¹² Therefore, climate change and its environmental consequences are a critical consideration for the cultural security agenda. To address this deficiency gap, this article aims to examine the correlation between climate change and cultural security by exploring potential threats and describing the cultural consequences of climate change's impact.

Overview of Climate Change

Throughout its 4.5 billion year history, planet Earth has experienced fluctuations between ice-age cycles alternating with warmer interglacial periods, during which, the average global temperature and levels of atmospheric carbon dioxide, methane, and other heat-trapping greenhouse gases have varied greatly. 13 Life began to evolve along with the planet approximately 800 million years after its formation, which ultimately led to the evolution of the first Hominids around 4.4 million years ago.¹⁴ Several million years later, about 70,000 years ago, descendants of these early Hominids known as Homo sapiens, began to leave Africa and spread throughout the rest of the world. Similar to all other mammalian lifeforms, they maintained a minimal and local effect on plant and animal life, with no impact on the global environment or climate. 15 This changed, however, beginning in the late 18th century, when the Industrial Revolution ushered in a new era of widespread automation and the use of machinery, often powered with the burning of fossil fuels. Consequently, it led to a global rise in atmospheric carbon dioxide and other heat-trapping greenhouse gases. This global rise in atmospheric greenhouse gases has since continued to intensify. Related climate research accumulated over the past several decades has made it clear that

human activity and industrialization contribute significantly to global climate change, as well as the related ongoing mass extinction of plant and animal species.¹⁶

Despite this knowledge, however, global greenhouse gas emissions continue to increase, and the long-term outlook is concerning. According to content experts from the Intergovernmental Panel on Climate Change, it is highly likely that human activity will be the dominant factor contributing to climate change in the 21st century.¹⁷ There is already a growing body of evidence supporting this projection. In the modern era of rapid technological advancement and increasing urbanization, greenhouse gas emissions, particularly carbon dioxide, methane, and nitrous oxide, have increased significantly due to human activity, which subsequently contributes to global warming.¹⁸

One of the observable indicators of this change is an accelerating increase of the average global temperature. The annual global average temperature has increased approximately 1.1 degrees Celsius since the beginning of the 20th century, and recent projections predict an increase to 3.2 degrees Celsius above pre-industrial levels by the year 2100. Since climate record keeping began in 1850, the five-year period of 2015-2019 has been the warmest such period in history and the year 2016 was the hottest year on record. Consequently, increasing global temperature results in sea level rise, warming of land and ocean surfaces, shrinking glacial covers and ice sheets, melting sea ice in the Arctic and Antarctic, and shifting of the seasons.

Over the last several decades, the global sea level increase has been accelerating rapidly, reaching its highest peak during the most recent measurement in 2018.²⁰ In addition, a study done at Oxford University found that oceanic waters have absorbed more than 90 percent of heat gained by the planet between 1971-2010 and average ocean temperatures have risen by approximately 0.25 degrees Celsius throughout this same period.²¹ Moreover, the largest glaciers in the world continue to retreat rapidly, as areas such as Greenland and Antarctica, lose billions of tons of ice each year.²² In many locations around the world, changes to season cycles are observable. Winters are shorter with less sub-freezing days, the spring season arrives earlier, and summer periods are increasingly hotter, all of which can adversely affect agricultural and environmental cycles,

including local vegetation, animals, and crops.²³ Another visible effect of global climate change is pertinent to the increasing frequency and occurrence of extreme weather events, such as severe hurricanes and cyclones, violent tornadoes, and intense tropical storms, which cause significant impacts worldwide.²⁴

Finally, one other measurable indicator of climate change relates to ocean acidification as the result of rising carbon dioxide emissions and absorption by the ocean. Some reports show that the acidification level of ocean waters has increased by approximately 30 percent since the start of the Industrial Revolution.²⁵ Worsening climate change and global warming can lead to the appearance of natural disasters, which may include prolonged drought episodes, severe floods, increasingly aggressive wildfires, and dangerous tsunamis. For example, the early 21st century has been one of the most severe long-term drought periods in the history of the United States.²⁶ Dry weather, persistent heat, and drought were major contributing factors to the Amazon rainforest fires, deadly wildfires in California, and the Australian bushfires of 2019.27 Concurrently, rising sea levels secondary to climate change may lead to more destruction when events such as tsunamis or inland floods inevitably occur. Furthermore, approximately 44 percent of the world population lives within 93 miles of the coast. As a consequence, some of the world's coastal cities, nations, and islands (for example, Venice, the Netherlands, the Maldives) are at high risk of becoming submerged under water if climate change continues to accelerate as the same rate.28

