

RESEARCH ARTICLE

How leaders perceive security dangers: The neglected dimension of unfolding experience

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Abstract

Leaders play a central role in world politics, and threat perception is a crucial element in the study and practice of International Relations (IR). Yet existing accounts of how leaders perceive threats are inadequate, drawing on an incomplete notion of leaders as (ir)rational information processors that pays no attention to the leader's experience of danger as it unfolds in time and how such experience is structured. By integrating a framework developed by linguist Ray Jackendoff to describe the experience of language with the study of danger in International Relations, and by employing an interpretive textual analysis technique to danger descriptions made by world leaders embedded in different historical and cultural settings constructing different security dangers, I develop and illustrate the 'danger framework'. In describing the unique features with which leaders experience security dangers, the danger framework theorises the qualia of danger experience and how it is organised into the conscious field of leaders. In doing so, the paper makes progress on three problems for existing accounts of threat perception in IR, illuminates important research puzzles, and provides the literature on experience and Ontological Security Studies (OSS) with micro-foundations.

Keywords: danger; experience; leaders; ontological security; threat perception

Introduction

Leaders' perceptions and experience matter in world politics, even if they do not have full control over political outcomes.¹ Leaders matter when regimes and organisations impose minimal constraints on them, when they lack diplomatic training and are therefore less likely to subordinate themselves to the foreign policy demands of the situation at hand, when they are interested in foreign policy or in a specific region of the world and have relevant expertise, when they have a 'hands-on' leadership style and are therefore more likely to leave their imprint on decision-making, when planning for long-term strategy takes place, when uncertainty prevails due to lack of information or its ambiguous character, and during international crisis situations which are handled by those occupying the highest levels of power irrespective of their degree of interest in foreign affairs.² Leaders matter for theory too: they are central to theories of crisis management, military

¹Michael Horowitz and Matthew Fuhrmann, 'Studying leaders and military conflict: Conceptual framework and research agenda', *Journal of Conflict Resolution*, 62:10 (2018), (pp. 2072–86). I use 'leaders' to refer to those sitting towards the higher ends of a particular decision-making structure with relevance to matters of national and international security broadly conceived. Such definition includes heads of state, heads of security agencies, foreign services, and secretary generals of intergovernmental organisations (such as the United Nations or NATO), as well as their proximate subordinates.

²For a good summary of the literature on the conditions under which leaders' perceptions and characteristics are more likely to matter, see Valerie M. Hudson and Benjamin S. Day, *Foreign Policy Analysis: Classic and Contemporary Theory* (London: Rowman & Littlefield, 2019).

conflict and aggression, adversary's intentions, collective action problems, and public manipulation.³ Like leaders, threat perception is a crucial element in the study and practice of International Relations, playing a vital role in theories of war, deterrence and compellence, alliances, and conflict resolution.⁴

How do leaders perceive security dangers?⁵ This question is important for theorists and practitioners of International Relations (IR) alike. For theorists, an adequate analysis of leaders' perception of danger could provide necessary micro-foundations to theories that engage with either the role of leaders in world politics, threat perception, or both.⁶ For practitioners, leaders' threat perception often underpins national strategy, informs crucial decision-making, and determines the allocation of vast human and financial resources.⁷

And yet underpinning our current understanding of leaders' threat perception in IR is an incomplete notion of human decision-makers as (ir)rational information processors that pays no attention to the role of experience in constructing a perception of danger at a given moment.⁸ Responding positively to Alexander Wendt's claim that 'no model of human beings is complete that does not have room for the experience of being human, of what it is like to be you or me,'⁹ this paper develops a framework with which scholars can explore what it is like for a leader to experience security danger at a given moment, i.e. what it might *feel* like for the leader,¹⁰ and how such experience is organised in the minds of leaders.

Importantly, by using the term 'experience,' I do not mean to denote, like most literature has, one's past events or professional background; instead, I wish to foreground the subjective ways the world might feel for a person when danger is 'present' in their awareness. In contrast to most literature on threat perception, which assumes threat perception is a *continuant* entity that is fixed, my point of departure is that leaders are not conscious of all dangers all the time and that the

³For the role of leaders in theories of crisis management, see for example Margaret G. Hermann and Bruce W. Dayton, 'Transboundary crises through the eyes of policymakers: Sense making and crisis management', *Journal of Contingencies and Crisis Management*, 17:4 (2009), pp. 233–41, and Karl E. Weick, 'Enacted sensemaking in crisis situations', *Journal of Management Studies*, 25:4 (1988), pp. 305–17. For the role of leaders in other theories, see for example the special issue by Horowitz and Fuhrmann, 'Studying'.

⁴Janice Gross Stein, 'Threat perception in international relations', in Leonie Huddy, David O. Sears, and Jack S. Levy (eds), *The Oxford Handbook of Political Psychology*, 2nd ed. (Oxford: Oxford University Press, 2013), pp. 364–94.

⁵I substitute 'threat' for 'danger', where danger is used to denote simulated harm associated with a broad range of threats, risks, and hazards, from the threat of nuclear war to the risk of abandonment (for example, Natalia Chaban and Ole Elgström, 'The threat of abandonment: Images of the EU's crises in post-Maidan Ukraine', this Special Section). This is because I am interested in capturing common features of the experience involved in perceiving all these entities. More on my notion of 'simulated harm' and how it is different from previous accounts later.

⁶Micro-foundations are about providing explanations at a lower level of analysis, where 'low' depends on the question being asked. These explanations posit the processes through which effects are produced. See Joshua D. Kertzer, 'Microfoundations in international relations', *Conflict Management and Peace Science*, 34:1 (2017), pp. 81–97.

⁷For the role of threat perception in crisis situations, see Raymond Cohen, 'Threat perception in international crisis', *Political Science Quarterly*, 93:1 (1978), pp. 93–107; for the role of threat perception in leaders' decision to intervene militarily (and covertly) and the choice of intervention strategy, see Elizabeth N. Saunders, *Leaders at War: How Presidents Shape Military Interventions* (Cornell University Press, 2017). For the role of leaders' turnover in affecting the risk of conflict, the role of leaders in shaping public attitudes about conflict, the role of leaders' prior experiences and worldviews in affecting their willingness to fight, and the role of leader-level factors in shaping beliefs about adversaries' intentions, see the special issue by Horowitz and Fuhrmann, 'Studying'.

⁸A note on terminology. Throughout the paper, I often use the term 'construction' in relation to threat perception. This is in line with much recent cognitive neuroscience which takes seriously a constructionist view towards perception. That is, rather than a passive recorder of reality and the dangers that might inhere in it, brains/minds actively construct the world (and the dangers in it). See for example Lisa Feldman Barrett, *How Emotions Are Made: The Secret Life of the Brain* (Pan Macmillan, 2017), p. 27.

⁹Alexander Wendt, *Quantum Mind and Social Science* (Cambridge: Cambridge University Press, 2015), p. 189.

¹⁰According to Thomas Nagel, 'an organism has conscious mental states if and only if there is something that it is like to be that organism – something it is like *for* the organism'. Thomas Nagel, 'What is it like to be a bat?', in *Readings in Philosophy of Psychology, Volume I*, edited by Ned Block, Cambridge, MA and London, England: Harvard University Press, 1980, pp. 159–68.)

same dangers do not feel the same all the time either. I am therefore interested in incorporating threat perception as-an-*occurrent* into our analyses, asking how it feels for leaders to experience danger at a given moment in time and what might be the implications of a particular experience for decision-making and crisis management.¹¹ Put simply, my task is threefold: to theorise the qualia of danger experience, to theorise how the qualia of danger experience are organised into the leader's conscious field, and to outline why these matter to international security.¹²

An analysis of how leaders experience security dangers has important implications for IR theory. Within the context of threat perception, a richer model of how leaders experience security dangers would enable us to investigate which features of leaders' experience of security issues might dispose them to construct issues (threats, risks) as more or less dangerous, how leaders' beliefs about aspects of the world might change as a result of a particular experience of danger,¹³ and whether particular kinds of experiences of danger are correlated with appraisal and action tendencies,¹⁴ as well as decision-making strategies and ways of managing crisis.¹⁵ More broadly, a richer descriptive model of what goes on in leaders' heads can help illuminate questions pertaining to the role of leaders in international relations and aid in the clearing away of some of the confusion surrounding concepts like threat, risk, anxiety, and dread, key to Ontological Security Studies (OSS).¹⁶

An account of how leaders experience security dangers has important implications for practitioners of international security as well. Leaders familiar with the features of danger experience (what I call 'danger literacy') might be better placed to reflect on their construction of security dangers – gaining a better grasp of why some experiences *feel* more or less dangerous.¹⁷ For example, leaders could scrutinise the ways in which a concrete feature of the experience of danger might sway them to re-evaluate their beliefs about global catastrophic risks.¹⁸ With better awareness of these themes, leaders could respond to danger in more nuanced and efficient ways. Moreover, leaders with enhanced danger literacy might be better placed to gauge how leaders of foreign countries might respond to their decisions and actions in the international system, thus potentially reducing the likelihood of misperception and unwarranted escalation. In short, in providing a descriptive account of how leaders experience dangers in the international system, I hope to enhance our

¹¹I develop my notion of experience as well as the conceptual distinction between *continuant* and *occurrent* in the next section.

¹²Qualia are the forms in which consciousness presents itself: a standard example is the hurtfulness of pain, i.e., what this experience is like.

¹³Scholars have examined *why* leaders' beliefs change due to causes such as role change, traumatic events, and learning in office. See for example Jonathan Renshon, 'Stability and change in belief systems: The operational code of George W. Bush', *Journal of Conflict Resolution*, 52:6 (2008), pp. 820–49. The danger framework provides a more detailed explanation for *how* beliefs might change because of a leader having a particular experience.

¹⁴While appraisal tendencies refer to what and how people think, action tendencies refer to what people want and do. See Robin Markwica, *Emotional Choices: How the Logic of Affect Shapes Coercive Diplomacy* (Oxford University Press, 2018), pp. 15–16.

¹⁵Scholars of crisis management outlined some of the links between what they called 'sense making' (noticing, interpreting, understanding, and assessing crises) and response to crisis under conditions of time urgency (extended time vs short time) and surprise (anticipated vs non-anticipated event). For example, in a non-anticipated situation wherein they perceive short time to decide and act, leaders would likely opt for rapid reaction, seeking closure quickly. In non-anticipated situations with extended time to respond, leaders would likely be innovative. See Hermann and Dayton, 'Transboundary', p. 235. Or, in another example, the perception of control over crisis enables leaders to notice more things they can affect, and through action, to transform complex tasks to simpler ones. See Weick, 'Enacted', p. 315.

¹⁶Nina C. Krickel-Choi has recently pointed out two divergent uses of anxiety in the OSS literature, which give rise to contradictory conclusions. The first use treats anxiety as an impediment to action and the second as a call to action. I return to OSS conceptual confusion in the concluding section. Nina C. Krickel-Choi, 'The concept of anxiety in Ontological Security Studies', *International Studies Review*, 24:3 (2022), p. viac013.

¹⁷This form of 'danger literacy' is not limited to theorists and leaders either: the features of experience introduced below provide publics with a framework against which to evaluate how their leaders construct security threats.

¹⁸This could also be used to 'nudge the nudgers'; see Yee Kuang Heng, 'Building futures literacy: Nudging civil servants to cope with uncertainties and threats', this Special Section.

understanding of how leaders perceive threats, to illuminate important theoretical puzzles, to clear away conceptual confusion, and to set the stage for better danger literacy.

The article proceeds as follows. The second section identifies three problems with classical accounts of threat perception in IR and substantiates the need for incorporating experience into the study of threat perception. The third section integrates the framework of conceptual semantics with the study of threat perception in IR, producing what I term the danger framework. The fourth section illustrates the danger framework with examples from world leaders. The fifth section discusses the framework's added values, generalisability, methodology, and research methods, and the final section concludes by linking the danger framework with different strands of IR theory before charting three avenues for future research.

