Reflections on the securitization of water resources, considering the cases of the Nile River and Aral Sea Basin: an analysis of human security

By Luciana M. Barbosa, Masters in International Relations*
Matilde de Souza, Ph.D. in Political Science**
Department of International Relations
Pontifical Catholic University of Minas Gerais
lucianambarbosa@gmail.com*
matilde@pucminas.br**

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Abstract

This proposal aims to analyze the securitization process of water resources, taking into account the conflicts motivated by access to water in two different regions in the world. This work applies the theory of securitization, as developed by the Copenhagen School, in which the process of communication and political security, understood as a speech act, are emphasized. From the analysis of two different cases on the competition for water, namely the case of the Aral Sea basin in Central Asia, involving the post-Soviet states of Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan, and that of the Nile River basin in East Africa. The goal is to understand the different concepts and approaches related to the securitization of water resources (proposed by the Copenhagen School) in order to reflect both on the concept of security and the applicability of recent developments in the field of human security studies to understand conflicts involving water resources.

Keywords: securitization, water resources, human security, Nile River, Aral Sea.
1. Introduction

From the politicization of environmental issues in the 1970s, a new phenomenon is emerging in the international arena in the post-Cold War: the relationship between environment and security. The first speeches on the emergence of a new category in security studies are illustrated by published reports from Richard Ullman (1983), Jessica Mathews (1989), and Norman Myers (1989), which highlight the need to redefine the security concept to include environmental changes.

With the end of the Cold War, this topic has taken on a new light in security studies, which have begun to discuss the emergence of new threats and the need to expand relevant agendas. The consolidation of this theme occurred more effectively with the publication of a work by Buzan, Waever and Wilde (1998), in which the authors propose the development of a specific analytical framework for each security sector by building their own rules, actors, discourses, and objects of reference.

However, the understanding of the relationship between environmental degradation and political stability is not homogeneous and has been carried out based on different premises, showing two predominant approaches. The first is related to the idea of environmental conflict, rooted in the concept of the scarcity or abundance of natural resources, which is commonly responsible for triggering conflict. This view is held by traditional security assumptions, according to which sovereignty and territorial integrity of the state are the main targets. The second discusses the concept of state sovereignty, referring to how environmental changes affect individuals as well, opening a recent trend: the human security approach.

More specifically, one of the first and most important official events, related to water scarcity and security in the beginning of the 1980s, was brought to the fore by Egypt’s Minister of Foreign Affairs, Boutros Boutros-Ghali, who claimed: "the next war in our region will be over the waters of the Nile". In 1991, months before being appointed as Secretary-General of the United Nations, Boutros-Ghali reiterated: "the next war in the Middle East will be fought over water, not politics" (Gleick 1993, 83). In 1995, the vice-president of the World Bank, Ismail Serageldin, made a statement often used in articles on the topic: "If the wars of this century were fought for oil, the wars of the next century will be over water" (Sinha 2005, 319). Such statements are part of a series of speeches by which water resources are treated as a problem of national and international security. Thus, it seems essential to discuss the following pertinent questions: what have been the impacts of the securitization process of water resources on the resolution of conflicts identified in the two studied regions? Was this process able to modify the debate on the issue by making the institutionalization of water resources a security issue? What are the main results of this process in each of the analyzed cases?

To understand these issues, it is necessary to trace a brief history of conflicts over water in the two regions, allowing one to understand what has been the response of political
communities concerning the specificity of each case and the approximation amongst themselves. To this end, the present work attempts to treat the issue of the securitization of water resources, in which the awareness of environmental issues renders the convergence of agendas partly incompatible, and which, when combined, have produced the securitized effect, in turn resulting in the questioning of the new security agenda (Waever 2009).

In addition to addressing the relationship between water and security, this work also aimed to reflect on the ideas that inform the discourses of security involving the cases of the Nile and the Aral Sea Basin, thus revealing a multiplicity of practices that show the possibilities and limits of the securitization theory for the analysis of new threats to security, more specifically, environmental threats.

