Who Securitizes? Climate Change Discourse in the United Nations

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Abstract

When and why do states reframe issues as security problems? Which states advocate for these shifts? While securitization theory predicts that states that are existentially threatened by a problem are most likely to attempt to securitize it, I argue that accounting for the dynamics of institutional agendas can better explain this phenomenon. States that stand to gain agenda control as a result of securitization are likely to rhetorically attempt to securitize, while those that are materially interested in the issue are less likely to do so. I test this theory in the case of the climate change in the UN, leveraging data on speeches in the General Assembly. I provide the first quantitative test of the securitization of climate politics, finding that P5 states securitize, contra previous expectations. I further find that the overall climate discourse cannot be characterized as securitized. These findings imply that the Security Council is unlikely to be significantly involved in climate change policy, and also demonstrate the importance of rhetoric for political outcomes and for the distribution of state power within international organizations.

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Introduction

Why are some issues in international politics discussed as security matters, while others are not? When and why do states make the political decision to frame issues as security concerns? The outcomes of these strategic discursive moves by states have substantial implications for the nature of policy responses by international organizations, and determine who are the key decision-makers involved in crafting such policies. In the United Nations (UN), the context of an issue determines whether it is addressed by the universally representative General Assembly (UNGA), or by the small group of states on the Security Council (UNSC). Once an issue is framed as a security problem, it shifts from the responsibility of the UNGA to that of the UNSC. This shift can have specific policy consequences: compared to UNGA, the UNSC can deliver more resources and raise the salience of an issue. However, these matters may become conceived of more narrowly within a security framework, and states that are not members of the UNSC lose their voice in the decision-making process. Do states securitize issues in international organizations to obtain funding and attention for that issue, or to control the venue in which the matter is discussed? The implications of securitization benefit some states, at a cost to others.

Previous work on issue securitization has demonstrated that securitization is an effective means of increasing international attention for a given issue (e.g. Buzan, Wæver, and De Wilde, 1998; Elbe, 2006), implying that actors who care more deeply about that issue will typically support securitization as a means of garnering salience. Yet, anecdotally, countries that do not have obvious material interests in particular issues have engaged in securitizing those matters, while countries that do possess such interests have not. The case of climate change is one such example. Climate change has not been taken as seriously by international organizations as many states would like, and securitizing the issue would be a way for these states to attract increased attention to the problem. Securitization theory would predict that Small Island Developing States (SIDS), the states most intensely threatened by the effects of climate change (IPCC, 2018), should be the states that care most about climate change action, and thus the

most likely to make securitizing moves, while countries like the United Kingdom, which are not as severely threatened by climate change, would be less likely to do so. In fact, I show that SIDS are *less* likely than other states to securitize climate change, while all of the P5 states, including the United Kingdom, are *more* likely to do so.¹

How can we explain this pattern? Securitization theory has focused on the attentionenhancing results of securitization, which can increase the awareness, speed, and resources dedicated to an issue, but has largely ignored the implications of securitizing moves on agenda control and power. While securitization may increase the salience of an issue, it also influences the forum and manner in which an issue is addressed. Drawing on studies on the politics of international organizations, I argue that securitization is a tool of agenda control within these fora. While these theoretical expectations should hold in many multi-issue institutions, I examine them in the UN as a crucial case. Issues taken up by the UNGA are commonly addressed by consensus, in a multidimensional approach that accounts for human rights, social, political, and economic considerations. Issues taken up by the UNSC, on the other hand, are addressed narrowly as security problems, and only the members of the UNSC are empowered to shape the response. This implies that if forum-shifting increases their control over the issue at hand, states that would be otherwise less materially-motivated to address an issue (i.e. the P5) have incentives to act as securitizing actors, while highly materially-motivated states would oppose securitization. I argue that securitization not only has policy-relevant implications, which have already been highlighted by classical securitization theory, but also has implications for institutional power, which I draw new attention to. By accounting for intra-institutional agenda dynamics as well as for the role of discourse, generally overlooked by rationalist theories, we can better understand when issues are securitized within international organizations, as well as what this implies for the distribution for state power within these institutions and for the type of polices that they produce.

I examine these agenda control dynamics in the case of climate change, an area of interest to securitization scholars (e.g. Trombetta, 2008; Conca, 2019) and a topic of

¹The Permanent 5 (P5) members of the UNSC are the United Kingdom, United States of America, Russia, France, and China.

tremendous substantive import that must be better understood by international relations scholars (Green and Hale, 2017). Previous work has examined the potential positive and negative policy implications of securitizing climate change in the UN, such as sanctioning non-compliance with climate agreements and sidelining scientific experts (e.g. Scott, 2015; Diez, Von Lucke, and Wellmann, 2016; Conca, 2019). While previous research asserts that climate change has been or is becoming securitized, it has has not examined UNGA discourse directly, which is the key place to look for evidence of securitization in international politics. I remedy this gap and present the first statistical test of climate securitization in an international political context, employing a topic model on a corpus of speeches given by states at the UNGA General Debate from 1949-2014 (Baturo, Dasandi, and Mikhaylov, 2017) to measure securitization. Leveraging this new approach, I find that the climate discourse in the UNGA is *not* securitized, and that each of the P5 members are more likely to make securitizing moves on climate change than are other states, while SIDS are less likely to make securitizing moves than others. I control for alternative explanations, including power, domestic politics, and geophysical vulnerability to climate change. These findings shed light on the interaction between issue forums, institutional structure, and state power in the international policymaking process, and the importance of rhetorical shifts in this process.

Securitization and International Politics

Securitization theory has been an highly influential framework for security studies. Nevertheless, theoretical and empirical applications of securitization theory have largely focused on the attention-enhancing results of securitization, without incorporating the implications of securitizing moves on agenda control and power in international politics. To account for these dynamics, I bring in insights from research on the politics, agenda dynamics, and discourses of international organizations.

Securitization theory ('The Copenhagen School') derives principally from the work of Barry Buzan and Ole Wæver. Their approach defines securitization as "the discursive process through which an intersubjective understanding is constructed within a political community to treat something as an existential threat to a valued referent object, and to enable a call for urgent and exceptional measures to deal with the threat," (Buzan and Wæver, 2003, 491). Securitization occurs through a rhetorical process, in which a 'securitizing actor' frames a problem using the language of existential threat, emphasizing the security dimensions of a topic to the exclusion of other dimensions (Chong and Druckman, 2007). This performative speech act is the 'securitizing move.' If the other actors in the political community accept this move, then the issue is considered 'securitized.' Importantly, an issue may be successfully securitized through discourse and still may not be addressed by adopting emergency measures. It is the intersubjective understanding of security – not an objective feature of the topic – that makes an issue a security issue and marks successful securitization. The decision to securitize is a strategic political choice made by the securitizing actor – an individual, state, or group – to change the way the issue should be handled (Elbe, 2006; Floyd, 2010).

As a result of being securitized, special powers and means can deployed to address the issue outside the rules of traditional politics (Buzan, Wæver, and De Wilde, 1998, 21-42). This can increase the level of attention, awareness, speed, and resources dedicated to the issue (Buzan, Wæver, and De Wilde, 1998; Elbe, 2006; Balzacq, 2011), and can also be used for self-serving purposes (Wæver, 1997, 221; Trombetta, 2008, 589; Floyd, 2010, 54-56, 117-121; McDonald, 2011, 18). Though the material realities of the issue at hand may not influence its likelihood of being securitized, the material incentives of the securitizing actors do matter: if the securitizing actor expects to benefit from securitization, they would be expected to make securitizing moves, whereas if they expected to be harmed, they would not be expected to do so. These considerations are particularly salient given that the scope for securitization is limited – not every issue can be characterized as an urgent, existential threat (Balzacq, 2011, 116-7; McDonald, 2011, 35).

As political decisions made by potential securitizing actors, the choice of whether or not to securitize is a rational calculation (Buzan, Wæver, and De Wilde, 1998, 29). Correspondingly, we should expect that the actors that would most benefit from securitizing an issue – and from the resultant increases in attention and resources – would be most likely to make and support securitizing moves. Generalized to the level of states as actors, states that are existentially threatened by a problem should securitize it to unlock these special policy tools and attention because they stand to benefit as a result (Buzan, Wæver, and De Wilde, 1998). Yet, as discussed in the previous section, these expectations do not hold in the case of the climate discourse in the UNGA, where based on this logic, SIDS should securitize, but do not. To develop a theory to better explain these dynamics, I integrate classical securitization theory with existing work on the politics of international organizations.

International organizations present a logical domain to apply securitization theory. The role of persuasive deliberation and consensus building in international politics has been extensively studied (e.g. Habermas, 1984; Finnemore and Sikkink, 1998; Keck, Sikkink et al., 1998; Risse, 2000). Securitization fits neatly within this framework as a discursive tool that states can employ to construct a new intersubjective understanding of a topic. In the context of international organizations, additional considerations outside the traditional scope of securitization theory – namely agenda control – also must be taken into account to develop an understanding of who securitizes and why. Positive agenda control is the ability to put an issue onto the list of items for active consideration by an institutional decision-making body (Elder, 1975, 14), and negative agenda control is the ability to block an issue for such consideration (Bachrach and Baratz, 1962).

Agenda control – both positive and negative – is a source of power that allows actors to influence what issues are addressed by an institution and how they are addressed (Romer and Rosenthal, 1978; Kingdon, 1984), including in the context of international organizations (Pollack, 1997; Joachim, 2007; Avant, Finnemore, and Sell, 2010; Carpenter, 2010; Schneider, 2018). By exerting influence over the agendas of international institutions, states are able to obtain more favorable outcomes and a greater share of institutional power (e.g. Steinberg, 2002; Stone, 2011). Agenda control in international organizations has important strategic and material benefits for states. It follows, then, that states would support outcomes that *increase* their agenda control relative to others, and *oppose* outcomes that reduce their relative agenda control. I argue that securitization has such effects on agenda control, and these implications will help to explain when and why states securitize.