Consequently, these severe weather conditions can have an impact on food and water security, as well as other resource availability and accessibility. Drought or flood can considerably affect agricultural lands and field crops, resulting in a shortage of drinkable water and food, leading to malnutrition and even famine. Persistent hunger and deepening poverty, along with other geographical changes, can lead to the spread of infectious diseases, as well as outbreaks of epidemics and potentially even pandemics, under certain conditions.²⁹ Simultaneously, climate change may lead to the reduction of global resources, resulting in local and regional conflicts. A study published in 2019 found an estimated 3-20 percent increase in armed conflict risk over the previous century due to climate change and scientists expect this number to increase dramatically in coming years.³⁰

In addition to the submerging of entire regions caused by rising sea levels, another reason for the expansion of uninhabitable areas across the world could be due to the rise of the average temperature. Wet bulb temperature (TW) measurements, which combine both heat and humidity to provide a threshold above which a healthy human body is unable to cool itself by sweating (>35 degrees Celsius), have already reached critical levels in several regions by 2020. This indicates that some aspects of global warming may be more advanced than originally feared, since climate change models did not predict that TW would reach this threshold prior to the mid-21st century.³¹

Because of both rising sea levels and increased temperatures, a loss of habitable lands may result in endangerment or extinction of plant and animal species, and further lead to both human and animal mass migrations. This evacuation of endangered populations and a need for global relocation may also contribute to the increased risk of international conflict over remaining habitable regions.³² To conclude, climate change and global warming have a significant impact on the planet's ecosystems and have the potential to affect the global security landscape increasingly through both sociocultural and political transformation, as well as major geographical and demographic changes.

Cultural Security

The relationship between culture and security has existed for millennia and the history of humankind demonstrates numerous consequences of cultural encounters. The development of culture and intergenerational transmission of its values contributed to the building of nations and entire civilizations.³³ Conversely, conflicts that bred from inter-cultural differences have repeatedly led to negative outcomes, including amongst many

- Insurgency (for example, Boko Haram activity in Nigeria);
- Social and national movements (for example, Arab Spring);
- Local and international conflicts (for example, Nagorno-Karabakh conflict);
- Military involvement and the outbreak of wars (for example, Bosnian-Serbian War).³⁴

Despite the fact that this interplay between culture and security occurred throughout most of recorded human history, the term cultural security has only begun to appear in literature relatively recently.³⁵ However, there is no consensus amongst security scholars regarding how to define and classify cultural security. Many contemporary security theorists regard cultural security as a type of security, alongside economic, environmental, ideological, information, military, political, and societal.³⁶ Other security experts emphasize the people-centered focus of cultural security, whether on an individual or collective level, and thus, consider cultural security to be a dimension of human security.³⁷ Another group of scholars regards cultural security as a component of the global competition for soft power.³⁸

Most security specialists agree, however, regardless of their ontological classification, that cultural security is pertinent to non-traditional security, as opposed to traditional, state-centered security, which relates more directly to military and economic power.³⁹ The lack of academic consensus and paucity of relevant literature highlights that cultural security is a neglected concept and emphasizes the importance of further examination, especially as it relates to rapidly evolving existential threat of climate change.

Cultural security is a multidimensional concept and the perceptions of cultural security differ across the world, as each state possesses its own set of characteristics, environments, and unique historical experiences. In addition, the definitions of cultural security vary depending on what particular aspect a content expert chooses to emphasize. Many definitions highlight the individual and collective dimensions of cultural security, particularly the concept of identity.⁴⁰

In Ukraine, for example, cultural security strongly correlates with the protection of cultural, national, and political identity from external influences. Therefore, cultural security integrates with information security and relates to a set of political and normative actions to protect Ukrainian culture and identity.⁴¹ Similarly, cultural identity plays a vital role in indigenous communities. Cultural, intellectual, and spiritual creations, known as Traditional Knowledge (TK) and Traditional Cultural Expressions (TCEs), are not only reflections of indigenous cultural heritage, but also crucial components of their community identity.⁴²

Therefore, the cultural security of indigenous populations refers to the protection of TK and TCEs. These identity-related definitions also extend to the protection of human and cultural rights, as well as one's sociocultural identity, which are the integral parts of human security.⁴³

One example that reflects this approach to cultural security links to a situation experienced in various regions of Africa. Many African nations are facing numerous challenges, including food and water insecurity, persistent poverty, outbreaks of epidemics, increased terrorist activity, and the eruption of conflicts and civil wars, mainly due to scarcity of natural resources. 44 These severe events not only endanger local people's livelihoods, but also affect their cultures, cultural identities, and diversity, making them prone and vulnerable to external influences and hindering their cultural continuity. 45 Consequently, cultural security closely correlates with human security and the protection of local populations and their cultures.