Conceptual, empirical, and theoretical problems with the classical accounts of threat perception

For decades, the mainstream view among scholars and practitioners of IR assumed that the perception of threat is a result of a deliberate process in which an actor estimates the capabilities and intentions of a certain entity.¹⁹ The rationalist model of threat perception assumes threat perception to be a deliberative process, supported by reasoning and evidence. In focusing on prescription and on the adversary, however, it sidesteps the descriptive question of how the observer of those threats selects, combines, and interprets incoming information as dangerous.²⁰ Social and political psychologists, diplomatic historians, and scholars of Foreign Policy Analysis (FPA) have done much to address the latter question, identifying a range of pre-existing 'dispositions' that either enable observers to perceive threats or hinder them from doing so. The list of dispositions includes ethnocentrism,²¹ an atmosphere of tension and mistrust in relations between actors involved,²² past and present experience of societies – reoccurrence of military attacks in the former case, and changes in power asymmetries in the latter case²³ – the strategic or emotional importance of certain geographical areas to the observer in question and the observer's sense of vulnerability to the given opponent,²⁴ ideological distance,²⁵ contingency planning and personal anxiety,²⁶ and the personality of decision-makers.²⁷ In addition to dispositions to perceive threats, scholars have argued that when evaluating threats observers further draw on their 'beliefs',²⁸ 'images',²⁹

¹⁹Rationalist theorists interested in deterrence and war point to signalling and credibility as informing threat perception. Scholars identified with the neorealist school have emphasised the role of power and intentions in forming estimations of threat. Stephan Walt, for example, developed the 'balance of threat' model which stipulates how states evaluate threats from external actors. See Stephen M. Walt, 'Alliance formation and the balance of world power', *International Security*, 9:4 (1985), pp. 3–43. Other scholars identified geography (distance and terrain) and technology as crucial variables inducing threat perception. See Barry Buzan, Ole Wæver, and Jaap De Wilde, *Security: A New Framework for Analysis* (Lynne Rienner, 1998); Andrew H. Kydd, *Trust and Mistrust in International Relations* (Princeton University Press, 2007). Still others focused on 'resolve' and 'risk-taking propensities': Randall L. Schweller, *Unanswered Threats: Political Constraints on the Balance of Power* (Princeton University Press, 2010), pp. 37–44 and pp. 31–3 respectively.

²⁰For a review of the different approaches to threat perception, see Stein, 'Threat'.

²¹William I. Thomas and Florian Znaniecki, *The Polish Peasant in Europe and America: A Classic Work in Immigration History* (University of Illinois Press, 1996).

²²Cohen, 'Threat'.

²³Klaus Knorr (ed.), *Historical Dimensions of National Security Problems* (University Press of Kansas, 1976).

²⁴Cohen, 'Threat'.

²⁵Mark L. Haas, 'The United States and the end of the Cold War: Reactions to shifts in Soviet power, policies, or domestic politics?', *International Organization*, 61:1 (2007), pp. 145–79.

²⁶Dean G. Pruitt, 'Definition of the situation as a determinant of international action', *International Behavior: A social-psychological Analysis*, edited by Herbert C. Kelman (New York: Holt, Rinehart and Winston, 1965), pp. 393–4432.

²⁷Knorr (ed.), *Historical*.

²⁸Robert Jervis, 'Understanding beliefs', *Political Psychology*, 27:5 (2006), pp. 641–63 and Renshon, 'Stability'.

²⁹Images about other countries – such as an ally, enemy – affect both the interpretation of new information and the search for new information, providing 'central building blocks in their identification of threats and opportunities'. See Richard K.

'biases',³⁰ 'identity',³¹ 'theories',³² and 'emotions'.³³ These psychologically oriented studies differ from the rationalist accounts of threat perception in that they tend to locate threat perception primarily with the observer (rather than with the adversary), aim at description and explanation (rather than prescription), and highlight how, when processing information about security threats, observers either rely on priors (e.g. dispositions, beliefs, images), deviate from rationality (e.g. biases), or reason based on emotions (rather than assessing threat 'rationally').³⁴

While they differ on their methodological stance, aim, and focus, 'classical' rationalist and psychological accounts of threat perception share an important similarity: both accounts operate within an incomplete version of the (ir)rational 'information processors' model. That is, when (mis)perceiving threats, observers consciously process information pertaining to 'real world' information (e.g. adversary's capabilities, intentions), drawing on priors, biases, emotions, or a combination of these.³⁵ Yet this model of human beings as information processors is incomplete because it neglects the role of unfolding experience in shaping how leaders perceive and respond to threats.

Three clarifications on the use of the term 'experience' are in order. First, by highlighting 'experience' in shaping threat perception I do *not* mean one's 'memory' or 'professional background'. This contrasts with much of the literature on threat perception in IR, which uses the term experience to denote memory and/or professional credentials.³⁶ Instead, by experience I mean to denote how

Hermann, 'Perceptions and image theory in international relations', in Leonie Huddy, David O. Sears, and Jack S. Levy (eds), *The Oxford Handbook of Political Psychology*, 2nd ed. (Oxford: Oxford University Press, 2013), pp. 334–63 (p. 337).

³⁰For a summary of these biases in an IR context, and especially of those biases which 'favour hawkish decisions in conflict situations', see Daniel Kahneman and Jonathan Renshon, 'Hawkish biases', in A. Trevor Thrall and Jane K. Cramer (eds), *American Foreign Policy and the Politics of Fear* (Routledge, 2009), pp. 79–96. For an excellent recent discussion of the negativity bias, see Dominic D. P. Johnson and Dominic Tierney, 'Bad world: The negativity bias in international politics', *International Security*, 43:3 (2018), pp. 96–140.

³¹Constructivist scholars have emphasised the role of identity, power, and norms in shaping threat perception. For the mitigating effect of societal affinity between rising and status quo powers on threat perception, see Stephen R. Rock, *Why Peace Breaks Out: Great Power Rapprochement in Historical Perspective* (University of North Carolina Press, 1989). For the mutual influence of identity and power on threat perception, see David L. Rousseau, *Identifying Threats and Threatening Identities: The Social Construction of Realism and Liberalism* (Stanford University Press, 2006); Rocio Garcia-Retamero, Stephanie M. Müller, and David L. Rousseau, 'The impact of value similarity and power on the perception of threat', *Political Psychology*, 33:2 (2012), pp. 179–93. For the role of norms and normative order in shaping threat perception, see Barbara Farnham, 'The theory of democratic peace and threat perception', *International Studies Quarterly*, 47:3 (2003), pp. 395–415; Ingrid Creppell, 'The concept of normative threat', *International Theory*, 3:3 (2011), pp. 450–87. Other scholars have argued that people who are attached to the nation more deeply would likely feel threats (and opportunities) more intensely. See Martha L. Cottam and Richard W. Cottam, *Nationalism & Politics: The Political Behavior of Nation States* (Lynne Rienner, 2001).

³²For example, their theories about the link between the adversary's behaviour and its underlying characteristics. See Keren Yarhi-Milo, *Knowing the Adversary: Leaders, Intelligence, and Assessment of Intentions in International Relations* (Princeton University Press, 2014).

³³See for example Markwica, *Emotional Choices*.

³⁴For the latter view, which originated with the work of neuroscientists such as Antonio Damasio and gained traction over the past two decades, see for example Rose McDermott, 'The feeling of rationality: The meaning of neuroscientific advances for political science', *Perspectives on Politics*, 2:4 (2004), pp. 691–706.

³⁵Writing about how intelligence agencies assess threats and arrive at judgements, David Omand makes the case that spies (should) think along Bayesian inference, i.e. by updating the probability of priors as new information becomes available. See David Omand, *How Spies Think: Ten Lessons in Intelligence* (Penguin UK, 2020).

³⁶Two important exceptions are James G. Blight, who alongside different collaborators has explored the psychology of policymakers, using the term 'experience' in manner like mine. See for example James G. Blight, 'How might psychology contribute to reducing the risk of nuclear war?', *Political Psychology*, 7:4 (1986), pp. 617–60, as well as Andrew Ross's work on emotion and experience in IR. While Ross highlights the concept of experience, he does so by drawing on a radical empiricist approach, which treats experience as 'the many sensory, affective, and aesthetic experiences that together constitute the lived dimension of social life.' Building from this, Ross engages with Feminist notions of experience to foreground the ways in which 'regimes of intelligibility...shape in advance which kinds and aspects of experience qualify as credible.' See Andrew A. G. Ross, 'Emotion and experience in IR', in Eric Van Rythoven and Mira Sucharov (eds), *Methodology and Emotion in International Relations: Parsing the Passions* (London: Routledge, 2019), pp. 27–42. In contrast, my focus is on the qualia and structure of leaders' subjective experience of danger, although I suggest that both approaches are needed to study experience.

one ‘makes contact’ with constructed danger at a given moment in time, i.e. how danger manifests itself in one’s awareness. Such ‘contact-making’ is often associated with mental content *that goes well beyond emotions*: it can manifest itself as patterns of inner speech (‘the voice in the head’), mental images (e.g. foreign missiles landing in the capital city), and even dreams.³⁷ Both the rationalist and psychological accounts of threat perception tend to gloss over this mental content.

Second, scholars working in different disciplines use ‘experience’ interchangeably with similar notions such as ‘consciousness’,³⁸ ‘phenomenology’,³⁹ ‘subjectivity’,⁴⁰ and ‘lived experience’.⁴¹ My use of the term experience overlaps with these notions in different ways but is perhaps best captured by philosopher Peter Godfrey Smith’s definition: ‘the first-person point of view of a complex living system of a certain kind ... the way things feel for a system that has the right kind of activity in it’.⁴² In adopting this definition, which speaks of ‘systems’ without limiting itself to humans, I wish to keep open the possibility of using the danger framework to conduct research beyond *human* experience. This is because I suspect there could be, for example, much to learn about threat perception in IR from how non-human primates perceive and experience danger.⁴³

Finally, by interrogating the ‘structure’ of experience I do not mean to outline another ‘sorting device’ the brain uses to collect and process information – what IR scholars with an interest in psychology have referred to as ‘cognitive structures’. Instead, by the structure of experience I mean to denote the *space of possibilities available to the device receiving the information*, i.e. a leader’s brain/mind. And while some of the scholarship surveyed above has implicitly identified some ‘pieces’ of the structures with which leaders experience the world, other important features remain unaccounted for, and the overall internal organisation of the experience of danger in the international system has been yet to be theorised in a systematic manner.⁴⁴

Three examples from leading studies on threat perception and crisis management will suffice to substantiate how my treatment of experience and its organisation diverges from previous work. First, Robert Jervis’s seminal study on perception and misperception has 63 references to ‘experience’, but most are made in the context of decision-makers’ capacity to learn by having a

³⁷ Dreams provide a good indicator of emotional concerns as experienced by individuals during the day: between 35 and 55 per cent of emotional concerns resurface in dreams (compared with 1–2 per cent of other daily experiences such as going to work, meeting specific friends, etc.) See Matthew Walker, *Why We Sleep: The New Science of Sleep and Dreams* (Penguin UK, 2017), p. 204.

³⁸ Drawing on materialism, neuroscientist Anil Seth defines consciousness in broad terms, as ‘any kind of subjective experience whatsoever’. See Anil Seth, *Being You: A New Science of Consciousness* (Penguin, 2021), pp. 18–20.