Securitization and Agenda Control in the UN

In applying classical securitization theory in different settings, the concepts must be contextualized (e.g. Balzacq, 2011; Diez, Von Lucke, and Wellmann, 2016). Accordingly, I extend the classical concepts of securitizing moves and securitization to reflect the unique contextual features of international organizations like the UN. I define securitizing actors as member states of the international organization, who speak through their diplomatic representation. I define a securitizing move in two parts, as a rhetorical move that: (A) emphasizes the security dimensions of an issue, specifically the language of existential threat; and (B) directly indicates UNSC jurisdiction over an issue. Part A represents the definition of a securitizing move in classical securitization theory, while Part B extends this definition to apply specifically to the context of the UN. Since securitization implies treating an issue as a security problem with all the special status, rules, and tools that this entails, within the UN system, securitization must enable or call for the issue to be on the agenda of the UNSC. Part B of the definition is operationally satisfied by one of two criteria. First, and most simply, a securitizing move can directly argue or assert that the UNSC should act on the issue. Second, a securitizing move can describe an issue that the UNSC has clear institutional authority to address, argue that this is the case, or associate an issue with issues under UNSC authority. Through this re-association, a non-traditional security issue can be moved conceptually closer to traditional security issues.

I follow classical securitization theory in defining **securitization** as the acceptance of the securitizing move by the relevant community, which in the context of international organizations like the UN comprises the set of member states. Empirical evidence of securitization is the adoption of the language of securitization by a majority of member states, indicative of general acceptance of the legitimacy of the securitizing move. While many works characterize discourses as securitized when there is a large or increasing amount of security language used (e.g. Diez, Von Lucke, and Wellmann, 2016; Schäfer, Scheffran, and Penniket, 2016) or characterize a discourse generally rather than quantitatively (e.g. Trombetta, 2008), I specify a more direct measure of acceptance of the securitizing move in which the threshold indicating securitization is measured not by the *amount* of security language being employed but by the *number of actors* employing such language. Examining only the amount of security language being employed could result in a misleading characterization of a discourse as being securitized if only a few actors are deploying such language and the majority of the community has not accepted such conceptualization as valid.

In addition to contextualizing the concepts of securitization theory to apply to international organizations, I also contextualize the theoretical expectations. Securitization theory in its classical form expects that actors with the greatest material interest in addressing an issue should be more likely to securitize (or at least to support securitization) to increase the salience of an issue and the likelihood of a strong policy response (see previous section). However, while securitizing can increase the salience and resources an issue receives, it also influences agenda control. The dynamics of agenda control can better explain securitization in international organizations than can variation in material interest in an issue. I posit an *agenda control theory of securitization* to explain how, when, and why issues are securitized (or not) by state actors within international organizations. This is a rational theory of rhetoric, in which states strategically try to control the institutional agenda to maximize strategic and material benefits.

I focus on securitization dynamics in the UN as a crucial and normatively important case. In the UN, shifting issues from the agenda of the UNGA to the UNSC has clear and obvious implications for the distribution of power and the policy response because of the unique institutional arrangement of the UN. The 15 member UNSC represents only a small subset of the 193 member UNGA, limiting the number of states with a decisionmaking role. Unique policy tools are available to the UNSC that the UNGA cannot employ, from sanctions to the use of force. Only UNSC decisions have binding authority, compelling specific actions from member states. Formally, the agendas of the UNGA and UNSC are mutually exclusive – the UNGA is precluded from addressing topics that are concurrently on the UNSC's agenda (UN, 1945). Agendas in the UN are very 'sticky,' and once an issue is added to the UNSC's agenda, it is rarely removed (Hurd, 2008). For all these reasons, agenda control between UNSC and non-UNSC members is likely to be highly contested and make it unlikely that securitizing moves would be 'cheap talk.'

Extending securitization theory, I contend that discursively securitizing an issue in the UN has direct implications for agenda control: it is through discursive practices that an issue is framed as a security matter (or not) within the institutional community. While non-securitized issues are within the remit of the UNGA, securitized issues move from the agenda of the UNGA to that of the UNSC. I argue that because of the agenda control implications of securitization, states have different preferences over whether an issue becomes securitized, and a securitizing move is expected to be contested. The member states that are expected to make securitizing moves are those for whom this agenda-shift results in increased agenda control: the members of the UNSC. As a result of the securitization agenda-shift, UNSC members increase the share of the UN's overall agenda over which they are the decision-makers. In addition to controlling a larger proportion of the UN's agenda collectively as the UNSC, each individual member of the UNSC increases their influence over the agenda. States are more powerful when they vote in the UNSC than the UNGA because of the smaller forum size – a state's likelihood of being the pivotal voter is greater in a forum of 15 than in one of 193.

The institutional power benefits of securitization particularly accrue to the P5 members of the UNSC. For non-permanent members of the UNSC, the expected gains in institutional benefits that would result from broadening the UNSC's agenda are much less than they are for the P5. Non-permanent members would only obtain these benefits for the duration of their term, while the P5 would gain them indefinitely. The P5 have the most powerful votes in the UNSC, and with their veto power can expect to be pivotal voters more frequently than non-permanent members (Vreeland and Dreher, 2014). The institutional power benefits of securitization hold for each P5 member, even assuming heterogenous preferences. A P5 member seeking to block an activist coalition in the UNGA could more easily do so by deploying a veto in the UNSC. Alternatively, a P5 member seeking to take more activist measures could more easily assemble a coalition of

the necessary size in the UNSC than in the UNGA, and would be able to call for more policy tools. Even with heterogenous preferences, the P5 members could be uniformly expected to prefer broadening the UNSC's agenda through securitization to accrue institutional benefits. Based on this logic of incentives to securitize, the P5 are more likely to securitize than other states.

Member states who stand to lose agenda control from securitization – those states that are not members of the UNSC – are less likely to make securitizing moves, and would be likely to *oppose* such moves. For these states, securitizing would take decision-making power out of their hands. The potential costs of securitization are even greater when the issue is of particular material importance to a member state. In this case, the state not only loses institutional power in its reduced agenda control on an issue selected at random, but also loses agency to shape the policy outcome on an issue of great importance, and the loss is more salient. On issues of the highest importance, states have the strongest preference to be involved and influential in the decision-making process. This expectation – that states for whom an issue is *the most* materially important are *the least* likely to support securitization – directly contrasts the expectations that would be derived from a classical interpretation of securitization theory.

In addition to explaining why states would or would not be expected to securitize, this theory of agenda control securitization implies clear expectations about when and where to look for issue securitization. Securitization would take place in the representative, general-purpose UNGA. Because membership in the UNGA is universal, the key criterion of securitization – intersubjective understanding – is most likely to develop in this forum (Buzan, Wæver, and De Wilde, 1998, 25). In the restricted membership of the UNSC, general acceptance of a securitizing move by definition cannot take place, and thus successful securitization cannot occur in that body. The result of successful securitization – defined as the acceptance of the securitizing move – moves an issue from the agenda of the UNGA to that of the UNSC.

Institutional constraints create scope conditions for the expectations of agenda control securitization. Institutional agendas are constrained by limited space and resources (Baumgartner and Jones, 1993). The P5 may also be constrained in making securitizing moves by concerns about the erosion of legitimacy within the UN (Hurd, 2008; Binder and Heupel, 2015; Nevitt, 2021).² In particular, non-UNSC members are wary of UNSC power concentration, lack of accountability, precedents set by increasing the scope of the UNSC mandate, undermining of other UN organs, and shifting the locus of power to security experts (Binder and Heupel, 2015; Conca, 2019; Fasulo, 2021). These limitations discourage UNSC members from attempting to securitize across every issue area. Rather, they are expected to selectively make securitizing moves on issues when they are important to them in some way.

In some cases, a securitizing move could be accepted by non-P5 states. As noted above, states are generally wary of increasing the authority of the UNSC. However, members must consider the tradeoffs: shifting an issue to the UNSC can result in benefits such as additional funding allocations and attention, but potentially sacrifice the more holistic consideration of the economic and human rights dimensions of a problem that would be afforded in the UNGA. The unique features of a given issue area, particularly how important are the economic and human rights dimensions of the issue, are crucial to consider in predicting how likely non-P5 states are to accept a securitizing move, and thus how likely successful securitization is to occur. In some contexts, material concerns (i.e. those addressed under classical securitization theory) would predict the securitizing actors better than the expectations of agenda control securitization. This would specifically be the case when the non-security dimensions of an issue are of lesser concern – that is, states are less concerned with addressing the human rights, social, or economic aspects of a problem, and would be willing to cede control over the matter in order to obtain material benefit. These tradeoffs are illustrated in the example of the securitization of HIV/AIDS.

After the UNSC took up the issue of HIV/AIDS – led by the United States, a P5 member – in July 2000 from the UNGA's agenda, dramatic and rapid increases in global attention and funding occurred (McInnes, 2006; Knight, 2008, 106). Other prevalent and

²Legitimacy is defined as "the normative belief by an actor that a rule or institution ought to be obeyed," (Hurd, 2008, 34).

deadly diseases such as Ebola, malaria, and tuberculosis did not receive the attention of the UNSC, and did not observe the same rate of increased international attention and funding (Poku, 2013). While resources and attention increased as a result of securitizing HIV/AIDS, economic and human rights dimensions were sidelined, with military and intelligence organizations empowered over civil society advocates of issues (Elbe, 2006, 119). Member states were willing to accept the securitizing moves of HIV/AIDS by the P5, despite reducing their own agenda control, because they were not concerned with maintaining agenda control over the non-security dimensions of the HIV/AIDS discourse. The development, public health, and human rights aspects of the issue were already being addressed under Millennium Development Goal initiative, and the UNSC's attention to HIV/AIDS had narrowed from the widely ranging debate in January 2001 to focusing specifically on the relationship between HIV/AIDS and UN peacekeeping missions by the time the UNSC resolution on HIV/AIDS was adopted in July (Rushton, 2010, 498-500).