A separate, but overlapping, group of definitions extends the concept of cultural security to the state level and associate cultural security with national security. In this context, cultural security refers to state's ability to protect its cultural, and by extension, national heritage.⁴⁶ Furthermore, cultural security refers to an environment in which a society can freely cultivate the values shaping its cultural, hence, national identity, while at the same time remaining open to the experiences, influences, and cultural achievements of other nations. In other words, it is the environment of cultural equilibrium, which allows the freedom to cherish one's own culture and experience the richness of other cultures at the same time. 47 For example, experiences of annexations, wars, limited sovereignty, and political disturbances shaped culture in the Republic of Poland. For these reasons, cultural identity and national heritage, including symbolic elements of culture, language, religious values, and historic remembrance, are the prime concern of national interests and cultural security of Poland.48

Another group of cultural security definitions emphasizes the importance of wisely utilizing cultural heritage in order to achieve desirable results in the international arena, which subsequently results in the strengthening of national power.⁴⁹ In this context, cultural heritage and achievement is a valuable tool to utilize in the global competition for soft power. Soft power

is a non-coercive form of power that a state uses as a means to influence and shape the preferences of others through attractive cultural, political, or ideological qualities in the realization of national interests.⁵⁰ In the People's Republic of China, cultural security is a vital component of nontraditional national security and refers to the protection against spreading globalization and the influences of Western culture. Simultaneously, cultural security in China puts an emphasis not only on safeguarding cultural values, but also on the promotion of local culture globally to strengthen their international position and effectively compete for soft power.⁵¹ Similarly, in South Korea and Japan, cultural security involves efforts to promote Asian pop culture worldwide to increase cultural attractiveness and the opportunity to compete for global soft power.⁵²

Ultimately, cultural security refers to a broadly defined protection of tangible (for example, cultural or historic sites, cultural objects, and artwork) and non-tangible forms of culture (for example, cultural identity, or symbolic values). Furthermore, cultural security relates to the protection of human and cultural rights of both recipients and creators of culture. Cultural security can also involve the provision of cultural freedoms of thought, lifestyle, and liberty to fully enjoy cultural rights and participate in cultural reality. Lastly, cultural security concerns cultural, ethnic, linguistic, religious, and other minorities fostering an environment in which individuals experience a sense of cultural belonging and cultural safety.⁵³

Climate Change and Cultural Heritage

As described previously, climate change has the potential to affect human populations considerably and therefore, their cultural security, by inducing a wide variety of physical and sociocultural changes. At their 2005 convention, the World Heritage Center administered a global survey, asking participating states to describe the impact of climate change on their national cultural sites and heritage. Out of 110 responses submitted by 83 participants, 72 percent stated that climate change has affected their natural and cultural heritage.⁵⁴

One major threat to cultural security is the loss or destruction of habitable lands due to severe weather events, such as floods or droughts, as well as increasing temperatures, which can result in the disappearance of cultural heritage or unique historic sites. One such endangered city is Venice, Italy, a United Nations Educational, Scientific, and Cultural Organization (UNESCO) World Heritage Site, which attracts millions of international tourists annually.55 Climate change, along with inadequate infrastructure and improper management of an increasing number of tourists, contributes to both the flooding and structural damage of this cultural and touristic landmark. While Venice has always been sensitive to changes in water level due to its location, the frequency and severity of flooding has increased in recent years due to globally rising sea levels and changes in annual weather patterns.⁵⁶ Another example of a coastal city at risk is the ancient city of Alexandria, Egypt, which is on trajectory to submerge underwater by the year 2050 if climate change and subsequent sea level rise continues at its current rate.⁵⁷ Not only is Alexandria a culturally and historically rich site, but also a regional economic center and one of Egypt's most populous cities. It is important to highlight that ancient buildings were constructed to withstand the elements of a specific local climate, so building materials may not be able to survive a change in weather conditions.58 The disappearance of these coastal cities would not only adversely influence tourism but also damage national and global sociocultural heritage and have long-term negative economic consequences.

