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Desalination, transboundary water desecuritization and cooperation

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ABSTRACT

The concepts of securitization and desecuritization, drawn from the security studies in international relations, explain the construction and deconstruction of security issues. The management of transboundary water resources has long been a national priority issue for many nations. By reducing the interdependence between states, large-scale desalination influences processes associated with the management of transboundary water resources and tends to place them back in the normal sphere of politics. Scholars described securitization and desecuritization as rather efficient or inefficient processes in terms of cooperation over water, but fail to provide a pertinent analysis of the implications of desalination on state interactions. This paper intends to fill in the research gap regarding the nexus between desalination, water securitization and desecuritization and cooperation. It analyses the theoretical background of the securitization and desecuritization theories emanating from the Copenhagen School and applies it to the issue of desalination. Using the Red-Dead Canal project between Israel, Jordan and Palestine, it illustrates how desalination can increase or decrease cooperation depending on the sociological context of the securitization and desecuritization moves. Lines of research on the factors and implications of desalination on transboundary hydro-politics are also discussed.

Keywords: Transboundary hydro-politics; Desalination; Security studies; Water security; Securitisation theories; Cooperation; Desecuritization

1. Introduction

Transboundary waters can act as sources of international tensions, though usually as part of a larger conflictual context. There has been sufficient literature showing that water itself does not produce conflicts like the so-called "water wars" [1,2,3]. Nevertheless, water can be a factor of friction between two actors. Therefore, in an arid region such as the Middle East, characterised by regional conflicts, it is essential to address issues of water management in order to prevent tensions and to promote cooperation. This article examines the theoretical background of water securitization and desecuritization and its incidence on state interaction regarding transboundary hydro-politics. In this context, it focuses on how desalination, as a factor of desecuritization, constitutes a tool that could increase or reduce shared water cooperation amongst riparian actors.

When water is crossing sovereign borders, regional stability can be challenged, especially when political issues take precedence over the hydrological realities [4]. With the addition of the scarcity factor, the potential for securitization and regional tensions increases as the demand for limited natural resources is on the national and international top policy agendas [5]. Nevertheless, the majority of the literature has considered water scarcity as a factor more inclined to induce cooperation rather than conflict [6,7]. In this context, Wolf [4] sees in desalination a potential game changer in the years to come. Wolf cites five critical areas in the transboundary waters field that will face an important change in the near future, the geopolitics of desalination is one of them. Wolf underlines the economic barriers to large scale desalination while acknowledging that it will change the inherent political power of upstream riparian actors, rearranging the set

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of basic geographic rules into a new one. Besides this, new technologies can help to achieve a more efficient negotiation and transboundary water management, as is the case with desalination which increases the supply of water available. Desalination thus signifies more flexibility in the management of shared waters [8].

Scholars have been inclined to describe securitization and desecuritization of water politics as rather efficient or inefficient processes in terms of cooperation, but have generally not provided a pertinent analysis of the implications of desalination on state interactions. The desecuritization of transboundary resources is the process of extracting a securitized issue from the realm of high politics, mainly dealing with national security issues, and putting it back in the field of normal politics, what is seen as concerning domestic issues. Desecuritization thus means less possibility for conflictual tensions. In some cases, this new configuration could lead to more cooperation, while in others, it could lead to unilateral actions. This paper intends to fill in the research gap regarding the nexus between desalination, water securitization and desecuritization and cooperation. First, it analyses the theoretical background of the securitization and desecuritization theories and applies it to the issue of desalination. Second, using the Red Sea–Dead Sea canal project between Israel, Jordan and the Palestinian Authority, it illustrates how desalination can increase or decrease cooperation depending on the sociological context of the securitization and desecuritization moves.

2. Security and water

Emerging in the beginning of the 20th century, within the realist framework of international relations theory, characteristic of that time, security studies at first considered only military threats to the state as security threats. This first wave of security theories has been called traditional security studies as opposed to the second wave, dubbed critical security studies [9]. In the 90's, with the end of the Cold War and the shift in dominance in the international relations literature from realist theory to constructivist theory, scholars started to broaden the range of national security threats outside of the military scope, shifting to include human security [10]. Security scholars, therefore, incorporated economic security, environmental security or human security within their field of research [11–13]. However, this article does not intend to deepen the debate between traditional and critical security studies, but rather merely to acknowledge the opening of the security theories to non-military issues, such as the environment.