To test the expectations of agenda control securitization, I apply it in the case of climate politics in the UNGA, deriving specific hypotheses in this context. I examine whether climate change discourse in the UNGA has been securitized, and which states are potentially driving securitization.

Climate Change and Securitization

The security relevance of climate change has become clear over time (Deudney, 1990; Homer-Dixon, 1991), portending threats to territory and extraterritorial strategic interests, pressures resulting from migration, and exacerbation of existing conflicts (e.g. Barnett, 2003; Hunter, Luna, and Norton, 2015; Koubi et al., 2018; Ide et al., 2020; Uexkull, d'Errico, and Jackson, 2020).³ Many works assert that climate change is securitized or becoming securitized (e.g. Buzan, Wæver, and De Wilde, 1998; Barnett, 2003; Floyd, 2010; Trombetta, 2008; McDonald, 2011). In the UN, securitizing climate change would empower the UNSC to address the topic with its greater menu of policy options than those available to the UNGA. The potential policy implications of a UNSC-led

³For an overview of the development of the discourse on climate change and its security implications over time, see Trombetta (2008) and Floyd (2008).

response to climate change are broad and are already well-studied, including imposing economic sanctions on states in violation of international climate treaties and developing early warning systems, but also potential negative consequences such as narrowing the understanding of the issue (e.g. Scott, 2015; Diez, Von Lucke, and Wellmann, 2016; Conca, 2019). Unlike the UNGA, decisions undertaken by the UNSC are binding on member states, and thus have greater opportunity to affect rapid change, potentially increasing compliance. On the other hand, securitization can amplify the voices of military and intelligence communities over experts like climate scientists, potentially shifting resources away from adaptation and mitigation towards emergency response.

Previous researchers have argued that because of the growing understanding of the security implications of climate change, state actors may be making securitizing moves in the UNGA debate by employing the language of existential threat in discussing climate change. However, as the theory of agenda control securitization describes, most UN member states are wary of increasing the agenda control of the UNSC, which would be the result of securitizing climate change. Securitization would only be expected if multi-dimensional concerns were minimal, which is not the case in the context of climate change (discussed below). Thus, in contrast to the claims made in previous work, I expect that climate change is not securitized in the UN. This would empirically imply that securitizing moves on climate change are not broadly accepted, and this language is not employed by a majority of UN members.

H1: Climate change is **not** securitized in the UN.

But which states *are* expected to act as securitizing actors? I argue, per the theory of agenda control securitization outlined above, that states that would gain agenda control from securitizing would be more likely to make securitizing moves, while states that would lose agenda control would be less likely to make securitizing moves. Members of the UNSC, particularly the P5 states, stand to gain agenda control, while non-UNSC states stand to lose. These expectations are constant across issue areas. However, the theory also predicts that states for whom the issue is extremely materially important – for whom it may represent an existential threat – are even less likely to securitize, and this depends on the issue at hand. Thus, understanding state preferences on the specific topic of climate change is crucial.

On the issue of climate change, states that are the most materially interested are those most vulnerable to the effects of climate change, and most in need of mitigation and adaptation support. Developing states and states in geographically vulnerable regions are the most vulnerable to the effects of climate changes (IPCC, 2018). Of all developing states, climate change, and particularly sea-level rise, is a particularly great threat to SIDS. While climate change poses an existential threat to SIDS, they are also greatly concerned with other dimensions of climate change besides security- notably, matters relating to migration, legal questions of sovereignty, and development financing (IPCC, 2014, 2018). Such topics would likely be ignored or minimized under a security approach to climate change, but would likely be addressed under a UNGA approach to climate change. Preferences over these multi-dimensional aspects of climate change outweigh the potential policy benefits that SIDS could obtain from securitization of climate change. This explanation supports claims that developing countries, including SIDS, have been key "antripreneurs" against the securitization of climate change (Bloomfield and Scott, 2017; Peters, 2018; Warner and Boas, 2019). Because climate change is a particularly important issue to SIDS, who have been leaders on climate change policy development in the UN, the loss of agenda control on the topic would be highly salient. Thus, the theory predicts that SIDS would be *less likely* than others to make securitizing moves on climate change, while the P5 would be *more likely* to do so. While all developing and vulnerable states are expected to be less likely to make securitizing moves than others, these expectations are the strongest for SIDS, who should be the *least likely* of all to attempt to securitize.⁴

Among the P5, France and the United Kingdom are most supportive of expanding UN efforts to address climate change, while Russia and China are more frequently opposed

⁴Ultimately, discourse analysis is unable to directly show underlying motives of observed rhetorical choices. While I take multiple steps in the subsequent analysis to address alternative explanations for state's motivations in securitizing, I am unable to unambiguously rule them out.

to such steps, favoring state level responses (Scott and Ku, 2018, 209). The position of the United States has varied by administration, though not necessarily by party. Under the leadership of Barack Obama, the United States was generally favorable towards expanding international efforts to address climate change. Despite heterogeneity in preferences over the nature of international climate change policy, we should expect each of the P5 to to act as securitizing actors. Regardless of their issue preferences, all P5 members stand to obtain institutional benefits of agenda control as a result securitization. France and the United Kingdom face an easier prospect whipping a majority of the small UNSC than the large UNGA, while China and Russia are better able to block efforts with a veto in the UNSC than trying to strong-arm the large caucus of developing states in the UNGA.⁵

While the P5 are more likely to securitize than other states on any given issue because of the increase in agenda control, concerns about institutional legitimacy also preclude the P5 from securitizing *every* issue, as discussed in the previous section – the P5 are expected to selectively make securitizing moves on issues of importance to them. In the case of climate change, the scale of the issue and its potential policy import make it an important one to the P5 (e.g. Peters, 2018; Trombetta, 2019). A UNSC response to climate change would also preclude a broader approach to climate policy that would be less amenable to P5 preferences, addressing issues such as migration, reparations, sealevel rise, and statehood, and imposing higher costs on developed states (including the P5) as high carbon emitters. The high stakes associated with climate change make it an issue on which the P5 would be willing to risk political capital and the legitimacy of the UNSC by making a securitizing move. Regardless of preferences, each member of the P5 has a greater likelihood of influencing the voting outcome on an important matter in the UNSC than they do in the UNGA. Non-P5 states would be expected to be less likely to support securitization, as their ability to impact the outcome would be diminished if climate change moved from the agenda of the UNGA to that of the UNSC.

H2: The P5 states are **more** likely than other states to act as securitizing actors on climate change in the UN.

⁵I focus on first order beliefs for analytical simplicity.

H3: SIDS are **less** likely than other states to act as securitizing actors on climate change in the UN.

Looking for Climate Securitization

Given the potential import of climate securitization, scholarly attention to the matter has been increasing. However, I contend that this research has been looking for securitization in the wrong place. In line with the theory I describe above, evidence for securitization in the UN should uniquely be found in the UNGA discourse. While a growing number of scholars argue that climate change is securitized or becoming securitized (e.g. Buzan, Wæver, and De Wilde, 1998; Barnett, 2003; Floyd, 2010; Trombetta, 2008; Mc-Donald, 2011), none have examined UNGA discourses for evidence of these trends. Other works have noted the particular relevance of the UNSC in climate securitization, exploring normative questions relating to the scope of the UNSC and whether climate change is an legitimate topic for its attention (e.g. Detraz and Betsill, 2009; Scott, 2015; Scott and Ku, 2018; Conca, 2019; Nevitt, 2021), but also fail to provide compelling evidence of securitization in the discourse of the general UN membership. Rather, these works observe that in 2009 the UNGA formally invited a potential relocation of the issue of climate change into the UNSC, calling unanimously in A-RES-63-281 for "relevant organs of the United Nations, as appropriate and within their respective mandates, to intensify their efforts in considering and addressing climate change, including its possible security implications," (UNGA, 2009). This resolution does not show us a *discursive* shift: only by examining patterns in discourse can we find compelling evidence of securitization.

Only a small amount of research on the securitization of climate change has actually looked at the UN discourse, and that which has has focused on three special ad-hoc sessions of the UNSC called in 2007, 2011, and 2017 discussing climate change,⁶ which are pointed to as evidence that the issue has been securitized (Detraz and Betsill, 2009; Scott and Ku, 2018). However, climate debates in the UNSC itself cannot be reflective of securitization, because securitization would require acceptance by the broader mem-

⁶A fourth special session was held on February 23, 2021, which has not yet been subject to rigorous examination.

bership in the UNGA. For an issue to be securitized, there must be acceptance of the securitizing move. To examine this process, we must examine rhetoric – not resolutions – in the UNGA – not the UNSC. While discourse analysis is an important tool in investigating international politics (Carta and Narminio, 2021) and climate discourses (Hardt, 2017), previous qualitative approaches have not been able to explore macro-level trends in UNGA discourse over time. By leveraging data on speeches given by high-level state representatives in the General Debate of the UNGA, I shed light on macro-level trends in the securitization of climate change in the key locale of the international political discourse.

UNGA Discourse on Climate

To test these hypotheses, I deploy new data to look for securitization in a more likely and conceptually appropriate setting – the UNGA – than has previously been examined. I examine whether securitization has occurred, then test my theoretical predictions that P5 states but not SIDS act as securitizing actors on climate change.