Another cultural security concern pertinent to climate change is deforestation, caused either by severe weather events, such as wildfires, or due to human activity. Deforestation also leads to an increase in average global temperature, contributing to climate change and subsequent further deforestation, a cycle that continues with increasing intensity.⁵⁹ One of the large-scale example is the Amazonian rainforest basin, which includes significant regions of Brazil, Bolivia, Peru, as well as parts of several other countries and is home to thousands of indigenous communities.⁶⁰ Deforestation results in the loss of territory and access to resources, all of which are fundamental to indigenous cultural identity. The loss of ancestral land poses a major threat, not only to the well-being and lives of indigenous populations, but also to the preservation of their unique cultures, knowledge, and languages.⁶¹

Language is not only a utility communication tool, but it also allows speakers to express, create, and embrace their cultural reality.⁶² Language is uniquely important for indigenous populations, as it forms concurrently

with their specific culture and allows for the preservation and transmission of cultural values and knowledge from one generation to another. ⁶³ Presently, many indigenous languages are disappearing at an alarming rate and others are in danger of extinction. ⁶⁴ According to data from UNESCO's Atlas of World Languages in Danger, the Amazon rainforest basin is home to over 400 vulnerable or endangered languages (approximately 20 percent of the global total), and 30 more have already been lost permanently. ⁶⁵ However, not only do the indigenous communities suffer because of these losses, but humanity as a whole suffers. Language is not only a product of the cultures and communities that have developed it, but also conversely shapes the worldview and cultural framework for critical thinking and problem solving distinctly unique to those who are native speakers. Therefore, when a language is permanently lost, ancient knowledge, cultural heritage, and an entire sense of community are lost along with it. ⁶⁶

Climate Change and Conflicts

Over the last 30 years, approximately 18 violent conflicts have been associated with natural resources, as well as almost half of all civil wars since 1960.67 However, while recent research has shown that climate change may increase the risk of violent conflict, including organized armed conflict and terrorism, there is no strong consensus amongst content experts as to how significant that increase will be.68 Nonetheless, the expansion of unlivable regions has the potential to exacerbate regional conflicts, cause instability, and increase international confrontations over habitable areas, agricultural lands, and natural resources, particularly potable water. Thus, conflicts may arise in a situation where the supply of resources including croplands, forests, fisheries, marinas, and water is insufficient to meet the demand. Developing nations are particularly at risk of conflict and economic damage caused by these resource deficiencies, as agriculture and farming account for almost 65 percent of their Gross Domestic Product, on average.⁶⁹ Ineffective governance, inadequate management of natural resources, and lack of environmental protections are also contributing factors towards conflict eruption. Moreover, competition to control access to renewable resources may lead to exploitation by armed groups and terrorist organizations. 70 There have been several case studies linking climate change to violent conflicts,

fragility, livelihood insecurity, urban violence, and competition for scarce environmental resources.⁷¹ Some recent examples include

- The terrorist activity of Boko Haram around Lake Chad, an important source of water for millions, which has shrunk by over 90 percent in the last 60 years;
- The Islamic State and civil war in Syria exacerbated by conflicts over access to water resources after severe drought in 2011;
- The Taliban and other insurgent driven criminal networks in Afghanistan organized around access to dwindling natural resources and opium; and
- The organized crime gang activity in Guatemala, which is thriving due to the downstream economic effects of increasingly severe natural disasters and extreme weather events.⁷²

The World Resources Institute anticipates the risk of water-related conflicts to rise across Africa, the Middle East, as well as South and Southeast Asia in the near future.⁷³ In the recent years, researchers examining the relationship between temperature rise and violence concluded that approximately every 0.3 degrees Celsius of warming correlates with a 10 to 20 percent increase in the likelihood of armed conflicts.⁷⁴ Another group of researchers analyzing armed conflicts in the context of climate change found that 23 percent of conflicts in countries with ethnically diverse populations started in months marked by significant weather-related disasters.⁷⁵ While climate change may not always be a direct trigger or primary cause for conflict eruption, it is likely to become a threat multiplier that can eventually lead to resource scarcity and increase the risk of conflict escalation further downstream.⁷⁶