The selection of the Aral Sea and the Nile cases is a strategy conducting by method of the most different cases, which allows one to outline the degree of differences and similarities in terms of securitization in a political context, especially as regards the securitization spectrum, levels of conflict (national versus transnational), and the security approach (national security versus human security). It is worth noting that the cases of the Nile and Aral basins were selected in an attempt to understand the different concepts of security discourses that inform the actors of the securitization of water resources: whether they associate the resolution of conflicts over water with the sphere of international cooperation or whether they resort to military responses based on the antagonism between states. The present paper, therefore, does not propose to delve deeply into the history and dynamics of the two conflicts, nor does it intend to extend the present results to all cases of conflicts over water (Stetter 2011).

Nevertheless, this article does begin with a brief description of the main contributions related to the study of water and security. It then presents the Copenhagen School and the securitization theory, in an attempt to allow for an analysis of the securitization of water. Subsequently, the two cases will be associated with discussions concerning the implications underlying this process, involving the two main approaches (national security and human security). Finally, the main point will be displayed, that is, no measure of exception will be taken; much to the contrary, as the actions indicate the following: while water is considered an element of uncertainty in the world, what has more commonly been observed is a cautious treatment of water scarcity as a problem of insecurity. This appears to be due to the fact that water does not fit the traditional paradigm of security, thus requiring a redefinition of international security to encompass other concepts, such as the sustainability of water resources, in turn breaking new ground on the paradigms of human and environmental security.

2. The emergence of water resources as a security problem
According to authors from different schools of thought who study conflicts over water resources (Gleick 1993; Homer-dixon 1999; Wolf 2007; Gleditsch 1998), the water scarcity crisis is affecting many regions throughout the world, progressively becoming a global threat. However, this perception has only become significant in the academic debate on international security during the post-Cold War era. The link between water and security, primarily linked to strategic studies, now appears in the debates on the extension of security studies, which advocates the reconceptualization of the time-honored paradigm of security. Traditionally, when theorists of international relations and political science refer to "international security", they are referring to "state security", whose threats would come as a menace to the state through the use of force, militarization, and conventional war.

Some authors believe that establishing water as a conventional security perspective is problematic, since wars are rare, especially if triggered by water. According to Uitto and Wolf (2002, 292), water scarcity could result in "exacerbated relations and conflicting interests, but not in violence, at least not among the nations." The same authors argue that conflicts over water scarcity often result in more cooperation between states than violent conflicts.

According to recent quantitative research developed by Tatemoto, using information available in various databases, cooperation is the option that has been most effectively adopted among states, thus making conflicts rare. When the conflicts occur, they are mostly resolved through diplomatic actions. As the author states in the conclusions of his work,

[...] If there is a common perception that water wars are imminent, there are few concrete indications that this perception is true. In fact, the survey data show that the relations between countries sharing water resources tend to be cooperative with respect to them. Conflicts over water resources are rare, occasional, do not scale to very worrying levels, and usually occur between states that have hostile relations for various reasons (Tatemoto 2010, 84).

Taking into account the conclusions of the research cited above, the failure to identify the most frequent military conflicts related to water sharing does not eliminate the security dimension, inasmuch as this is considered from the perspective of human security.

In general, advocates of the human centered approach to security argue that the theory of conventional security defines security in a purely state-centric paradigm, ignoring the threat that water scarcity poses to human security and economy. Indeed, water scarcity can also be portrayed as a threat to human security, even in situations devoid of interstate conflicts (Guslits 2011).

Another criticism of traditional security studies is that they share of an anthropocentric perspective of security, ignoring the threats to environmental security, represented not only by water crises and climate change, but also by the general framework of global
environmental change. Thus, environmental security is a necessary condition for all other references to global stability.

Scholars, such as Peter Gleick (1993), believe that this controversial approach underestimates the extent of water scarcity in the development of socioeconomic tensions that can result in violent conflicts. According to this author, water scarcity is a threat to security because the natural resources and environmental problems reduce the quality of life and increase competition and tensions among groups at sub-national or national levels, many times leading to extreme cases, including violent conflicts and even war (Guslits 2011). One example is associated with the war between Arabs and Israelis in 1967, which occurred at the basin of the River Jordan, whose main cause, according to some scholars, was water. In addition to these two main approaches, there is also a third, very useful approach which is relevant to the problems found at the basin of the Nile river: the possibility of an interstate conflict manifested through the difficulties related to the establishment of agreements or guidelines, aimed at sharing of water resources and tackling the difficulties that state co-users face when attempting to act cooperatively.

