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Escalation in asymmetrical relations

A rational strategy for weak states?

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Abstract

It is a prevalent view in International Relations scholarship that in conflicts the most powerful party generally prevails. It would follow that weak party escalation usually is an irrational course of action, and therefore should not be attempted. Nonetheless, comparably weak states from time to time escalate confrontations with vastly stronger adversaries, and benefit from it. This paradox is not well understood. While there is a large literature on escalation, it is primarily concerned with situations of symmetrical power. A rare exception is Angstrom and Petersson (2019), who propose that weak party escalation can be rational given specific conditions of the weak state's preferences, capabilities, or alliances.

Asymmetrical conflicts and confrontations of various intensity are numerous, and taking place in politically important regions such as the South China Sea, the Middle East, Eastern Europe, and the Arctic. This paper addresses the knowledge gap surrounding the repeatedly observed, though scarcely understood, phenomenon of weak party escalation. Grounded in offensive realism and theory on strategy of conflict, I aim to answer the research question *how can weak parties in asymmetrical relations use escalation to advance their strategic interests?*. Using game theoretical modelling and a case study of the Russo-Norwegian conflict of interest, this paper develops a rigorous explanation for successful weak party escalation. I argue that weak party escalation can be successful given specific conditions of the conflict, such as private information about the cost of conflict, the weak party being supported by a great power ally, or by the weak adopting a limited aims strategy.

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Øystein Solvang

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List of Abbreviations

ADE Armoured Division Equivalent

BMD Ballistic Missile Defence

C2 Command and Control

CINC Composite Index of National Capability

COIN Counter-Insurgency

CON Congruence Analysis

COV Co-Variance Analysis

CPT Causal Process Tracing

EU European Union

GATT General Agreement on Tariffs and Trade

GDP Gross Domestic Product

GNI Gross National Income

GNP Gross National Product

GP Garrison in Porsanger

GPV State Armament Programme

GSV Garrison in South-Varanger

IR International Relations

LRS Long-Range Strike

MID Militarised Interstate Dispute dataset

MPA Maritime Patrol Aircraft

MRDE Motor Rifle Division Equivalent

NATO North Atlantic Treaty Organisation

OOB Order of Battle

QCA Qualitative Comparative Analysis

SDCA Supplementary Defence Cooperation Agreement

SOF Special Operations Forces

SSBN Nuclear Ballistic Missile Submarine

UN United Nations

US United States

USMC United States Marine Corps

USSR Union of Soviet Socialist Republics

WB WDI World Bank World Development Indicators

WP Warzaw Treaty Organisation

WTO World Trade Organisation

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Introduction

1.1   The puzzle

How come North Korea – an impoverished country largely isolated from the international community – has repeatedly threatened the United States? And why did Iceland – a state without any armed forces – go to "war"[1] with Great Britain? What enabled North Vietnam to prevail in face of the massed might of French and American military apparatuses? And how come Norway is not dissuaded from provoking Russia, when these states' nuclear warhead balance is six thousand to nil?[2]

These questions illustrate a puzzle in International Relations (IR) theorising: How can relatively weak states, confronting vastly more powerful opponents, advance their interests by increasing the level of conflict? As such, the thesis addresses a sparsely examined research topic (Angstrom & Petersson, 2019). Whilst the conventional wisdom in IR theory holds that "[...] the strong does what he can, and the weak suffers what he must" (Thucydides, 1999, p. 57, vol. II), weak states not only challenge vastly stronger adversaries, but also prevail with considerable frequency (Arreguin-Toft, 2001; Paul, 1994). "Asymmetric conflicts of this nature are interesting because our standard theories imply that they should not happen" (Allen & Fordham, 2011, p. 1026).

In this thesis I set out to explain the paradoxical phenomenon of *asymmetrical weak party escalation*. The research question is *How can weak parties in asymmetrical relationships use escalation to advance their strategic interests?* The dependent variable is the occurrence of escalation by an asymmetrically weak state, while the independent variables are specific attributes of the strategic interaction. The inquiry is based on an offensive realist theoretical framework, and applies game theory and case study techniques to examine the dynamics of escalation in asymmetrical inter-state relations. I find that support from

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1. The Anglo-Icelandic conflicts over trawling in waters near Iceland during the second half of the 20th century, are commonly referred to as the *Cod Wars*, a direct translation of the conflicts' Icelandic name. These were not, however, wars in the strict sense of the word.

2. In 2018, Russia was estimated to possess approximately 6500 nuclear warheads, of which 1600 were deployed (Stockholm International Peace Research Institute, 2019, p. 11). Russia is currently one of three countries to field a nuclear triad, the other being China and the United States (Institute for Strategic Studies, 2020a, p. 26).

another great power, the employment of specific strategies, and issues deriving from limits on communication may explain why weak states escalate conflicts with superior adversaries.

The rationalist approach dictates that primacy is given to the escalatory move's ex ante efficacy.[3] As such, the analysis focuses on escalation only insofar as it likely to advance the escalating weak state's interests (see Angstrom and Petersson, 2019; Fearon, 1995). While it under different assumptions may be warranted to analyse the occurrence of asymmetrical escalation with disregard for the likely outcome – i.e. to include "suicidal" and other forms of irrational behaviour – the rationalist framework adopted in this thesis entails close consideration of the productiveness of escalation. However, as inter alia Fearon (1995) has demonstrated, certain systemic constraints may make ex post[4] inefficient strategies rational ex ante. Therefore, I distinguish between ex ante and ex post considerations, and give primacy to the former in this thesis.

Rationalist IR theory focuses on structural, rather than domestic, variables to explain the causes and consequences of events in the international system. Specifically, such theories posit that the anarchic nature of the international system have a strong influence on states' behaviour, making them pursue wealth,[5] security,[6] or power.[7] In analysing asymmetrical weak state escalation, I therefore focus on structural causes and constraints, such as anarchy, the balance of power, alliances. Domestic causes, such as regime type, internal political pressure, and state leader characteristics are not considered.

Asymmetrical escalation merits study for several reasons. As Angstrom and Petersson (2019) note, despite being repeatedly observed, weak state escalation is a sparsely explored phenomenon. Further inquiry may advance our understanding of these events, while explaining these departures from theoretically predicted behaviour may advance IR theorising. Knowledge about asymmet-

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3. That is, the escalatory move's likely outcome as it appears before the escalation is instigated. Ex ante efficacy is understood as the balance of perceived cost and utility of the escalatory move given the information the actor has before making the decision to escalate or not.
4. That is, in consideration after the fact.
5. Neoliberal insitutionalism, see Keohane, 1984.
6. Structural realism, see Waltz, 1979.
7. Offensive realism, see Mearsheimer, 2001.

rical escalation would offer guidance for weak states locked in struggle with a superior adversary, and, as Arreguin-Toft (2001) notes, also be of value to strong states facing inferior adversaries.

