

Education for Sustainable Development – Securitization in International, National and Local Settings? A Critical Study of Environmental Security in Policies, Education Reforms and Teaching Practices in Sweden

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Abstract

The study focused on environmental security in relation to international and national aims of Education for Sustainable Development (ESD) to explore if ESD can be understood as being part of a globally implemented securitization process with national empirical studies in Sweden. The perception of environmental threats was first set with regard to international environmental agreements and, mainly, UNESCO's policy aims of ESD. Expressions, statements and undertakings related to environmental threats were examined through a content analysis of education reform policies. Results demonstrated that the implementation of ESD varied depending on the usage of educational programs and individual understanding of ESD at different societal levels. Individual initiatives among teachers played a significant role in this process. It was also shown that securitization took place both horizontally and vertically and that securitization could be re-activated at the existing societal level although the previous one had ignored the impact of environmental threats to society.

Keywords: Education for all, education for sustainable development, education reform, environmental threats, securitization.

Introduction

Daily reports from various research institutes and media express concern about the climate's negative effects on nature, human well-being and prosperity in global settings (London School of Economics and Political Science [LSE], 2023; International Research Institute for Climate and Society [IRI], 2023; Stockholm Environment Institute [SEI], 2023). In Sweden, heavy rains during the summer of 2023 led to flooding in several places where municipalities and authorities had not foreseen the consequences of climate-induced threats. Two incidents called for infrastructural breakdown and safety measures for children not being able to get to school (DN, 2023; Sala, 2023). According to Sweden's national strategy for sustainable development, all political decisions must be designed to meet social and environmental aspects in the longer term (Swedish Government, 2004). National authorities are consequently responsible for producing risk and vulnerability analyses for climate adaptation, whereas the regional

level is responsible for coordinating responses to climate change at a municipality level (The Swedish Civil Contingencies Agency, 2021).

This study entails examining how security outlooks among different stakeholders at the international, national and local levels affect the ways environmental threats are perceived and handled in the international and Swedish settings, in order to reach the aims of sustainability in accordance with Agenda 2030 for Sustainable Development. A security outlook constitutes the overall scientific positioning where the utilization of securitization theory is intended to provide for a deeper understanding for how environmental threats are perceived, addressed and handled in international and national settings. Reasons for this outlook are motivated by the latest outcome of the COP 28 (IISD, 2023) where negotiations between resource-rich and resource-poor countries initially failed and ended in a weak resolution on how to make governments decrease future fossil emissions. Also, Sweden, as a developed country, has not given sufficient attention to environmental threats as major hazards to society. Rather, national threat images are primarily aimed at terrorism at different levels of society and in educational settings (SOU, 2021:15; Swedish Government, 2023; SOU, 2023:28; Holmberg & Alvinus, 2021). Linking knowledge of environmental threats to educational planning and content of education for sustainable development (ESD) in relation to severe environmental threats to society is, thus, a neglected area within a Swedish context, while this aspect is often mentioned in international settings (UNESCO, 2023a, 2023b, 2023c; Swedish Environmental Protection Agency, 2023; Mochizuki, 2012). In this study, ESD refers to the international outlook of UNESCO where the education sector clarifies responses to “the urgent and dramatic challenges the planet faces” (UNESCO, 2023a).

The aim of this study is to explore the perception among different actors of increased environmental threats to Swedish society based on an international outlook as a possible securitization process. Scrutinizing international and national strategies for addressing the impact of severe environmental threats to society along with adopting and implementing the sustainable development goals of Agenda 2030, therefore, constitutes essential features. A further aim is to examine the education reform and the implementation of ESD in relation to the securitization theory in order to evaluate its impact on addressing and responding to environmental threats through education by studying three national curricula and content of ESD material. These three reforms represent a period where environmental issues and climate change have been acknowledged as prioritized areas within the International Community and to a varying degree at the national level (see for instance The Kyoto Protocol (UN, 1997); Agenda 2030 (UN, 2015)).

The examination builds on establishing matters for international environmental security concern and how these international aims that include measures for responding to environmental threats are followed up and carried out at the national and local levels in Sweden – including education reform – through discourse acts. These discourses conduct the means for settling on how to respond to environmental threats by making use of Eriksson’s (2004) and Stepka’s (2022) awareness of framing. Further, the Swedish Government has highlighted the necessity to reach consensus between actors at the national, regional and local levels on implementing the Agenda 2030 (Swedish Government, 2022). The perception of threats by different stakeholders may, however, differ. The rationale, thus, presupposes that environmental issues are framed to become legitimized as high prioritized areas in the political process. Framing, thereby, contributes to assessing if securitization has taken place concerning

environmental issues and if the deployment of ESD can be considered as securitization. Environmental threats and issues related to ESD will first be set in relation to international environmental agreements, UNESCO's policy aims of ESD, before exploring national threats, policy aims and content of ESD in the Swedish education reforms.

By making use of Buzan's et al. (1998) securitization theory, the tasks of the research comprise:

- (a) to identify and examine perceived environmental threats as plausible securitization processes;
- (b) to explore how environmental threats at the international, national and local levels are considered and integrated into the educational sphere and
- (c) to define and examine the security procedures of actors involved in the planning and carrying out of ESD at the international, national and local levels.

Literature Review

A Security Perspective on Environmental Threats and ESD

Four areas of security perspective are highlighted. They consist of ESD, disaster reduction, securitization and framing. These areas show the interactive process between the objective and subjective forms of perception among actors who make use of ESD as a means for responding to environmental hazards as tangible threats yet shaped in an intersubjective process.