Nevertheless, any significant conflict poses a serious threat to cultural security. Violent discord has a direct effect on the environment, local ecosystems, and other protected areas, as well as downstream effects on the health, cultural rights, sociocultural capital, and heritage of local populations. One global research organization conducted a study, which found that 32 states globally face extreme risk of conflict eruption or civil war due to worsening climate over the next 30 years.⁷⁷ This can lead to the destruction of historical or cultural landmarks, monuments, sculptures, and natural sites (for example national parks, natural wonders), which is an important consideration when examining climate change-induced

conflicts. Wartime also extends to the treatment of works of art within the conflict zones. For example, during the Second World War, soldiers notably plundered artwork, as well as destroyed historic and cultural sites for strategic combat purposes.⁷⁸ During this time, a great number of cultural artifacts, antiques, paintings, and other notable works of art went missing, due to large-scale looting, vandalism, destruction, and exploitation.⁷⁹ While numerous laws and international regulations currently exist to protect cultural heritage worldwide, many cultural and historic sites do not survive protracted conflicts.⁸⁰ One recent example is the Islamic State's successful destruction and trafficking of ancient landmarks and artifacts from sites in Iraq and Syria to fund the militant group's activities.⁸¹ As climate change continues to worsen, potentially leading to frequent outbreaks of conflict, many experts raise concerns about the continued development of similar practices and a growing underground transnational art crime network.⁸²

Climate Change and Migration

Due to an increasing average global temperature, many regions will become unlivable, forcing millions of citizens and residents to flee their homelands and seek refuge in areas that are better suited for living. ⁸³ The World Bank estimates that regions of Latin America, Sub-Saharan Africa, and Southeast Asia will generate 143 million more climate migrants by 2050. ⁸⁴ Although reported cases of climate-induced migration have been limited thus far, unchecked climate change will likely lead to an increase in mass migration. ⁸⁵

Large-scale human migration results in the concurrent migration of a population's cultures, languages, ideologies, and religious beliefs. ⁸⁶ Contact between two or more distinct cultures can lead to both positive and negative outcomes. ⁸⁷ An example of a positive outcome would be the successful and balanced adaptation to a new reality. In this scenario, an individual would continue to practice their own cultural habits and beliefs freely, while fostering a respectful attitude and openness towards the new, unknown culture and its representatives. In 2015, The European Commission administered a survey to citizens of participating states, asking to what extent they consider themselves a citizen of European Union (EU). About 60 percent of respondents defined themselves as both Europeans and nationals of their country of origin. ⁸⁸ These results imply

that individuals demonstrate a positive attitude towards other cultures while remaining attached to their national cultures.⁸⁹ On the other hand, negative outcomes could emerge, including a disregard or loss of one's own culture, disdain for a new locally imposed culture, and increased tension between individuals from host states and newcomers, or even potential conflicts between cultural groups. 90 Therefore, this can eventually lead to the emergence of negative social attitudes, including, amongst many, anomies, intolerance, and various forms of discrimination, denationalization, nationalism, and xenophobia. 91 Furthermore, these negative experiences may contribute to the deepening of social inequalities and differences, often causing social unrest and cultural discontinuity, which can eventually result in cultural insecurity.92 It is noteworthy that in recent years there appears to be a decline in worldwide interest to welcome migrants from or into certain countries.93 Therefore, the societal discontent regarding an uncontrolled influx of foreigners, may be an exacerbating factor in emergence of negative feelings towards newcomers and their cultures, regardless of the reasons for migration.

Climate-induced migration can also adversely affect cultural security through the processes of forced integration, assimilation, and cultural adaptation. Climate change contributes to the expansion of unlivable lands, leading to mass evacuation and the forcible relocation of affected populations. This raises questions regarding effective integration policies and the overall preparedness of receptive states to accept a large number of climate refugees from different cultural backgrounds.94 Mass migration produces different reactions amongst diverse populations, and often triggers debate regarding state immigration processes, requirements for receiving members of foreign states, and conditions that newcomers must meet in order to become full members of the hosting society.95 One of the overarching concerns regarding mass migration is how to ensure that individuals coming from diverse cultural backgrounds, especially those with opposing cultural identities, succeed in their new environment culturally, economically, and socially. A recent example of mass migration includes exodus of African and Middle Eastern refugees fleeing conflicts, exacerbated by climate change, to the EU. Many of these migrants came from conservative Islamic cultures, which sparked new debates around the compatibility of their values with those of host states.⁹⁶ Ultimately, this forced integration led to a reactionary rise in support of far-right

nationalist political parties and, furthermore, the creation of the Identity and Democracy far-right political bloc in the European Parliament.⁹⁷