1.2   Background

This section reviews a selection of key literature to provide the background for the thesis.[8] Angstrom and Petersson's *Weak party escalation: An underestimated strategy for small states?* (2019) is one of very few academic works concerned specifically with inter-state weak party escalation (see pp. 284, 297-298). Based on rationalism and a series of synoptic case studies, they construct a theoretical model to explain weak party escalation. The four mechanisms theorised are mobilising and exploiting alliance support, domain-specific dominance, and the forging of reputation (Angstrom & Petersson, 2019, pp. 289-294). However, the inquiry suffers in that general theoretical postulations are drawn from a brief overview of a small number of cases, and the authors themselves stress the need for more research on the subject. This is part of the motivation behind this thesis.

A related topic that has received more attention in the literature is asymmetric wars.[9] On the aetiology of asymmetric conflict, Paul (1994) argues that relatively weaker states initiate wars against stronger adversaries when they perceive that their political objectives can be achieved by a limited war (pp. 35, 167-173). Support from a great power and advantages granted by specific military conditions increase the likelihood that weak states initiate asymmetric wars. Domestic factors, however, rarely have any significant influence on a weak state's decision to assault a superior adversary (Paul, 1994, pp. 171-173).

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8. Note that while this section presents some empirical and theoretical findings that precede this study, the comprehensive discussion on those is reserved for later chapters.
9. The literature on system level theories of war initiation, e.g. power transition and balance-of-power theories, is of secondary importance to this thesis, as they pertain to the systemic balance of the international system and (predominantly) great power rivalry, rather than the decision-level mechanisms of (asymmetric) escalation. For a discussion on system-level explanations of war initiation, see Fearon, 1995; Mearsheimer, 2001; Walt, 1985; Waltz, 1979.

On the aetiology of war in general, Fearon (1995) finds that under rationalist assumptions, states' decision to start wars can be explained by one of two mechanisms.[10] Firstly, wars can be caused by the fact that states have incentives to misrepresent or hold back information about their intent and power, which makes the parties unable to reach a shared judgement about the appropriate outcome ex ante. Secondly, states can be unable to reach an agreement due to commitment problems. The logic of the former – that states cannot trust information conveyed by others – may lead a weak state to fight a stronger state despite knowing in advance that it will lose, because the war can provide it a reputation of not yielding (Fearon, 1995, p. 400).[11]

Similarly, Angstrom and Petersson (2019) argue that a weak state may escalate a conflict despite lacking both escalation dominance – i.e. means to secure victory unilaterally – and external support – i.e. prospects of help to achieve victory – to forge a reputation of being tough to subjugate (pp. 289, 293-294).[12] This is rational given that the long term cost of subjugation are greater than the short term cost of military defeat (ibid.). Lastly, Paul (1994) finds that the weaker state may initiate a losing war for some other political gain, such as to

10. Fearon (1995) here introduces his bargaining model, which can be briefly summarised as follows: Say that A and B dispute a matter for which their respective utilities are inverse and continuous (i.e. A prefers an outcome towards one end of a spectrum and B prefers an outcome towards the opposite end). Given some broad assumptions (such as that there is some cost associated with going to war), it can be shown that there always exists a set of negotiated settlements that both sides would prefer to war (where the victor unilaterally chooses the outcome). The range of such settlements is the bargaining range (Fearon, 1995, pp. 386-388, 409).

11. Fearon's second mechanism of war initiation – commitment problems – affects the range of possible settlements that states can reach short of going to war, and may open up a window for rational pre-emptive or preventive war. Commitment problems are an important consequence of the anarchic nature of the international system, as discussed in Chapter 2 and 3.

12. Both Fearon (1995) and Angstrom and Petersson (2019) quote Finland fighting the Soviet Union as examples of this point. However, the former references the Winter War, while the latter references the Continuation War. The main analytical difference is that Finland fought a defensive war – as opposed to immediate submission – in the former, but was the instigator of the latter, i.e. escalated the conflict. Finland, of course, lost both wars, although it faired far better than what a simple comparison of material power would have predicted. Furthermore, while forced to adopt a bandwagoning policy, i.e., Finlandisation, the state preserved its sovereignty and lost relatively little territory.

change a status quo it cannot tolerate (pp. 173-175).

Other scholars have worked to explain the *outcomes* of asymmetric wars. Specifically, the causes that can explain why nominally superior states are defeated or made to concede, such as France and the United States in Vietnam, or the Soviet Union and the American coallition in Afghanistan. Prescribing courses of action for insurgencies, the Maoist three-stage strategy emphasises that the weak party should utilise protracted guerrilla warfare to force a victory (Ashworth, 1990). It is emphasised that the weak should avoid strictly military decisions to conflict – i.e. through maneouver warfare and set-piece battles – but rather espouse attrition of the strong over time (Katzenbach, 1956, pp. 38-39). Grice (2019) criticises this reading of Mao for failing to comprehend the complexities of his writings, especially on the role of conventional military forces in an insurgency, though not contesting the emphasis on protracted conflict and close integration of political and military affairs (pp. 17-25).

Variations over Mao's writings are nonetheless recurrent in explanations of weak-party successes in asymmetric conflicts. Taber (1965) emphasises guerrilla movements' ability to persist in favourable terrain (natural or urban), and argues that they exploit a discrepancy between the strong actor's objective – to defeat the guerrilla – and the means employed – overwhelming conventional military force.[13] Explaining American failures in Vietnam, Kissinger (1969) points to the fact that while the strong actor is superior in strictly military terms, it struggles to translate military success into political advantage (p. 212). Berdal (2019) explains NATOs failure in Afghanistan along similar lines, concluding that the alliance was unable to procure political effects from its military achievements (pp. 526-528, 539-540). Furthermore, modern military formations, trained, equipped, and organised for peer-competition, are little apt to fight insurgencies due to their intrinsic de-emphasis of interaction with the local populace (Lyall & Wilson, 2009).

Several scholars writing on different aspects of international relations have

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13. Conventional here refers to the application of training and equipment intended to fight a peer adversary, as opposed to irregular warfare, i.e.,Counter-Insurgency (COIN) or asymmetric warfare operations. It does not refer to the distinction between conventional and nuclear weapons.

proposed that asymmetry in power causes fundamental differences in how actors interact. On a general note, Womack (2015) writes that "[...] the weak have more reason to resist than the strong have interest to dominate" (p. 5, see also Hirschman, 1980, p. IX.) The asymmetry in power creates an asymmetry in perception and interaction that is fundamental to the relationship between the states (Womack, 2015, pp. 5-7). Concerned with negotiations in asymmetric relations, Habeeb (1988) argues that the outcome is determined by more than sheer power. More pertinent to any outcome is the issue-specific power balance, consisting of not only material power, but also the degree of commitment and outlook for alternatives each actor possesses.