Research on ESD mainly focuses on issues concerning development and globalization (Wals & Kleft, 2010) where ESD is often related to environmental education (EE) (Bonnett, 1999) and development education (Scott & Gough, 2003; Nevin, 2008). Scientific literature is also characterized by examining the objectives of ESD with regard to teacher training (McKeown et al., 2006), learning opportunities (Nambiar, 2014; West, 2015; Kramming, 2017) and the realization of ESD policies (Taylor, 2014). Boeve-de et al. (2022) state that teachers are often unsure of how to implement ESD in Sweden, including unclear definitions of the subject and lack of practices. Increased self-efficacy among teachers is expressed as a necessity for bringing ESD into their educational practice. Similar ideas appear in an international context as Watchana et al. (2020) and Anyolo et al. (2018) found that both teachers and school administrators experienced a lack of knowledge of ESD, thus affecting its implementation. Gericke and Thorbjörnsson (2022) discuss different types of enablers and obstructive factors for implementing transformative ESD at the school level. Like all educational activities, ESD is mainly based on didactically designed learning situations aimed at achieving specified curriculum goals. However, in the teaching situation, tasks are performed which in essential parts may deviate from both the official and the intended purpose of the curricula (Remillard & Heck, 2014 in Fredriksson et al., 2020).

Ardoin (2006) suggests that change in environmental behaviors is best achieved through place-based education since emotional attachment may encourage students to protect the local community. This, as pointed out by Wanchana et al. (2020), takes place under the condition that teachers' competence in the area is developed. Teachers also need to gain knowledge about the local society regarding geography and ecological characteristics. Increased knowledge could be achieved through professional development activities as described by Brandisauskiene et al. (2020) by developing

learning networks among schools in the local area. Along these lines, Gopalakrishnan et al. (2019) showed in their study the benefits of making use of social media among pre-service teachers to increase an understanding of ESD with regard to their subject discipline. The study included 60 respondents who belonged to either Arts/Humanities or Science education using/not using social media. The results showed that personal pedagogical knowledge was an important factor along with making use of social media in contributing to address issues related to ESD at a higher rate among those in Arts/Humanities than in Science Education. ESD and sustainability as important factors at any education level in order to form active professionals were further stressed by Creel and Paz (2018). Merri et al. (2018) further elaborated on barriers and support related to the development of ESD at the school level, for instance, curriculum design, administrative and institutional barriers and lack of awareness and/or knowledge of ESD in primary and secondary schooling.

Salite et al. (2016) argue for an action research approach in order to grasp the inner content of sustainability in education among different occupational groups as part of a larger collective meaning at a university level through discussions and by making use of a transdisciplinary framework. Action research may contribute to development of the content of ESD at the local level through continuous processes among involved stakeholders.

Another area connects ESD to disaster risk reduction (DDR) (Shaw & Oikawa, 2014; Oikawa, 2016). The subject of ESD, within the concept of sustainable development, can thus be described as wide and embracing of a variety of approaches. The increased interest among scholars to comprehend the meaning of environmental threats and environmental awareness in contemporary security and conventional politics suggests that this is an area in need of further research (Barnett, 2001; Al-Rodham, 2007; Liebhenguth, 2022). Disaster risk reduction also includes climate induced barriers to learning. Different types of threats to schools are mainly linked to geography. "Impacts in exposed areas include disrupted water and energy services, climate migration, and violent conflicts over increasingly scarce resources" (Newsome et al., 2023, p. 498). Kitagawa (2023) critically examines how teacher education programs fail in addressing issues of DDR in connection to ESD. To some extent, this depends on whether society is in need of quick interventions in the event of climate induced threats and also if DDR is mentioned in the national curriculum. DDR and ESD are mainly related to the subject of geography.

Environmental awareness and environmental threats can be understood as settling on threat images through an intersubjective process among decision-makers and citizens in line with Buzan et al. (1998) and Williams (2003). Eriksson (2004) argues that the perception of environmental threats is often presented as threats to survival. However, they are rarely viewed as a prioritized security concern within the security policy framework even though global environmental depletion has been important to respond to, according to public opinion. This is exemplified by different risks posed to societies where threats are becoming increasingly apparent to people (Hakala et al., 2019). Different interpretations of threat images could thus be understood by how different actors, such as policy makers or citizens, interpret the image of a threat and if the issue has been politically framed. Framing builds on the notion of processes that are contextually set and constructed to form certain ways of understanding and respond to certain issues (van Hulst & Yanow, 2014). Stepka (2022) presents framing, in accordance with Entman (2007), as a practice which overlooks certain facts to promote a specific construction of social reality. Framing, thus, functions

as a process where security threats, in this case climate change and climate calamities, are constructed and shaped through a motivated agenda among actors who argue for and against the consequences of potential climate threats (Stecula & Merkley, 2019). Sometimes these political practices ignore objective facts (Jerit & Zhao, 2020).

Securitization theory builds on a constructivist approach and has become one of the main theories within security policies and analysis since it was first introduced by Buzan et al. in 1998 as a security framework building on a constructivist approach to security and how security is defined within political and societal settings (Corry, 2012; Alker, 2006; Williams, 2003; Balzacq, 2015). Securitization theory was developed as a response to the analytical drawbacks of the realist and the liberal models for explaining threats from an objective situation where an actual entity was threatened (Baldwin, 1997; Balzacq, 2011). What securitization theory brings to the fore is the usage of language in relation to settling on if an issue can be understood as part of the security framework for action (Buzan et al. 1998; Balzacq 2011; Williams, 2003; Eriksson, 1999, 2000).

Several new scientific developments of securitization theory have been executed (Baysal, 2020). Criticism has mainly concerned the different types of actors that Buzan et al. (1998) have brought forward as necessary for the examination of threats, security and securitization and how they contribute to the research process as analytical tools (Baldwin, 1997; Balzacq, 2005; Balzacq, 2011; Patomäki, 2015; Trombetta, 2011). Within the education sphere, security issues and, especially, securitization theory have still not received substantial coverage regarding how insecurities may have an impact on the realization of education and education reform (Dwyer, 2018; Goleman et al., 2010). Educational issues linked to societal factors that negatively affect children's schooling are usually associated with scientific fields such as sociology (Giavrimis & Papanis, 2008; Ghongkedze, 2018), economics (Kontio & Sailer, 2017; Levin, 2017), politics (Viennot & Pont, 2017) and educational decisions that are implemented within the school organization (Jarl et al., 2021; Nilholm et al., 2013).