Other fundamental questions emerge regarding protection of both the human and cultural rights of minority groups. The host state's role is to create an environment in which individuals can succeed and experience cultural freedoms without fear of expressing their own cultural identities. Therefore, these more stable host states must take responsibility for safeguarding cultures, cultural identities, and rights of newly arrived minority representatives. The inability of a state to relocate newcomers successfully and effectively, results in the formation of new densely populated areas, such as refugee camps where individuals wait for further relocation, oftentimes in poor living conditions. 98 Consequently, these persistently overcrowded areas become increasingly dangerous, posing considerable threats to the overall security of refugees and cultural minorities coming from distant geographical locations. In addition, the accumulation of large groups of people may affect their physical and mental well-being, and contribute to increased social discontent and anxiety, eruption of conflicts, or even leave these populations vulnerable to outbreaks of violence or disease.99 Conversely, when a large number of newcomers arrive into a country, there is a risk of the emergence of cultural enclaves, where individuals do not attempt to integrate with local society, often due to lack of opportunity or insurmountable sociocultural barriers. On a larger scale, this practice can create tensions or conflicts over cultural differences, which may eventually lead to outbursts of violence or even hate crimes.100

Climate Change and Statelessness

The term stateless describes individuals who are not considered citizens or nationals by any state under the operations of its law. ¹⁰¹ The United Nations High Commissioner for Refugees estimates that there are approximately 4.2 million stateless persons around the world, although given the lack of data availability and reliability in some instances, this number may be much higher. ¹⁰² The issue of statelessness is broad and can include individuals who formally hold a nationality, but cannot turn to the state for protection, because of their immigration status or due to an ineffective or corrupt system. ¹⁰³ Statelessness violates a universal human right to nationality and prevents individuals from enjoying their basic

human and cultural rights. This is due to the lack of fundamental political, cultural, and social freedoms typically provided by the government and administration of a properly functioning state. 104 One ongoing example is the nomadic Muslim tribes of Northern Kenya, Ethiopia, and Somalia, who have lived throughout these remote regions spread over multiple state lines long before colonial borders were drawn. These minority groups have suffered discrimination for decades in relation to their rights of citizenship and basic identity documents, leaving them stateless and without the fundamental economic, political, or sociocultural rights.¹⁰⁵ In addition, a lack of nationality, documented immigration status, or citizenship may negatively affect one's sense of sociocultural belonging and cultural identity. This inability to develop sociocultural bonds may lead to social exclusion, alienation, and finally loss of identity that is necessary to be a full member of society. 106 While statelessness is already a focus area of many organizations, it is noteworthy that it closely relates to cultural security as well, as it frequently concerns members of various ethnic, cultural, or religious minorities, including indigenous groups. 107

Statelessness can occasionally take even more extreme forms and escalate to physical violence. One example that accurately reflects these severe consequences of statelessness is the situation of the Muslim Rohingya cultural and religious minority in Myanmar. In the recent years, the Myanmar government has declined to recognize Rohingyas as a legal minority, depriving them of rights to citizenship, and in result, leaving the Rohingya people stateless. Due to systematic oppression, increasing brutality, and ethnic cleansing, thousands of surviving Rohingyas have had to relocate internally or have fled Myanmar since 2017. 108

Evidence of large-scale climate change-induced statelessness is thus far limited. Nevertheless, progressing climate change is likely to increase the number of stateless individuals globally, as the amount of habitable land decreases while instances of climate-related conflicts and mass migration increase. Notably, most recent examples of statelessness are mainly due to violent conflicts in unstable regions or failed states and include conflicts in Syria, Darfur, South Sudan, Iraq, and Rwanda. ¹⁰⁹ In addition, the populations of low-lying states (for example, the Maldives, Kiribati, Marshall Islands) may need to evacuate due to rising sea levels and the possible submergence of their lands. ¹¹⁰ While the loss of territory due to land submersion is unlikely to occur before the end of the 21st century,

extreme weather events will most likely continue to increase in frequency.¹¹¹ Therefore, these low-lying states are likely to become uninhabitable before complete submersion of their lands, causing a large number of people to experience statelessness for the first time.¹¹²