³⁹ Phenomenology aims to characterise subjective experience and to provide an account of the mind–world dyad/the self–other–world triad. Dan Zahavi argues that the latter, not the former, is the primary focus of phenomenological analysis. See Dan Zahavi, *Phenomenology: The Basics* (Routledge, 2018), p. 15. As such, phenomenology analyses both our way of understanding and experiencing the world and the entities and their modes of appearance to us. See Zahavi, *Phenomenology*, p. 27.

⁴⁰ Alexander Wendt takes subjectivity to be about cognition, (free) will, and experience; so, his definition of subjectivity subsumes experience. See Wendt, *Quantum*, p. 242.

⁴¹ The term experience is often adjoined with ‘lived’ as in ‘lived experience’. The notion of ‘lived experience involves not only people’s experiences, but also how people live through and respond to those experiences’ over time, that is lived through continuity and change; it further delineates the distinctions between lived and experiences and addresses the question of why some experiences are prioritised over others. See Robin M. Boylorn, ‘Lived experience’, in Lisa M. Given (ed.), *The Sage Encyclopedia of Qualitative Research Methods*, Vol. 2 (Thousand Oaks: Sage, 2008), pp. 483–91; Bren Neale, ‘Introduction: Young fatherhood: Lived experiences and policy challenges’, *Social Policy and Society*, 15:1 (2016), pp. 75–83.

⁴² With this definition, Godfrey-Smith communicated his position according to which qualia are not ‘extra things that need an explanation, somehow produced by the workings of the physical system. Instead, they are part of what it is to be the system being described’. Peter Godfrey-Smith, *Metazoa: Animal Life and the Birth of the Mind* (Farrar, Straus and Giroux, 2020), location 1354, 3261.

⁴³ This definition of experience is also in line with Ray Jackendoff’s framework and thus ensures consistency and complementarity with his version of conceptual semantics.

⁴⁴ For example, see Kenneth E. Boulding, ‘National images and international systems’, *Journal of Conflict Resolution*, 3:2 (1959), pp. 120–31.

'firsthand experience' of a certain event during their life.⁴⁵ As such, it is not the experience of danger unfolding in time that is the focus, but the impact of past events or memory on perception and decision-making. Second, Janice Stein's helpful review of threat perception in international relations defines the key term of perception (at the individual level) without mentioning experience once.⁴⁶ Moreover, none of the explanations for threat perception surveyed in the review addresses experience in a meaningful way. Third, a leading study in the crisis-management literature refers to experience interchangeably as memory and professional background.⁴⁷ When elaborating on how leaders make sense of crisis, the study suggests that people use 'encoded experience', or a scrap of information, 'and weave a scenario around it, using their experience and expectations as mental yarn'. To process this information, the brain makes use of 'packaging and organising devices' (i.e. cognitive structures), including historical analogies,⁴⁸ metaphors, scripts, schemas,⁴⁹ and stories. These devices/structures, in turn, 'enable people to draw upon encoded experience and selectively recalled experience to interpret the present and prepare for the future'.⁵⁰ In other words, the study defines experience as memory and, following some psychologists, conflates cognitive 'devices' and 'structures', thus glossing over the space of possibilities available to the brain when constructing danger.

This overlooked dimension of the model of human decision-makers as information processors – experience – stands at the core of this article. To clarify, I do not propose to discard the model of human decision-makers as information processors, adopted from the cognitive sciences in the 1960s, but to provide a fuller version of this model, one which takes experience and its structure into account. But before I do so, it is imperative to persuade the readers that, by neglecting experience, available accounts of threat perception in IR leave out something important, i.e. they are incapable of addressing important theoretical puzzles, and that by incorporating experience and its structure we can illuminate important theoretical puzzles and generate new and important questions.

Classical accounts of threat perception share three interrelated problems: conceptual, empirical, and theoretical. The first problem is conceptual. At the individual level, classical accounts tend to conceptualise threat perception as a *continuant entity* that endures through time. For example, to observe that in the late 1960s Chairman Mao viewed the Soviet Union as China's main threat (as rationalist accounts of threat perception might) is to treat Mao's Soviet threat perception as a continuant, where the perception of danger posed by the Soviet Union was fixed. Similarly, to observe that in the late 1960s Mao was disposed to view the Soviet Union as a threat because of ideological distance (as psychological accounts of threat perception might suggest) is to treat Mao's Soviet threat perception as a continuant. This conceptualisation, I argue, is only partial. Conceptually, threat perception is not limited to a continuant entity that is experientially blind; it is also an *occurrent entity*, referring to the construction of the experience of danger at a given moment or over well-defined temporal/spatiotemporal regions.⁵¹ Whereas Mao might have been

⁴⁵Robert Jervis, *Perception and Misperception in International Politics: New Edition* (Princeton University Press, 2017), pp. 239–71.

⁴⁶See Stein, 'Threat', p. 365.

⁴⁷At one point, it suggests that experience – mentally coded stored representations – is the basis for leaders' sense making, and at another point it argues that experience – one's professional background – is usually a predictor of effective response in times of crisis. See Arjen Boin, Eric Stern, and Bengt Sundelius, *The Politics of Crisis Management: Public Leadership under Pressure* (Cambridge University Press, 2016), pp. 34, 38.

⁴⁸See for example Yuen Foong Khong, *Analogies at War: Korea, Munich, Dien Bien Phu, and the Vietnam Decisions of 1965* (Princeton University Press, 2020).

⁴⁹See for example Keith L. Shimko, 'Metaphors and foreign policy decision making', *Political Psychology*, 15:4 (1994), pp. 655–71.

⁵⁰Boin, *The Politics*, p. 34.

⁵¹This re-conceptualisation of threat perception as both continuant and occurrent draws on Basic Formal Ontology (BFO). Simply put, BFO combines elements of three-dimensionalist (reality consists only of entities extended along the three spatial dimensions) and four-dimensionalist (reality consists of only four-dimensional entities) perspectives. See Barry Smith, 'Classifying processes: An essay in applied ontology', *Classifying Reality*, 25:4 (2013), pp. 101–26. This incorporation of threat

disposed to view the Soviet Union as China's primary enemy on 27 August 1969 – a disposition he had held for a while – his *experience* of the danger posed by the Soviet Union is likely to have fluctuated considerably during that day. Thus, Mao might have *experienced* the Soviet Union as an intense danger in the morning as members of the Central Military Commission deliberated plans to evacuate population and key industries from China's largest cities due to concerns about a Soviet nuclear attack. But the same experience could have subsided soon after these measures were issued, only to resurge later in the night in a slightly different form.⁵² Incorporating threat-perception-as-occurrent in addition to threat-perception-as-continuant is therefore crucial in understanding how leaders 'encounter' dangers as part of their unfolding experience and how they might respond to it. Importantly, the two notions of threat perception as continuant (Mao's persistent belief that the Soviet Union was dangerous) and occurrent (Mao's fluctuating feelings in relation to the danger[s] posed by the Soviet Union) are interrelated but distinct, i.e. they cannot be reduced to one another.

The second problem for the classical accounts of threat perception in IR is empirical. As mentioned, classical accounts disregard the mental *content* of leaders' threat perception, the 'what is it like' for a leader to experience security danger. To continue with Mao, even if we grant importance to his fluctuating experience of the danger posed by the Soviet Union, we still do not know how it felt like for Mao to experience the Soviet threat, i.e. what was the content of his threat perception. It is these subjective experiences of danger, which can manifest as inner speech, mental images, dreams, that are often missing from classical accounts. And while there are formidable challenges in gaining empirical 'access' into these subjective experiences of danger, as leaders are often reluctant to publicly share this content or are simply unaware of such content themselves, it is by no means impossible to gain insight into them.⁵³

The third problem for the classical accounts of threat perception in IR is theoretical. To the extent that classical accounts of threat perception take the observer of threat seriously, they do so insufficiently. Whereas both the rationalist and psychological accounts shed light on the kind of information observers attend to, and the psychological account highlights priors and information-processing errors, both accounts ignore the question of over which structures information is encoded by the brain/mind in the first place. Yet if one were to take the notion of the brain/mind as information processor seriously, then one must incorporate the background of a space of possibilities available to the device receiving the information, as well as its inherent organisation.⁵⁴

This theoretical problem relates specifically to how the experience of danger in international relations is organised in leaders' conscious fields. For example, for Finnish Prime Minister Sanna Marin to feel a *novel* sense of danger from Russia after she learned about Putin's invasion of Ukraine

perception as occurrent also has parallels with Eastern traditions (Daoist and Buddhist thought in particular), quantum theory, as well as with Western process philosophy. In our terms, Mao's belief that the Soviet Union is a threat would be categorised as a continuant, and Mao's fluctuating experience of the Soviet danger on a particular morning would be categorised as occurrent. For a good discussion of Daoist, Buddhist, and quantum theory in the context of impermanence, see Karin M. Fierke, *Snapshots from Home: Mind, Action and Strategy in an Uncertain World* (Policy Press, 2022), section I. For a good treatment of Western process philosophy, see Johanna Seibt, 'Process philosophy', in Edward N. Zalta and Uri Nodelman (eds), *The Stanford Encyclopedia of Philosophy* (Spring 2024 Edition), available at: <https://plato.stanford.edu/archives/spr2024/entries/process-philosophy/>.

⁵²This is a conceptual point, not an empirical one. For the war scare that transpired in China in the summer and autumn of 1969, see Yang Kuisong, 'The Sino-Soviet border clash of 1969: From Zhenbao Island to Sino-American rapprochement', *Cold War History*, 1:1 (2000), pp. 21–52. The study glosses over threat perception as an occurrent. Other studies have demonstrated that leaders' emotions vis-à-vis an adversary have fluctuated considerably during times of crisis. For example, Robin Markwica's analysis of Nikita Khrushchev's emotional choices during the Cuban missile crisis suggest that they fluctuated considerably from one day to another. See Markwica, *Emotional Choices*, pp. 142–7. While Markwica is interested in emotions, I am interested in experience as a whole.

⁵³I return to this point in the discussion section below.

⁵⁴It is important to emphasise that a leader in whose mind various structures reside does not perceive these structures; rather, the leader understands the world by having these structures in her or his mind. See Ray Jackendoff, *Language, Consciousness, Culture* (MIT Press, 2007), p. 32.

on 24 February 2022,⁵⁵ she must have had the capacity to understand Russia as an entity who performed an action on Ukraine, to assign it to a category (e.g. Russia is an adversary), and to experience the danger associated with it as novel or familiar (all features of mental structures that would be examined in the next section). Incorporating this background of a space of possibilities available to the leader receiving the information raises new and interesting questions. For example, is it possible that features of the experience of danger might be correlated with appraisal tendencies (e.g. to pursue bold ideas) and with action tendencies (e.g. the Finnish decision to join NATO)?

Uncovering the structure of experience can also illuminate important theoretical puzzles such as what features or combination of features of experience might dispose leaders to construct issues as more or less dangerous, and how do leaders' beliefs about aspects of the world change. Attempts to develop more nuanced models to explain how civilian leaders evaluate threats and how they respond to crisis situations have been made and, while they overlap with my notion of experience, they (implicitly) capture only some of the structure of danger experience. For example, Keren Yarhi-Milo's research project examining how actors infer the long-term political intentions of an adversary provides important insight into leaders' experience of danger. Yarhi-Milo argues that a change in beliefs about the adversary occurs under a particular set of conditions:

such as when a specific experience is too vivid or salient to be ignored, too unambiguous to be discounted, or so directly in conflict with a decision maker's expectations that it becomes cognitively cheaper to abandon that belief instead of trying to tolerate the inconsistency.⁵⁶

I suggest the three conditions underlying change in beliefs about the adversary that Yarhi-Milo identifies – vividness/salience, unambiguity, and surprise – are better understood as features of experience. But at least four additional features structure the experience of danger, yet they are not addressed sufficiently by Yarhi-Milo, or in the IR literature about threat perception: sense of reality, of volition, of control, and of emotional connection/valence.⁵⁷ I elaborate on these additional features in the third and fourth sections.