Environmental security focuses on the importance of environmental threats and their impact upon and interrelation with human security and well being [14,15]. This wider approach resulted from "the acknowledgement that a sustainable environment not bound by political borders is integral to the continued development and survival of all human systems" [16]. Climate change, for example, is a good illustration of this concept as it is widely considered as a factor of national insecurity, along with the nexus between natural resource scarcity and security [17]. Within the framework of the notion of environmental security, the meaning of the term water security, subject to numerous interpretations and increasingly used in the last few decades, remains nevertheless quite often unclear [18]. More specifically, the hydrological interdependence between riparian states resulting from transboundary water resources represents a particularity within the field of water security, which "accentuates the need for co-management strategies, indeed for cooperation, as the bedrock for achieving true water security" [19].

According to Fischhendler [17], there are two types of security when it comes to water resources. The first one is strategic security related to the hydrology of an international river basin. The complex network forming the basin creates political, economic and environmental interdependencies between the riparian states. These interdependencies often link water availability, economic growth, food security and conflicts. The resulting connections can, therefore, raise water resources to a national security issue, "attaching a set of wider values, benefits and expected costs to water obviously elevates the resource into a national security issue" [17]. The second type of security is what he calls tactical securitization, which takes place "when low politics issues, such as water, are linked with the high politics issues of national survival" [17].

In the various approaches emanating from the critical security studies, the constructivist approach to security studies has focused on the discursive construction of reality and especially of the notion of security [10,20]. To the question "what is security?", Wæver argues that: "with the help of the language theory, we can regard "security" as *a speech act*. In this usage, security is not of interest as a sign that refers to something more real; the utterance *itself* is the act. By saying it, something is done (as in betting, giving a promise, naming a ship). By uttering "security", a state-representative moves a particular development into a specific area, and thereby claims a special right to use whatever means are necessary to block it" [10].

One of the key concepts of the constructivist approach in the field of security studies is securitization and desecuritization theories. Securitization and desecuritization theories have emerged from the work of Barry Buzan and Ole Wæver's team of scholars, known as the Copenhagen School (CS) [9,10,11]. These theories are defined as follows:

Securitization is considered as a process of taking an issue out of the realm of normal politics and bring it into the one of high politics, with the acceptance of exceptional measures to deal with it [21]. Three essential steps frame the securitization process: first is the identification of existential threats, second is an emergency action, and third, effects on relations between the parties by breaking free of rules [22]. According to the CS, securitization is considered successful or complete when two overarching facilitating conditions are met. The first one is the internal linguistic-grammatical construction of an "existential threat, point of no return and a possible way out" [9]. The second condition is "external, contextual and social" [9], with the importance of the actors taking part in the construction process and the context in which the process take part [16].

Desecuritization, on the other hand, happens when "a political community downgrades or ceases to treat something as an existential threat to a valued referent object, and reduces or stops its calls for exceptional measures to deal with the threat" [23]. According to Wæver [24], there are three ways to desecuritize an issue. The first option is not

to use any security semantic at all. The second is, if an issue has been securitized, not to generate security dilemmas and escalate the security process. The third is to bring back security issues into the realm of normal politics [24]. Regarding the third option, Wæver claims that "in the case of desecuritization, we have neither security nor insecurity. To talk of a situation as characterized by security means that a threat is articulated but that sufficient counter-measures are felt to be available – in contrast to insecurity with a threat of insufficient defence. If the situation is taken out of the realm of security conceptualization, the situation might inelegantly be described as one of 'a-security'" [10].

Unlike securitization, desecuritization is more likely to occur through a lack of speech rather than through speech acts. Were an agent to declare an issue not to be securitized anymore, this would not actually remove this issue from the high politics level [25]. Securitization and desecuritization follow a consistent rationale. According to Stetter et al. [6], securitization is a rational process, with the process itself varying between sectors and according to region [6]. The same reasoning would apply to desecuritization, meaning that bringing back an issue into the realm of normal politics does not happen arbitrarily either. The CS expressed a clear preference for desecuritization rather than for securitization [26,10]. According to Wæver's words, "we do not find much work aimed at desecuritizing politics which, I suspect, would be more effective than securitizing problems" [10] where effectiveness in dealing with the issue is of prime concern. Wæver also claims that desecuritization is better for democracy than securitization.