Constructing a general explanation of weak party victory in asymmetric conflicts, Mack (1975) argues that the discrepancy in relative interest between the weak and strong actor explains strong actor defeat (pp. 194-196). According to this *interest asymmetry thesis*[14] the difference in power between the actors lead to difference in interests (ibid.). This is analogous to what Kissinger (1969) describes as "asymmetry in the definition of what constitute[s] unacceptable losses" (p. 212). Consequently, the fact that the war is limited for the strong actor causes it domestic political attrition, being unable to induce public support for the sacrifices that are necessary for victory (Mack, 1975, pp. 180, 185–187). The weak actor, on the other hand, benefits from national unity caused by the totality of the threat imposed by the strong (ibid.). Then, as long as the weak actor does not loose, but over time steadily inflicts cost on the strong, the strong actor absorbs political attrition, which eventually causes its defeat[15] (Mack, 1975, pp. 199-200). As noted by Kissinger, 1969:"[T]he guerrilla wins if he does not lose. The conventional army loses if it does not win" (p. 214).

However, Arreguin-Toft (2001) criticizes Mack's postulation that relative power causes relative interest, and rather argues that the interest asymmetry thesis neither explains variation in war duration nor variation in the distribution of outcomes over time (pp. 98-99). Subsuming Mack's political attrition argument, Arreguín-Toft contends that *strategic interaction*[16] best explains the

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14. The term *interest asymmetry thesis* (or argument) is not used by Mack, but coined by Arreguín-Toft to describe Mack's thesis.
15. For an empirical application and discussion on this argument, see Agoôt (2019).
16. That is, the relationship between the strategies adopted by the opposing sides. If both

outcomes of asymmetric conflicts: Strong actors win when the weak actor fights on the former's terms, which enables the strong to leverage its full power advantage (Arreguin-Toft, 2001, pp. 99-110). But weak actors adopting indirect strategies, which sacrifice values for time, gain from the political attrition of their opponents, which may enable them to eventually prevail (ibid.).[17]

The insights produced by these studies help shape the thesis' inquiry. They draw attention to key independent variables of the analysis: External (alliance) support (Angstrom & Petersson, 2019; Paul, 1994), indirect – guerrilla and limited aims – strategy (Arreguin-Toft, 2001; Paul, 1994), provocation and reputation (Angstrom & Petersson, 2019; Fearon, 1995), and provide a rationale for focusing on systemic rather than unit-level variables (Arreguin-Toft, 2001; Paul, 1994). Additionally, I hope to have illustrated the knowledge gap in the literature on asymmetric escalation which this thesis seeks to address.

1.3   Research question

While Angstrom and Petersson (2019) have described the possible causes and consequences of escalation in asymmetric relations, this thesis aims to contribute in two respects: For one, to increase the theoretical clarity by scrutinising the causal mechanisms of weak party escalation in greater detail, and also with the analytical rigorousness of game theory. For another, to provide a more in-depth empirical analysis of an instance where a weak state escalated a conflict with a superior adversary.

The research question of the thesis is:

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     adopt direct strategies, e.g. direct attack and direct defense, the strategic interaction is symmetric. If one side adopts a direct strategy (e.g. direct attack) and the other adopts an indirect strategy (indirect defense, e.g. guerrilla strategy) the strategic interaction is asymmetric.

17. More specifically, the independent variable of this argument is strategic interaction, that is, the relation between the two actor's strategies (cf. previous footnote). Symmetric strategic interaction favors the strong actor while asymmetric interaction favors the weak. This is equivalent to Mao's observation that the success or failure of the guerrilla varies directly with the degree to which it fights on the terms of the mechanised opponent (quoted in Katzenbach, 1956, p. 38).

How can weak parties in asymmetrical relationships use escalation to advance their strategic interests?

The research statement is supported by five subordinate questions:

- Which strategies are available to weak parties in asymmetrical relations?

- What defines weak party escalation as a distinct strategy?

- How can weak parties in asymmetrical relations use escalation to their advantage?

- What are the pros, cons, options and limitations of weak party escalation?

- Could escalation be viable strategy for Norway vis-a-vis Russia? If so, how?

1.4   Philosophy of science

Data exists in infinite amount and cannot speak for itself, but must be chosen and organised based on specific procedures (Waltz, 1979, pp. 4-7). "Beneath any given research design and choice of methods lies a researcher's (often implicit) understanding of the nature of the world and how it should be studied" (Moses & Knutsen, 2012, p. 1). This section briefly elaborates the philosophy of science that underpins this thesis.

Moses and Knutsen (2012) argue that approaches to social science can be broadly grouped into two ideal types – naturalism and constructivism – each with its distinct ontology, epistemology, and methodology (Moses & Knutsen, 2012, pp. 3-5).[18] In this context, naturalism is related to positivism, behaviouralism, empiricism and critical rationalism; constructivism is related to

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18. Note that the terms "method" and "methodology" refer to distinct, albeit related, concepts. Following Moses and Knutsen (2012), methodology is defined as the field of metaphysics concerned with how knowledge is generated, based on epistemology and methods. Method denotes specific techniques for analysing information.

Conventionalism and Critical Theory (Moses and Knutsen, 2012, pp. 3-5; Blatter and Haverland, 2014, p. 9, see also Price and Reus-Smit, 1998).

Naturalism is based on the view that social science research should be founded on equivalent principles to those applied in the natural sciences (Moses & Knutsen, 2012, pp. 3-5). It emphasises the feasibility of direct observation and logical reasoning (ibid.). Constructivism emphasises that the social world is distinct from the natural, and that the metaphysical framework applied in the natural sciences is not suitable for studies of social phenomena (Moses & Knutsen, 2012, pp. 9-11). Viewing international politics as a socially constructed phenomenon, constructivism places an emphasis on social knowledge, practice, and the shaping of identities and interests (Wendt, 1995, pp. 71-73). The constructivist-naturalist divide came to the fore in the IR discipline's "fourth great debate", where scholars in either camp quarrelled over how to understand the world (see Mearsheimer, 1995; Wendt, 1995).

Naturalist ontology assumes the existence of a real world that is independent of our experiences (Moses & Knutsen, 2012, pp. 7-8). The corresponding epistemological position is that patterns in the world can be discovered and explained by careful recording of observations and experience, logic, and reason, and that it is possible to distinguish the factual from the subjective (ibid.). The naturalist methodology relies on falsification and predictive ability to evaluate knowledge (Moses & Knutsen, 2012, p. 8). Furthermore, naturalists emphasise that scientific enterprise should be directed at the nomothetic, not the idiographic (Moses & Knutsen, 2012, p. 9). The rationalist paradigm in which this thesis is positioned, has a distinct metaphilosophical position that is largely equivalent to naturalism as described here (see e.g. Keohane, 1984; Waltz, 1979).