In short, a fuller account of threat perception is needed because classical accounts have conceptual, empirical, and theoretical shortcomings: little to no theorising of threat perception as an occurrent, of the mental content leaders associate with perceived threats, and of the distinctive features with which leaders experience different security dangers and how these are organised into the conscious field of leaders. As a result, classical accounts of threat perception in IR cannot provide adequate descriptions of Chairman Mao's experience of the Soviet danger on any given day in 1969, nor can they tell us how Prime Minister Marin experienced the danger from Russia at the end of February 2022 – what it *felt* like for her, and how this experience was structured. A fuller account of threat perception would not only help address these problems but also illuminate theoretical puzzles and raise new and important questions about international security.

Integrating experience with the study of threat perception in IR

So why incorporate experience into the study of threat perception in IR? Because we cannot make sense of the human mind and the security dangers it constructs without taking experience, with its mental content, gut feelings, and inherent organisation, into account. And while classical accounts of threat perception in IR neglect the notion of experience, there is a growing recognition among IR

⁵⁵In a public speech delivered to the Finnish Parliament on 15 March 2022, PM Marin said: 'The post-Cold War has broken. We now see how Russia is likely to operate for a very long time to come. In this new environment, Finland, too, must assess ways to strengthen security.' See Prime Minister's Office, 'Speech delivered by Prime Minister Sanna Marin at Parliament's topical debate on 15 March 2022', available at: <https://vnk.fi/en/-/speech-delivered-by-prime-minister-sanna-marin-at-parliament-s-topical-debate-on-15-march-2022>).

⁵⁶Yarhi-Milo, *Knowing*, p. 5.

⁵⁷Likewise, scholars have identified uncertainty, surprise, and control as having an impact on how leaders might decide and act in crisis situations. See Hermann and Dayton, 'Transboundary' and Weick, 'Enacted'. For radical uncertainty, see Janice Gross Stein, 'Radical uncertainty and pragmatism: Threat perception and response', this Special Section.

scholars that the discipline must engage experience seriously. Drawing on panpsychism, a recent proponent of incorporating consciousness/experience into the discipline is Alexander Wendt.⁵⁸ Wendt seeks to bring quantum theory to bear on experience, citing an important challenge in doing so – the challenge of generalising experience, which he believes is ‘inherently particular’.⁵⁹ The difficulty is surmountable, however, Wendt argues, as at least two kinds of experience are universal: the experiences of time and space.⁶⁰ That is, we all feel time as if it flows forward and we all feel objects as being ‘out there’ in the world. In contrast to Wendt, I believe there is more to the universality of experience than simply the experiences of time and space. As the next two sections demonstrate, additional elements in leaders’ experience of security danger might be universal, and the feeling of stuff being ‘out there’ in the world characterises much more than our experience of space, including our experience of language, vision, proprioception, and, indeed, danger.

Having made the case for incorporating experience into the study of leaders’ threat perception in IR, and having briefly discussed Wendt’s treatment of experience, the next question is how to do integrate experience into threat perception research. I suggest two general ways. A ‘top-down’ approach would apply an established theoretical framework of experience to analyse how leaders experience danger. A second ‘bottom-up’ approach would examine empirically how leaders experience danger to construct such a framework from scratch, for example by paying attention to how leaders describe dangerous entities in their personal writing (e.g. diaries, memoirs, letters). In the pages that follow, I combine both approaches: I introduce a framework developed by linguist Ray Jackendoff to characterise the experience of language and modify it to reflect the character of danger based on empirical data drawn from leaders’ descriptions of danger. I opt for synthesising both approaches because I believe that the experience of danger must share some of its features with the experience of other domains of life, including language, and because I wish to ground the linguistic framework in danger descriptions made by leaders.

Much of the theory I draw on in advancing this proposal comes from the linguistics subfield of conceptual semantics.⁶¹ Spearheaded by Ray Jackendoff, conceptual semantics seeks to describe the range of human thoughts that can be conveyed in language – an overall framework for the theory of meaning – and to further integrate this theory into linguistics, philosophy of language, and cognitive science. Why conceptual semantics? Because of all cognitive sciences, it is only linguistics that has systematically investigated the content of mental structures that underlie human capacities such as language, as opposed to investigating ‘the machinery’ involved in processing mental structures (working memory, attention, and learning).⁶² And of all strands of linguistics, it is conceptual semantics which maintains strong links with cognitive neuroscience and evolutionary psychology, thus providing a firm grounding for the study of the various aspects of the human brain/mind,⁶³ as well as for the study of leaders in international relations.

⁵⁸Wendt associates consciousness with the broader notion of ‘experience’. See: Wendt, *Quantum*, pp. 15, 189.

⁵⁹Wendt, *Quantum*, pp. 189–90. A second challenge according to Wendt is the challenge of reducing experience to language. I agree with Wendt that, while language has an important role in shaping experience, it does not completely subsume experience because at least some animals have no language but have experience, and because without experience, language would not *feel like it* has meaning (addition and emphasis mine). The experience of language as meaningful is however part of experience. I develop this point in the next section. It is worth mentioning that the framework of conceptual semantics is at odds with Wendt’s quantum view of language.

⁶⁰Wendt qualifies this by writing that he does not mean that ‘we all experience time and space in the same way’, only that, ‘by virtue of sharing the same physics of the body our experience of time and space has a universal aspect’. Wendt, *Quantum*, p. 189.

⁶¹See Ray Jackendoff, ‘Conceptual semantics’, in Claudia Maienborn, Klaus Heusinger, and Paul Portner (eds), *Semantics Theories* (Walter de Gruyter, 2019), pp. 86–113 and Leonard Talmy, ‘Cognitive semantics: An overview’, in Claudia Maienborn, Klaus Heusinger, and Paul Portner (eds), *Semantics Theories* (Walter de Gruyter, 2019), pp. 1–28.

⁶²Jackendoff, *Language*, p. 31.

⁶³Jackendoff, *Language*, p. 20.

Conceptual semantics and the experience of danger

The central hypothesis of Conceptual Semantics (CS) is that underlying thought and meaning is a basic level of mental representation or, more accurately, mental structure. This level of mental representation consists of at least two ‘data structures’: a conceptual structure (closely related to language) and a spatial structure (closely related to visual perception and imagery).⁶⁴ The conceptual structure encodes information associated with the individuals/entities we know and the relationships between them, assigning objects to categories (e.g. China is a friend) and encoding the relationships among different categories (such as authoritarian and democratic systems are both kinds of political systems). It dissects events into the actions of their characters (e.g. Russia invaded Ukraine) and the time at which something is thought to be taking place (past, present, or future – e.g. Russia invaded Ukraine in February 2022).⁶⁵ The spatial structure encodes information such as three-dimensional object shape, size, and position, as well as spatial layout, motion, and force, and it does so in geometric/topological terms. It integrates information derived from vision, but also from auditory localisation, touch, proprioception (the sense of our body’s position), and action representations (e.g. moving our muscles).

The conceptual and spatial structures are interconnected: otherwise, we would not be able to talk about what we see.⁶⁶ Our understanding of the world is encoded in terms of these interlinked mental structures. But here comes the crucial part: in addition to our understanding of the world, we also experience it. Yet as Jackendoff suggests, there has been no serious attempt to describe how experience is structured outside of vision – how qualia are organised into the conscious field across different faculties of the mind (language, proprioception), including, as I outline below, the danger faculty.⁶⁷

To give an example of how experience is structured in the mind, take language. As Jackendoff suggests, many of us experience language as perceived sound, whether listening to others or following our ‘inner speech’, the ‘voice in the head’. When we hear a sentence in a language that we cannot understand, we still have a form of language present in awareness (qualia). Yet perceived sound alone cannot be the source of qualia for the cognition of language. For example, when we hear someone else speak (pronunciation is present), we can still distinguish it from our own use of pronunciation as it takes place in our heads. If phonology were all there was to it, we would experience these pronunciations in the same way. Jackendoff thus proposes to divide the features of experience into two major classes, the ‘content features’ (these are spatial and conceptual structures) and ‘character tags’ (see below.) The content features give experience its form. In the case of language, it is perceived sound.⁶⁸ The character tags give the experienced entities their feel – their sense of reality, of coherence, of familiarity, of volition, and of emotional connection. Importantly, these character tags cut across the various faculties of the mind.⁶⁹

What tags characterise experience? To identify character tags, Jackendoff suggests the following criteria: that the feature encodes a difference in awareness that is a matter of ‘feel’ rather than form; that it applies to multiple modalities (e.g. vision, language); that it can be integrated with other

⁶⁴I address these mental structures and their role in constructing threat perception in detail elsewhere. See Ray Jackendoff, *Semantics and Cognition* (Cambridge, MA: MIT Press, 1983), p. 19; Jackendoff, ‘Conceptual’, pp. 97, 123, 126; Ray Jackendoff, *A User’s Guide to Thought and Meaning* (Oxford University Press, 2012), p. 126.

⁶⁵The conceptual structure also subsumes semantic structures – entities like object, location, direction, event, action, distance, and times (past, present, future) – which enable us to conceptualise the world and express our thoughts to one another.

⁶⁶Jackendoff, *A User’s Guide*, pp. 122–5.

⁶⁷Jackendoff, *Language*, p. 79. Jackendoff’s conception of qualia is in line with ‘representational theories of qualia’. Other views of qualia exist, of course. For an overview, see Michael Tye, ‘Qualia’, in Edward N. Zalta (ed.), *The Stanford Encyclopedia of Philosophy* (Fall 2021 Edition), available at: {<https://plato.stanford.edu/archives/spr2024/entries/qualia-knowledge>}.

⁶⁸In the case of vision, this is the visual surface.

⁶⁹Notice the difference here between Wendt’s observation about the experience of space, and Jackendoff’s framework. The feeling of objects being ‘out there in space’ is not limited to our understanding of space, but to other modalities/faculties as well, including, as I argue in the next section, to the danger faculty. I return to this point in the conclusion.

character tags to provide a range of character in awareness; and that there are certain illusions that emerge through misattribution.⁷⁰ Jackendoff lists the following features: external reality vs imagery, meaningful vs meaningless, familiar vs novel, self-initiated vs non-self-initiated, and affective or emotional connection (positive vs negative, as well as sacred vs taboo).⁷¹

To demonstrate the case for character tags across different modalities of the mind consider the following examples:

1. External reality vs internal imagery. For an example with language, I can identify speech as external to me (hearing my partner's call from the living room) or as internal linguistic imagery that I 'hear' in my mind (as when I simulate my partner calling me).
2. Meaningful vs meaningless. For an example with vision, think about the moment when visual stimulus changes from a pattern of splotches into a picture of a Dalmatian.⁷²
3. Familiar vs novel. For an example with language, think about the difference between 'the only thing we have to fear is fear itself' and 'there is evidence for multiple circuits in relation to the content of threat'. The first sentence conjures a feeling of familiarity, the second not so.
4. Self-initiated vs non-self-initiated. For an example with proprioception, think about the difference in the feeling of deliberately pulling your face versus an involuntary facial tic.
5. Affective: does it matter? how? positive vs negative. For an example with language, think of that feeling of 'liking' certain words and 'disliking' others without necessarily understanding why.