According to Aggestam [27], "desecuritization is seen as a positive process that moves an issue away from the exceptional and back to the normal spheres of politics, which are characterized by compromise, transparency and deliberation". However, the concept has not been defined more precisely, with desecuritization mostly considered as the absence of the negative aspects associated with securitization rather than with any positive goals to be achieved [17,22,27,28]. In fact, Wæver's primary consideration is the effectiveness of the phenomenon in the decision-making process which according to him is more likely to happen with desecuritization [10,28] . It is not the aim of this paper to find out if securitization or desecuritization is preferable or not or more efficient, and this study does not express any judgment on this issue, but analyses instead the implications of such processes on states' interactions in the case of shared waters management. To recapitulate, according to the CS, any issue can be discursively transformed into a national threat as long as the audience is receptive to the securitization move launched by the securitising actor. Following this, when it comes to water security, "transboundary water is a topic of choice for securitization, with water negotiations and allocations often identified as a national security priority in several international river basins" [17].

Since the emergence of the securitization and desecuritization theories, various scholars have expressed some reservations regarding the CS's framework without denying its important contribution to the field of international relations and beyond [20,28,29]. First and foremost, the degree of formality of the discursive action of security held in the CS's theory implies a certain code of practice to the concept of security itself. Securitization is more of a pragmatic practice than a static configuration of rules and takes part in a set of circumstances, namely the political agency, power and audience [30]. Second, as previously presented, the School's definition of securitization and desecuritization focuses on the securitising actors and the audience. Such a point of view prevents one from seizing the broader societal structure in which the securitization occurs, as well as the activating factors and impacts of the process [17]. As Floyd [22] presents it, securitization is entirely an "issue-dependent rather than static" procedure, in line with Balzacq's point of view on the dynamic nature of securitization. Roe [26], however, reproaches the School for developing a framework in which successful securitization occurs only within a certain context, with certain actors and a certain language . This implies that while opening up the range of possibilities for issues to be securitized and desecuritized, securitization and desecuritization remain narrow concepts. Roe's claim is similar to another critic underlining the centrality of the state in CS's framework [29,31]. According to Floyd [29], this stems from the fact that most securitization moves are still performed by state actors since they have the capabilities to make it happen. Among other critics, various scholars point at the School's focus on the language [21,32,33] or its simplifying binary logic [6]. These scholars underline the non-linguistic wealth of the security field and its numerous declensions. Regarding water issues, Stetter et al. [6] address similar critics, underlining the obstruction of two structural factors by the CS's approach:

"On the one hand, the securitization of water does not occur in a societal vacuum, but needs to be studied in relation to how conflicts, understood as autonomous social systems, render the emergence and dynamics of such securitization possible. {…} On the other hand, water-related conflict discourses cannot be understood in isolation from broader frames of reference with which actors make sense of reality in the era of globalization" [6].

Joining the more general critics addressed to the CS's theories, various scholars have preferred a more inclusive approach in which securitization is mainly a pragmatic process happening in a certain sociological context. Given this disparity of approaches, this work investigates a different approach to securitization and desecuritization, addressing these critics and offering a new framework for analysis.

The different constraints of the securitization and desecuritization theories of the CS's approach call for a more comprehensive definition of the two processes. According to Balzacq's [30] approach, securitization and desecuritization are "a strategic (pragmatic) practice that occurs within, and as part of, a configuration of circumstances, including the context, the psycho-cultural disposition of the audience, and the power that both speaker and listener bring to the interaction". Balzacq argues that there is a need to consider securitization as a strategic practice, with the set-up of linguistic and non-linguistic means. Moreover, he argues that these strategic acts of security take place within a certain set of circumstances made of internal and external conditions. This formulation ensues three questions. The first one is related to the access to discursive resources, raising the question of power. The second one asks how an actor does securitize an issue by using the security jargon, bringing up

the question of the audience. Finally, the third one deals with the framework within which the strategic speech act is taking place, originating the question of the context. According to Balzacq [30], the congruence of these three factors will define the outcome of securitization and desecuritization.

Balzacq [30] reproaches the internalist view of the context of securitization and desecuritization within the CS framework which, in his view, overstates the intrinsic power of a static set of rules, while the author, argues that in order for the speech act to pass, it needs to be related to the external context. According to Mirumachi [34], Balzacq's approach is able to reveal the political and socio-cultural elements in the securitization discourses. Unlike the CS's focus on discursive means, securitization is also represented in non-discursive means in the sociological approach. The semantic repertoire of the securitization and desecuritization processes is a mix of cultural and textual inputs, namely constructed by interactions and written and spoken language [30]. This combination is forming what the author calls a "frame of reference" [30]. The sociological approach examines securitization and desecuritization from a causal adequacy point of view through the analysis of "the degree of congruence between different circumstances driving and/or constraining securitization" [30]. Regarding environmental security, the CS's rules have determined many environmental issues as unsuccessful cases of securitization when in fact these issues can actually have similar results as cases of securitization from an empirical perspective. The sociological approach focuses on what is done as a result of the speech act between the different parties and not on a specific set of rules between the parties themselves [20,34].