I utilize the data collected by Baturo, Dasandi, and Mikhalylov (2017), which consists of all speeches given by state representatives in the General Debate from 1970-2014. Not only are speeches good indicators of country preferences and priorities (Baturo, Dasandi, and Mikhaylov, 2017, 3), by securitizing issues, they also perform an agenda-setting function. Each year at the opening of the UNGA in September, the General Debate gives the opportunity for each state to speak in a largely unconstrained setting (Smith, 2006). Allocating the scarce resource of speech-time to discuss a given issue is a signal that a country considers it to be of great importance.⁷ This data comprises 7,897 speeches and 205,913 distinct speech segments, which are analogous to paragraphs. In a given year, there are an average of 32 segments per speech. I filter this full corpus of speeches based on a set of key terms to obtain only the segments that discuss climate change. This procedure results in a subset of 4,525 relevant speech segments drawn from

⁷More information about the General Debate speeches, including a discussion of the independence of observations, is found in the Appendix.

1,987 speeches.⁸ The earliest speech on climate change occurs in 1984, so this year is used as the beginning point for the remainder of the analysis.

For speeches that discuss climate change to any extent, on average 20% of the speech's segments are about climate change. There is high variation in this proportion, ranging from 1% to 73% of a speech's segments. On average, each country dedicates 23 segments to the discussion of climate change. In addition to comprising a substantial proportion of discussion at the country-speech level, climate change has been an important topic of the General Debate broadly. Across years, an average of 126 and a maximum of 169 out of 193 countries speak about climate change, with an increasing share over time. While overall speech length declines, the proportion of speech segments dedicated to climate change increases, indicating that states take this issue seriously, as they allocate an increasingly scarce resource of speech-time towards its discussion, as seen in Figure 1. SIDS discuss climate change at higher rates than other states, with nearly double the average number of segments discussing climate change (51) and a higher proportion of speech segments. However, SIDS are not necessarily early adopters, picking up the climate discourse at the same time as other states. The P5 discuss climate change at roughly the same rate as the average state, devoting on average 22 segments to the matter.

Figure 1: Over time, length of General Debate speeches declines, while attention to climate change increases



Note: Blue triangles are total number of speech segments in a given year, green dots are number of speech segments that discuss climate change. Trend lines are Loess smoothed.

⁸A description of the procedure used to segment the speeches, the list of key words used for filtering, and descriptive statistics of the General Debate speech data can be found in the Appendix.

To prepare this speech data for text analysis, I conduct additional pre-processing and estimate a Structural Topic Model (STM) with speech segments as the unit of analysis, allowing topic proportions and topic prevalence to vary over time (Roberts, Stewart, and Tingley, 2019).⁹ Because this speech corpus is already filtered to one topic – climate change – the topics uncovered by STM can be thought of as different and coherent ways of speaking about the same topic, or in other words, topical frames (Chong and Druckman, 2007). Ultimately, this procedures represents every topic k as a unique vector of word probabilities β . The word probabilities are used to calculate segment-level topic proportions, which are the share of the words in each document (speech segment) that are most highly identified with each topic, representing each segment as a mixture of different topics summing to 1. The final model is selected to maximize semantic coherence and exclusivity at the topic level, and minimize correlations between the topics.

I validate the results of the topic model by varying the parameters in the model specification, conducting a supervised analysis of the speeches for securitizing moves in their content, and crowdsourcing the topic labeling to ensure reliability (Ying, Montgomery, and Stewart, 2021). I also conduct a placebo test, comparing the results on climate change corpus to a placebo STM estimated with the same specifications on the full General Debate corpus showing that the P5 do not simply securitize across all topic areas, as well as a robustness test, estimating the model on a corpus excluding developing states to show that they do not drive the results. Additional details on these procedures can be found in the Appendix.

I find that coherent topics cluster around general types of parliamentary and institutional language, oceans, institutional language relevant to the UN, greenhouse gases, international treaties (in particular the Kyoto protocol), finance and development, rising sea levels, and language describing conflict and security. The words most characteristic of each topic and the share of the corpus represented by each topic can be seen in Table 1. The conflict and security topic makes up the second most prevalent way of discussing climate change, after the sea level topic.

⁹Details on the topic model pre-processing, estimation of the topic model, topic correlations, and robustness and placebo tests can be found in the Appendix.

Topic	Top Words	Topic Proportion
General	active education civil agencies organizations relations	0.130
	reform society organization taiwan	
Oceans	solomon forum marine pacific low-lying declaration	0.072
	conservation barbados islands management	
UN Institution	mr secretary-general thank president commend	0.110
	congratulate theme leadership election ki-moon	
GHG	gases carbon per cent sources atmosphere greenhouse	0.110
	clean renewable forests	
Treaties	protocol kyoto instrument parties 21 ratification ratified	0.120
	soon step early	
Finance	transfer responsibilities differentiated principle technology	0.138
	technologies common measures responsibility strategies	
Sea-Level	sea-level low-lying rise floods caused existence damage	0.165
	devastating sea coastal	
Conflict & Security	weapons nuclear problems destruction crime war mass	0.156

Table 1: Climate Discourse Topics

Notes: Highest probability words defined as the 10 words within each topic with the highest topic-word probability, β . Topic proportions represent the share of the corpus made up of words most commonly associated with the topic. The topic of interest, Conflict & Security, is shaded.

threats hunger conflict

Do any of these topics constitute securitizing moves? To recall, the definition of a securitizing move requires (A) invoking the language of existential threat; and (B) directly indicating UNSC jurisdiction over an issue. The sea-level rise topic describes rising tides and increased extreme weather events as threats to states, and in particular to SIDS. The most frequent rhetorical strategy employed in the conflict and security topic is to associate climate change with other traditional hard security issues like terrorism and nuclear weapons, describing climate changes as similar to these concerns, seen in the examples below. This shows a strategy of framing climate change as a broad threat to international peace and security, and related to issues that are unambiguously under the jurisdiction of the UNSC.

"Nobody can protect themselves from climate change unless we protect each other by building a global basis for climate security....Our climate presents us with an ever-growing threat to international security," (United Kingdom, 2006).

"Today the greatest threats to our security often come not from other functioning sovereign States, but from terrorist organizations, from failing States and from man-made shocks to our environment like climate change, which can exacerbate State failure and breed internal instability," (United Kingdom, 2004).

"Besides the economic crisis the first large-scale crisis of the era of globalization global development as a whole continues to be threatened by regional and local conflicts, terrorism, cross-border crime, food shortages and climate change," (Russia, 2009).

Both of these topics clearly satisfy the first part of the definition of a securitizing move, employing the language of existential threat. However, only the conflict and security topic directly indicates UNSC jurisdiction over climate change. The sea-level topic, on the other hand, does not make a clear call for the UNSC to engage with the issue of climate change, nor does it draw associations with other issues under UNSC jurisdiction. Extreme weather and sea-level rise do not necessarily involve violence or conflict between or within states, and do not obviously fall within the remit of the UNSC. If such connections were featured as part of the rhetoric, this topic could theoretically constitute a securitizing move, however, empirically this is not the case in this data. Thus, while the conflict and security topic can be considered a securitizing move, the sea-level rise topic cannot.

But has climate change been securitized? I predict in Hypothesis 1 that this is not the case, and the data supports this claim. To recall, I argue that empirical evidence of securitization is the adoption of the language securitizing moves by many member states, indicative of general acceptance of the legitimacy of the securitizing move. To test this hypothesis, I examine the share of countries employing the conflict and security topic and find that while the language of conflict and security is relatively common in the discourse, it is not employed by a majority of member states.

For a given speech segment on climate change, the mean use of the conflict and security topic is 15.6% (sea level rise, the most commonly used topic, characterizes 16.5% of the average segment's language, and the least commonly used topic, the general oceans topic, represents 7.2%). The conflict and security topic is used more over time, while other topics, particularly the Kyoto Protocol topic, decrease in their use over time.¹⁰ However, a majority of countries are not making securitizing moves: the increasing use of the conflict and security topic is concentrated among a subset of states. Only 39 countries deployed 5 or more speech segments that were primarily about conflict and security, and only 10 countries deployed 8 or more. Countries are more likely to use the sea-level

¹⁰Analysis of the trends in topics over time can be found in the Appendix.

topic, and nearly as likely to use the finance and development topic. I also aggregate the document-level topic proportions to the country level to obtain the topic most commonly employed used by each country. While conflict and security is the most common modal topic (48 of 194 countries), this is less than a quarter of all members. The lack of common usage indicates that there is not a consensus among the membership that the securitizing move is legitimate. At less than 16% of the overall climate discourse, while securitizing moves are certainly present, it appears that the UNGA members have not reached an intersubjective understanding of climate change as a matter for the UNSC to take up, but rather, that the use of this language is concentrated among a subset of states.

Who Securitizes?

Which states are more or less likely to make securitizing moves? I expect that P5 states are more likely to be securitizing actors, and SIDS are less likely (Hypotheses 2 and 3). For the dependent measure of securitization, I use the document-level topic proportion in the conflict and security topic estimated by the STM, described in the previous section. This is a continuous measure that can range 0:1. Bivariate examination supports both expectations, as seen in Figure 2. P5 states are 5.4 percentage points more likely to make securitizing moves compared to non-P5 states, a statistically significant difference. This result holds across time, and for each of the P5 states individually, which is shown in the Appendix. P5 discourse on climate change is lead by the United Kingdom with 40 speech segments, followed by France with 26, China with 18, the United States with 14, and Russia with 11 (recalling that the average state discusses climate change for 23 segments). This finding also holds in a restricted sample of states with medium and high levels of development (see Appendix).

These results speak to the internal validity of the securitization measure. The identified leadership by the United Kingdom comports with earlier descriptions of climate security discourse in the UN (Scott and Ku, 2018; Peters, 2018). While previous evidence for British entrepreneurship on climate securitization has generally rested on the fact that the United Kingdom convened first UNSC debate on climate change in 2007, this new evidence provides broader support for the claim that the United Kingdom is a leading

securitizing actor on the topic throughout the UN. In the US case, there is a high degree of variation across administration, which also matches previous assessments (Scott and Ku, 2018, 209-210). Figure 2 also shows that SIDS are significantly less likely to securitize than non-SIDS by 6.4 percentage points, but are much more likely to use the oceans and sea-level topics (by 7.5 percentage points for both topics). In fact, these topics are predominately employed by SIDS.¹¹ This finding comports with SIDS' great concern about the issue of climate change as an existential threat, but also their wariness for the UNSC agenda control on the matter (e.g. Bloomfield and Scott, 2017; Peters, 2018; Warner and Boas, 2019). If the P5 are more likely to make securitizing moves than other states but SIDS are not, this suggests that the patterns described in the agenda control theory of securitization hold in the case of climate change.