Bringing together constructivist theory and concepts scientifically recognized within the scientific fields of International Relations and Education, thus, contributes to examining different types of perceived environmental threats and crises and their impact on civil society. A sociological approach to securitization will therefore facilitate the exploration of different categories of perceived environmental vulnerabilities and threats and their possible bearing on educational change and reform in Sweden during the past decades with special focus on security policy agendas, education reforms, climate induced barriers to learning and the implementation of ESD. Educational change and reform policies could therefore be understood as strategies for handling acute and approaching escalating threats. Reform processes are linked to forthcoming insecurities to society where changes consist of elements of uncertainty, struggle and opposing information difficult to grasp its full content (Fullan, 2001).

Conceptual Framework: Securitizing Environmental Threats Through Framing

The conceptual framework combines two positions into the examination of ESD. Securitization theory constitutes the overarching theory, while adding the concept of framing contributes to exploring how context shapes the political and the societal environment affecting the perception of environmental threats.

The idea of securitization draws on linguistic usage within an extended security perspective (Buzan et al., 1998). Linguistic usage concerns communicating what

security entails – the identifiable feature of securitization (Buzan et al., 1998). Utterance may involve both speech acts and written texts. In this study, an utterance equals statements and content in the text.

To establish if a matter is an issue for advancing into the territory of securitization, including security response, three specific steps should be fulfilled. First, it is necessary to define what constitutes existential threats. Second, it is essential to define the emergency action and determine how to respond to the threat (initiating the securitization move). Third, it is crucial to assess the consequences if the threat is not managed correctly (Buzan et al., 1998). However, scientific criticism regarding content and what the context consists of has been overlooked to determine whether securitization of an issue has taken place (Eriksson, 2004; Stępką, 2022). Part of this criticism is linked to the necessity of including framing into the study of securitization to generate a more distinct analysis model for what constitutes a threat and how different actors perceive a specific issue to constitute a threat. Thus, both Eriksson (2004) and Stępką (2022) argue for the necessity to bring in framing to the analysis for a thorough understanding of context and content and their relevance in a securitization process, including tailoring policies that are embraced by ministries and public agencies (Eder et al., 1995). Framing in combination with securitization theory would thus adhere to strengthening and deepening the inherent meaning of a speech act by giving increased legitimacy to the person or organization that makes statements. In other words, it is about generating a deeper understanding of what Buzan et al. (1998) express as “the external, contextual and social – to hold a position from which the act is made” (p. 32).

Four entities are part of the framework in a securitization process (Buzan et al., 1998). A fifth entity has been added to examine the implementation securitization (Dwyer, 2018). *The referent objects* are entities that are understood by stakeholders to be existentially threatened and that have a legitimate claim to continued existence. *Securitizing actors* are actors who securitize issues by arguing for that something – a referent object – is existentially threatened. *The functional actors* influence the content of a security sector. Without being the referent object or the security actor, this is a supplementary actor who actively influences decisions related to a security issue (Buzan et al., 1998). Buzan et al. further mention the role of *the audience*. The audience generally consists of citizens. The audience approves or dismisses the securitization move, thereby giving legitimacy to the securitization process, or rejects it. This process is described as intersubjective. However, a securitization move can take place without an audience if the decision to bring about a security response to a perceived threat must be made without delay. A new term is here introduced into the securitization process – “extended securitization actor” (Dwyer, 2018). *The extended securitization actors* are actors who carry out and implement decisions made by the securitization actors. They play a significant role in the implementation of the securitization process as they support or dismiss what the securitization actor has decided for to be securitized. Support or dismissal builds on the extended actors’ perception and understanding of a certain threat put forward by the securitization actors. This new term adds to determining the level of a threat and if securitization has taken place among various categories of (policy) actors who are set to implement policies and reforms articulated by the securitization actors. The extended securitization actor’s perceptions and following actions, thus, come to legitimize or de-legitimize the securitization process. However, they should not be viewed or labeled as the audience of a securitization

process since they work on mandate of the securitization actor and has the capacity to securitize.

Stepka (2022) refers to Huysmans (2006) by claiming that like securitization, framing is based on intersubjective practice where sense making shapes the nature of the threat as well as settling on the actions necessary for addressing the threat. By adding framing to the procedural of securitization, it becomes plausible to examine the perception of threats from diverse and multiple angles, which may be conflicting to each other (Stepka, 2022). In a similar way to the function of the “extended securitization actor”, framing has to do with the implementation of securitization. As Eriksson (2004) explains, under specific circumstances an issue may be framed through transformation and redefined or moved into another political area. However, this presupposes that actors who act intersubjectively also could act in a different way and that actors are aware of the consequences of action and non-action in practice (Lukes, 1974). Intersubjectivity in a security context can, therefore, be said to include matters of highlighting and issue, transforming it, acting or non-acting to a threat depending on the course of action and choices made by actors. Actors’ possibility to make non-decisions and justify them is generally not brought up in the context of securitization, nor within ideas of framing but may become important when different policy decisions are made at different levels of society on one and the same issue.

The intersubjective model for securitization along with framing could, therefore, be recognized as ways of shaping the perception of threats where power and agenda positioning alternately define where the threshold lies for initiating securitization of environmental threats. In this process, the education sector becomes an integral part of a sociological approach to an environment-based security outlook by incorporating ESD, education change and reform into the securitization framework for action (Balzacq, 2011).