The more comprehensive approach of securitization and desecuritization that is the sociological approach is, therefore, the definition that is used in this paper. In the context of water security, specifically, Fischhendler [17] identifies three research gaps related to the securitization and desecuritization phenomena. First, the activating factors gap; second, the implications gap, and third, the gap regarding desecuritized water. It is to these gaps that this paper now turns.

3. Activating factors of securitization and desecuritization

As outlined early, in Balzacq's approach, securitization is a pragmatic rather than static process and is influenced by the sociological context. It is the dynamic balance between different variables producing security and not a set of rules and conditions that need to be strictly followed. The three factors of securitization and desecuritization according to Balzacq [30] are the audience, the context and the securitizing agent. It can be deduced from this theory that any specific configuration of the set of these three factors will imply or not the activation of securitization or desecuritization. A distinction can be drawn between internal factors such as the audience and the securitizing agent and external factors such as the context. Nevertheless, these three factors are interlinked and it is the congruence between the three that creates securitization and desecuritization.

Focusing on the securitizing agent, the question of capabilities arises, these being the result of external and internal factors. In the case of transboundary water resources, one has to take into consideration the resources of the hydrocracy [34]. The hydrocracy, defined as a group of actors in charge of planning and implementing water resources management, has a considerable power in securitizing water through its technological and institutional expertise. Even when the discursive means are effective in securitizing water, certain capabilities are necessary for the securitizing actor to validate the securitization process [22,34]. Another important concept to take into consideration while reviewing activating factors is power asymmetry [18,34,35]. Asymmetric power between the parties involved can influence the securitization or desecuritization processes [16,36]. In the case of water, the asymmetry in the institutional setting within which parties negotiate over water may start off securitization [16]. Only a few empirical studies have tried to define the different factors influencing securitization and desecuritization of water issues. In this sense, Nathan and Fischhendler [16] pointed to asymmetric actor ratio and negative background events as contextual factors activating the securitization move.

One has to examine the political, social and historical contexts of a particular securitized issue to grasp the way security is constructed [21]. Salter [37] calls these variables "sociological settings" and highlights the importance of the venue in shaping securitization moves. According to the author, all actions depend on the venue, shaped by the sociological settings. To use Floyd's terms, with securitization and desecuritization being issue-dependent processes rather than static ones, the context is crucial for the outcome of securitization and desecuritization [17,22]. In their empirical study, Nathan and Fischhendler present several independent variables such as the venue of the negotiations: whereas political ones as opposed to technical ones can represent a contextual factor activating securitizing moves [16]. According to the environmental scarcity thesis of the Toronto Group led by Homer-Dixon, resource scarcity may activate securitization, while on the contrary, means such as trade and technology, that can help reduce resource scarcity, may activate desecuritization [4].

Fischhendler [17] mentions three types of these mechanisms in the securitization process: structural, institutional and linguistic. Regarding shared water issues, Fischhendler also cites different mechanisms to desecuritize the decision-making process over water, for instance: engaging in data sharing and building of river basin organizations, engaging in trade of virtual water and avoiding basin closure. These can be classified amongst his mechanisms typology. Nevertheless, Roe [26] and Balzacq [30], for example, emphasize the fact that it is not an easy task to turn a securitized issue into an asecuritized one. This can be the case with water issues, where desecuritization is seen as a process being technical, managerial and instrumental rather than political or ethical [17].

This research starts from the principle that desalination, as a relatively new technology, could influence the securitization and desecuritization processes. Desalination is undoubtedly a means to handle water scarcity by creating a new source of water supply. As demonstrated by Mirumachi and Allan [38] in the TWINS method, natural resources scarcity can be overcome through several means which can be cooperation, trade or, the highest level, finding a way to get a new supply like with technology.