Note: Figures show expected speech segment proportion in the conflict and security topic estimated by STM, comparing P5 states to non-P5 states, and SIDS to non-SIDS. Uncertainty calculated from the STM by composition with 95% confidence intervals.

While the evidence from these bivariate tests suggests that the expectations of the agenda control securitization theory are correct, status as P5 or SIDS is far from randomly assigned, and is likely associated with many other sources of variation. Though it is

¹¹By region, a similar trend is observed: Oceania is more likely to employ the oceans and sea-level topics, likely driven by the prevalence of SIDS in this region.

impossible to rule out all potential explanatory factors in an observational context, I can more carefully test the theory against alternative explanations by leveraging additional data to control for other relevant sources of variation. I conduct this analysis at the country-year level, averaging the segment-level conflict and security topic proportion estimates from the STM at the country-year level as the dependent variable. Because the dependent variable is ranges continuously from 0 to 1, I employ a linear regression framework. The independent variables to be employed in these tests are outlined below, and described in greater detail in the Appendix.

Public opinion in democratic states has been found to be more supportive of climate change action than in non-democratic states (Lewis, Palm, and Feng, 2019), and democratic states are more likely to be responsive to public opinion than non-democratic states (Moravcsik, 1997). Domestic pressures, then, may make states more likely to securitize. As a possible domestic political explanation, I leverage variation in regime type, measured with Polity score. Countries with Polity scores greater than 6 are coded as democracies, while countries with Polity scores less than -6 are coded as autocracies. I also utilize cross-national public opinion data on public concern about climate change from a Gallup survey conducted across 106 countries in 2010. This panel included all of the P5 members except France, as well as 4 SIDS (Singapore, Dominican Republic, Haiti, and Comoros, out of 37 total SIDS). Though this is unfortunately a small proportion of SIDS, it provides much better coverage than any other cross-national survey with data on climate change attitudes conducted to date.

States that are more geographically vulnerable to the effects of climate change also may have an incentive to make securitizing moves. This expectation would be supported by classical securitization theory, which argues that states that are intensely threatened by a problem would be more likely to be securitizing actors (Buzan, Wæver, and De Wilde, 1998). To control for geophysical features, I incorporate a measure of actual warming as a change in national average air temperature over land since 1960 in degrees Celsius, measured by Berkeley Earth. I also construct a measure of climate disaster occurrences to capture the experienced effects of climate change across states, utilizing data from the International Disaster Database from 1984-2018. I include data on climate-related disasters, including climatological (drought and wildfire), hydrological (flood and landslide), and meteorological (extreme temperature and storm) disasters. The disaster database captures the number of deaths, injured, affected, homeless, and costs for many of these events. To maximize data availability and reduce the effects of income-dependence, I follow Roberts and Parks (2007) and use a smoothed measure of total persons affected. I also test an indicator for developing states as an alternative measure to the SIDS indicator, as expectations with respect to the relationship between development and likelihood of securitization are mixed. Some research (e.g. Boas, 2014) suggests that developed states would be more likely to securitize. However, because they are more vulnerable to the effects of climate change, classical securitization theory would predict that *developing* states would be more likely to securitize. For a final measure of geophysical exposure to climate change, I employ the ND-GAIN composite index of vulnerability and readiness, developed by the Notre Dame Global Adaptation Initiative. Models employing the ND-GAIN index as a robust alternative measure can be found in the Appendix.

Finally, organizational politics have been found to influence state behavior in international organizations like the UN (e.g. Voeten, 2013). To test for the influence of institutional politics on a state's likelihood of making securitizing moves, I use the measure of affinity constructed by Bailey, Strezhnev and Voeten (2017), which employs voting records in the UNGA to measure state preference similarity. To determine whether US influence is driving securitization choices in UNGA rhetoric, I include the measure of vote similarity for each country with the US. If relationships supporting the agendas of an 'important' state are driving securitization, higher levels of voting affinity would be expected to predict securitization.

In addition to these measures, I also control for general indicators of state power. These factors might reflect a higher level of overall state security concerns, which could be associated with a greater propensity to make securitizing moves – concerns that SIDS generally do not share. I include annual measures of country level GDP per capita (logged), population (logged), and military expenditures as a proportion of GDP, all collected by the World Bank. I also include year and a second order polynomial on year to capture linear and nonlinear time trends in the data. I conduct 5 multiple imputations to address problems of missing data and avoid introducing potential bias from listwise deletion. This analysis includes 1,987 observations of unique country-years, covering every year from 1984-2017 and 194 distinct countries. Again, this analytical strategy is not able to fully rule out potential confounders, but is able to provide suggestive evidence in favor of agenda-setting securitization relative to alternative explanations.

The results of the main model, shown in Model 1 in Table 2, comport with the mean differences examined earlier. Controlling for alternative explanations, P5 status remains a significant predictor of securitization, with P5 states 5 percentage points more likely to securitize than non-P5. SIDS status is a significant predictor in the negative direction, with SIDS expected to securitize 8 percentage points less often than other states. While these predicted effects may seem substantively small, as a shift in framing choices, a small increase in securitization could have substantial effects in terms of agenda setting and influencing topic choice by other states. Further, the mean securitization level by states is 16%, so a 5 percentage point shift represents an allocation change of nearly one-third. Variables associated with the domestic politics explanation (Public Concern and Democracy) are not statistically significant predictors of securitization, nor is the international politics explanation (Agree with US).

The variables measuring geographic vulnerability to climate change are of mixed significance: while Amt. Warming and Climate Disasters are significant predictors of securitization in most models, their substantive impact is negligible (less than 0.1 percentage point influence on predicted securitization in most cases) and in the negative direction. The expected first difference of increasing the mean value of the adjusted disaster score by one standard deviation is a decrease of 1% in the use of securitizing language. This result may be explained by the increased incidence of climate disasters in SIDS, which were found to be less likely to securitize. Two of the measures of structural power (Population and GDPPC) fail to achieve statistical significance at the level of 0.05. Military Expenditure, however, has a statistically significant and substantively large effect on predicted securitization. This result comports with the theoretical expectations of agenda control securitization: like the P5, states with large military complexes would expect to obtain an increase in institutional power with the securitization of climate change, contributing military expertise and taking a more active role in the issue. Such states may even be invited to participate in UNSC discussions of climate security because of their role in the security sector, thereby gaining agenda control. Even with the large amount of predictive power of military expenditure, however, the key finding of P5 securitization remains significant.

These findings are robust to several alternative model specifications, shown in Models 2-7 in Table 2, and additional specifications included in the Appendix. Overall, these findings support my argument that the P5 have an incentive to securitize the issue of climate change to increase their agenda control, while SIDS are less likely to do so. Military expenditure may capture too broad of a phenomena, as the effects of climate change are likely to be particularly acute to naval forces. As an alternative measure for military expenditure that specifically captures naval powers, I construct in indicator for countries with aircraft carriers (Model 2). I also specify models where the measure of affinity with the US is replaced for vote similarity with Brazil and with India to determine whether coalitions of developing countries are influential in setting the patterns of securitization discourse (Models 3-4). None of these alternative specifications of these variables achieve statistical significance and do not meaningfully change the predicted effects of other variables, nor does adding an interaction term between P5 status and year (Model 5).

While the P5 are specifically expected to securitize more than other UNSC members, the non-permanent members could be motivated to maximize their influence during their temporary appointment or to signal their temporary leadership in security matters. To test this argument, I replace the P5 indicator with an indicator for non-permanent membership in the UNSC (Model 6). This indicator is 1 for non-P5 countries during the years that they serve on the UNSC. This variable is not a significant predictor of securitization, indicating that the effect only holds for P5 members and not UNSC members more broadly.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
P5	0.05*	0.06*	0.05^{*}	0.05	0.02		0.02
E10	(0.04)	(0.03)	(0.04)	(0.05)	(0.76)	0.02	(0.30)
SIDS	-0.08***	-0.08***	-0.08***	-0.08***	-0.08***	(0.31) -0.08***	
Developing	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	-0.04^{**}
Pubic Concern	0.00	0.01	0.00	0.00	0.00 (0.87)	-0.01	(0.00) 0.01 (0.84)
Democracy	(0.00) (0.94)	(0.01) -0.01 (0.24)	(0.00) (0.85)	(0.00) (0.73)	(0.01) (0.94)	(0.99) 0.00 (0.83)	(0.04) (0.83)
Climate Disasters	(0.94) 0.00^{*} (0.04)	(0.24) 0.00^{*} (0.05)	$(0.00)^{*}$ $(0.04)^{*}$	(0.10) 0.00^{*} (0.04)	(0.94) 0.00^{*} (0.04)	(0.00) (0.10)	0.00**
Amt. Warming	(0.04) -0.01* (0.04)	(0.05) -0.01 (0.05)	(0.04) -0.01^{*} (0.04)	(0.04) -0.02^{*} (0.04)	(0.04) -0.02^{*} (0.04)	(0.10) -0.01 (0.07)	(0.00) -0.01 (0.12)
Agree with US	(0.04) -0.02 (0.50)	(0.09) -0.02 (0.50)	(0.01)	(0.04)	(0.04) -0.02 (0.51)	(0.01) (0.85)	(0.12) -0.03 (0.22)
Agree with Brazil	(0.00)	(0.00)	0.01		(0.01)	(0.00)	(0.22)
Agree with India			(0.00)	0.00			
Military Expenditures	0.76^{*}		0.76^{*}	(0.00) 0.76^{*} (0.01)	0.76^{*}	0.82^{*}	1.15^{**}
Aircraft Carriers	(0.01)	0.00	(0.01)	(0.01)	(0.01)	(0.01)	(0.000)
GDPPC (Log)	0.00	(0.00) (0.66)	0.00	0.00	0.00	0.00 (0.58)	-0.01
Population (Log)	(0.00) (0.10)	(0.00) (0.18)	(0.00) (0.10)	(0.04) (0.12)	(0.00) (0.10)	(0.00) (0.23)	(0.10) 0.00^{**} (0.00)
Year	(0.10) 0.00 (0.17)	(0.10) 0.00 (0.31)	(0.10) 0.00 (0.17)	(0.12) 0.00 (0.17)	(0.10) 0.00 (0.19)	(0.20) 0.00 (0.17)	(0.00) (0.00) (0.08)
Year Sq	(0.17) 0.00 (0.35)	(0.51) 0.00 (0.52)	(0.17) 0.00 (0.33)	(0.17) 0.00 (0.33)	(0.19) 0.00 (0.37)	(0.11) 0.00 (0.33)	(0.00) (0.26)
P5*Year	(0.00)	(0.02)	(0.00)	(0.00)	(0.57) 0.00 (0.57)	(0.00)	(0.20)
Constant	0.22^{***} (0.000)	0.22^{***} (0.000)	0.20^{***} (0.000)	0.21^{***} (0.000)	(0.07) 0.22^{***} (0.000)	0.19^{***} (0.000)	0.13^{*} (0.03)