3. The securitization theory and water resources: a structure for analysis

During the Cold War period, the concept of security was key to the study of international politics, hitherto focused on military issues and the use of force. The non-military aspects of security began to gain greater visibility with global transformations since the 1970s and the emergence of a broad security agenda in the 1980s. After the Cold War, the criticism about the primacy of military security began to be asserted, resulting in a fragmentation of discussions into three perspectives: the traditionalist, whose primary focus is military; the comprehensive, part of the horizontal expansion of the concept which incorporates other sectors beyond the military; and the critical current, called Critical Security Studies, which questions the theoretic framework within which security is defined, resulting in the vertical and horizontal expansion of the agenda (Buzan 1997). For a comprehensive approach, security is a specific form of social practice, that is, security is "what actors make of it" (Wendt 1999; Brauch 2007; Huysmans 2002) or "how it is a socially constituted nature of the issues" (Buzan et al 1998, 203).

One of the most important formulators of a comprehensive approach to security is the Copenhagen School, a research body mainly associated with the work of Barry Buzan and Ole Waever, who were responsible for developing an important analytical instrument: the securitization theory. This theory emphasizes the political nature of "doing" security, challenging the traditional approach to security concerned with self-evident threats, and introducing a social perspective based on constructivism.
Security from the perspective of the Copenhagen School theorists can be understood as a particular form of social practice, a result of speech acts uttered by a securitizing actor, who has designated a particular issue as an existential threat to the referent object, demanding the adoption of urgent and exceptional measures in an attempt to contain this threat. It should be noted that the specific qualities that characterize the security problems include: the sense of urgency, the demand for the use of exceptional/extraordinary means, and the construction of an existential threat to a referent object (Buzan et al 1998).

The securitization theory should be understood as the study of subjective threats, defined in a process of the intersubjective construction of understandings of reality. For this, the analyst should study the construction of the threat through the logic of securitization and its effects (Buzan et al 1998). One way to identify the securitizing actor is by studying the logic of securitization. For this, it is important to verify whether or not an actor is speaking as an individual or on behalf of an organizational structure. This can be especially difficult when referring to environmental issues, given that these do not commonly join to form an organizational structure with pre-ordained spokesmen, in turn hindering the legitimization of discourses from non-state actors (Buzan et al 1998).

According to Buzan et al (1998), the term securitization can be understood as a process in which certain issues become part of the security agenda:

“Security” is the move that takes politics beyond the established rules of the game and frames the issue either as a special kind of politics or as above politics. Securitization can thus be seen as a more extreme version of politicization. In theory, any public issue can be located on the spectrum ranging from nonpoliticized (meaning the state does not deal with it and it is not in any other way made an issue of public debate and decision) through politicized (meaning the issue is part of public policy, requiring government decision and resource allocations or, more rarely, some other form of communal governance) to securitized (meaning the issue is presented as an existential threat, requiring emergency measures and justifying actions outside the normal bounds of political procedure)” (Buzan et al 1998, 23 - 24).

The securitization process can be understood as one in which a given object is handled by a particular actor - the securitizing actor - as if it were facing an existential threat. However, despite this character, the Copenhagen School's approach cannot be considered uniformly distributed. While their understanding of security is radically constructivist, interpretation of social relations is not. Although the ontological constructivism should advocate that social relations are not a product of nature, but rather the result of human actions and are constantly subject to change, Copenhagen theorists admit that not all social practices are malleable. Some practices are deeply embedded and cannot be considered a matter of choice (Buzan et al 1998; Huysmans 1998). It is precisely within this point that one can observe the tensions that surround
the securitization theory, exposing an empirical analysis of non-conventional security objects, such as water resources (Stritzel 2007; Lindberg 2010; Allouche 2007). This is because the concept of security entails a set of practices and a particular way of dealing with the security problem that comes from Schmitt’s understanding of the political\(^1\).

However, the emergence of new threats, especially environmental ones, has suggested that an antagonistic understanding of security and exceptionalist measures are not the only ways available to deal with the advent of new threats. There are also other practices based on liberal thought that evinces the emergence of human security as a permanent practice within the security arena.