1.5   Research design

To comprehend the international system, I build on Waltz (1979) and Mearsheimer's (2001) realist framework. While this provides a rigorous understanding of the international system and its actors, as a structural theory, it has been criticised for being too coarse a framework for analysis (Nye, 1988, pp. 243-245;

Wohlforth, 2008, pp. 6-7). Structural realism is aimed largely at producing testable propositions about system-level mechanisms in the international system (see Waltz, 1979). Therefore, there are many questions within IR to which structural realism does not provide a clear answer (Nye, 1988, pp. 243-245). It is therefore common to combine structural realism with other theories to tackle specific research puzzles (Wohlforth, 2008, p. 7).

Thus, to analyse decision-level mechanisms in a rigorous framework, this thesis uses game theory to develop a model of strategic behaviour in asymmetric conflict. Game theory is a technique for analysing problems with interdependent decision-makers, which is frequently used in political science and strategic studies (Ayson, 2008). The fathers of game theory, von Neumann and Morgenstern (1944), established that basic problems of social behaviour were identical with the mathematical notions of games (p. 2). As a type of games, strategic games are those where the best course of action depends on the action of others (Schelling, 1960, p. 3). Bernard (1954) labelled this as a "modern sociology of conflict".

For empirical value, the model on strategic behaviour in asymmetric escalation is examined through a comparative case study approach. In IR research, case study methods are frequently used, both in inferential and deductive approaches (Bennett & Elman, 2008). In this thesis, the comparative case study is theory oriented, seeking to further develop and test the game theoretical causal logic models (see Lijphart, 1971). Seeing that the low prevalence of weak party escalation (small N) excludes the use of statistical methods, using a comparative case study approach is a good option for mitigating the problems of producing generalizable data from a single case (see King et al., 1994).

The case chosen is the Russo-Norwegian relationship. A comparison is made between the immediate post-war era (1945-1951) and the situation that arose following the 2014 Ukraine crisis. Comparing Norwegian security policy during the formative years of these distinct, but separate conflicts of interest – I aim to scrutinise the theoretical model of weak state escalation. The two cases are viewed as suitable for this approach due to their considerable similarity on key variables, such as relative power, geo-political factors, and 'the context of a great power rivalry. I aim to examine whether variation in the level of great

power (i.e., American) support enjoyed by Norway can explain changes in the willingness to escalate the confrontation with a superior adversary, the Soviet Union/Russia.

1.6   Delimitation

I have several choices regarding the breadth of both the theoretical concepts and empirical materials examined in the thesis. The most profound delimitation is to consider only conflicts between states. Despite their relatively low prevalence,[19] inter-state conflicts warrant special attention due to their potential for vast destructiveness and systemic consequences (Levy, 2013, pp. 581-582). It has furthermore been argued that the low prevalence of inter-state conflict after 1945 does not constitute a statistically significant decline in inter-state conflicts (Clauset, 2018). While a number of intra- and extra-state conflicts have been destructive and influential at the same extent as lesser inter-state wars, the latter are nonetheless of the greatest significance for the study of international relations. From this, I consider that to focus exclusively on inter-state interaction is a warranted choice.

The thesis is moreover largely based on a single theoretical perspective, opting for an in-depth inquiry rather than a comprehensive approach. As such, I omit several perspectives commonly applied to understand conflict, such as liberalist, constructivist, Critical, and feminist theory, institutional, and organisational approaches. This singularity is in contrast to the recent proliferation of works combining approaches, in what is commonly labelled theoretical eclectisism or pluralism (Katzenstein & Sil, 2008). While it enables multi-faceted examination of issues, the eclectic approach has been criticised for over-determination of models, hindering theory development, and for missing out on the macro level mechanisms (Checkel, 2013, pp. 220-221, 233–234).[20] As such, I consider the use of a single, consistent theoretical approach as appropriate.

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19. 19 percent of the 225 conflicts recorded between 1946 and 2001 were inter-state wars (Gleditsch et al., 2002, p. 620).
20. Pertinent alternative approaches, including the use of other theoretical frameworks, are discussed in the concluding chapter.

1.7   Structure of the thesis

The thesis consists of seven chapters and three appendixes. This introduction presented the research questions, highlighted key literature, and described the research design. The two following chapters constitute the theoretical part of the thesis: Chapter 2 discusses the theoretical foundation of the thesis, with an emphasis on the structure and mechanisms of international relations, asymmetry, escalation. In Chapter 3, a game theoretical model of weak party escalation is specified and analysed based on the previous theoretical discussion. Chapter 4 and 5 constitute the thesis' empirical component. Here, considerations of data collection and analysis are discussed, the data material is presented and analysed. The object of this exercise is to provide a preliminary test of the model from Chapter 3. Chapter 7 summarises and discuss my findings.

The appendixes include supplementary materials, serving to substantiate arguments made in other chapters, and to provide details necessary to replicate my findings. Appendix I examines variations in the distribution of symmetrical and asymmetrical relations for different proxies for power and thresholds for asymmetry. Appendix II measures the power balance in relevant conflicts to classify state dyads as symmetric or asymmetric.

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Theory

God is usually on the side of the big squadrons against the small

Comte de Bussy-Rabutin (1618-1693)[1]

God is on the side not of the heavy battalions but of the best shots

Voltaire (1694-1778)[2]

2.1 Introduction

While the introductory chapter laid out the central research puzzle and the structure of the thesis, I now turn to theory. The purpose of this chapter is to present a coherent theoretical framework for the analysis of inter-state interaction and conflict, and from this to build testable hypotheses about why weaker states may rationally escalate conflicts with their superior adversaries. To examine asymmetrical escalation, it is necessary to discuss the constraints and options states face, define asymmetry and escalation, as well as related concepts, such as power, and to present ways of operationalising these concepts.

The theoretical framework of this thesis is based on two separate, though related, theories: Firstly, a realist approach to explain the actions of states, their means and objectives, and the structure in which they interact. Secondly, a game theoretic approach to analysis of cooperation and conflict, what is sometimes labeled the *stragegy of conflict*, which provides a framework for understanding interactions between states within this international system. This chapter is concerned with the former – the realist approach to international relations – and with discussing and defining the theoretical concepts of rational actors, power, asymmetry, and escalation. The game theoretic analysis is covered in Chapter 3.

The chapter is organised as follows: It begins by discussing the theoretical background of the thesis, including a brief overview of key debates and developments in IR theorising. Then, the offensive realist approach to IR is

1. The Oxford Dictionary of Phrase and Fable, 2006.
2. ibid.

presented, and key elements of this theory are discussed. This is followed by an examination of the concepts of power, asymmetry, and escalation. The chapter ends by operationalising the theoretical postulations as hypotheses on weak party escalation in asymmetrical relations.