Table 2: Linear regression model of securitization

Note:

*p<0.05; **p<0.01; ***p<0.001

Standard errors averaged from 5 imputations of missing data. 1,987 observations in all models.

The developing indicator, tested as an alternative to the SIDS indicator in Model 7, has a statistically significant effect on predicted securitization, and a predicted effect size of half the magnitude as the SIDS indicator. This finding is in line with the theoretical predictions of agenda control securitization laid out earlier: like SIDS, developing states should securitize less than other states. This is because the more exposed to the threat of climate change a state is, the more it is expected to care about the issue, and thus the less likely it is to be willing to give up agenda control to the UNSC. Because developing states lack the same adaptive capacity as developed states and are more likely to be located in the geographic tropics, they are more threatened by climate change. Thus, while developing states care deeply about addressing the challenges of climate change, they share in a desire to maintain agenda control over the issue. Developing states are less likely to securitize, and SIDS – as the most vulnerable subset of this group – are the *least* likely to securitize. Similar results are observed in the robustness test replacing the SIDS indicator with the ND-GAIN index, shown in the Appendix. These results, as well as the results for the military expenditure variable, also speak to the generalizability of agenda control securitization: motivation to maintain agenda control can be conceived of as continuous and varying in magnitude depending on the preferences and institutional positions of states.

Conclusion

This work provides new insight into a puzzle in the internal dynamics of international organizations: why do some matters become framed as security problems, while others do not, and which states are behind these shifts? Classical securitization theory predicts that states that care greatly about the issue, and particularly states that are existentially threatened, should be more likely to make securitizing moves. However, I show that by accounting for agenda control dynamics in international organizations, we can develop the opposite expectations: states with the greatest material interest in an issue may, in fact, be the least likely to attempt to securitize it, fearing a loss of agenda control.

The tendency of the P5 not to securitize across all UNGA discourse may indicate

a persistent concern for institutional legitimacy, which would bode well for the continued relevance of the UN to both powerful and less powerful states. The fact that the climate discourse is not securitized suggests that most UN members would not support a substantial role for the UNSC in addressing climate change, a policy response would be more likely to come from the UNGA or another inclusive body like the UNFCCC, and would likely include more attention to the non-security dimensions of climate change, like financing, migration, and human rights, but it would also lack the compulsory force and international salience of a UNSC resolution. While I do not find that securitization is taking place broadly across issue areas in the UNGA, were such a trend to develop, it could have broad implications in expanding the UNSC mandate to other issue areas outside of the traditional security realm, and increasing the likelihood of policy responses that de-emphasize human rights, economic, social, and political dimensions of problems.

Both institutional rules and rhetoric matter in shaping institutional distributions of power and policy responses. The theory of agenda control securitization is expected to hold in any international organization with a division of labor across its sub-institutions, such as the AU, the OAS, ASEAN, and CARICOM. To test the generalizability of agenda control securitization, future research should explore agenda control securitization in other institutional settings. In addition to exploring *contextual* generalizability, future work should also investigate *topical* generalizability. Developing a framework to categorize issues on dimensionality, winners and losers in agenda control, and importance to different states would help to shed light on when securitization in international organizations is likely to be contested, and when it is likely to succeed. As one possible example, human rights-centered discussions about the right to healthcare access could indicate that the securitization of global pandemics likely to be contested. Extending the theory of agenda control securitization could also allow for the development of expectations about when states would be likely to actively block securitizing moves, and when *de*securitization may be expected.

This work brings to light the importance of agenda control dynamics in the discourses of international organizations to help explain why some matters are framed as security problems, while others are not, and how state preferences can help explain these outcomes. As the nature of global security challenges expand and become more complex, international organizations will play a crucial role in coordinating policy responses. Examining securitization in these organizations could help to understand their ability to respond to new security challenges, and their continued legitimacy.

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Supplementary Materials for Who Securitizes? Climate Change Discourse in the United Nations

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Speech Data

I utilize the data collected by Baturo, Dasandi, and Mikhalylov (2017), which consists of all speeches given by state representatives in the General Debate from 1970-2014. Not only are speeches good indicators of country preferences and priorities, by securitizing issues, they also perform an agenda-setting function. Each year at the opening of the UNGA in September, the General Debate gives the opportunity for each state to speak in a largely unconstrained setting (Smith, 2006). Because General Debate speeches are not linked to particular resolutions or votes, which are traditionally used by researchers to measure state preferences, they are more informative about a country's underlying priorities and positions.¹ Every country has equal opportunity to speak, affording small states a "rare moment for seizing the spotlight and putting a point of view that might otherwise be ignored," (Nicholas, 1971, 108). The audiences for these speeches include domestic and foreign publics, bureaucrats at the UN, and members of other state delegations. States take the General Debate seriously: each year, nearly all countries who are can do so choose to give speeches in the UNGA plenary session.

States send high-level representatives to the session, with 44.3% represented by heads of state or government, 49.3% by vice-presidents, deputy prime ministers, and foreign ministers, and only 6.4% by country representatives to the UN (Baturo et al. 2017, 3). An institutional norm restricts speech-time to 15 minutes. While some countries ignore the limitation on length, speech-length has indeed declined over time. We may thus consider speech-time as a limited resource – countries are simply unable to address every issue in a given speech because of time considerations. Allocating the scarce resource of speech-time to discuss a given issue is a signal that a country considers it to be of great importance.

One may worry that the speeches delivered in the General Debate are not independent observations, that is, the order in which the speeches are given may have effects on their substantive contents, or speeches may be influenced by previous years' contents. Strategic coordination and political sources of influence are widespread in state voting records in the UN (Voeten, 2013), but procedural constraints of the General Debate make this an unlikely concern in this speech data. Speeches are uniquely crafted each year to reflect current events and themes highlighted by the Secretary-General. The speeches are then submitted in advance of the General Debate to allow for translation into the official languages of the UN, and to circulate the text to the press and the other delegates of the UNGA. As such, speech content is determined in advance of the General Debate rather than crafted in response to statements by earlier speakers. Further, because states consider the General Debate a consequential platform, many people are involved in the speechwriting process from country missions and governments, and therefore the content is determined well in advance of the General Debate.

The process in which the order of speakers is determined also weighs against a strategic selection process in which the order of speeches may affect their contents. Per tradition, Brazil and the United States always give the first speeches of the General Debate. Subsequently, the order of countries is determined by the importance of the delegation's speaker, with heads of state prioritized. Only after these factors are used in ordering are other factors taken into consideration in setting the speech order, including

¹Interviews with officials from state Permanent Missions to the UN inform and support the claims made in this section.

individual country preferences for speaking order and geographical balance. Based on variation in these factors, the order of speakers and the speech content varies from year to year.

The data used in this analysis is pre-processed by a text tiling procedure, which identifies features to divide speeches into substantively coherent units ("segments") that are analogous to paragraphs (Hearst, 1997). This procedure is necessary because in many of the documents, natural paragraph delimiters are not available and formatting indicators (i.e. line breaks) are inconsistent across units, so semantic similarity is used to determine paragraph-like units.

After separating the speeches into segments, I extract the speeches on climate change from the full corpus by identifying segments that contain any of a set of keywords, shown in Table 1. The set of key terms was composed in several stages. I began with words that appeared frequently in the context of climate change discussions in the course of my research. I then expanded the set of key words by iterating on the initial set, finding the words whose occurrence correlated the most highly with the initial set and were substantively related to climate change. These discovered words were added to the initial set to create the final set of filtering words. States that do not speak on climate change at all, states that do not exist after 1984, and speeches that do not represent a specific state are dropped from the analysis – this includes speeches given on behalf of the European Union, the European Community, Yugoslavia, Czechoslovakia, Democratic Yemen, and the German Democratic Republic. All other states are included.