In the 1970s the discussions on the environment are quite clearly a part of security studies. A pioneer at this stage was Lester Brown (1977), who published the text "Redefining national security". This theme was also taken up in 1983 with the publication of the article "Redefining Security", by Richard Ullman. Another factor that contributed to the integration of environmental problems in the security debate was the publication of the Brundtland Report in 1987, which stated 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 impact of environmental stress – locally, nationally, regionally, and globally" (WCED 1991, 21).

For the World Commission on Environment and Development (WCED), environmental security considers state sovereignty as a referent object which can be framed in the context of comprehensive national security studies. To reduce security threats, the report recommends a redefinition of priorities on both national and global scales, which should include the adoption of broader concepts of security, with the rejection of military logic and the concentration of efforts in the building of a common future (WCED 1991, 325-344). For such a change to be plausible, the committee coined the term "environmental insecurity," which aims to rethink the link between environment and security (Trenell 2006, 12).

\(^1\) According to Carl Schmitt the political means the difference between friendship and enemy categories (Schmitt, 1996). For this, the security logic is the logic of war, suggesting an extreme oppositionism form, a play of zero-sum in the comprehension of security. A security performative has to take into account this antagonism. This conception is the same that characterize the security practices adopted by Buzan et al (1998) and Waever (1995) in the securitization theory, limiting the historicization of security and the transformation of security unities (Trombetta 2006).
FIGURE 1 – Relationship between security, environment, and conceptual variations

Adapted from Barnett (2001).

Thus, the fundamental logic of the discourse on environmental security, according to Wilde (2008), is based on the idea that humanity is living beyond the full capacity of terrestrial ecosystems at local, regional, and global levels. For Wilde, the central objective of these discourses is to evaluate the relationship between environmental degradation and political stability. The discussions surrounding this relationship contain two core understandings: the national perspective and human security (see Figure 2).

FIGURE 2 – Paradigms of Environmental Security

Adapted from Page (2000).
4. Water as a security problem: the case of the Nile River and Aral Sea Basin

The Nile River Basin

The Nile River Basin is one of the largest worldwide. Approximately 160 million people depend on its waters for subsistence and approximately 360 million live in the riparian countries (Kameri-mbot 2007). It is estimated that over the next three decades, this population will more than double, increasing the demand for water resources, also considering the estimated growth of industry and agriculture in the region. In addition to being the second largest basin in the world, the Nile River Basin is one of the most complex considering its political and social aspects, given the occurrence of harsh processes within the region, such as desertification and prolonged droughts on the one hand, and social unrest and political clashes on the other.

Currently, eleven countries share the geography of the basin, namely Egypt, Northern Sudan, Southern Sudan, Eritrea, Burundi, Rwanda, Congo, Ethiopia, Kenya, Uganda, and Tanzania (see Figure 3), of which, according to the United Nations Development Program, all countries of the basin, with the exception of Egypt, are among the countries with the lowest Human Development Index of the world (UNDP 2011). This scenario is accompanied by increasing pressure on natural resources in the region.
The Nile waters, which are responsible for providing the livelihood of thousands of inhabitants in the region, has recently faced a number of challenges, including the consequences of climate change, population growth, environmental degradation, conflicts over land use, lack of proper management of water resources, and the fragility of national, political, and institutional structures.

In addition to socioeconomic and environmental pressures, the fact is that both Egypt and Sudan are almost entirely dependent on the Nile River, of which 85% comes from Ethiopia, which plans to increase the volume of water consumed in its own territory (Tatemoto 2011). This situation makes the control of the water resource in the basin vital, considering that, as highlighted by Stetter (2011), there is a historical perception

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2 Available at: http://siteresources.worldbank.org/INTAFRNILEBASINI/About%20Us/ 21082459/Nile_River_Basin.htm
that, while the other basin countries have alternative water sources at their disposal, Egypt depends heavily on waters from the Nile, which goes beyond its borders. Because of this situation, the governments of Egypt and Sudan have been trying to dominate the regulation of the Nile and often attempt to securitize its waters in relation to the countries upstream of its borders.

The Nile Water Agreement, signed by Egypt and Sudan in 1929, recognized the rights acquired by Egypt, granting it a major portion of the annual water flow, and determined that no project would be built on the Nile without Egypt’s consent, especially if it affected the volume of water that would reach the Egyptian territory. Meanwhile, Egypt reserved the right to implement such projects without prior permission from their upstream neighbors (Stetter 2011; Tatamoto 2011).