Methodological Approach: Content Analysis and Sociological Securitization

A mixture of methodological approaches was adopted where analysis of text and expressions could be placed within the areas of *content analysis* and *discourse analysis* (Descombe, 2021). A conventional approach to content analysis is based on describing a phenomenon (Hsieh & Shannon, 2005), here this refers to securitization. By identifying and examining discourses in close connection with a phenomenon (securitization), we can gain a better understanding of how the phenomenon is perceived in a certain context (Nelson & Hardy, 2002). The starting point for selection of and deciding on relevance of the content and discourses was based on Balzacq’s (2011) notion of sociological securitization by examining the perception of environmental threats among different stakeholders. Discourse analysis draws on a subjective view where social reality is produced. Discourses are shared and social, emanating out of interactions between social groups and the complex societal structures in which the discourse is embedded. If we are to understand discourses, we also need to analyze its context (Sherzer 1987, van Dijk, 1997 in Nelson & Hardy, 2002). Here, this applies to the intersubjective process of settling on how environmental threats at different levels of society are *framed* in relation to societal structures. Data processing was, therefore, carried out according to content (measurement based on occurrence and position) and discourse acts (the meaning of the text as well as social structures and processes). This approach enabled interpreting current events, different types of documents and statements where the aim was to establish their meaning and

connotations (Vedung, 2018; Bacchi, 2015 in Stępką, 2022). Hence, interpretation was based on examining linguistic usage and expressions within the political arena, contextual settings and agenda positioning concerning the perception of environmental threats and the application of ESD at different societal levels.

Table 1

Data Selection of Linguistic Usage: Securitization/Framing

Securitization/ framing	International level	National level	Local level
Stakeholders and material	Reports from international organizations, NGOs. Scientific journals.	Reports from international organizations. Reports, legislation and information from the Swedish Government and Parliament. National Agencies. NGOs. Magazines. Scientific journals. National curricula and syllabuses.	International organizations. Governmental reports. National Agencies. NGOs. Scientific journals.

The data was selected and analyzed through the following operational procedure based on five phases:

- (1) the data was selected to display different types of environmental threats towards the global, national and local level of society, including ESD. Data not meeting the requirements of the aims of the study was disregarded;
- (2) the data was carefully scrutinized by examining the argumentation of stakeholders, policy content and context (Beckman, 2007; Descombe, 2021) in relation to perceived environmental threats, including the securitization move (Balzacq, 2011), in order to find shared codes;
- (3) codes were arranged into themes based on comprehending the external and internal meaning of the selected texts (Descombe, 2021);
- (4) the themes were then organized under three main headings – international level, national level and local level – corresponding to the previously mentioned three societal levels;
- (5) the findings were then theorized and contextualized to meet the requirements of sociological securitization (Descombe, 2021; Balzacq, 2011) by describing ideas in the data, including validating them. Concerning this final phase, interpretation provided a background for defining possible securitization moves, securitization processes and framing.

The utilization of these five phases made it possible to identify and define how environmental threats were addressed as part of an intersubjective process among local actors in relation to ESD. From a securitization perspective, this means being able to identify stakeholders' views on what constitutes urgency and climate threats in statements at three societal levels. Table 2 shows in the horizontal row the three

societal levels included in the analysis of environmental threats and ESD. These three levels present the study. At each of the three societal levels, the stakeholders and themes arriving at in the content and discourse analysis of the data are presented in the vertical row. They are examined against the conceptual framework of securitization and framing also shown in Table 2.

Table 2
Environmental Threats, Stakeholders and ESD

Securitization/ framing	International level	National level	Local level
Stakeholders	UN, UNEP, UNESCO, UNICEF, INGOs.	Swedish Government and Parliament, Agencies.	NGOs, Teachers.
Themes	Globalization, Legitimacy, Dependency/Autonomy, Disaster reduction, Curriculum design, Inclusion and the Right to Education.	Globalization, Development strategies, Long-term goals, Education and curricula.	Globalization, Health issues, Autonomy, Democracy.

Data Selection, Validity, Reliability and Ethics

The selection of data targeted different angles communicated and scrutinized by academics, civil society, international agencies, professional experts and NGOs in covering the perception of environmental threats and education reform among different stakeholders. Reliability was linked to interpretation of stakeholders’ usage of security in relation to the contextual setting. It also built on how security was addressed in primary and secondary sources depending on who transmitted statements. This part was signified by the role a specific stakeholder obtained and was presented by at a given time within a security framework (Buzan et al., 1998). Validity included accounting for securitization processes by identifying and defining perceived environmental threats and their impact on education reform through framing (cf. Entman, 1993 in Stępka, 2022). It also comprised defining where the threshold laid for when the securitization actor made the *securitization move* by comprehending where the threshold laid for perceiving an environmental threat as an urgent and viable threat in relation to the intensity and effects of the crisis by making predictions concerning the severity of environmental and/or material damage.

Ethical concerns included the handling of documents and statements. The four main ethical principles applicable to the Swedish research have been considered: (1) Voluntarily consent to participate in research; (2) informed consent; (3) protection of privacy and confidentiality must be incorporated into the research; and (4) maintaining the right to withdraw from research participation (Bryman, 2016, pp. 170-171). The selection of documents and content in relation to the areas studied meant these guidelines had no specific bearing on the object of investigation or the approach to the study.

International Level: Environmental Threats in Global Settings and the Call for an International Curriculum of ESD

Matters related to sustainable development currently include the implementation of Agenda 21, strategies for disaster reduction, protection of global climate and the preservation of biological diversity (UN, 2023a) along with accomplishing the Right to Education in an inclusive environment (UN, 2023b; UNESCO, 2020). Although the UN Assembly only has the power to make non-binding recommendations to states, it has been successful in promoting actions within several areas UN's significance in the international community (IC) has changed over the past decades (see for instance Luard, 1994; Holsti, 1992). This change is partly linked to the complex subject matter on state sovereignty and unwillingness to respond to the urgings of the UN complicates matters of implementation (Weiss & Thakur, 2010). The conditions for implementing international agreements related to environmental security are, therefore, both connected to the political authority, mandate and finances of the UN and its sister organizations to pursue their interest, as well as individual states' perception of environmental threats. As Ivanova (2010) argues, the perception of environmental threats at the national level is consequently restricted to whether autonomous states follow signed agreements or settle on contractionary policies. This applies even though various new actors – such as inter-governmental organizations, NGOs and environmentalist advocacy groups have gained access and come to influence and shape the global environmental agenda (Biermann & Pattberg, 2012). State's autonomy therefore has had a negative impact on recognizing the environment as an essential matter for securitization. Even though several international agreements have been signed, environmental issues are still less noticed at the national level.