Some of these features entail subcategories that can be combined with other categories and subcategories to characterise experience. For example, the binary character tag 'meaningful' has an important binary subcategory 'committed'.⁷³ While sentences that you believe and sentences that you do not believe have no difference in terms of their form (you can perfectly 'hear' both), your sense of commitment to them plays a role in your experience. Subsequently, Jackendoff suggests that 'the sense of belief in a proposition should be encoded as a [character tag]: it affects experience not through form but through "feel"'.⁷⁴

Importantly, character tags do not characterise one's experience as a whole: instead, they are attached to particular percepts and/or images. For example, I can listen to someone speaking and make comments to myself – all at the same time, without losing grasp of which is which.⁷⁵ Character tags are further subject to error (as when one experiences the 'voice in the head' although the brain/mind has created this linguistic image) and apply across different modalities including language, vision, audition, and proprioception, and, as I suggest, the danger modality.⁷⁶

Here comes the critical question: how does the structure of experience relate to threat perception in international relations? I suggest the leaders' experience of security dangers is structured in a manner like Jackendoff's 'form' and 'feel' albeit with three modifications. First, while linguistic experience draws its form from perceived sound, the experience of danger draws its form from the *simulation of harm*.⁷⁷ Whether it is a military build-up near our borders, losing face in diplomatic negotiation (or any social situation), or an intelligence warning about a potential assassination

⁷⁰Jackendoff, *Language*, pp. 90–1.

⁷¹Jackendoff, *Language*, pp. 87–96 and Jackendoff, *A User's Guide*, p. 150.

⁷²Available at: <https://www.popsci.com/story/diy/dalmatian-illusion/>.

⁷³This subcategory is closely related to the philosophical notion of 'propositional attitude', which is typically associated with beliefs and desires.

⁷⁴Jackendoff, *Language*, p. 95.

⁷⁵Jackendoff, *Language*, pp. 87–8.

⁷⁶The danger modality might be better characterised as a central system in the mind to which the various modalities are linked.

⁷⁷I substantiate this claim in the next section. Harm or injury, I argue, is not confined to physical harm (it can refer to social, environmental, and psychological harm as well) and can manifest in various forms of mental content including imagistic (visual, auditory, linguistic, bodily), propositional (related to facts/knowledge, logics, counterfactuals), and symbolic. Interestingly, this notion of harm evokes Aristotle's definition of fear: 'a pain or disturbance due to imagining some destructive

attempt, simulation of harm is necessary for leaders' danger qualia.⁷⁸ My notion of 'simulated harm' is similar to Dominic Johnson and Dominic Tierney's notion of 'negative phenomena', and to the notion of Trine V. Berling et al. of 'unwanted futures', although it is both more restrictive as it focuses on harm and broader as it allows for simulated harm that has taken place in the past, as when one relives past harm again and again.⁷⁹

Second, while all six of the character tags Jackendoff proposes are relevant to the experience of danger in the international system, I have rearranged the sixth feature of 'emotional connection', which Jackendoff coined 'sacred' vs 'taboo'. When applied to the experience of danger in international relations, I found the character tag of 'taboo' to be a subcategory of a broader feature, that of experiencing simulated harm in a *safe* or *existential* manner.⁸⁰ Thus, one can conjure simulated harm and feel existentially threatened by it or feel safe despite having simulated it. For example, writing in his diary about a briefing he had received in the Pentagon about US military and intelligence capabilities, President Roland Reagan stated in June 1984 that 'I can only say I left the Oval Office filled with optimism, pride and a sense of safety'.⁸¹ Reagan's sense of safety was *despite* a grave sense of Soviet threat, which he had recorded in his diary on numerous occasions prior.⁸²

I therefore associate Jackendoff's feature of 'sacred' with my feature of 'safe' and relegate 'taboo' to a subcategory of the feature 'existential'. This is because while leaders feeling gravely threatened by a certain simulated harm might wish to contemplate the danger in certain situations, this may not always be the case. In some cases, when the form of danger is especially disturbing, leaders may altogether wish to avoid simulating that harm in their minds – the danger thus becomes 'unthinkable'. I therefore designate taboo as a subcategory of the 'existential' feature, which is itself a feature denoting emotional connection.

Third, based on analysis of leaders' descriptions of their sense of danger (see next section), I add a seventh feature to denote the 'feel' the experience of danger can take: the character tag of 'control'. In line with Jackendoff's criteria of identifying new features of experience, control encodes a difference in awareness of danger that is a matter of feel rather than form (I can simulate harm materialising with or without me being able to do something about this danger), it applies to multiple modalities (for an example with language: think of the feeling of not being able to stop someone from saying something, as when one is watching someone speak on TV without the ability to stop them), it can be integrated with the other character tags to provide a range of character in awareness (think of emotional connection for example, i.e. the positive notion of 'having no control' as when one surrenders to faith or the negative notion of having no control over issue like climate change);

or painful evil in the future'. Cited in Richard Ned Lebow, *Why Nations Fight: Past and Future Motives for War* (Cambridge University Press, 2010), p. 85.

⁷⁸Scholars before me have pointed out to the crucial role of future in threat perception. Brian Massumi for example has argued that 'threat is from the future. It is what might come next.' See Brian Massumi, *Ontopower: War, Powers, and the State of Perception*, (Duke University Press 2015), pp. 189–206. I suggest that in experiencing danger, leaders might also simulate harm from the present, past, or even 'possible world' (as when experiencing a near-accident). So while simulated harm is often associated with the future, it is not limited to it.

⁷⁹Negative phenomena refer to information, events, or beliefs with the potential to cause undesirable or bad outcomes (e.g., losing resources, suffering military defeats, or gaining enemies). Unwanted futures capture commonalities between security, threat, risk, unsustainability, catastrophe, and danger – futures we do not want. In contrast, my framework focuses on the experience of danger (the simulation of *harm*) and is thus narrower. This is because if one were to adopt one of these two broader conceptions, eventualities like a leader's favourite football team losing a match could qualify as an instance of the experience of danger. These kinds of eventualities have little to do with danger in the international system in my view. See Dominic D. P. Johnson and Dominic Tierney, 'Bad world: The negativity bias in international politics', *International Security*, 43:3 (2018), pp. 96–140; Trine Villumsen Berling et al.; Ulrik Pram Gad, Karen Lund Petersen, and Ole Wæver (eds), *Translations of Security: A Framework for the Study of Unwanted Futures* (Taylor & Francis, 2022), p. 240.

⁸⁰The positive value Jackendoff's original feature can take – 'sacred' – denotes the feeling that one is 'invulnerable', 'secure', 'safe', or 'protected' despite being in grave danger. I therefore equate it with the positive feature 'safe'.

⁸¹The briefing was held on 22 June 1984. Ronald Reagan and Eric Conger, *The Reagan Diaries* (New York: HarperCollins, 2007), p. 249.

⁸²For example, on 9 December 1983, Reagan recorded in his diary a 'sobering briefing on Soviet offensive power'. See Reagan and Conger, *The Reagan Diaries*, pp. 203–4.

Table 1. Danger framework: How leaders experience security threats

Experience	Form ('content features' or conceptual/spatial structure)	Physical, social environmental and/or psychological harm [simulated harm]	
	Feel ('Character tags')	Sense of reality	Does this simulated harm feel like it is out there in the world [+real] or solely in the leader's head [-real]?
		Coherence	Does this simulated harm feel meaningful [+meaningful] in the sense that it 'makes sense', i.e. fulfils a clear pattern/trajectory/plan/goal, or meaningless [-meaningful]?
		Familiarity	Does this simulated harm feel familiar [+familiar] or novel [-familiar]?
		Volition	Does this simulated harm feel like it was initiated (conjured voluntarily) by the leader [+self-initiated] or not (conjured in their head in a way that feels non-voluntary)? [-self-initiated]
		Control	Does it feel like the leader/their group can do something about this simulated harm [+control] or are they helpless about it [-control]?
		Emotional connection: Valence (Does it matter? How?)	Does this simulated harm feel like it matters? If so, does it matter to the leader/their group in a positive [+affective: valence+] or negative way? [+affective: valence-]
		Emotional connection: Intensity (How much does it matter?)	Does this simulated harm matter a lot but cannot harm the leader/their group [+affective: safe+] or does it matter a lot and can harm the leader/their group in an existential way? [+affective: safe-]

The table was created by the author.

and that there are certain illusions that emerge through misattribution (think of proprioception for example, i.e. the phenomenon of sleep paralysis when one feels as if one cannot move).

Table 1 summarises the form and feel of experience as they pertain to danger in the international system. Following the conventions of CS, and to allow for interpretive textual analysis, I list how each of the framework's features will be denoted by bracketing it (e.g. [real]), and by adding plus or minus symbols to denote the value this feature takes, as in [+real]. For example, if a leader discusses a threat they believe to be real, i.e. existing out there in the world, then the feature will be preceded by a plus symbol [+real]. If a leader discusses a threat as if it is solely in their head, then the feature will be preceded by a minus symbol [-real]. I add guiding questions to orient the researcher's analysis on the right-hand column.

Next, I illustrate how these features of experience relate to danger in international relations. To do so, I apply the danger framework to leaders embedded in different cultures perceiving different security dangers in different periods of time.

Illustrating the danger framework using leaders' danger descriptions

To illustrate the applicability of the danger framework, I have deliberately drawn on a range of typical leaders from different spatial, temporal, and security contexts. Following such a *typical descriptive case-study strategy* would allow me to demonstrate a common pattern of experiencing

danger with simulated harm exists among world leaders.⁸³ To ensure my data represents features that are common within the larger population of world leaders, and is not skewed by contextual factors,⁸⁴ the first principle entailed choosing typical leaders embedded in different historical periods and cultures. This would enable me to gauge the extent to which the danger framework applies to different leaders experiencing security dangers in different contexts. To assert whether the danger framework applies to different leaders perceiving/experiencing *different kinds of threats and risks*, the second principle required the leader to be concerned with different security dangers (home-grown or foreign, state-based or non-state-based), and with different core referent objects at stake (national unity, regime stability, human lives, national security, and planetary survival). To maintain the analytical focus on leaders, the third principle required the agent providing danger description to be a leading member of a decision-making hierarchy (state, government ministry, organisation). By using this case-selection strategy, I aim to illustrate the broad applicability of the framework to leaders across time and space, and type of security danger. In choosing specific leaders for analysis, I adopted an informal approach and followed my research interest, with the only caveat that they fulfilled the three selection criteria.⁸⁵ While not exhaustive nor necessarily generalisable to all leaders operating across all contexts, this case-selection strategy and the ensuing analysis provide a 'proof of concept' for the danger framework because it demonstrates that the structure of experience obtains in more than one case/context. Finally, the data I have chosen for analysis is a mix of private letters and statements and public reconstructions of dangerous situations as recorded in memoirs.⁸⁶ Using a mix of private and public data, I also minimise the risk of the analysis being skewed by the kind of data collected.

Before I proceed to empirics, it is important to discuss two challenges pertaining to methods and data: first, how much of a leader's experience of danger is conscious;⁸⁷ and second, how much of a leader's experience of danger as reflected in their descriptions of it is genuine rather than an attempt to justify or rationalise their decisions and actions. The first challenge is formidable: if leaders are not aware of their (below-conscious) perception of threat, how can scholars gauge it? This challenge is one reason why, as Marcus Holms has pointed out, contemporary models of threat perception privilege conscious information processing (based on deliberation) while downplaying the role of unconscious information gained through diplomatic interactions. Holms makes the convincing case that, 'under specific conditions, threat and non-threat perception occurs without processing information – at least in a conscious sense'.⁸⁸ The second challenge is equally daunting: if leaders' danger descriptions are not authentic, how can scholars authentically assess them?

These are important challenges, yet scholars have come up with sophisticated ways of addressing them. For example, Robin Markwica offered ways to help distinguish expressions of felt and unfelt emotions, which could be used to study experience and to distinguish between genuine and rationalised danger descriptions. Because leaders may be unaware of how they experience danger, or may even feign elements of experience in some situations for personal, cultural, or strategic reasons, scholars could prioritise leaders' spontaneous remarks over prepared speeches, privilege

⁸³ John Gerring, *Case Study Research: Principles and Practices* (Cambridge University Press, 2006), p. 56.