With the independence of Sudan, the main focus of conflict in this region today is between Egypt and the quota stipulated to use the waters of the Nile. In 1956, while Sudan insisted on the revision of the Nile Water Agreement, Egyptian President Gamal Abd Al-Nasser envisioned building the Aswan Dam. Because of diverging interests, the Egyptian army was deployed to the Sudan border with the intent of threatening this country through the use of force. This tension resulted in a treaty signed in 1959, which allocated almost 90% of Nile’s waters to the two countries, and limited the overall amount of water used by other countries to 2 million cubic meters of water (Stetter 2011). This agreement not only granted veto power to Egypt, but also excluded the other 08 countries from the negotiations on the grounds of "acquired rights" over the river, leading Ethiopia to challenge the legality of the bilateral measures, in turn resulting in eminent threats of conflict between the two countries in the post-colonial period. This asymmetry in the allocation of Nile resources is based on colonial history and the imbalance of regional power.

According Tatamoto (2011, 75), "the history of relationships between Egypt and the other basin countries, especially Ethiopia, is marked by distrust." However, the privileged position of Ethiopia, according to their ability to dam the Nile, has been used to threaten their neighbors downstream. Such securitization movements concerning the waters of the Nile have existed throughout the region's history, as can be seen by allusions to President Anwar Sadat's discourse, delivered in 1979 and almost entirely repeated by the Minister of Foreign Affairs, Boutros Boutros-Ghali, in the 1990s, both previously cited in this article.

Although the Egyptian government, including the current military government, has securitized water resources and identified water scarcity as an existential threat to "Egyptian national security", which represents a given object, the 1990s has witnessed the emergence of cooperative practices between Egypt and the countries upstream. In 1992, the 10 basin countries began a process of international mediation which culminated in the Nile Basin Initiative (NBI) in the end of 1990s. This initiative became a transition framework to a process of continuous negotiation for the equitable allocation of water and the promotion of a "shared vision" of water resources in the
region. There are still efforts to insist on the implementation of large hydrological projects with unilateral character, which pose a threat to cooperation in the management of shared water in the region. Moreover, the major point of divergence is still the equity in the allocation and the regulation of water, especially given the hegemonic position of Egypt and its strong coordination with Sudan, which has imposed restrictions on the formation of a system among the 11 countries, in turn rendering the cooperation process unstable (Stetter 2011).

The Nile River Basin presents a practical example of some challenges inherent in the management of transboundary waters. The achievement of an agreement covering the entire Nile basin has also been complicated by the competing needs of users upstream and downstream. However, countries bordering the Nile basin have sought to cooperate on a number of technical issues related to projects and have demonstrated how technical cooperation can lead to collaboration when the entire basin is integrated.

The Aral Sea basin

The Aral Sea Basin occupies approximately 1.8 million square kilometers, extending through Turkmenistan, Kyrgyzstan, Tajikistan, Uzbekistan, and Kazakhstan (see Figure 4). Approximately 83% of the Aral Basin is in a territory that was part of the former Soviet Union, with part of the basin resting on the lands of Iran and Afghanistan (Wenthal, 2006). The two most important rivers of the basin are the Amu Darya and the Syr Darya. Both originate in the eastern mountains of Central Asia following the deserts of Kara Kum and Kyzyl Kum, respectively, until emptying into the Aral Sea, a large lake in the desert.