2.2   Paradigms in international relations theory

The realist school of thought traces its origins to the ancient works of Thucydides and Sun Tzu (Pevehouse & Goldstein, 2017, p. 39). The former's account of the Peloponnesian War (Thucydides, 1999) and the latter's guidance on strategy and conflict (Sun Tzu, 1988) both revolve around topics appreciated to this day. Moreover, while predominantly concerned with giving political advice to city state rulers in Northern Italy, and predating the Westphalian state, Machiavelli (1532/2007) is frequently cited as an early realist thinker. His decrees of retaining power at any cost and rejecting morality in politics resound in realist thought to this day (Pevehouse & Goldstein, 2017, p. 39). In the subsequent century, Hobbes (1651/1909) described the anarchic order as a state of nature characterised by war of all against all. Key concepts of contemporary IR thought, such as the security dilemma, balance of power, and mutual insecurity under anarchy, can trace their origins to these works (Nye & Welch, 2014, pp. 8-12).

Rejecting the immorality of power politics, Wilsonian idealism gained ground in the aftermath of the Great War's industrial scale slaughter, most clearly manifested in the establishment of the League of Nations (Nye & Welch, 2014, pp. 120-124). A part of the larger liberalist tradition, that traces its roots to Montesquieu, Kant, Bentham and Mill, idealism contended with realism in what has been described as the first of IR's great debates (Nye and Welch, 2014; Wegge, 2013, p. 15, see also Cooley and Nexon, 2021). Contradicting idealism, E.H. Carr's *Twenty Year's Crisis* (1939) and Hans Morgenthau's *Politics Among Nations* (1948) were the central works of the "palmy days" of realism in the '40s and '50s, and established the realist approach to IR (Quinn, 2018; Wæver, 1996, p. 155). This first great debate has been cast "[...] as one between altruistic moralists and egoistic power calculators." (Baldwin, 1993, p. 9) The dismal

failure of the League of Nations, the outbreak of the Second World War and the lowering of the Iron Curtain across Europe, established as conventional wisdom that realism won this debate (Wegge, 2013, p. 16).

The realism-idealism debate was followed by the second debate, where the behavioralist research programme challenged conventional IR methodology and epistemology. This lead to changes in the discipline, but fell short of establishing a new paradigm (Wæver, 1996, pp. 155-157). In the third debate, between realism, liberalism and marxism (radicalism), attention returned to the structure of the international system (Wæver, 1996, pp. 156-157). This inter-paradigm debate was increasingly viewed as not a competition to be won, as the paradigms were incommensurable. Rather, pluralism came to be seen as an enduring part of the tradition (Wæver, 1996, pp. 155, 158).

While realist theorising had lost momentum during the 1970s, this would soon change (Wegge, 2013, p. 19). Kenneth Waltz' *Theory of International Politics* (1979) marked a shift in the realist theory towards a more stringent scientific approach, abandoning human-nature-assumptions for a parsimonous structural theory: structural (alias neo-) realism (Quinn, 2018; Wæver, 1996; Wegge, 2013, pp. 161-163). Increased tension on the international stage during the period further advanced realism's position (Grieco, 1988). Some years later, the neo-liberal institutionalism of Robert Keohane (1984) consituted an analogous shift in the liberal paradigm.

Wæver (1996) considers two "fourth debates": debate 4a between reflectivists (constructivists, post-postivist) and rationalists (neo-liberalists, neo-realists), and 4b between neo-liberalism and neo-realism (pp. 164-167). The former debate was concerned with questions on the philosophy of science, with reflectivists emphasizing interpretation, social construction and the use of post-positivist methods; rationalists adopting postivist approaches in the search for a true reality believed to exist (Keohane, 1988; Wæver, 1996, pp. 164-167). The 4b debate pertained largely to the question of absolute versus relative gains: Neorealists argued that states are locked in a pursuit for survival and so worry about relative gains, hampering prospects for cooperation (Grieco, 1988, pp. 498-499; Waltz, 1979, p. 105, see also Wegge, 2013). Neoliberalists argued that international institutions mitigate the primacy of security concerns, making

states seek wealth and power[3] and disregard relative gains, thus improving prospects for cooperation (Keohane, 1984, pp. 25-27; Baldwin, 1993, pp. 4-8).[4] Unlike previous liberal-realist debates, however, it was not marked by incommensurable differences and conflict, but rather specific empirical questions (Wæver, 1996, pp. 166-167, see also Baldwin, 1993; Keohane, 1988).

The end of the Cold War lead to renewed challenges to structural realist views about international relations. "Every time peace breaks out, people pop up to proclaim that realism is dead" (Waltz, 2000, p. 39). Perhaps the most infamous was Francis Fukuyama's (1989) proclamation that liberal democracy was poised to spread to all corners of the globe, to affect the end of human history. Less ludicrous arguments have been advanced to the effect that developments in the latter part of the 20th century – such as the lack of armed conflict between the US and the USSR, and the emergence of a "pluralist security community" – contradict key realist positions (see e.g. Lebow, 1994; Schroeder, 1994). Waltz (2000) however, argues that these developments merely constitute changes within the international system, they have not changed the system itself (pp. 5-6, 18, 39-40; see also Mearsheimer, 2019).

2.3   Realism

While theoretical eclectisism has demonstrated the plausibility of combining several theories to tackle a single problem (Katzenstein & Sil, 2008), this thesis follows a single IR tradition, in line with most of the related literature (see Arreguin-Toft, 2001; Fearon, 1995; Mack, 1975). The choice of the rationalist approach follows from the problem statement and overall design of the inquiry – i.e., the constructivist view of the world as a social construct is hardly compat-

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3. As opposed to security and survival.
4. This is not to say that neoliberal insitutionalism argues cooperation between states is unconditional. Rather, neoliberalism agrees with the neorealist position that uncertainty about other's motives and plans – i.e. commitment problems – hampers cooperation. (For a neoliberal line of reasoning on this point, see Keohane, 1984, chapters 2, 4; for a neorealist approach, see Grieco, 1988, pp. 497-499.)

ible with quantifying unitary states' utility in game theoretical models.[5] The incommensurable differences between rationalism and constructivism mean that adopting an eclectic approach would be impractical for contributing to the general understanding of weak party escalation.[6] Using a single theoretical approach enables a more in-depth analysis of the mechanisms that can explain weak party escalation, as compared to briefly reviewing the question using various theoretical lenses.

Distinguishing the rationalist approaches – liberalism and realism – the former offers an "optimist" view on world politics, in particular on the role of institutions in ameliorating challenges stemming form the anarchic order (Keohane, 1988). Realism, on the other hand, is rather "pessimist", and sees little room for institutions to mediate between sovereign states seeking to fulfill their self-interests (Mearsheimer, 2001; Quinn, 2018). Rather, institutions are viewed as foreign policy tools of (powerful) states, not self-governing entities (Waltz, 2000, p. 21; Mearsheimer, 2019, pp. 9-11). Mearsheimer (2001) frames the state of world politics thusly: "Alas, the claim that security competition and war between the great powers have been purged from the international system is wrong" (p. 1).