⁸⁴ Representative of contexts does not mean that the small sample I discuss here is representative of the entire population of world leaders who have ever lived, only that my examples are intended to represent the central tendency of a distribution of world leaders. For a discussion of this point, see Gerring, *Case Study*, pp. 56–7.

⁸⁵ An informal approach to case-selection is in line with the typical descriptive case-study strategy. See Gerring, *Case Study*, chapter 4.

⁸⁶ In four of the five examples (Japan, Britain, Israel, China) in the section 'The experience of danger: Form [simulated harm]', the constructor of threat shares their thoughts privately with their colleagues. In the fifth examples (USA), the constructor of threat shares their thoughts in the form of a political memoir published after the events. Both examples in the section 'The experience of danger: Feel' were drawn from public descriptions of dangerous entities, using political memoirs.

⁸⁷ This question relates to the 'level of consciousness' problem as articulated in Jennifer Mitzen and Kyle Larson, 'Ontological security and foreign policy', in *Oxford Research Encyclopedia of Politics*, edited by Edited by: Cameron G. Thies (2017), available at: <https://oxfordre.com/politics/view/10.1093/acrefore/9780190228637.001.0001/acrefore-9780190228637-e-458>.

⁸⁸ See Marcus Holms, 'You never get a second chance to make a first impression? First encounters and face-based threat perception', *Journal of Global Security Studies*, 1:4 (2016), pp. 285–302 (p. 286).

reports of concurrent rather than past experiences, prefer spoken language over written words, prioritise statements given to a private audience with trusted advisors, and look for consistency within and between leaders' self-reports and observers' reports.⁸⁹ While these measures would neither completely reveal the unconscious nor remove inauthentic danger descriptions, they could be useful in bringing some of the 'unfelt' dimension of experience to light and in increasing the share of authentic reports. Next, I first illustrate the form danger takes in awareness before illustrating its feel.

The experience of danger: Form [simulated harm]

To theorise the form of danger in awareness, I discuss five danger descriptions drawn from 1860s Meiji Japan, 1930s Britain, 1950s Israel, 1980s China, and 2010s USA; notice how in all cases, leaders associate danger with *simulated harm*.

The first example pertains to Meiji Japan and to domestic security. In June 1869, Meiji government forces managed to suppress the last pocket of resistance of the Tokugawa loyalists in Japan's northern main island Hokkaido, in what marked the end of the so-called Boshin War (1868–9). Despite their victory, Meiji government officials felt a sense of danger, as seen in the correspondence exchanged between its leaders. In a letter addressed to leading Japanese politician Iwakura Tomomi in late April, the destined head of the Home Ministry Ōkubo Toshimichi (1830–78) wrote:

Although it might appear that, with the end of the war, peace has arrived, I am most apprehensive about the lords of domains all over the country feeling uncertain about what is coming next and preparing for that eventuality. It is as if a fire has already started under the floor and could burst above it at any time [simulated harm].⁹⁰

Notice how in conveying his sense of the domestic threat Ōkubo referred to simulated harm, further using a metaphor of fire. Although Ōkubo does not reveal the content of this simulated harm, danger is almost tangible in the sense that the fire has already caught under the surface of the house; yet it is the image of its impending break above the surface that appears to be most disturbing for Ōkubo. In other words, it is the simulation of harm which provides the form of the danger experience.

The second example pertains to 1930s Britain, and to the alarm about the external security threat posed by Hitler's Germany. As British decision-makers debated how to respond to the Anschluss (March 1938), the newly appointed Foreign Secretary Lord Halifax opposed issuing a deterrent threat to Germany. Halifax believed that even if Germany were to secure control over Central Europe, there was still an element of uncertainty about whether it would then choose to 'deliberately challenge' the British Empire. And yet even with this cautious assessment in mind, Halifax shared his sense of harm:

The fact must be faced that we are now witnessing the beginning of Germany's penetration of Central Europe, which, if not checked, will culminate in her establishing more or less complete domination of that part of Europe. It may be foreseen that this in its turn will lead to the isolation of Great Britain and France in Western Europe, with all the consequent loss of influence, prestige, and even security [simulated harm].⁹¹

In other words, while he was opposed to issuing a direct threat to Germany, Halifax still entertained simulated harm involving Germany. As in the previous example, this sense of danger relates to contemporary *and* future developments. Thus, if left unchecked, Germany's advance into Central

⁸⁹ Markwica, *Emotional Choices*, chapter 3.

⁹⁰ Hisahiko Okazaki, *Mutsu Munemitsu and His Time* (JPIC, 2018), p. 75.

⁹¹ Minutes of the Committee on Foreign Policy, 18 March 1938, appendix I, CAB 27/623, cited in Yarhi-Milo, *Knowing*, p. 71.

Europe could result in complete control over that part of the continent, and in British isolation and loss. This suggests two things: first, simulated harm is present in the experience of danger regardless of whether one is advocating for strict security measures (such as issuing a deterrent threat) or restraint, and, second, danger qualia often involve a link between disturbing developments in the present and future escalation.

The third example pertains to 1950s Israel and to human security. Soviet support for the establishment of a Jewish state in Palestine from early 1947 had increased national sentiment among the Jewish population in the Soviet Union. Agitated by this sentiment, the Soviet leadership prohibited contact between Israeli diplomats and Jewish citizens and began prosecuting Israeli representatives and local Jews.⁹² In turn, Israeli policymakers became alarmed by these developments and felt concern for the well-being of the Jewish diaspora in the Soviet Union.⁹³ This concern is evident in classified communication between Israel's diplomats at the time. In response to a report detailing the Soviet measures, Minister of Foreign Affairs Moshe Sharett wrote in a letter to the Israeli minister plenipotentiary in Moscow in March 1950:

Your final report has arrived and unleashed a new torrent of profound fear as to what is happening and what is about to happen to Soviet Jewry [simulated harm]. We stand helpless and forlorn before this fate.⁹⁴

Notice how here, too, in communicating a palpable sense of danger, Sharett draws a link between what is already happening and future harmful developments.

The fourth example pertains to 1980s China and to perceived threats to regime legitimacy. Spurred by the death of a leading reformist figure Hu Yaobang, student-led protests broke out in April 1989, demanding great political freedom.⁹⁵ Tiananmen Square was the epicentre of these protests. Zhao Ziyang, the Chinese Communist Party (CCP) General Secretary who was later ousted for his alleged support for the movement, recalls in his memoir a crucial meeting held by members of the Politburo Standing Committee on 17 May 1989, two weeks before the violent suppression of the Tiananmen Square protests. In the meeting, Zhao shared his thoughts about the danger posed by the protests and how to overcome them:

The situation with the student demonstrations has worsened and has grown extremely grave. Students, teachers, journalists, scholars, and even some government staff have taken to the streets in protest. Today, there were approximately 300,000 to 400,000 people ... The key issue blocking dialogue with the students is the judgement passed by the April 26 editorial [*People's Daily* editorial that labelled the protestors as 'anti-party' and 'anti-socialist'] ... The only way to bring about some kind of resolution would be to somewhat relax the judgement from this editorial. This is the key and, if adopted, will gain wide social support. If we remove the labeling of the student movement, we will regain control over the situation. If the hunger strike continues and some people die, it will be like gasoline poured over a flame [simulated harm]. If we take a confrontational stance with the masses, a dangerous situation could ensue in which we lose complete control [simulated harm].⁹⁶

⁹²Uri Bialer, *Israeli Foreign Policy: A People Shall Not Dwell Alone* (Indiana University Press, 2020), pp. 176, 179.

⁹³Israeli leaders' alarm was arguably informed not only by human security concerns but by national security concerns as well: their desire to bring Soviet Jews to Israel was in large part a result of their belief that a strong Israel that could stand in the struggle against the numerically superior Arabs required a dramatic increase in the number of Israeli citizens. See Bialer, *Israeli Foreign Policy*, chapter 4.

⁹⁴Bialer, *Israeli Foreign Policy*, p. 177.

⁹⁵Hu was associated with reform and had been pushed out of the central leadership by conservatives two years prior.

⁹⁶Ziyang Zhao, Pu Bao, Renee Chiang, Adi Ignatius, and Roderick MacFarquhar, *Prisoner of the State: The Secret Journal of Zhao Ziyang* (New York: Simon & Schuster, 2009), location 813. Because of his attitude towards the protests and his refusal to carry out orders to impose martial law in Beijing to suppress the demonstrations, Zhao was ousted from his role as General Secretary of the CCP and held under house arrest until his death in 2005.

Notice how, as in previous descriptions, Zhao refers to the possibility of a grave situation further escalating, employing the metaphor of fire. And note how, like Halifax's description, simulated harm is present in the experience of danger regardless of whether one advocates for strict security measures (such as calling up the military to clamp down on protestors in Beijing) or for dialogue with the protestors (as Zhao did).

A final example pertains to 2010s USA and to the threat of climate change. In his memoir, the former US president Barack Obama reconstructs his views on climate change and the environment, putting forward a clear articulation of the experience of climate-change danger as simulated harm:

The human toll of a rapid climate shift was hard to predict. But the best estimates involved a hellish combination of severe coastal flooding, drought, wildfires, and hurricanes that stood to displace millions of people and overwhelm the capacities of most governments [simulated harm]. This in turn would increase the risk of global conflict and insect-borne disease [simulated harm]. Reading the literature, I pictured caravans of lost souls wandering a cracked earth in search of arable land, regular Katrina-sized catastrophes across every continent, island nations swallowed up by the sea [simulated harm]. I wondered what would happen to Hawaii, or the great glaciers of Alaska, or the city of New Orleans [simulated harm]. I imagined Malia, Sasha, and my grandchildren living in a harsher, more dangerous world [simulated harm], stripped of many of the wondrous sights I'd taken for granted growing up.⁹⁷

Notice how vivid Obama's pictorial imagery of the potential harms associated with climate change is, and how he reflects on a future world that is harsher and more dangerous than the current one.

Whereas more research is needed to generalise this claim, the five examples drawn from typical leaders suggest that simulation of harm might be a universal feature of danger experience. Despite historical, cultural, and even motivational differences (i.e. policy preferences on how to deal with the threat), and with different security dangers and referent objects in mind, leaders in Japan, Britain, Israel, China, and the USA described their experience of various dangers in private and in public in terms of simulated harm. Whether it was domestic security in Meiji Japan, foreign military danger in 1930s Europe, danger to the Jewish diaspora as sensed in 1950s Israel, danger to regime legitimacy in late 1980s China, and the danger posed by climate change in 2010s USA, danger takes the form of simulated harm in leaders' awareness. Yet simulated harm alone is insufficient to account for the qualia of danger experience. To provide such an account we need character tags (feel) in addition to form.

The experience of danger: Feel

To illustrate the character tags of felt experience, I apply the danger framework to danger descriptions made by former Japanese Prime Minister Naoto Kan (relating to the nuclear accident) and by former National Security Advisor Condoleezza Rice (relating to the homeland danger posed by Al Qaeda). By illustrating the framework across these two cultural and security contexts, I aim to show that the framework characterises how different leaders operating across diverse settings experience security dangers. And by focusing on two leaders rather than more, I wish to delve into the unique danger experience these leaders have had – what it was like for them to experience danger as these experiences unfolded.

The first example pertains to 2011 Japan and to the danger posed by the nuclear accident at the Fukushima nuclear power plant, which was caused by a combination of the earthquake and tsunami of 11 March and of human error. In his memoir *My Nuclear Nightmare: Leading Japan through the Fukushima Disaster to a Nuclear-Free Future*,⁹⁸ Kan records that significant chain of

⁹⁷ Barack Obama, *A Promised Land* (Kindle Edition, 2020), p. 488.