The Amu Darya is formed by two rivers, Panj and Vakhsh, in Afghanistan and Tajikistan, where it subsequently flows into Uzbekistan and Turkmenistan, and then into the Aral Sea. By contrast, the Syr Darya begins in the eastern mountains of Kyrgyzstan, flowing westward toward Uzbekistan, in the Fergana Valley, where it receives the Kara Darya and then continues to flow through Tajikistan, Uzbekistan, and Kazakhstan until it finally empties into the Aral Sea.
The Aral Sea Basin defines not only the physical environment of Central Asia, but also the sociopolitical environment. Originally, this basin covered an area the size of India, Pakistan, and Bangladesh combined. Until the 1960s, 56 km³ of water flowed annually into the Aral Sea; however, since the 1970s, its tributary, Syr Daya, has not been able to reach the lake. In the 1980s, the Amu Darya also stopped flowing into the Aral Sea. During the Soviet regime, nature was seen as an object to be subdued. Moreover, decisions of the political regime were all virtually hidden, resulting in almost no possibility of controlling the actions of the government by the people, including the use of environmental resources. Consequently, the government of the former Soviet Union was forced to spend billions of dollars to build dams and canals across Central Asia in an attempt to increase the irrigation area for cotton production, regardless of environmental degradation. These actions resulted in the shrinking of the Aral Sea and, therefore, the calamitous pollution that still persists in the region. In the region where there was once the fourth largest lake in the world, today has only two bodies of water one in the north and another in the south, separated by a desert of salt (see Figure 5).
Because these countries are located within arid and semi-arid regions, the agriculture can only be sustained through an extensive and sophisticated irrigation system. However, the policy adopted by the Soviet Union favored and promoted the specialization of all regional economic output regarding the cultivation of cotton in downstream countries, bypassing the need for hydroelectric production in the upstream countries.

The collapse of the Soviet Union has disrupted the economic base for which the infrastructure of production was designed, causing divergences due to asymmetries in the interests and capabilities amongst the water users located both upstream and downstream of the Syr Darya and Amu Darya tributaries. According to the example set forth by Wheintal (2006), with independence, Uzbekistan has discovered that it had no control over the three main rivers - Syr Darya, Amu Darya, and Zarafshon - on which it depended for its irrigated agricultural production, given that 91% of its production depended on the waters from these three rivers. Similarly, 98% of all the water used by Turkmenistan is extracted outside of its own borders.

3 Available at: http://mappery.com/map-of/Aral-Sea-historic-coastline-Map
These examples demonstrate that the collapse of the Soviet Union altered the political structure in the region, including the purposes for which water was previously directed. The downstream states, responsible for the higher consumption of water for irrigated agriculture, found themselves in an underprivileged position as compared to the upstream states. Moscow, however, did not have sufficient legitimacy to resolve disputes concerning the allocation and use of water resources in the region.

With the independence of Central Asian countries, each new state began to set their own economic interests, which, in many cases, conflicted with the goals of the other, adding more tension in a region already weakened by the collapse of the Soviet Union. Regarding the management of two major sub-basins in the region, the Amur Darya and the Syr Daria, disputes among Kyrgyzstan, Kazakhstan, Uzbekistan, Turkmenistan, and Tajikistan began in 1991, whose focus turned to the amount and seasonality of water, discharge of effluents into water bodies, the maintenance of related infrastructure from the Soviet era, and the attribution of economic value to water (Weinthal 2006).

In summary, the potential conflicts for equity, as well as human and economic development, are often demanded by the states when they speak of the future of their people in Central Asia, especially due to the asymmetry of interests and capabilities between the downstream and upstream countries of the two main Aral Sea sub-basins.

On the other hand, the presence of these asymmetries, rather than result in the triggering of acute conflicts surrounding the transboundary resources in the Aral Sea, began a process of the strengthening of interstate institutions in the region. According to Weinthal (2006), the basin states were able to negotiate new agreements with the aim of reducing the possibility of the outbreak of conflicts over water due to the demarcation of new borders in the post-Cold War era.

Months after independence, the Central Asian leaders signed an agreement on "Cooperation, Management, Use, and Protection of Interstate Water Sources" in February 1992. According to it this agreement, Central Asian states are obliged to refrain from actions that may infringe upon the interests of other parties, cause damage to themselves, or threaten the values agreed upon concerning the region's water resources (Allouche 2007). Water resources were defined as "common and comprehensive," ensuring that states can continue the process of cooperation according to what has been done historically and based on the quantities used by the Soviet Union (Weinthal 2006). This agreement was intended to protect the cotton crop, preventing the destruction of irrigated agriculture through the process of political transition, as well as perpetuating past practices.

However, this agreement allowed for the creation of an Interstate Commission for Water Coordination (ICWC), whose objective was to determine the limits of water consumption for each state and according to seasonality within the region. Under this agreement, four other institutions were created; the most important is the Interstate Council for the Aral Sea Basin (ICAS).
5. The securitization of water resources in the Nile River and Aral Sea basins: reflections on the field of security studies

The traditional view of environmental security is driven by two core ideas: the idea of scarcity and the notion of the abundance and/or scarcity of natural resources. This approach, commonly called "environmental conflict", is guided by the traditional assumptions of security, according to which the sovereignty and territorial integrity of the state are the referent objects of a security discourse.