Looking back, the international community has exerted massive efforts to address environmental issues, but except for a few cases, the overall situation is deteriorating. Biodiversity loss, climate change, water crises, chemical pollution, and land degradation have not been effectively resolved (UNEP, 2014, p. 15).

This indicates that there is a challenge for the UN to pursue and communicate environmental security as a highly prioritized security area within the International Community. Consequently, the UN as a securitization actor, had to explicitly define the urgent need to protect the environment to its member states. The new agenda for global action – “Summit to adopt the Post – 2015 Development Agenda” includes discourses of this enhanced security approach as seen in Goal 13.

Goal 13. Take urgent action to combat climate change and its impacts.

13.1 Strengthen resilience and adaptive capacity to climate related hazards and natural disasters in all countries

13.2 Integrate climate change measures into national policies, strategies and planning

13.3 Improve education, awareness raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning (The Global Goals, 2023).

By making use of the expressions “urgent action” and “combat climate change” in relation to stating environmental threats and incentives for improving policies, the UN accentuates the prerequisites for the securitization move. Also, education has an important role in increasing environmental awareness. However, framing of

environmental security does not contribute to a higher degree of authority since the UN fail to make states comply with life-determining directives. This standpoint is shown even more clearly in the latest report from UNEP which highlights the discrepancy between states' planned fossil fuel production concerning states' increasing climate carelessness (SEI, Climate Analytics, E3G, IISD & UNEP, 2023; UN, 2023d).

Disaster Reduction and Environmental Security

UNESCO functions both as a securitization actor (own security initiatives) and as a global extended securitization actor along with its sister-organizations within the UN where the development of ESD has become a vital part of their objectives. The speech act below presents the main international aims of ESD with regard to biological and environmental security, including ESD (see UNESCO, 2022a; 2022b). The development of ESD below shows an intersubjective approach to meeting future environmental hazards.

We can no longer turn a blind eye to urgent sustainable development challenges such as climate change, the food crisis, disappearing biodiversity and the depletion of natural resources. A way to rise to these challenges is through Education for Sustainable Development (UNESCO, 2010, p. 1).

Further, UNESCO along with UNICEF (2012) mentions that children are those most affected in times of crises. Disruption of infrastructure and school systems may lead to limited access to schooling and in the worst-case scenario prolonged disruption of education (p. 3). A recent report from UNICEF estimates that 43 million children are displaced due to the effects of climate change, which also affects access to education in crisis-stricken areas (UNICEF, 2023). The following equation serves as an assessment tool for settling on the *securitization move* signifying that the quota of “disaster risk” and “capacity of societal systems” can be understood as parameters for under what circumstances environmental threats can be perceived as issues in need of securitization.

$$\begin{array}{c} \text{Disaster Risk} = \text{Natural Hazard} \times \text{Vulnerability} \\ \text{-----} \\ \text{Capacity of Societal System} \end{array}$$

(UNESCO/UNEP, 2011, p. 63 in UNESCO & UNICEF, 2012, p. 20).

Even though the calculation formula primarily assesses the scientific intensity and societal bearing of an environmental threat, an additional measurable or contextual term could have added to the assessment for framing – the reaching point of the issue on the agenda and how framing contributes to accentuate the impact of threats among policy-actors. This is against the background of the UN organizations' difficulties in getting individual states to implement the global 2030 goals, including ESD. Similar lines of thought were put forward by the IC based on elevating ESD at the national level. UNESCO began, as a result, to advocate the incorporation of disaster reduction as part of national educational policies and curriculum design (UNESCO & UNICEF, 2012; UNESCO, 2010; UNDRR, 2023a; UNDRR, 2023b). This part included guiding states, specifically, in linking ESD to specific strategies in education. It was a necessary request since most countries did not have a special ESD policy or strategy (Wals & Kleft, 2010), suggesting that the national level did not perceive environmental threats as urgent

matters to consider. Also, Bowers (2010) addressed the difficulties involved in reform and teaching on these matters since the complexity and depth surrounding these issues were generally ignored, thus failing the call for ecological intelligence (Nagamma & Taj, 2021). Overall, the examination of the international level shows that securitization processes occur against the emergence of potential environmental threats. Nevertheless, the structure of the international system as anarchic also affects both the legitimacy of UN bodies and the management of securitization processes. Furthermore, the analysis shows that even if framing takes place, it does not affect the very possibility of giving a securitization process a higher level of legitimacy than if the analysis was based on securitization theory solely.

National Level: Securitizing the Environment in Swedish National Policies and Education

ESD is emphasized as a decisive factor in achieving sustainable development and should be included at all educational levels from preschool up to university level (SOU 2004:104; Swedish Government, 2004). Sweden was at the forefront in 2003 by employing measures for global development into governmental decisions (Swedish Government, 2016). This approach entails to prioritize Agenda 2030 by incorporating global sustainability targets into action plans (Government Office, 2023). Two agencies were given the overall responsibility to guide authorities in this process – the Environmental Protection Agency (Naturvårdsverket) and the Swedish Civil Contingencies Agency (MSB). Additionally, the Swedish Civil Contingencies Agency was given mandate to include the Sendai Framework for Disaster Risk Reduction 2015–2030 into realizing the goals of Agenda 2030 (Swedish Government, 2016). The Government's mandate includes for National Agencies to investigate and incorporate the realization of Agenda 2030 within their organization. These results also function as guiding principles for authorities at different societal levels. However, the implementation of the Agenda cannot be understood as part of securitization processes as they do not express any kind of urgency. On the other hand, the mission directed to the Swedish Civil Contingencies Agency fulfils the criteria of a securitization move where the agency functions as an extended securitization actor.

This narrowed governmental view of the acute global environmental threat was, however, noticed by other actors. In a supporting report to the environmental council committee, two experts explicitly expressed that it was socio-economically motivated to make adjustments that were beneficiary for society to meet climate change and potential hazards (Alfredsson & Karlsson, 2016).