Both the study of what is colloquially knows as hard power politics and that of strategy are inexorably linked to realism (Ayson, 2008). The realist tradition is broadly based on the assumptions that states are unitary actors and the central units of international relations, they seek power, interact in an anarchic system, and international politics is principally different from domestic politics (Lechner, 2017, p. 6). The various realist subschools generally hold variations over these statements as a common baseline, differing in the precise wording, meaning, and in the choice of auxiliary premises (ibid.).

The classical realism of Carr, Morgenthau and their contemporaries emphasises that the international system is anarchic in the sense that it is characterised by

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5. Notwithstanding limited use of rational actor models in constructivist IR scholarship, see Kubálková (2001), the assumptions underlying a strict game theoretic approach do contradict key constructivist assumptions and concepts.
6. As opposed to a strictly empirical study, where adopting several perspectives to interpret and analyse observations could be greatly beneficial.

absence of hierarchical authority, where the stability of the system is attributed to the balance of power (Morgenthau, 1973, pp. 167-172, see also Lechner, 2017, pp. 6-7). Furthermore, classical realism assumes that states seek to maximise their relative power vis-à-vis other states, and that such behaviour is a consequence of the inherent human lust for power – the "animus dominandi" (Lobell, 2010, pp. 3-4; Morgenthau, 1973, pp. 4-5).

2.3.1   System, units, and structural realism

Structural realism – alias neo-realism – is a more scientifically rigorous approach to the study of international politics (Wæver, 1996). Contrary to classical realism, it focuses on material capability rather than relational power (Wegge, 2013, p. 37).[7] As a structural theory, factors such as variation in domestic politics, political leaders, and ideological commitments are excluded from analysis (Waltz, 1979, p. 80). The crux of the theory is that the structure of the system influences the patterns of behaviour, forcing states to rely on self-help for their own preservation, and to place a premium on security in all political considerations (Waltz, 1979, pp. 91-93). While states may pursue supplemetary policies, "[...] the international environment severely penalizes states if they fail to protect their vital interests or if they pursue objectives beyond their means [...]" (Grieco, 1988, p. 488).

The key units of the international system are states, and the system is decentralised and anarchic, as all units are – formally – equal each other, with no one entitled to command, nor required to obey, any others (Waltz, 1979, p. 88).[8] The structure is formed by interaction between the states, whom are self-regarding units (Waltz, 1979, p. 91). States are functionally equal – all are sovereign[9] entities faced with similar tasks – but differentiated by variations in

7. A microtheory, it applies assumptions about actors and structure to explain how these actors interact in the system, stipulating expected outcomes under specific and constant conditions (Waltz, 1979, pp. 88-91, see also Keohane, 1984, pp. 27-29).
8. Note that while the emphasis on anarchy is a direct inheritance from classical realism, the two definitions of anarchy bear little or no resemblance.
9. There is a flora of definitions of sovereignity, and the concepts very suitability for analysis is contended. Waltz (1979) defines sovereignity broadly in terms of freedom of choice – i.e. a sovereign state can itself decide how to deal with issues internal and external – although

capability – they are not equally able to perform those tasks (Waltz, 1979, pp. 93-97). Institutions are viewed as incapable of acting decisively without the support or acquiesence of states, or without themselves taking on attributes and capabilities of states (Waltz, 1979, p. 88).

Variation in capabilities is what sets state apart – it defines their power – while the *distribution* of capabilities is an attribute of the international system as a whole (Waltz, 1979, pp. 97-99; Waltz, 2000, pp. 5-6). Crucially, the number of great powers in the system defines its structure, be it bipolar – as during the Cold War (Waltz, 2000, p. 27) – unipolar – as in the aftermath of the Cold War (ibid.) – or multipolar – as in the early 20th Century and in the present or near future (ibid., p. 32; Mearsheimer, 2019, p. 8).[10]

2.3.2   Cooperation, conflict, and offensive realism

The international system is characterised by competition, conflict, and uncertainty, and states therefore care about relative gains (Grieco, 1988, p. 487; Waltz, 2000, p. 39). Under mutual security competition, one state's gain in power is another state's loss, and states therefore adopt a zero-sum mentality (Mearsheimer, 2001, p. 34).[11] The emphasis on relative gains inhibits cooperation as states are weary of granting other states benefits, and thus are reluctant to enter into agreements even though they in mutually beneficial in absolute terms (Grieco, 1988, p. 487). Prospects for cooperation are further hampered by the mutual distrust between states, who cannot be certain that other states will abstain or be prevented from cheating (ibid., Mearsheimer, 2001, p. 51). While states ally in the pursuit of common interests, such arrangements are always temporary, and states must appreciate that an alliance partner is a potential future competitor (Mearsheimer, 2001, pp. 30-33, 52–53). In essence, the international system rewards selfish behaviour (ibid.).

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    not precluding that choices are constrained and influenced by others (p. 96).

10. Of these configurations, unipolarity is considered the least durable because dominant powers tend to embark on too many tasks and cause worry for lesser states (Waltz, 2000, pp. 27-28). Bipolarity is considered the most stable (Waltz, 1979).

11. Meaning that states act to maximise their own utility at the expense of others. In a zero-sum-logic, country A can only gain what country B loses.

The *security dilemma* describes the paradox that measures taken by a state
to increase its own security, may actually decrease it (Mearsheimer, 2001, pp.
35-36).[12] Herz (1950) describes the security dilemma as a situation where one
group fears for its security and therefore acquire more power. This renders
the other groups less secure, leading them to take steps to increase their
security. "Since none can ever feel entirely secure in such a world of competing
units, power competition ensues, and the vicious circle of security and power
accumulation is on" (Herz, 1950, p. 157).

The two subschools of structural realism draw different conclusions from the
premises of structural realism, defensive realism emphasising that aggression
is generally not a profitable strategy, offensive realism arguing that power
maximisation is the ultimate security guarantee (J. Snyder, 1991; Wohlforth,
2008, pp. 7-8). [13] Offensive realism then, argues that states aim to maximise
their share of world power at the expense of others, which leads great powers to
be locked in a perpetual struggle to become unilateral hegemons (Mearsheimer,
2001, p. 2). With states constantly seeking more power, war and conflict becomes
an endemic part of the system (Elman, 2004). While offensive realist theory
focuses on great powers for the reason that they are the most important
actors, the general assumptions and predictions equally apply to lesser states
(Mearsheimer, 2001, p. 54).[14] Great powers are in fact merely states exceeding