 Table 1: Terms Used to Create Climate Filter

1	climate change	7	climate politics	13	global average temperature
2	global warming	8	framework convention on climate change	14	greenhouse effect
3	cap and trade	9	bali roadmap	15	kyoto protocol
4	unfccc	10	bali action plan	16	ipcc
5	paris accord	11	greenhouse gas	17	greenhouse effect
6	emissions trading scheme	12	ghg	18	intergovernmental panel on climate change

Descriptive statistics of the full corpus and the climate subset are shown in Tables 2 and 3. The overall length of speeches declines over time, dropping off particularly steeply after 2000. In any speech, the greatest number of segments that specifically discuss climate change is 16 (a speech by Samoa in 2015), while the average is 4 segments. SIDS discuss climate change at higher rates than other states with more segments about climate change and greater speech proportions on the topic, but they are not necessarily early adopters, picking up the climate discourse at the same time as other states. There are few outliers in terms of speech length: one exceptionally long speech was given by Libya in 2009 (100 segments). Only four other countries gave more than one speech longer than 50 segments (Russia, USA, Cuba, and Germany), and multiple long speeches were given in 1973, 1976, 1978, 1983, 1984, and 2009.

To prepare this speech data for unsupervised text analysis, additional pre-processing steps were needed. I remove word stems that occurred in fewer than 1% of documents or in more than 95% of documents, common stop words, as well as documents that contained only unique word stems (that is, shared no features with other documents). I also remove the terms 'united', 'nations', 'general', and 'assembly', as these will occur too frequently to be informative.

	# Segments	# Speeches	Avg. # Segments	Total Segments	Avg. Segments Por Country
	per speech	per rear	per rear	by Ital	Ter Country
Min.	4	150	17.1	2963	11.2
1st Qu.	15	191	19.1	3271	22.6
Median	19	193	20.8	3552	28.0
Mean	20	191	20.9	3565	27.6
3rd Qu.	23	194	21.2	3662	31.9
Max.	93	196	40.4	5550	51.9

 Table 2: Descriptive Statistics: All Segments

 Table 3: Descriptive Statistics: Climate Segments Only

	# Segments	Prop.	# Speeches	Avg. $\#$ Segments	Total Segments	Avg. Segments
	per Speech	of Speech	per Year	per Year	per Year	per Country
Min.	1	0.01	1	1.0	1	1.0
1st Qu.	2	0.09	125	3.3	270	2.3
Median	3	0.16	147	3.8	360	3.1
Mean	4	0.19	126	3.5	315	3.6
3rd Qu.	5	0.26	157	4.1	404	4.3
Max.	16	0.73	169	4.4	492	8.3

Topic Models

Methodology and Estimation

Structural Topic Model (STM) is a variant of Latent Dirichlet Allocation (LDA), which is a Bayesian generative model of language. LDA, and the STM variant of LDA employed in this analysis, assumes a hierarchical system of distributions, with an underlying Poisson distribution of words (N) and of Dirichlet topic probabilities (θ) across topics (k). Conditional on these priors of words and of topics, each of N words in a document w_n is drawn, and each topic z_n and word w_n from a Multinomial. The β parameter is a KxVmatrix of word probabilities (Grimmer and Stewart 2013). STM adjusts this the LDA procedure to allow the topic proportions of θ (referred to as topical prevalence) and the observed words n (referred to as topical content) to be drawn from a document-specific prior rather than a universal prior. Covariates associated with each document can inform the distribution of topics and words across documents (Roberts et al. 2016). To allow for variation in the content and prevalence of topics over time, I include year as a parameter in the STM. To allow the prevalence of topic to vary non-linearly over time, I fit a spline on years in topical prevalence. To allow topical content to vary over time but to impose some constraint, I fit a factor on decade in topical content.²

I estimate the STM models at the standard value value of the prevalence hyperparameter (α) as 1/k, though changing the value of α had little effect on the results. I employ a Spectral initialization for stability. Because the corpus is already limited to the particular topic of climate change, I employ a smaller k than would be typical for analysis across an entire corpus. I test values of k ranging from 2 to 15 and assess topical coherence manually to find the optimal number of topics. I estimate the STM with k = 8 topics based on manual evaluation of topical coherence, as well as maximization of semantic coherence and exclusivity, seen in the left panel of Figure 1. The distinctiveness of the

²Results were largely consistent across different parameterization choices of year and decade; the final modeling choices were made to minimize the residuals in the model.

different topics obtained in the final model is validated by an analysis of the correlation between the different topics, which was found to be low across all topical pairs, shown in the right panel of (Figure 1). The ultimate topics obtained were quite consistent across all the different model specifications described above.

The topic proportions are shown in the left panel of Figure 2 and Table 1 of the main text. The conflict and security topic is the second most frequently employed. It is also used more over time, while other frames, particularly the Kyoto Protocol frame, decrease in their use over time (Figure 2, right panel). Across all time periods, the P5 employ the language of securitization more than do SIDS (Figure 3)

Figure 1: Selecting Number of Topics



Note: Number of topics (k was chosen to maximize semantic coherence and exclusivity (left), to minimize correlation between topics (right), and based on best performance under manual examination.

Figure 2: Topic Proportions



Note: Left panel shows expected topic proportions across the corpus, right panel shows linear estimation of changing topic proportions over time.

Robustness

One of the key benefits of topic modeling is its inductive nature, reducing the impact of the *ex ante* beliefs of the researcher. Rather than pre-specifying the words that I expect to be associated with securitization, as in a dictionary-based approach,

Figure 3: P5 Make Securitizing Moves More Than SIDS Across Time



I allow the model to identify the words associated with securitization. However, topic modeling can be sensitive to the specifications of the model, so I take several steps to ensure robustness, aligning with the recommendations on validation outlined in Ying et al. (2021).

I validate the results of the STM with a supervised analysis. I randomly selected 10% of the speech segments on climate change (448 segments) and read them to identify the topics that they employ, coding them as being security relevant or not. In this exercise, I was also able to test the keyword filtering approach, verifying that there were no false positives (that is, there were no speeches included in the data that were not actually about climate change). Based on my binary coding of the segments as securityrelevant or not, I found a high level of agreement with the results of the STM. When the results of the STM are binarized at the level of the mean (segments with 15% or higher topical prevalence in the conflict and security topic are coded as security-relevant), my coding agreed at 58% with segments in the conflict and security topic. When the results of the STM are binarized as more than half of the paragraph identified as the conflict and security topic, my coding agreed at 67%. This provides confidence that the results of the unsupervised analysis are not artifact but are indeed identifying clusters of security language in the data. Based on the words found to be most representative of the different topics (words within each topic with the highest topic-word probability, β), I constructed the label for each.

These labels were validated with a crowdsourcing exercise whereby anonymous respondents were shown the set of words representing each topic, conducted with a convenience sample and expanded with snowball sampling in November 2019. Respondents were instructed, "For each of the following eight questions, you will be shown a set of 20 words. Please respond with one word that you think best summarizes the content of these words- that is, assign the best fitting (in your opinion) topic label to the words- there are no incorrect responses." For the conflict and security topic, the words presented in the task were "weapons, nuclear, problems, destruction, crime, war, mass, threats, hunger, conflict, today, diseases, live, terrorism, still, life, crises, values, increasingly, complex."

Out of 16 respondents (10 non-political scientists and 6 political scientists), 10 provided words that corresponded with my characterization of the topic ("security, crises, war, weapons of mass destruction, fighting, war and terrorism, conflict, international conflict, war, threat"), while the remaining 6 respondents provided more general words ("Middle East, international relations, human influence, changing society, foreign policy, fear"). No respondents assigned a security0related label to Topic 7 (sea-level rise). For Topic 7, the most common label applied was in fact was "climate change" generally (9/16 respondents), followed by "natural disasters" (4/16). There were no noticeable differences in responses across political scientists from others.

A second supervised task asked respondents to provide words based on the top segments in the topics, rather than the top words. Respondents were instructed, "You will be shown a series of 10 short paragraphs. After each paragraph, you will be asked to respond with one word/phrase that you think best summarizes the content of these paragraphs- that is, assign the best fitting (in your opinion) topic label to the paragraphs- there are no incorrect responses, but since all of the paragraphs are about climate change, please DO NOT say that "climate change" is the best label." 10 respondents were shown in a random order the 5 speech segments with the highest topic proportion in the sea-level rise topic, and the 5 speech segments with the highest topic proportion in the conflict and security topic. In this task, respondents were 4 times more likely to assign a security label to the conflict and security topic segments than to the sea-level segments. Topic labels for the sea-level rise segments highlighted natural disasters, the challenges for small island states, and inequality.

Predicting Securitization

Variables

- **P5:** Indicator for P5 Member status (United States, United Kingdom, China, Russia, and France).
- E10: Indicator for elected UNSC membership status during the years when a state served on the UNSC (Dreher et al. 2009).
- SIDS: Indicator for UN designation as a small island developing state (Cuba, Dominican Republic, Haiti, Singapore, Trinidad and Tobago, Fiji, Guyana, Jamaica, Mauritius, Barbados, Bahamas, Grenada, Comoros, Cabo Verde, Guinea-Bissau, Maldives, Papua New Guinea, Sao Tome and Principe, Suriname, Seychelles, Samoa, Dominica, Saint Lucia, Saint Vincent and the Grenadines, Antigua and Barbuda, Belize, Solomon Islands, Vanuatu, Saint Kitts and Nevis, Micronesia, Marshall Islands, Palau, Nauru, Tonga, Tuvalu, Kiribati, Timor-Leste) (United Nations Statistics Division, 2021).
- **Developing:** Indicator for UN designation as a developing state (144 countries) (United Nations Statistics Division, 2021).
- Vulnerability: Vulnerability is measured with the ND-GAIN index, a composite measure combining metrics of country-year level vulnerability to climate disruptions and readiness to leverage private and public sector investment for adaptive actions(University of Notre Dame, 2021). This data is available beginning in 1992, so for analyses utilizing this indicator, the time series is left-censored at that point. In addition to the continuous measure of ND-GAIN, four binary indicators are constructed with this indicator to test for robustness of the most vulnerable measure: countries with lower than mean (49.10) ND-GAIN composite scores, countries in the lowest quartile of ND-GAIN composite scores (less than 40.22), countries with higher than mean (0.46) vulnerability composite scores, and countries in the fourth quartile of vulnerability composite scores (higher than 0.53). Mean ND-GAIN composite is reported in the results below, results were robust across all specifications of the vulnerability variable (results with these specifications available upon request).