The major risks of the climate issue, its complexity, and its geographical and temporal extent, in combination with large uncertainties in the entire chain of causality presents decision-making with large challenges. At the same time, knowledge has developed strongly, and a consensus has emerged about the needs of to act [...] The risks with climate change are well documented, and the effects potentially very large (Alfredsson and Karlsson, 2016, p. 19).

A reason for diminishing the impact of environmental threats to society can be found in the governmental report which included different plans for long-term climate goals until 2045. Emphasis was put on the justice principle 31 in the UN climate convention implicating that rich countries were expected to contribute to climate action in less developed countries (SOU, 2016:47). This approach reflects the current Swedish

climate debate and policies claiming that natural hazards are not territorially acute (near and long-term). Severe environmental threats are rather understood as damaging to exposed and deprived territories (far away and urgent). This means that the perceived impact of environmental threats on Swedish society is generally based on the perception that Sweden is not exposed to environmental hazards or urgencies that would create major disasters. This non-acute outlook is also present in the forthcoming 2024 Budget Bill proposition where the expenditure for “Climate, environment and nature” is suggested to decrease until 2026 (Budget proposition for 2024 [Prop.] 2023/24:1, see Table 2.2, p. 8). However, criticism was raised immediately among environmental actors, i.e., functional actors, claiming that the environmental issue was not taken seriously and that increased adjustments would take too long (Miljö & Utveckling, 2023). At the same time, the government describes the conditions for reaching Agenda 2030 and future goals accordingly:

Although several initiatives have been carried out, the government assesses that decided measures at the national and international levels are not enough to reach most of the goals. Assessment is based on the in-depth evaluation of reaching established environmental goals reported in 2023. The Swedish Environmental Protection Agency considers that it will be difficult to reach the targets set for 2045 and that the milestones for 2030 and 2040 are endangered (Prop. 2023/24:1, p. 15).

Thus, halfway through the implementation of Agenda 2030, policy statements show a more restrained approach where policies highlight long-term awareness. Recent governmental reports on climate change and its consequences propose an actor-based strategy to reduce climate impact to achieve climate-sustainable consumption from a socio-economic point of view. Education is pointed out as an important factor in reducing “global footprints”. Still, UNESCO as a leading actor in this process is not included, nor is the aspect of urgency (see SOU, 2022:15).

Additionally, a governmental report on “Organizing for Sustainability” (SOU, 2023:14) addresses a long-term transformation process. This transition should accordingly build on durable legitimacy directed by the government to support the practical implementation of Agenda 2030. These actions are necessary to meet the demands of regions, municipalities, the private sector and NGOs which are far ahead of the state administration and, therefore, there is a request for a stronger commitment from the national level. Educating politicians and administrators is highlighted.

For Sweden to succeed in changing to a sustainable society, we need to take a greater grip on the national control and organization of the work with sustainable development in accordance with the agenda. To continue working in the same way as before will not be enough. Time is short (SOU, 2023:14, p. 10).

A differentiated view of perceiving the climate threat to Swedish society as acute is discerned. The regional and municipal levels perceive climate threats as escalating and acute, whereas the national level is lacking clear views on and directives for how these threats should be handled. Even though the issue of the environment is high on the policy agenda (framing), the contextual setting for possible securitization shows disparities between the actors involved in decision-making processes and experts. This indicates that the governmental level had partly not taken action to meet the requested

requirement of the lower decision-making levels; however, it also shows that the governing models for responding to climate hazards is already built into the system. Still, it illustrates that there is a discrepancy in how the state level handles its role as a potential securitization actor and the experience of their achievements at the lower societal levels. Thus, it is not possible to determine whether this procedure is based on unwillingness from the state level to make decisions concerning these matters (Lukes, 1974 op. cit.) or if procedures are based on earlier established intersubjective negotiations between different levels of society.

The Utilization of ESD in Comprehensive Education in Sweden

In a historical perspective, ESD can be seen as a further development of previous environmental education, initiated in the 1960s, which was strictly labelled "Environmental Education" (EE) (Myndigheten för skolutveckling, 2004a; Cars & West, 2014; Öhman, 2011). An environmental outlook was thus realized in reform policies and can be studied in the Swedish National Curriculum, 1969 (see LGR69, 1969). Environmental protection was mentioned as one of modern society's most important issues where incorrect use of natural capital raised legitimate fears for the future (LGR69, 1969). Three national education reforms – Lpo94 (1994); LGR11 (2011) and LGR22 (2022) – have been singled out for further examination.

The increased internationalization and ratification of treaties concerning climate change (UN, 1992a, 1992b, UNEP, 1995) coincided with the introduction of curriculum Lpo94. In Lpo94, the subject matter of the environment seems rather clear and transparent on issues related to the environmental protection (2006). Two subjects have been singled out – geography and civics – as examples where the environment is prioritized. The first speech act is taken from the syllabus (SKOLFS, 1994:3). The second speech act refers to social studies within the syllabus of 2000 also released under Lpo94. Both speech acts below show securitization characteristics in terms of language use.

Geography will provide knowledge about the geographical discoveries, diverse natural and cultural geographic environments in the world and the basic living conditions in these in a historical perspective. This will lead to basic insights into matters of human survival. [...] An ecological approach will characterize the analysis of the relationship between man and his surroundings (SKOLFS, 1994:3, p. 31).

A certain modification to the content of the text was made in a later update of the geography syllabus where the term "sustainable development" was used (see SKOLFS, 2008:68). A joint outlook on environmental education and development was also shared between the four social science subjects – geography, religion, history and civics.

Local and global environmental and survival issues

Social studies share the responsibility for work on environmental issues with other subjects in education. In addition to understanding the complicated interaction between the earth, water and air, it is important that insights on how changes in the landscape and in society are formed and take place as a result of struggle and compromises between different interests in conflict with each other. Such knowledge also provides preparation for a constructive approach to not only local, but also global change and survival issues (SKOLFS, 2008:68, p. 73).