Conclusions

The aim of this article has been to provide a non-comprehensive overview of how climate change can affect cultural security. Based on the literature review performed to explore these topics, the authors have concluded that climate change does pose a threat to many aspects of cultural security. Climate change is an exacerbating factor in conflict eruption, and the world is already witnessing competition for limited natural resources. Inadequate access and scarcity of renewable resources indirectly contributed to the outbreak of civil war in Syria in 2011 and disturbances in Mali in 2019, and this will likely occur more frequently as climate change worsens.¹¹³ As climate change continues to accelerate, it can potentially lead to an increase in terrorist activity and the outbreak of violent conflicts over habitable lands and renewable resources. 114 These conflicts put the livelihood of local inhabitants in danger and can contribute to the devastation of important cultural and historic sites, posing a major threat to cultural creations and local populations, and hindering their cultural security. 115

Climate change will also likely continue to increase severe weather event frequency and duration, putting many coastal historic and cultural sights in danger of destruction. The World Heritage sites of the City of London on the banks of the River Thames, as well as the historic center of 13th century Cesky Krumlov town are both at risk of experiencing severe floods. Tidal floods, from increasingly frequent high tides and rising sea levels, also threaten Venice, Italy, an area historically prone to flooding due to its sensitivity to small changes in water level. This could be a forewarning as to what may happen to other at and below sea level regions around the world, as the average global temperature increases further, if climate change continues to worsen.

Indigenous communities are especially vulnerable to the effects of climate change, as it can negatively affect their resilience and destroy the sociocultural continuity of their communities. Consequently, climate

change impacts can negatively affect their safety, cultural identities, health, and economy. 117 Members of indigenous communities are often the most susceptible to cultural extinction due to living in remote locations, dwindling populations, and lack of written records. This can lead to the permanent loss of language, ancient knowledge, cultural heritage, and an entire community along with it. Therefore, it is important to assist these communities in their survival in the years to come, considering they have not contributed towards climate change.

The findings that the authors present also suggest that climate change can become a major driving factor for mass displacement due to the loss of habitable lands, which can eventually lead to the disappearance of local cultures and identities. 118 Mass migration can subsequently contribute to the development of negative social behaviors and attitudes between climate refugees and host societies, who may fear for their cultural integrity.¹¹⁹ This can further lead to political radicalization, polarization, and even paralysis of the political system and democracy of the host states.120 Large-scale migration, without adequate systems and processes in place, can also create stateless individuals whose human and cultural rights are in danger of violation. The United Nations High Commissioner for Refugees currently has a plan in place to end statelessness in Europe by 2024 but admits this is not feasible in other parts of the world without significant international collaboration and capital investment.¹²¹ Finally, the mass exodus of climate migrants can lead to an increased emergence of refugee camps, which, along with other well-documented hazards, put displaced populations at risk due to the aforementioned increase in extreme weather conditions. For example, in 2018, several refugee camps in Africa and Asia experienced the occurrence of severe weather events that significantly affected and damaged camp areas. 122

This literature review exploring the link between climate change and cultural security presents only a narrow, yet important, view of relevant issues. As climate change continues to worsen and the average global temperature continues to rise, more threats to cultural security will begin to emerge. Therefore, there is a need to continue to increase global awareness regarding the importance of slowing and stopping climate change, as well as the potential wide-reaching cultural consequences. It is also essential for both state and nonstate actors to make significant efforts in combating climate change and develop strategic imperatives with

concrete action plans to address these potential threats to security. However, without some significant renovation and reformation to the modern liberal order and improvements in transnational cooperation, the outlook is tenuous, at best. Even if states continue to implement the Paris Agreement obligations diligently, which thus far, has not been the case, the world will still experience a 3.2 degree Celsius temperature increase by the end of this century. 123 The potentially economically restrictive obligations imposed on states participating in the Paris Agreement contributed to the rise of nationalistic populism in some states. Therefore, it may be fruitful to pursue further research regarding the reciprocal relationship between the breakdown of neoliberalism and worsening climate change, and its effects on different aspects of cultural security. Without any sort of comprehensive, executable, and globally accepted action plan, the cultural security of millions, especially populations that are already vulnerable, remains at risk. Ultimately, climate change is a global crisis and thus requires global solutions and actions to ensure stability of the global order. Therefore, it is the hope of the authors that the information presented in this article will lead to further discussion and research in this field, as well as the development of relevant global strategies and policies to address these issues before it becomes too late.

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