4. Implications of desecuritization on decision-making processes pertaining to shared water resources

As there is a general trend amongst security scholars considering securitization mostly as a negative process for decision making [26], desecuritization would, therefore, be preferred when it comes to effectiveness and democracy [10]. According to the CS, securitization can lead to less collaboration and cooperation [9,10]. Nevertheless, there could be cases in which securitization can favor or hasten the decision-making process and thus have a positive impact on cooperation and state interactions [30]. It could, for example, give a voice to marginalized actors and institutions in the decision-making process and create some leverage [39]. Some scholars have expressed their fear regarding securitization, expecting the creation of 'a zero-sum rationality', with winners and losers and the annihilation of cooperative attempts [16,40]. Turton [41] suggests that desecuritization in the water sphere would favor the development of institutions and rather create a win–win rationality, which would be more beneficial for economic growth and thus promote positive peace. Desecuritization would also allow parties to engage in benefit sharing [41], which is perceived as a way out of the zero-sum game associated with the sharing of water costs at the basin level [42]. Nevertheless, Fischhendler [17] warns that these assumptions have been unverified until now.

According to Nathan and Fischhendler [16], Fischhendler and Katz [43], and Swatuk [44], the fact that scholars are in favor or against securitization is irrelevant to the debate since none of them can analyze rigorously the implications of securitization on cooperation. In the case of desalination, however, what can be assured is that the reduction of inter-dependence between riparian actors thanks to new technology that creates a greater flexibility and lessen the zero-sum game rationality, favoring the desecuritization of shared water resources. To answer to Nathan and Fischhendler's [16] remark, one has to analyze what are the factors that imply more or less cooperation with large-scale desalination. Aviram et al. [8] have noted that desalination should reduce the potential for scarcity-based conflict, though the impact on cooperation is uncertain and context dependent [8]. Analyzing these processes based on case studies and creating a typology of factors that can be applied to any specific case would be an interesting approach. This typology would allow to classify factors activating securitization or desecuritization without positioning itself in favor or against securitization or desecuritization. Since this paper takes from the view that securitization and desecuritization processes are context-dependent, this research is a neutral approach to the processes.

5. The Red-Dead Canal as a desecuritized water case study

The Dead Sea is the lowest and saltiest body of water on Earth and is shared by Jordan, Israel and the Palestinian Authority. The Dead Sea Basin generates an important ecosystem granted with a great biodiversity. However, this unique ecosystem is facing severe deterioration, generating an ecological disaster. Water levels have decreased, from –397 m in 1968 to –423 m in 2012 and continue to decline at a rate of roughly 1 m per year. A third of the sea surface area has already dried out [45,46]. The extensive diversion of water from the tributaries to the Dead Sea by the countries of the region, particularly by Israel, Jordan and Syria, is the primary reason for the depletion of the Dead Sea. Indeed, the overall flow of the Jordan River, its largest contributor, has dramatically declined due to over-extraction [47]. In addition to unsustainable rates of extraction from the Jordan River, the drilling of wells and the exploitation and intentional evaporation of the sea by large chemicals industries have added to the rapid decline of the Dead Sea. The phenomenon of over two thousand sinkholes along the Sea's coast, directly resulting from the drop in sea level, poses a threat to the ecosystem, to local communities, and to infrastructure [48]. In a region where all riparian actors face, water scarcity and renewable supplies are fully appropriated, increasing the water supplies has become a common priority of governments in order to reduce water shortages [49,50]. Since desecuritization allows a clear understanding of the cooperative, contextual and procedural elements, it produces a more comprehensive approach of the empirical reality and guards against the deficiencies present in the realist approach [32]. Desecuritization being a dynamic rather than static process, it allows for understanding the different degrees of cooperativeness of a state, even as power-based variables do not vary.

The Red Sea–Dead Sea Water Conveyance Project (RSDSWC) is a joint initiative presenting three main objectives [46]. The first one is to desalinate water on a large scale to produce water at an affordable price for all three parties in order to alleviate water scarcity, especially in Amman and northern Jordan. The second objective is to prevent or mitigate the depletion of the Dead Sea by disposing of the brine from the desalination process in the sea. Finally, the project could serve as a symbol of peace and cooperation in the region [46]. The project of connecting the Mediterranean Sea or the Red Sea to the Dead Sea has been a topic of discussion for the last century. The project was given a greater impetus with the Peace Agreement between Israel and Jordan in 1994 and the creation of a plan for integrated development [51]. The Palestinian Authority joined the talks and an agreement was signed by the three governments to conduct a feasibility study on 9 May 2005. A funding proposal was presented to the World Bank which commissioned the feasibility study, released in 2013 [47]. A memorandum of understanding (MoU) was signed on 9 December 2013 at the World Bank headquarters acknowledging the will of the three parties to start the implementation of Phase I of the project. A bi-lateral agreement between Jordan and Israel was later signed on 26 February 2015. The agreement states the modalities of the cooperation the two parties have agreed on, in every stage of the project as well as for the management and the procedures [52]. A water-swap agreement between Israel and Jordan reduces the cost of water supply which makes it economically attractive for both parties [52]. Annually, 100–300 million cubic meters (MCM) will be extracted from the Red Sea and transported through pipelines to a desalination plant in Aqaba. From there, 65–100 MCM of desalinated fresh water will be produced. From this amount, 35–50 MCM will be sent to Israel as part of the water-swap agreement while the Israeli authorities will supply 50 MCM of freshwater to northern Jordan. The rest of the desalinated water will be distributed to the Aqaba region while approximately 110–220 MCM of seawater and brine will be transferred to the Dead Sea [52]. The desalination