- Public Concern: This data comes from the 2010 Gallup World Poll conducted across 106 countries in 2010 that featured two questions on climate change (Gallup 2010). The first survey question measured *understanding*, asking respondents "How much do you know about global warming of climate change?" and coding understanding as the percentage of respondents saying they know something or a great deal. The second question measured *concern*, asking respondents "How serious of a threat is global warming to you and your family?" and coding concern as the percentage of respondents reporting that they view global warming as a very or somewhat serious threat. This question was only asked to respondents reporting familiarity with the topic of climate change. The panel included all of the P5 members except France, as well as 4 SIDS (Singapore, Dominican Republic, Haiti, and Comoros, out of 37 total SIDS).³ I use the measure of concern rather than understanding in the model because it more closely capture the kind of electoral pressure that would be likely to move policymakers to advance the issue of climate change on the global agenda.
- **Democracy:** I use scores from the Polity IV project to indicate regime type (Center for Systemic Peace 2018). Polity scores can take on a possible range of -10 to 10. Countries with Polity scores greater than 6 are coded as democracies, while countries with Polity scores less than -6 are coded as autocracies.
- Climate Disasters: I construct a measure of climate disaster occurrences to capture the experienced effects of climate change across states, utilizing data from the International Disaster Database from 1984-2018 (Guha-Sapir 2015). I collect data on climate-related disasters, including climatological (drought and wildfire), hydrological (flood and landslide), and meteorological (extreme temperature and storm). The disaster database captures the number of deaths, injured, affected, homeless, and costs for many of these events. To maximize data availability and reduce the effects of income-dependence, I follow Roberts and Parks (2007) and use a smoothed measure of total persons affected. For each country, I sum the number of total persons affected by climate disasters and divide by the country population in each year and then take the log.
- Amount Warming: I measure warming as a change in national average air temperature over land since 1960 in degrees Celsius, measured by Berkeley Earth (2020). This measure ranges from 0.65 degrees to 3.6 degrees, with a mean of 1.88 degrees.
- Agreement: The measure of affinity is constructed by Bailey, Strezhnev and Voeten (2017). These measures of state preference similarity are constructed using voting records in the UNGA. The voting similarity index compares one country's voting record in a given year with another, ranging from 0-1. The main model includes the measure of voting agreement with the US. I also specify models where this measure is replaced for vote similarity with Brazil and with India to determine

³Respondents in P5 states show higher understanding than either other states or SIDS (0.85 for the P5, 0.54 for SIDS, and 0.68 for other states). For both the P5 and SIDS the level of concern is less than other states (0.43 and 0.44 for the P5 and SIDS compared to 0.50 for other states). On both measures, China is substantially lower than other P5 members, while Singapore is substantially higher than other SIDS.

whether coalitions of developing countries are influential in setting the patterns of securitization discourse.

- Military Expenditures: Military expenditures as a proportion of GDP, measured by the World Bank Development Indicators (World Bank 2020).
- Aircraft Carriers: Indicator for countries with aircraft carriers. Countries included are Argentina, Australia, Brazil, Canada, China, France, Germany, India, Italy, Japan, Netherlands, Russia, Spain, Turkey, Thailand, United Kingdom, and United States. This binary measure specifies countries that have operated aircraft carriers at some point in history. All P5 members are included as naval powers.
- **GDPPC**: Annual measures of country level gross domestic product per capita (logged), measured by the World Bank Development Indicators (World Bank 2020).
- **Population**: Population (logged), measured by the World Bank Development Indicators (World Bank 2020).

Robustness

The results in the main model show linear regression estimates with standard errors averaged from 5 imputations of missing data, conducted with Amelia. These results are also observed in simulated first differences (Table 4). The main result that the P5 securitize more than other states holds for each P5 member directionally, although because of the reduced amount of data, the results do not hold statistical significance at the individual level (Figure 4). To further test robustness, I also re-estimate the model on a restricted sample of the climate change corpus to only states with high and medium levels of development, and find that even in the restricted sample, the P5 are more likely to securitize than non-P5 states (Figure 6, right panel), demonstrating that the overrepresentation of developing states in the original sample does not drive results, though the statistical significance of the finding is attenuated due to reduced sample size. As discussed in the main paper and shown in Table 2 of the main text, I find that the results are robust to many different specifications.

In addition to these primary robustness tests, I also conduct a placebo test to assess whether the P5 simply try to securitize across all topic areas, and the observed securitizing moves on climate by the P5 are not a unique feature of that discourse. The theoretical model of agenda control securitization contends that because of resource and legitimacy constraints, the P5 attempt to securitize issues strategically, and would not be likely to securitize across all issues. The evidence supports this expectation. To verify that the P5 are not simply making securitizing moves across all topics, I conduct a placebo test, fitting an additional topic model with the same specifications to the full General Debate corpus. Comparing the STMs on the climate discourse and the full discourse reveals that conflict security matters comprise a distinct topic in the General Debate, and that this topic particularly focuses on 'hard' security issues such as nuclear weapons, disarmament, and terrorism. There is not evidence that the overall discourse is securitizing: the prevalence of the conflict and security topic is declining over time, whereas the use of security language in the climate discourse specifically was increasing over time (Figure 5). In the overall discourse, the conflict and security topic is not used generally by many states, with only 6% of states using this as their most frequent topic, the second least common of all topics. The security language is also not prevalent across

topics in the overall debate, but is confined to the particular conflict and security topic. In the general discourse, the P5 are no more likely to employ the conflict and security topic than other states (Figure 6, left panel). These findings support the analysis of climate discourse as a distinct case of securitization in UN discourse, and provide further evidence that the P5 are expected to securitize strategically, selecting particular issue areas where there securitization might be more likely to be accepted. Security words are not characteristic of other topics.

 Table 4: First Differences on Changing P5 and SIDS Status

	P5 Ind	SIDS Ind
Mean	0.0512	-0.0800
St. Dev.	0.0243	0.0117
$2.5 \ \mathrm{CI}$	0.0044	-0.1028
97.5 CI	0.1014	-0.0571



Figure 4: P5 States Individually Securitize

Note: Figures show expected speech segment proportion in the conflict and security topic estimated by STM, comparing each P5 states to other states. Uncertainty calculated from the STM by composition with 95% confidence intervals.

I also estimate the main model using alternative measures to SIDS status to capture vulnerability to the effects of climate change, and thus potential likelihood to make securitizing moves. I find that like SIDS, developing states are less likely to use securitizing language, indicating that concerns about increasing UNSC strength (as well as interest in the multidimensional aspects of climate change) appear to be at work for developing states as a larger category, as seen in the right panel of Figure 7. A similar finding holds in observing states with lower than mean vulnerability in the ND-GAIN index, shown in the left panel of Figure 7.⁴ My key prediction – that SIDS are the *least* likely group of

⁴Because the number of observations changes in the ND-GAIN analysis, the estimation of

Figure 5: Security in Placebo Test



Note: Linear estimation of changing conflict and security topic proportion over time. Uncertainty calculated from the STM by composition with 99% confidence intervals.

Figure 6: P5 Robustness



Note: Left panel shows expected topic proportions in the placebo test of the full corpus, right panel shows expected topic proportions in the restricted sample of the climate change corpus to only states with high and medium levels of development. Uncertainty calculated from the STM by composition with 95% confidence intervals.

Figure 7: Developing states also less likely to securitize, but less so than SIDS



Note: Figures show expected speech segment proportion in the conflict and security topic estimated by STM. Left panel shows developing states compared to others, right panel shows vulnerable states (by ND-GAIN) compared to others. Uncertainty calculated from the STM by composition with 95% confidence intervals.

states to make securitizing moves – also bears out, as SIDS are 1.59 times less likely to use the language of securitization than are developing states. Model 7 (shown in Table 2 of the main text) shows that this result holds for developing states, even when controlling for other confounders: like SIDS, developing states are less likely to use the language of securitization, but the magnitude of this effect is much greater for SIDS. Table 5 shows similar results hold for the vulnerability measure, operationalizing the ND-GAIN measure as a binary (Model 1) and continuous (Model 2) measure. More vulnerable states are less likely to securitize to a substantively identical degree as developing states, although vulnerability is not statistically significant as a continuous measure. Note that the number of observations included in these models is smaller than the main models estimated, as the ND-GAIN measure is only captured beginning in 1992.

	(1)	(2)
P5	0.00	0.00
	(0.99)	(0.89)
Vulnerability (Binary)	-0.04**	()
	(0.00)	
Vulnerability (Continuor	us)	0.00
U ()	(0.49)
Pubic Concern	0.01	0.02
	(0.91)	(0.70)
Democracy	0.01	0.01
v	(0.40)	(0.42)
Climate Disasters	-0.01**	-0.01**
	(0.00)	(0.01)
Amt. Warming	0.00	0.01
Ū	(0.97)	(0.35)
Agree with US	-0.04	-0.04
0	(0.23)	(0.25)
Military Expenditures	1.21**	1.19**
· *	(0.01)	(0.01)
GDPPC (Log)	-0.01	0.00
(0)	(0.36)	(0.77)
Population (Log)	0.01***	0.01***
	(0.00)	(0.00)
Year	0.00	0.00
	(0.89)	(0.86)
Year Sq	0.00	0.00
-	(0.56)	(0.55)
Constant	0.13	-0.02
	(0.09)	(0.69)

Table 5: Linear regression model of securitization

Note:

p < 0.05; **p < 0.01; ***p < 0.001

Standard errors averaged from 5 imputations of missing data. 1,694 observations in all models.

the STM changes slightly: the numerical ordering of the topics shifts, and the 'general' topic is replaced by a specific 'food' topic.

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