12. The security dilemma is principally a Prisoner's Dilemma (Nye & Welch, 2014), although it
    may under certain assumptions take the form of a Stag Hunt (Acharya & Ramsay, 2013).
13. While defensive and offensive realism represent the distinct subschools, structural realism
    has a third descendant in neoclassical realism (Ripsman, 2011, pp. 1-2). Neoclassical realism
    subscribes to the same scientific rigor and emphasis on strucutral causes as structural
    realism, but retains classical realism's attention to domestic level factors, variation in
    perceptions, and state leader attributes (ibid.). However, it does not retain classical realism's
    focus on human nature, passion, or the quest for power (Ripsman, 2011, p. 9). Neoclassical
    realism has however been criticised for including domestic variables on an ad hoc basis
    and for failing to adhere to structural realism's rigorous scientific program (Ripsman, 2011,
    p. 11).
14. Note that the extension of realist theory to small states is somewhat controversial, and
    a number of prominent scholars have limited their writings to great powers (Gleditsch,
    1999). E.g. Waltz (1979) applies his theory to small states only in the event that they are
    insulated from interference by great powers (p. 79). Morgenthau (1973) however, extends
    the basic assumptions of realism to all states (p. 208). Likewise, in his analysis of balancing
    and bandwagoning behaviour, Walt (1985) considers the actions and strategies of both

some threshold of material power. Accordingly, the offensive realist assumptions – that states are unitary, self-interested, power-seeking actors – are extended to all states.

Structural and offensive realism are fundamentally descriptive theories, seeking to explain and predict outcomes. However, they both contain a normative element in that states are prescribed recommended courses of action (see e.g. Mearsheimer, 2001, pp. 11-12). These normative positions are implicitly based on the assumptions of power and security as the principal good, in contrasts to theories arguing that actors in international politics should strive for some elevated moral or ethical principle (e.g. Critical Theory, with its drive for emancipation, see Bohman, 2021). The offensive realist position is closely linked to the tradition of raison d' etat,[15] following in line with Machiavellian ideas of cynicism in power politics (see Meinecke, 1924/1962). There is a clear parallel between this position on the descriptive and normative elements of theory, to theory on strategy of conflict,[16] which normatively seeks to prescribe optimal courses of action to attain a sought outcome, and by assuming that actors want to act rationally, give these predictions a descriptive element (Mercer, 2005, pp. 80-81).

2.4   Power

To analyse how states interact to maximise their power and security, it is necessary to review the concept of power and its application in international relations theory. There is no consensus in the IR literature on how to define and measure power (Mearsheimer, 2001, p. 55). A classic definition of power comes from Robert Dahl's 'intuitive idea of power', that "A has power over B to the extent that he can get B to do something that B would not otherwise do" (Dahl, 1957, pp. 202-203, for IR-specific adaptations of this concept, see Morgenthau,

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weak and strong states.

15. Lit. *reasons of state*, the notion that use of violence and contravention of laws is permissible and the norm in the pursuit of the state's vital interests (Lechner, 2017; Meinecke, 1924/1962).

16. See Section 2.4.1 and Chapter 3.

1973, pp. 27-33; Nye and Welch, 2014). These are relational power definitions, as they concern themselves with the interaction between subjects, effectively treating power as a form of causation (Baldwin, 1983, pp. 161-163). As relational power definitions are outcome-oriented, an actor's power can only be measured ex post (Keohane, 1984, pp. 20-21). Measurement is complicated by the fact that the absence of contestation over an issue can also be a consequence of the exertion of power (see Lukes, 1974, pp. 24-25.[17]

In contrast to these definitions, offensive realism defines power in terms of resources Mearsheimer, 2001, p. 57, see also Waltz, 1979, pp. 131, 192). Mearsheimer (2001) distinguishes between *potential power* – defined by population, economy and other factors required to build military power – and *actual power* – defined by military assets (pp. 43-44, see also Walt, 1985, pp. 9-12 for a similar distinction).[18] Mearsheimer (2001, pp. 33-36) argues that states always seek to maximize their power relative to other states – ie. to alter the *balance of power* in their favor – applying economic, diplomatic, military and other means to gain power at other's expense. Thus, in this thesis, power is defined in terms

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17. Note that Dahl (1957) goes on to define the power of A (over a) as the difference in the conditional probabilities of a performing some action x given that A does or does not perform some other action, w. Let M be power and $\overline{w}$ be the abstention of performing w. $p1$ is the conditional probability that a performs x given that A performs w (Dahl, 1957, pp. 205, 207–208):

$$p1 = P(a, x | A, w)$$

$p2$ is the conditional probability that a performs x given that A does *not* perform w:

$$p2 = P(a, x | A, \overline{w})$$

A's power over a is then defined as the difference between these two conditional probabilities:

$$M\left(\frac{A}{a} : w, x\right) = p1 - p2$$

It is readily apparent that obtaining sufficient data to measure power using this definition would be extremely resource intensive, and in most cases, impossible. To collect data on these conditional probabilities not only requires measurement to be performed ex post, but also that a's action with regard to x is measured repeatedly in both cases, (A, w) and $(A, \overline{w})$. Note that while the 'intuitive idea of power' is a definition of potential power, the definition quoted in this footnote pertains to actual power, see also Lukes (1974, pp. 11-12).

18. The term potential power is used interchangeably with latent power, and the term actual power is used interchangeably with the term military power. For a recent application of this distinction between latent and actual power, see Moghadam and Wyss, 2020, pp. 155-157.

of material assets in relation to the material assets of other states – i.e., relative material power.[19]

2.4.1   Strategy and rationality

Mearsheimer (2001) lists four strategies states employ to cope with challengers: *buck-passing* – getting another state to carry the burden of checking the aggressor; *balancing* – mobilising resources to directly deter the aggressor, either one's own resources (internal) or through alliances (external); *appeasement* – making concessions to an aggressor to remedy its security concerns and thus diminish its motive for war; *bandwagoning*[20] – joining forces with the more powerful opponent (pp. 155-165). In jackal bandwagoning, a state aims to benefit from a stronger state's power, and supports the strategic project of the strong state in exchange for security attainment or a share in the spoils of conquest (Schweller, 1994, pp. 93-94). Of these strategies, both bandwagoning and appeasement are in general detrimental to a state's security and therefore should be avoided by those states with sufficient power to sustain alternative strategies (Mearsheimer, 2001, pp. 162-164).

Studying the "[...] rational, conscious, artful kind of behavior" in conflict – *strategy of conflict* – may serve both to achieve success in conflicts, and to understand how they unfold (Schelling, 1960, pp. 3-4). Here, the term strategy is derived from game theory, where a game of strategy is one where what constitutes the best response for one player depends on the action of the other players (Schelling, 1960; von Neumann & Morgenstern, 1944, p. 3). The study of strategy – in the sense applied here – is limited to the assumption of rational behaviour (Schelling, 1960, p. 4). Furthermore, rational behaviour is an underpinning assumption of the rationalist research agenda (see Keohane, 1984; Waltz, 1979). Rational behaviour analysis remain in widespread use, and

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19. I return to the details of measuring power in Section 2.4.2 and Section 4.2.
20. The definition of bandwagoning and balancing is a point of disagreement in structural realist theory. Waltz (1979) defines balancing as alignment with the weaker side, and bandwagoning as alignment with the stronger (pp. 125-126). The balance-of-threat-theory formulated by Walt (1985) defines bandwagoning as alingment with the stronger threat, balancing as alingment with the lesser threat (p. 4).

have recently been applied to questions such as the U.S.-Iran standoff (Devlen, 2010), European Union security policy (Strikwerda, 2017), and the strategic situation in the Baltics (Veebel, 2019).