plant will entirely be located in Jordan. With the pilot project accepted, Jordan will, therefore, sell the water desalinated in Aqaba to Israel while the Israeli authorities will sell water from the north of Israel to Jordan. A water swap has also been agreed on between Israel and the Palestinian Authority.

This study focuses on the incidence of the deal on cooperation and its role in water reallocation. What has been observed is that desalination has allowed Israel and Jordan to achieve a joint decision on cooperation regarding the issue of water scarcity. Another observation is that the Palestinian Authority has not been on the same level of cooperation as Jordan with respect to negotiations with Israel, and that political tensions have prevented the two parties from further cooperation. With the Palestinian Authority formally part of the beneficiaries, several issues have been ignored in the process. The Palestinian Authority seeks to leverage the project to promote the issues of its legitimacy to the land and sea and most importantly water rights. Although an official partner in the RSDSWC negotiations, in practice, the Palestinians, without influence, have been set aside, even from the Red Sea–Dead Sea Water Conveyance Study Program directed by the World Bank [53]. In order to build a sustainable peace, several experts suggest that the deal needs to address not only technical and functional issues but also political issues and to introduce transformative dynamics as well in the negotiations [47]. What we observe is how more flexibility, resulting from desalination, is allowing Israel to trade water with its riparian neighbors, here the Kingdom of Jordan and the Palestinian Authority. Nevertheless, with the same flexibility, Israel acts with different degrees of cooperation when it comes to its partners, with greater cooperation with the Jordanian authorities and more unilateral actions with the Palestinian Authority. Such a difference in Israel's cooperativeness can be partially explained by the contextual settings such as the larger Israeli–Palestinian conflict and the issue of access to water rights.

6. Conclusion

In regions where water scarcity could possibly heighten tensions between riparian states, new technologies such as desalination can create new sources of water supplies and increase states' flexibility. Securitization and desecuritization theories represent an inclusive tool to analyze the incidence of desalination on inter-state cooperation regarding shared water resources. Nevertheless, these processes have been defined differently among the academic literature. The sociological approach allows a more comprehensive approach, suiting better the environmental security issues. Still, the concept of desecuritization remains under-studied and often wrongly understood as the absence of securitization. This article attempted to clarify this mistake and to set up the base for further research. There is, therefore, a need to better theorize the concept of desecuritization and to link it with the securitization theory. Further research on whether it is possible for an issue such as water to be desecuritized after it has been securitized is also necessary.

To analyze the political and social context in which the securitization and desecuritization occur is essential to understand these processes. One has to consider the significance of threats and opportunities when dealing with the study of the processes of securitization and desecuritization [34]. The concept of "consequentialist securitization" determines if the process of securitization and desecuritization is a positive or negative process according to the impact it has on its beneficiaries [22]. Irrespective of whether or not securitization and desecuritization processes are per se positive or negative processes for democracy and efficiency in the decision-making, one has to acknowledge that the impact of securitization and desecuritization on the achievement of water security, therefore, lies within the way the securitization actors construct existential threats and how these threats impact on the parties involved [16]. There is also a need to share data about desalination technology and knowledge since desalination can induce desecuritization to avoid conflict and in some cases to promote cooperation. This is the case, even though it can also promote non-cooperation in some cases. Since securitization and desecuritization are issue and context-dependent, there is a need to create a classification that will allow water security experts to say in which case desalination as a desecuritization factor would increase or decrease cooperation. To conclude, as Leb and Wouters's [19] state, one has to understand "how cooperation and not securitization is at the heart of achieving effective water security".

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