⁹⁸ The Japanese title is much drier and reads: 'My thoughts as Prime Minister about the TEPCO Fukushima nuclear reactor accident'. See Naoto Kan, *My Nuclear Nightmare: Leading Japan Through the Fukushima Disaster to a Nuclear-Free Future* (Cornell University Press, 2017).

events. The prologue begins with the following statement, in which both form (simulated harm) and feel (six character tags) are evident:

I often recall the harsh conditions of that first week. From the time of the earthquake disaster on 11 March 2011, I stayed in the prime minister's office complex and, when I was alone, napped in my disaster fatigues on a couch in the reception room located behind the office where I conducted my official duties. When I say that I 'napped', I was really just lying down and resting my body while my mind raced [–self-initiated], thinking frantically about how to cope with the earthquake and tsunami [–meaningful, –control], about the potential escalation of the nuclear accident [+real, +affective: valence–], and whether it could be contained [+affective: safe–]. I have no recollection of actually sleeping.⁹⁹

Notice how laden this opening paragraph of the memoir with traces of *emotional connection* – both negative *valence* and *intensity*, and how Kan reveals that his mind was *involuntary* racing during the first week after the disaster, as he was trying to make sense of it and of how to *control* the danger. Later in the memoir, Kan again comments on the events of the first week, confessing that:

As the prime minister, I felt painfully powerless [–control] and unprepared [–familiar] when I was unable to prevent the Fukushima nuclear accident from occurring [–control] and so many people from suffering [+affective: valence–].¹⁰⁰

Kan's experience of the danger posed by the nuclear accident can therefore be characterised by a strong sense of emotional connection as well as a lack of control, volition, and familiarity. As we will see, this experience might have led him to re-evaluate his beliefs about the utility of nuclear power.

The second example pertains to the USA in 2001 and to the homeland threat posed by Al Qaeda. In *No Higher Honor: A Memoir of My Years in Washington*, Condoleezza Rice recalls the hours and days after the September 11 attacks. Both the form (simulated harm) and feel (four character tags) of the danger framework are evident in her description:

The days after September 11 were marked by the uncertainty [–meaningful] and unease [+affective: valence–] that come from operating in dangerous [+affective: safe–] and uncharted territory [–familiar]. We knew far too little about al Qaeda and how it operated [–meaningful]. We knew even less about what it was planning next [simulated harm], [–meaningful].¹⁰¹

Rice's experience of the danger posed by Al Qaeda can therefore be characterised by a strong lack of coherence and familiarity and, early on, a lack of control as 'enormous confusion' prevailed after the attacks.¹⁰² Despite having been presented with some intelligence reporting suggesting that bin Laden was determined to attack the United States, 'no one was prepared for what happened on that awful day.'¹⁰³

The two examples presented above suggest that the tags characterising the experience of danger are not particular, at least not in crisis situations. Despite contextual differences, leaders in Japan and the USA described their experience of danger in terms of a sense of reality, of coherence, of familiarity, of volition, of control, and of emotional connection. Whether it was the danger of the nuclear accident in 2011 Japan or of homeland terrorism in 2001 USA, leaders reported their experience of danger by drawing on the framework's content features and character tags. While it

⁹⁹Kan, *My Nuclear Nightmare*, p. 1.

¹⁰⁰Kan, *My Nuclear Nightmare*, p. 147.

¹⁰¹Condoleezza Rice, *No Higher Honor: A Memoir of My Years in Washington* (Crown, 2011), pp. 103–4.

¹⁰²Rice, *No Higher Honor*, p. 73.

¹⁰³Rice, *No Higher Honor*, p. 70.

would be premature to conclude these features are universal, research conducted with other leaders identified these character tags at work.¹⁰⁴

Discussion

The previous two sections introduced the theory used to develop the danger framework and illustrated the framework's applicability to international relations. In this section, I address questions about the danger framework's added values, generalisability, and related research methods and data.

The distinctive contribution of the danger framework over the classical accounts of threat perception lies in its descriptive power. As John Gerring argued persuasively, *description matters*, and disciplinary progress cannot occur without it.¹⁰⁵ And while there are different ways of describing the world, my claim here is that the danger framework captures important aspects of empirical reality which are currently beyond the reach of IR scholars.¹⁰⁶ While scholars might wish to use the framework to generate new causal, constitutive, or processual explanations for threat perception (or other phenomena), as it stands, the danger framework is best viewed as a descriptive argument¹⁰⁷ that improves on previous work in three main ways. First, the framework grounds our understanding of how individual leaders perceive threats more firmly in disciplines studying the brain/mind, making progress on the conceptual problem of linking threat perception as continuant and as occurrent. Second, the framework describes the neglected dimension of unfolding experience, making progress on the empirical problem of overlooking the mental content of threat perception. And finally, the framework outlines the structures over which information processing occurs as well as their organisation, thus making theoretical progress relating to how leaders perceive a range of security dangers and respond to them. I elaborate on each of these contributions below.

First, the framework ties our understanding of threat perception in IR more closely with conceptual semantics, which in turn maintains strong links with cognitive neuroscience and evolutionary psychology. This provides a firmer grounding for the study of leaders in international relations, venturing beyond rationality and psychology. Following Ray Jackendoff, the danger framework suggests that leaders *understand* the world by way of having conceptual and spatial structures which give rise to the qualia of danger (its 'form') and *experience* the world and its dangers with character tags which gives the qualia of danger its 'feel'. By describing how leaders both understand and experience danger in a given moment, the danger framework enables IR scholars to incorporate threat-perception-as-occurrent into their analyses of threat perception, further linking it with threat-perception-as-continuant. Thus, the framework makes progress on the conceptual problem affecting classical accounts of threat perception.

Second, the danger framework describes a hitherto-neglected dimension of the model of leaders as information processors: experience. By enabling scholars and practitioners to pay closer attention to the form and feel of the experience of danger, it begins to address the second problem hindering classical accounts – the empirical disregard of the mental content of threat perception. In tackling this problem, the framework further illuminates theoretical puzzles and opens new questions such as how these various features might operate independently or together to inform leaders'

¹⁰⁴ See for example Eitan Oren, 'How leaders understand and experience security threats', *New Voices in Global Security* (2022), available at: <https://www.kcl.ac.uk/how-leaders-understand-and-experience-security-threats>.

¹⁰⁵ The task of description should be approached independently of causal theories. John Gerring, 'Mere description', *British Journal of Political Science*, 42:4 (2012), pp. 721–46.

¹⁰⁶ This suggests a separation between the scholar and the researched world, meaning the framework lends itself well to 'mind–world dualists', i.e. post-positivist and critical realist methodologies. See Patrick Thaddeus Jackson, *The Conduct of Inquiry in International Relations: Philosophy of Science and Its Implications for the Study of World Politics* (Routledge, 2016).

¹⁰⁷ A descriptive argument 'describes some aspect of the world. In doing so, it aims to answer what questions (e.g., when, whom, out of what, in what manner) about a phenomenon or a set of phenomena. Descriptive arguments are about what is/was.' See Gerring, 'Mere description', p. 722. Here, I am describing how leaders experience security danger.

sense-making and response to world events. It is possible for instance that specific combinations of features might be correlated with change in direction of beliefs, with preferences, and/or with dramatic policy decisions. Two examples in this regard will suffice to link the danger framework with theoretical puzzles and questions.

The first example pertains to Kan's danger experience in the aftermath of the triple disasters that hit north-east Japan in March 2011. To recall, in reflecting on his experience of those events Kan testified to a strong negative and intense emotional connection, and to a strong sense of a lack of control, familiarity, and volition. Did Kan update his beliefs about the desirability of nuclear power partly because of the unique mix of felt experience of the danger posed by the nuclear accident? In Kan's words:

My experience of the nuclear accident that began to unfold on March 11 changed my thinking about nuclear power. I came to understand that a nuclear accident carried with it a risk so large [+affective: safe-] that it could lead to the collapse of a country [simulated harm]. I became convinced that what we had been calling 'safe nuclear power' could only be found through independence from nuclear power [+affective: safe+].¹⁰⁸

It is therefore possible then that Kan's experience of the nuclear accident – characterised by emotional connection as well as lack of control, familiarity, and volition – prompted him to change his belief about the utility of nuclear power and reverse his policy position on the subject.

As mentioned, previous work argued that a change in beliefs about aspects of the world occurs when a specific experience fulfils a set of three conditions: vividness/salience, unambiguity, and surprise.¹⁰⁹ Yet as my interpretive textual analysis of Kan's recollection of 11 March demonstrated, Kan's danger experience of the nuclear accident was informed by a strong emotional connection (both valence and intensity), a lack of control, familiarity, and volition. And if we accept his claim that his danger experience of the nuclear accident changed his thinking about nuclear power, then we have uncovered additional pathways for change in beliefs. Concretely, the features of control and volition have yet to be employed in the IR literature about belief change to the best of my knowledge.

The second example relates to Rice's response to the September 11 attacks. In recalling the hours and days that ensued, like Kan, Rice attested to a strong sense of emotional connection (both valence and intensity), as well as lack of coherence and of familiarity.¹¹⁰ Did Rice's support for the administration's decision to invade Afghanistan result from her particular experience of 9/11, and, more minutely, which of these features played a role in such a momentous decision?

Interestingly, Rice attests to a fluctuating emotional connection and a sense of control in the days after the attacks. While she was 'shaken' to her 'core' in the immediate moments after she had learned about a second plane hitting the World Trade Center,¹¹¹ for two days after 9/11 she operated in 'a virtual state of shock', with emotions and a renewed sense of control gradually emerging. As she puts it,

I have always felt as if I operated in a kind of fog, a virtual state of shock, for two days after 9/11. That was my state of mind on September 14 as we prepared for the National Day of Prayer and Remembrance service at National Cathedral ... The service was cathartic ... What had begun as a day of sadness ended, for me, with a sense of rising defiance [control+] ... The last hymn was 'The Battle Hymn of the Republic' ... As the military choir sang the climatic

¹⁰⁸See Kan, *My Nuclear Nightmare*, p. 118.

¹⁰⁹Yarhi-Milo, *Knowing*, p. 5. These three conditions relate to features of the danger framework: emotional connection/intensity (Yarhi-Milo's vividness), coherence (unambiguity), and the combination of familiarity plus emotional connection (surprise).

¹¹⁰Rice, *No Higher Honor*, pp. 70–6, 79, 82.

¹¹¹Rice, *No Higher Honor*, p. 71.

'Amen, Amen', I could feel my own spirit renewed. We'd mourned the dead. Now it was time to defend the country [control+].¹¹²

Later in the day, Rice discussed policy options over dinner with Vice President Richard B. Cheney, Secretary of State Colin Powell and Secretary of Defense Donald Rumsfeld: 'We all knew that the outcome [of the next morning's session with the President] would be a declaration of war against the Taliban and an invasion of Afghanistan.'¹¹³ This would signify a dramatic change from the Al Qaeda strategy that Rice forwarded to the President for his approval on 10 September, which included a covert-action programme in Afghanistan and the launching of the Predator drone for reconnaissance missions.¹¹⁴ Could Rice's experience of regaining her sense of control – having re-emerged from a virtual state of shock – informed her decision about the appropriate response to the attacks? Previous work in the crisis management literature has argued the perception of control over crisis situation enables leaders to notice more things they can affect and, through action, to transform complex tasks to simpler ones.¹¹⁵ Yet as my interpretive textual analysis suggests, it was not just the sense of control over simulated harm but a broader mix of *fluctuating* emotional connection and a sense of *regained* control which informed Rice's decision-making calculus.