Even though several international climate agreements and ESD were settled on (IISD, 2009; UN, 2000a; 2000b; UN, 2007), the Swedish National Commission for UNESCO (2009) noted that in the referral to the upcoming reform of LGR11 ESD was not mentioned in the Governmental Report on Sustainable Teacher Education (SOU 2008:109):

How can a report on the future teacher education, [...] in such a situation, lack insightful thinking about education for sustainable development? The text of the report on the area reflects misconceptions and prejudices about what education for sustainable development is about (Swedish National Commission for UNESCO, 2009, p. 1)

Thus, the management of ESD in education does not meet criteria that would indicate securitization. However, it fulfils the national policy aims of incorporating ESD in education. A closer look at the syllabi in LGR11 further showed that ESD mainly built on international policy discourses of ESD rather than addressing tangible and factual threats in a Swedish context (LGR11, 2011). In the latest reform LGR22, it is possible to trace a certain specification of what can be perceived as urgent environmental threats to society. Global challenges and preparedness to promote sustainability are included into the central aims of geography. Within physics, there is a short passage about required knowledge of greenhouse models and the effects of climate change in grades 7–9. In chemistry, knowledge of fossil and renewable fuels and their impact on the climate are taught in grades 4–6; in grades 7–9 awareness of the greenhouse effect is mentioned (LGR22, 2022). Whether these clarifications draw on increased perceptions of environmental threats towards society or if they are related to the reform itself where clearer objectives and knowledge requirements were advocated for cannot be concluded.

From a securitization perspective, the concept of ESD in Swedish education seems to be two-fold. On the one hand, it lacks defining climate change and sustainability as prioritized areas in need of securitization in a Swedish context. On the other, it builds on the notions of ESD expressed at the international level as urgent in Agenda 2030. Thus, ESD in LGR11 and LGR22 (op cit.) and reform policies are related to the global aims of UN and UNESCO and the need to securitize the environment. However, when it comes to the national policy level, environmental threats are evaluated as distant, both in time and in space. In comparison with Lpo94 and its securitization-based outlook on environmental threats, the content of LGR11 and LGR22 politicizes environmental issues. The view held by Swedish National Commission for UNESCO (op. cit.) confirms this outlook.

Local Level: Independent Schools and Independent Actors' Role in Comprehensive Education for Developing Ideas of ESD in Local Settings

From a reform perspective, knowledge about ESD is shaped through teachers' own initiatives in the field (cf. Cars & West, 2014). These security initiatives, and sometimes securitization moves, are consequently initiated by making use of allocated material. Reasons for adopting different NGOs environmental education programs seem to build on lack of clarity in governmental policies and discourses on how to address the impact of environmental threats and make it part of education. This lack of clarity was considered to have contributed to why teachers turned to own solutions in the planning of ESD (see Myndigheten för skolutveckling, 2004a; 2004b; Green Flag, 2023). In the following section, teaching materials within ESD from four different autonomous actors

will, therefore, be critically reviewed. The first actor represents the Swedish Outdoor Association (Friluftsrämjandet); the second is the EU-based Green Flag linked to the Keep Sweden Tidy Foundation; the third is the international NGO World Wide Fund for Nature (WWF) and the fourth is the global actor UNDP with support from the Swedish International Cooperation Agency (SIDA). In a securitization process, the first two would represent the functional actors. The Green Flag and UNDP working on mandate from the EU and UN/SIDA respectively would be considered extended securitization actors.

As an NGO, the independent In All Weather Schools (I Ur och Skur) is part of the Swedish Outdoor Association (Friluftsrämjandet) with its own program on environmental awareness and protection. An earlier study, concerning securitization and ESD, showed that the organization advocated environmental knowledge linked to urgency (Dwyer, 2018). At present, the orientation towards environmental security has altered. Instead, a more holistic and salutogenic approach where the environment is related to positive attributes for increasing well-being is advocated (Friluftsrämjandet, 2023). Schools connected to the NGOs claim that learning results will increase if sustainability is interconnected to societal planning, infrastructure and natural surroundings. Also, children with special needs will benefit (Skabersjöskolan, 2023). Hence, a shift in discourses downplay ecological threats for a more health-based approach to meet the demands of Agenda 2030. Moreover, there is no evaluation or evidence included in the material showing that learning increases or that results benefit from this kind of education. Another type of environmental education is the EU-Green Flag school program (EU, 2023; ECO-schools, 2023). The Keep Sweden Tidy Foundation promotes Green Flag environmental awareness campaigns and environmental education by stressing that ESD is an essential part of the Swedish curriculum (HSR, 2014 as cited in Dwyer, 2018; HSR, 2022; 2023) for promoting democracy where cooperation between teachers and students is essential for continuity (HSR, 2023). The emphasis is, thus, placed on developing long-term goals using inclusive measures without incorporating matters related to acute threats.

The NGO, WWF, has also developed programs that address ESD. Like the already mentioned programs it is based on a democratic approach. What separates them, from a securitization perspective, is that WWF uses a language that appeals to the emotions. Word choices, such as *major threat*, *climate anxiety* and *man-made disaster*, reflect that climate issue is of urgent concern (see WWF, 2020). Furthermore, the emotional tone also shapes didactics by asking teachers: *“How do you convey hope and courage to your students?”* (WWF, 2020)? The individual teacher, thus, has a responsibility to respond to students' climate anxiety and urgent ecological concerns. WWF also discusses power relations among different actors by pointing out that politicians often deny scientific facts and question the climate crisis (2020), claims which were also raised in the governmental report (SOU, 2023:14 op. cit).

UNDP teacher's guide on climate actions also stresses the impact of global threats where climate change mainly takes place at an international level. Tasks for students to work with are mainly directed towards the global level. Some assignments are, however, directed towards the local level for the students to study (UNDP & SIDA, 2022). There is a site developed by the Swedish UNDP. It is characterized by an interactive model where the expressions surrounding climate threats are more distinct in comparison with the teacher's guide. Expressions related to urgency include, for instance: *SOS, existential threats, difficulties – we can change the trend* (UNDP & SIDA, 2023). An interactive model facilitates for the securitization actor of the international

level to actor to convey the message of urgency, while teachers and students who primarily make up the audience legitimize the material through the use of it. On the other hand, there is a risk that critical examination will not be carried out. This means that the teacher needs to be aware of different discourses in the material but also, if necessary, make it comply with the aims of the national curriculum.