In one case, Egypt uses security as a speech act to draw the audience's attention to a national security threat posed by the sharing of the waters of the Nile with other riparian nations. Egypt, therefore, treats the possible loss of authority over the uses of the waters of the Nile as a threat to the state, inasmuch as its position downstream in the basin and its near total dependence on the Nile render it completely vulnerable.

According to Lindberg (2010), the adoption of drastic measures by Egypt, such as transferring the issue of the Nile River from the Ministry of Water to the Ministry of Foreign Affairs, exemplifies this exceptionalist perspective of traditional security. This approach to the water issue is in line with the history of Egypt's role in the region. However, with the increasing power of other countries, the interdependence amongst them and the creation of the NBI in 1999 have made Egypt begin to adopt a more conciliatory tone on the issue, adopting a cross-border approach that is aligned with the ideals of human security.

This position of Egypt can be understood by analyzing how the importance of the loss of their decision-making power regarding the waters of the Nile impacts the survival of the state, as Ullman states:

"[...] (1) threatens drastically and over a relatively brief spell of time to degrade the quality of life for the inhabitants of a state, or (2) threatens significantly to narrow the range of policy choices available to the government of a state or to private, nongovernmental entities (persons, groups, corporations) within the state. (Ullman 1983 apud Page 2000, 36).

At the same time that Egypt claims to be keeping with the traditional view of security, it is also traversing through the universe of cooperation geared toward the management of the shared waters of the Nile, assuming that changes in the environment affect not only national security, but also individuals, including other countries. Thus, this concept integrates the perspective of "human security", which is close to that adopted by Brauch (2005, 34), for whom the "human-centered environmental security" leans heavily on moral and pragmatic reasoning, inasmuch as its main focus is the welfare of individuals, particularly the protection of the rights of the most vulnerable individuals of society.
against water scarcity. This is the case in most countries of the Nile basin, whose rates of poverty and social and environmental vulnerability are among the worst in the world.

In this sense, the human security approach is relevant for two reasons: first, because it sees the state as a source of threat and may itself be the referent object of national security under threat, and second, because certain changes in the environment can trigger other potential forms of insecurity, such as poverty, disease, discrimination, and even terrorism (Dabelko et al. 2000).

These explanations are useful to comprehend the case of the countries in the Aral Sea basin, where the actions of the Soviet Union led to the collapse of the water resources in Central Asia, resulting in drastic changes in the environment, threatening the survival of the economy as well as the entire population in this region.

Considering these aspects, this proposal of conceptual reformulation challenges the state-centered understandings of security, transcending national boundaries and supporting values, such as sustainable human development, with the purpose of providing individuals with a world "free from want" and "free from fear". Moreover, although human security is based on norms of humanism and ethical responsibility to redirect security toward the needs of the individual, rather than the those of the state, the latter remains an indispensable means through which to guarantee individual rights, creating economic opportunities and ensuring good governance. Thus, despite its emphasis on the importance of individuals, human security cannot be separated from institutional frameworks, particularly from the states within which human rights are (not) implemented "(Sorj 2005, 01).

In summary, this approach represents a new perspective that aims to reconcile issues concerning human security with the political agenda of states "in a globalized and insecure world" (Dodds and Pippard 2005). Therefore, to this approach of human security, water resources should be recognized by states as inalienable to the environment and to human rights, given their importance for economic development (Guslits 2011).

### 6. Conclusions

The securitization of water resources in the Nile River and the Aral Sea Basins has led to another concern about the perspective of human security, whose purpose is to adopt a preventive approach, supported by mitigation and adaptation policies regarding the consequences of environmental changes and the strengthening of multilateral agreements for the management of transboundary waters. Contrasting with an approach that considers water wars a self-fulfilling prophecy (Gleick, 1993; Starr, 1991),
according to which states must be prepared for potential threats, such as the scarcity of resources, the approach adopted by Human Security takes into account the catastrophic impacts of such threats on the future of water resources in these regions. For this reason, this stance suggests the adoption of measures for mitigation and adaptation, guided by the rationality of preventive and shared action. In this sense, the securitization of water resources in the two analyzed cases suggests a transformation in the debate on the subject, which no longer belongs to the realm of traditional security, but now integrates the field of cooperation and environmental security. Although the belief in the possibility of gains from progressive cooperative relationships between water resources and security is challenged by many scholars, this has revealed considerable gains spurred on by open and multilateral policy required for the treatment of water problems on a global scale.