The third way in which the danger framework improves our understanding of threat perception relates to the theoretical question of over which structures information is encoded by the brain/mind in the first place, as well as their inherent organisation. In this regard, the danger framework offers a systematic description of these structures. While various scholars have previously identified – either implicitly or explicitly – some aspects of danger experience, the danger framework provides the richest description of leaders' experience of danger to date, further outlining the criteria and principles necessary to further explore the experiential dimension of threat perception. Thus, the framework makes progress on the theoretical problem of over which structures information processing takes place (the conceptual and spatial structures) as well as their inherent organisation (the unique features with which leaders experience danger).

The danger framework as outlined above pertains to leaders. Whether it can be applied to the analysis of publics' threat perception is an empirical question that could be tested by applying the framework to the 'everyday'. It might be the case that much of the framework holds for both leaders and the public, but leaders have specific features and sub-features or combinations of these that do not get 'activated' for citizens and vice versa. This is because leaders often have unique political and career goals, because they care about their political legacy more than the average citizen, and because one of their primary tasks is to ensure the territorial state and its populace are secured.

Whether the danger framework can be applied to describe how people embedded in different cultures understand and experience danger is yet another empirical question that ought to be addressed by using cross-cultural research designs. My intuition here, however, is that the scaffolding of the danger framework is shared across cultures: as posited above, the form danger takes in awareness – simulated harm – was shared by leaders in different cultural contexts. As for the feel of danger, many of the character tags might be universal. For example, to the best of my understanding, the sense of emotional connection is shared by people of all cultures.¹¹⁶ However, some features and sub-features of experience might differ between cultures. For example, scholars have argued that some cultures value confidence more than others: as a result, leaders embedded in these cultures might experience danger as coherent (the sub-feature of 'committed') more often or with more conviction than those cultures who value confidence less.¹¹⁷

¹¹²Rice, *No Higher Honor*, pp. 82–3.

¹¹³Rice, *No Higher Honor*, p. 83.

¹¹⁴Rice, *No Higher Honor*, p. 70.

¹¹⁵See Weick, 'Enacted', p. 315.

¹¹⁶While the debate about whether specific cultures have discrete emotions that are unique to them is not settled, no one disputes the contention that the capacity for emotional connection is available across all cultures.

¹¹⁷See for example Frank J. Yates, Li-Jun Ji, Takashi Oka, et al., 'Indecisiveness and culture: Incidence, values, and thoroughness', *Journal of Cross-Cultural Psychology*, 41:3 (2010), pp. 428–44.

A range of research methods could be used to test or further illustrate the danger framework, including interpretive textual analysis, micro-phenomenological interview,¹¹⁸ sentiment analysis, content analysis,¹¹⁹ process tracing, experimental methods,¹²⁰ or combination of these. As for data, in addition to data collected in controlled experiments or survey experiments, data collected from letters, confidential correspondence, press conferences, memoirs, diaries, personal blogs, videos, ethnographies, auto-ethnographies, and interviews could be used to infer features of experience.

Conclusion

Classical accounts of how leaders perceive threats are incomplete, drawing on a limited version of the notion of leaders as (ir)rational information processors. Rationalist and psychological accounts suffer from conceptual, empirical, and theoretical problems: they tend to conceptualise threat perception as a continuant and ignore threat perception as an occurrent; they are mostly silent on the mental content associated with security dangers; and they do not comment on how the experience of security danger is organised in leaders' awareness. As a result, classical accounts of threat perception in IR cannot begin to provide adequate descriptions of Chairman Mao's experience of the Soviet danger in any given day in 1969, nor can they tell us how Prime Minister Marin experienced the danger from Russia at the end of February 2022 – what it *felt* like for her – and how her experience of danger was organised into her conscious field.

My task in this article was threefold: to theorise the qualia of danger experience, to theorise how they are organised into the leader's conscious field, and to outline why these matters to international security. The result of the first and second tasks is the danger framework, which improves on classical accounts of threat perception in three ways. First, the framework grounds our understanding of how individual leaders perceive threats more firmly in disciplines studying the brain/mind, making progress on the conceptual problem of linking threat perception as continuant and as occurrent. Second, the framework describes experience, including its form and feel, and thus makes progress on the empirical problem of overlooking the mental content of threat perception. Third, the framework uncovers the structures over which information processing occurs in the first place as well as their inherent organisation, thus improving our theoretical understanding of the structures and processes involved in leaders' perception and experience of danger.

If the descriptive account of how leaders experience danger is accurate, we might have a valuable alternative for how world leaders construct threats compared to typical approaches to threat perception in international relations that are rooted in rationality and in psychology. This helps us manoeuvre into a position from which we could further explore the potential implications of this descriptive account. This section concludes by drawing linkages between the danger framework and the budding literature on experience as well as to OSS, before suggesting three avenues for future research.

Implications for the literature and future research

The danger framework has important implications for IR literature. Consider first the study of experience in international relations. Taking its cue from Wendt's important observation according to which a complete model of human beings must incorporate experience,¹²¹ the danger framework

¹¹⁸Leonardo Orlando proposed a form of guided introspection (e.g. the 'micro-phenomenological interview') to help researchers glean the very 'fabric of agency' – i.e. to actors' conscious experience of their mental process. See Leonardo Orlando, 'The fabric of agency: Navigating human potentialities through introspection', *Security Dialogue*, 51:5 (2020), pp. 467–81. (p. 474).

¹¹⁹For example, Eitan Oren, 'Japan's evolving threat perception: Data from diet deliberations 1946–2017', in *International Relations of the Asia-Pacific* 20:3 (2020), pp. 477–510.

¹²⁰For example, Marika Landau-Wells, 'Effort versus accuracy: How well do we understand why others perceive threats?', this Special Section.

¹²¹Wendt, *Quantum*, p. 189.

improves Wendt's preliminary account of experience in two ways. First, whereas Wendt contends that the experience of space is universal,¹²² as we all feel objects as being 'out there' in the world, the framework introduced above suggests leaders *understand* the world by way of having a spatial structure – and yet the feel of stuff being 'out there' in the world is one of several character tags that structure our overall experience of the world, including the experience of vision, language, and danger. Second, the danger framework challenges Wendt's claim that experience is 'inherently particular'.¹²³ While different leaders might, in given moments and to varying degrees, have experiences with diverging mental content, the basic features of this experience including the form the qualia of danger takes (simulated harm) as well as its feel – its sense of reality, of coherence, of familiarity, of volition, of control, and of emotional connection – are likely shared among leaders. Combined, both improvements provide micro-foundations for theorising the role of experience in international relations.

The danger framework has implications for OSS as well, equipping this literature with micro-foundations at a level lower than the individual, thus helping to clarify conceptual confusion.¹²⁴ Three examples pertaining to key concepts of OSS in this regard. First, the danger framework captures the existentialist notion of the difference between fear and anxiety, which plays a key role in contributions to OSS.¹²⁵ According to the mainstream existentialist conception, while fear is projected externally towards specific threats and concrete objects, anxiety is an integral part of the human condition.¹²⁶ Drawing on the danger framework, we can re-characterise this conception of the difference between fear and anxiety in the following way: while anxiety involves the spatial structure giving rise to a form of danger (simulated harm to me/us) and the character tags of emotional connection (valence and intensity), the precise content of the conceptual structure is unclear or perhaps not engaged. And when leaders experience fear, simulated harm (form) engages both the spatial and conceptual structure (entity x is dangerous) alongside the character tags of emotional connection, prompting a sense of being projected towards concrete threats and objects.

A second example pertains to the very characterisation of anxiety. In his work, Brent Steele asserts that 'we feel anxiety not about those things that are outside of our control, but about those we perceive to be in the realm of our possible agency'. Similarly, Nina Krickel-Choi follows Liang in highlighting the distinction between 'normal' and 'existential' anxiety. While normal anxiety is associated with 'inspiring change', existential anxiety 'paralyses' the actor, inhibiting action. In our terms, we can recast Steele's and Krickel-Choi's notions of anxiety as involving the character tag of *control*, and to represent it as [+control]. That is, a leader might feel anxious when they feel they have some measure of control against a potential danger (normal anxiety), or they can feel anxious without being able to control events [–control]. But as we have seen with the previous example, this characterisation is partial. A richer understanding of anxiety incorporates not just the character tag of control, but the spatial structure and the character tags of emotional connection as well.

A final example pertains to the difference between fear and dread. Here, Steele follows Heidegger to suggest that: 'If ... that which threatens has the character of something altogether unfamiliar, then fear becomes dread'.¹²⁷ Again on our terms, the distinction between fear and dread can be recast by using the character tag of familiarity, whereby dread is represented as [–familiar] and fear as [+familiar]. Here too, the danger framework enables us to provide a richer description of how

¹²²Wendt qualifies this by writing that he does not mean that 'we all experience time and space in the same way', only that, 'by virtue of sharing the same physics of the body our experience of time and space has a universal aspect'. Wendt, *Quantum*, p. 189.

¹²³Wendt, *Quantum*, pp. 189–90.

¹²⁴See for example Krickel-Choi, 'The concept'.

¹²⁵See for example Catarina Kinnvall and Jennifer Mitzen, 'Anxiety, fear, and ontological security in world politics: Thinking with and beyond Giddens', *International Theory*, 12:2 (2020), pp. 240–56; Bahar Rumelili, 'Integrating anxiety into International Relations theory: Hobbes, existentialism, and ontological security', *International Theory*, 12:2 (2020), pp. 257–72.

¹²⁶See Rumelili, 'Integrating', p. 258; Brent Steele, *Ontological Security in International Relations: Self-Identity and the IR State* (Routledge, 2008), p. 61.

¹²⁷Steele, *Ontological Security*, p. 171.

leaders experience these phenomena: when experiencing fear and dread, a leader's mind engages not only the character tag of familiarity, but also the character tags of emotional connection as well as the conceptual and spatial structures. Thus, the danger framework provides micro-foundations below the individual level at the level of mental structure, characterising the various experiences of anxiety, fear, and dread, and helping dispel some of the conceptual confusion in OSS.

I propose three avenues for future research. First, scholars might examine how particular features of experience (both form and feel) are correlated with particular outcomes. While I suggested that Kan's and Rice's belief changes and policy reversals were informed by their particular danger experiences, more research is needed to substantiate these kinds of suggestions. I believe this line of research could potentially illuminate the ever-complex relationship between leaders' private worlds and their beliefs, preferences, and decisions.

Second, future research might identify additional features and sub-features of felt experience. For example, Jackendoff suggests that character tags could apply to pairs of experienced entities, resulting in a 'feel' about a dyad. One such candidate is the subcategory of 'connected': the entities are sensed as having some influence on each other, whether symmetrical (e.g. their motions are coupled) or asymmetrical (e.g. one is causing the other) influence.¹²⁸ Integrated into the domain of danger experience, the feature 'connected' can characterise experience in the following way. While some simulated harms might have no bearing on one another, others could very well be felt as having some mutual influence.¹²⁹ Subsequently, the sense of connectedness of precepts of simulated harm might be encoded as a [character tag]: it affects experience not through form but through 'feel'.¹³⁰

Finally, scholars might establish whether leaders' experience of danger is likely to be shared not only across time period, culture, political context, and security danger, but also in terms of gender, personality, and age. Do women leaders experience danger in the international system like men do? If not, then how is it different? Do leaders' personality traits correlate with specific mixes of felt experience? Does the experience of danger evolve with age, and, if so, how? These kinds of questions would help substantiate my suggestion that much of the form and feel of danger experience is shared between humans while being attentive to nuanced differences that might emerge among leaders, thus helping us make further progress on danger literacy.

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¹²⁸ Jackendoff, *Language*, p. 97.

¹²⁹ Consider for example Condoleezza Rice's sense of the need to address the nexus between terrorism and nuclear weapons following the September 11 attacks. Rice, *No Higher Honor*, p. 153.

¹³⁰ Jackendoff, *Language*, p. 95.