Discussion

The securitization of environmental threats and ESD in a Swedish context addressed the content of environmental threats in policies and in education where the different roles of actors in relation to environmental threats as urgent or non-urgent were scrutinized. Examination was also related to context and policymaking with the intention of establishing the attributes of framing in environmental security processes at the global, national and local levels. Further, discourses linked to climate safety and ESD advocated the need to respond to environmental threats' space, scope and impact on society's functions. This could be seen at all social levels even when securitization was not present. Environmental issues and ESD were analyzed based on its position on the agenda, the so-called framing. Four main reasons were found whether environmental threats would make it to the top of a national agenda: (a) International treaties are non-governing; (b) states' own interests and possibilities of responding to national and global environmental threats; (c) differing governance systems at the national level are responsible for how environmental threats and environmental catastrophes are to be dealt with in the event of a crisis; (d) implementation strategies at the local level regarding ESD. These four parts will be presented below.

Although the international level is deeply engaged in addressing environmental urgencies, the role of the UN and its mandate to act on these threats were argued as restricted due to the institutional set up of the UN where states as independent actors in the international system do not always follow ratified declarations even when environmental issues are of great concern. Consequently, it can be difficult to allocate sufficient resources and to make member states follow the decisions taken on how to respond to perceived environmental threats in line with UN agreements.

At the national level, statements in the most recent governmental reports showed that international claims for environmental urgency responses were lessened to make room for a more holistic view of the sustainable 2030-goals and ESD in comparison with the former government. From a securitization perspective, there are different interpretations regarding how the referent objects, the state and the environment, should be protected, i.e., climate concerns seem to have become synonymous with development in comparison with the situation taking place only a few years ago. From this angle, environmental urgency becomes part of aid policy as the perception of acute climate threats becomes transferred to states that are designated as aid countries. This implicates that environmental issues are securitized by the Swedish state but not within the Swedish borders. A view that is not shared by the lower levels of society, who call for reinforcing policies and governance related to meeting future environmental threats to Swedish society. This indicates that a reformulation of the severity that environmental threats pose to society is reduced where the threat is perceived as less acute. However, this re-evaluation cannot be equated with de-securitization as the threat is still present and genuine. Also at the national level, it is shown how governance models have an impact on how environmental threats are to be controlled. Framing, thus, takes place primarily at the regional and local level, where the management of

responses to environmental threats is also handled. In this case, the lower levels of society demand a clearer handling and management of crisis situations at the national level. A vertical securitization process emanating from national to regional and local level, in line with Buzan et al. (1998), can therefore not be established.

In the reform policies of LGR11 (2011) and LGR22 (2022), it was possible to detect that the climate issue had been brought up to date but did not reach the point of creating urgency unlike Lpo94. However, it cannot be ruled out that ESD would involve any form of securitization depending on who interprets the syllabi at the school level, i.e., securitization or non-securitization may intentionally or unintentionally arise as a result of the didactic preferences held by the teacher (Remillard & Heck, 2014 in Fredriksson et al., 2020, p. 5 op. cit.). Teacher's ability to influence the content of ESD partly depends on their own previous education in the field, curriculum design, subject-specific education and the opportunity to network with other actors (Wanchana et al., 2020; Brandisuskane et al., 2020; Gopalakrishnan et al., 2019; Cred & Paz, 2018; Merrit et al., 2018). To increase Swedish teachers' possibilities to network and improve ESD-knowledge transdisciplinary education processes show positive results (Salite et al., 2016).

Comparing the content of the two first ESD programs from independent actors to a previous study showed that the substance had altered from a security perspective towards embracing holistic parts of Agenda 2030. There was no mentioning that climate change or urgencies would produce climate induced barriers to learning. At the local level, the securitization process of the international level became re-activated again through the utilization of programs and teachers' interpretation of the material and contextual setting. This indicates that teachers could act as extended securitization actors carrying out the implementation of the international aims of ESD when these programs could be linked to severe threats to the environment. Hence, Kitagawa's (2023) claim that teacher education has a responsibility to train teachers in climate induced threats would add to the probability of ESD becoming part of a securitization process.

Conclusion

Securitization of ESD in a Swedish context takes place both vertically (between different societal levels) and horizontally (at school level). Absence of securitization of environmental issues and ESD in this case partly indicates that politicization of the climate issue has taken place through, for example, streamlining the impact of environmental threats to society, but also by departing from what experts have presented to the government. Moreover, there are different control models for the state, regional and local level regarding responsibility issues, how climate emergencies should be responded to also affect the development of ESD in the context of securitization. By combining securitization theory (Buzan et al., 1998) with ideas of framing (Eriksson, 2004 and Stepka, 2022), it was possible to establish that these two theories not only contributed to recognizing how securitization was initiated in the event of an urgent climate threat and in the planning and application of ESD. The theories also confirmed that increased research is necessary to explore how governance models at different levels of society add to the understanding of how the various units of the securitization process are distributed between actors. This means that an actor can take on several roles in a specific context while responding to urgencies. Lastly, the use of the new term "extended securitization actor" deepened the

analysis concerning how governance models affect the initiation and development of the securitization move, which does not always lead to a fully developed securitization process. Further studies are, therefore, required to examine how governance models affect the development of perceived environmental threats to society. For instance, there is a need for studies where teachers' involvement as securitization actors in the development and teaching of ESD is further scrutinized. This would also involve viewing the securitization process not only as a top-down process that starts from either the international level or the national level and is brought down to the local community level (Dwyer, 2018; Buzan et al., 1998), thereby leading to additional types of securitization processes emanating from the local level where certain occupational groups would come into focus.

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