It is worth noting that the construction of threats has much to say about the values and interests safeguarded by the actors, as well as the practices and logics associated with security. For this reason, the exploitation of the special characteristics of the securitizing speech acts of water resources has proven to be significant. First, these speeches suggest a concern for water security, understood as a sine qua non condition for the maintenance of political stability in these regions, as well as a precedent for the "preservation of acquired levels of civilization" (Buzan et al 1998, 76), especially from Egypt.

Second, the needs of the modern and contemporary world are emerging in the wake of environmental problems in global proportions, resulting in the following issue: to preserve the political, economic, and sociocultural modern societies at the local, national, and global levels, it thereby becomes an imperative to change their structures, given their unsustainable characteristic over the long term. Therefore, if these structures are not modified through the voluntary action of relevant actors, they could in fact suffer setbacks from environmental crises, thus running the risk of causing severe political instability, the social and/or economic consequences of which are difficult to predict (Wilde, 2008). In this sense, this dilemma goes to the core of any discussion involving the countries of the Nile River and the Aral Sea basin, involving the existence of two contrasting approaches regarding the provision of security. The first, dependent on emergency measures, suggests the impossibility of being prepared for all potential threats arising from environmental changes. The second is developed from a preventive approach and warns of the heavy impacts of such changes (Trombetta 2008). This debate, therefore, brings about the possibility of transforming a phenomenon that has not yet materialized into a threat, in turn influencing the practices suggested by the Copenhagen School, thereby revealing the limits and possibilities of the concept of security in tackling this problem.

The reference to the security issue in the cases studied has resulted not in an outbreak of conflicts, but rather in the adoption of alternative measures, including the construction of and the attempt to strengthen multilateral agreements. Another important conclusion is that the securitization of water movements concerning the two basins has led to the
politicization of the issue. According to Trombetta (2006), this development is problematic to the theoretical formulations of the Copenhagen School, in that the authors ensure that “transcending a security problem by politicizing it cannot happen through thematization in security terms, only away from such terms” (Waever 1995, 56). This is true due to the fact that, once an issue has entered into an antagonistic logic, it then becomes very difficult to reintroduce it to an open forum.

However, “the various politicizations of environmental issues that followed the appeal to security – those that the Copenhagen School dismissed as failed securitizations - seem to reinforce the argument suggested by Edkins that there is a tendency to politicize issues through their securitization” (Trombetta 2006, 11). In turn, this question suggests that the securitization of environmental and economic issues can assume different forms, demonstrating that evoking security in these sectors does not seem as problematic as Buzan et al (1998) claimed it to be.

This tension between what the theory postulates and what was observed in the cases studied herein allows for the following reflection: according to the formulations set forth by the Copenhagen School, one should define water securitization as unsuccessful. However, one must consider that the transformation of a security issue into a problem can be driven by a distinct logic that escapes the antagonist logic of the national security model. Thus, "speech-act theory entails the possibility of argument, of dialogue, and thereby holds out the potential for the transformation of security perceptions both within and between states” (Williams 2003, 523).

In this sense, the emergence of new threats has suggested that the adoption of exceptional security measures, embedded in the meaning of security as antagonism, is not the only way to deal with the threats posed by environmental changes, especially that referent to the scarcity of water. Instead, preventive measures seem to emerge as an alternative, making practices such as risk management, conflict prevention, and multilateralism reasonable answers to the discussion on security and water resources (Trombetta 2008).

Therefore, "securitization can be considered as a reflective process, not only directed by the rules [rule-directed] but transformer rules [rule altering]” (Trombetta 2008, 591). In this sense, securitization does not refer to the use of a fixed meaning of security as exceptionalism, as suggested by Waever (1995), much to the contrary. This speech act suggests an interactive process and a localized production of meanings (Stritzel 2007; Trombetta 2008).
References