Analysing international relations under the assumption rational behaviour simplifies premises, makes decuctions clearer, and concentrates attention on systemic constraints imposed on actors (Keohane, 1984, p. 29). Assuming rationality means that explanations of actor's behaviour ignores their idiosyncrasies – such as values, internal arrangements, efficiency, and so forth (Keohane, 1984, p. 27).[21][22] In the context of conflict, rationality implies that states in conflict with each other stringently considers the options available to them, and the risks and payoffs associated with each strategy, before selecting their course of action (Fearon, 1995, pp. 379, 383–384).

The seven assumptions underpinning rational actor theory are that (1) the individual is the basic actor, (2) that he pursues goals, (3) which reflect his self-interest, (4) based on conscious choice, (5) having consistent preference orderings, (6) will choose the alternative with the highest expected utility, and (7) possesses information on possible alternatives and the likely consequences of choices (Monroe, 1991, p. 4). While rational actor models principally applies to individuals (ibid.), it has long been commonplace in IR theory to extend the same assumptions to states (see, e.g. Keohane, 1984; Mearsheimer, 2001; Waltz, 1979).

Rational behaviour analysis is restricted by the fact that the derived results may or may not be good approximations of actual behaviour (Mercer, 2005, pp. 78-80, see also Schelling, 1960, p. 4). The discrepancy between normative and descriptive behaviour has been subject to considerable debate, and scholars have considered individual's performance errors, computational limitations, and subjects or researchers applying the wrong normative model to

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21. It is, as such, congruent with the offensive realist framework as discussed above.
22. Furthermore, if one assumes rationality as a baseline where departures from this are idiosyncratic and non-systematic, the difference between rational and actual behaviour become irrelevant given a sufficiently large sample of observations (Mercer, 2005, p. 84). The assumption of departures from rationality as random has however been criticised (ibid., pp. 84-89).

the considered tasks (Stanovich & West, 2000, pp. 645-646). Haselton et al. (2009) argue that much of the observed discrepancy is due to bad research design, and that the human mind exhibits largely rational behaviour (p. 755). In essence, while it has marked limitations, rational actor modeling is a useful analytical framework to interpret empirical observations, generate hypotheses and analyse causal mechanisms (Hovi & Rasch, 1993, pp. 19-20).

2.4.2   Asymmetry

Arreguin-Toft (2001) defines an asymmetrical state dyad as a pair of states with a large gap in relative material power between them (p. 94).[23] This asymmetry in power causes asymmetry in the relationship between the states (Mack, 1975, pp. 181-182). The key consequences of asymmetry are that the weak party attaches greater importance to the relationship,[24] and that the strong party poses an existential threat to the weak, while the weak does not threaten the survival of the strong (Mack, 1975, p. 181).

There are however competing definitions of asymmetry. Nutter (1994) describes the *force interface* – the ability to engage the opponent militarily – as a necessary condition to impose a threat.[25] Mack (1975) notes that an important aspect of asymmetrical wars is that the weak actor cannot harm the strong's homeland. Technological advances may render these points of less relevance, however, as modern Long-Range Strike (LRS) and cyber weapons may enable military marginal states – and in some cases, even non-state actors – to produce strategic effects (Salonius-Pasternak, 2020, pp. 4-8; Kello, 2013, pp. 22-25).

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23. As such, it is not a state's power per se that is considered, but its power compared to that of a specific other state. Consequentially, a state can be classified as both weak and strong, depending on which state it is compared to.
24. A.O. Hirschman, 1980, quoted in Womack (2015, p. 3)
25. The force interface can take on one of three distinct values – positive, negative or asymmetrical: A positive force interface is the U.S.-Soviet Cold War posture, where both sides fielded strategic nuclear weapons capable of targeting the other's homeland, a negative force interface is the Paraguayan de jure war on Germany from February to May 1945, where non of the parties were in a position to harm the other, and an asymmetric force interface is the Vietnam war, where the U.S. was able to inflict force on North Vietnamese territory, while the opposite was not true.

As an alternative approach, Womack (2015) defines an asymmetrical relation-ship as one where the disparity in capabilities is great enough to make the smaller state significantly more exposed to the interaction between the states, yet not so overwhelming that the larger can unilaterally dictate terms (Womack, 2015, pp. 7, 10). Womack's *asymmetry theory* has several problems, however. Firstly, his definition of asymmetry excludes several of the cases on which his argument builds,[26] and (perhaps inadvertently) defined asymmetry and symmetry as equivalent relations – crippling the exercise altogether.[27] The definition applied by Arreguin-Toft (2001) is congruent with offensive realist perceptions of power, and also applied by Angstrom and Petersson (2019) in their study of weak state escalation. It is therefore the one applied in this

26. Womack (2015) quantifies his threshold for asymmetry as between the capability ratios 1:1.5 and 1:10, where capability is defined in terms of several non-composite proxies – inter alia demographic power (population) and technological power (per capita productivity) (pp. 6-8). However, to take a pertinent example, the population of North Vietnam accounted to less than 10 percent of the U.S. population, which is Womack's threshold for overwhelming, ie. non-asymmetrical, relationships (pp. 7-9). The population of the U.S. in 1972 was 209 million (World Bank, 2021), while North Vietnam's was estimated at 20.1 million (Central Intelligence Agency, 1972). This makes North Vietnam's population 9.62 percent of the U.S. population. A less than 10 percent weak to strong actor ratio was clearly also the case for the Sino-Vietnameese war, another of Womack's examples. The disparity is even greater if GNI – another proxy applied by Womack – is used. Besides this self-contradiction, the outcome of the Vietnam war makes it reasonable to discard a theory which predicts that the U.S. should have been "[...] able to dictate unilaterally the terms [...]" with North Vietnam, see Womack, 2015, p. 10.

27. Womack represents the distinction as follows: "[...] asymmetry theory analyses $A > B \rightarrow A \neq B$, while symmetry assumes $(A > B) = (A = B + x)$, where x is the difference in capabilities." (Womack, 2015, p. 13) However, it is evident that this definition makes symmetry and asymmetry mathematically equivalent, $(A = B + x) \equiv A \neq B$, given $x \neq 0$, which is a logical necessity given $(A > B) = (A = B + x)$. Ergo, while asymmetry is said to be a situation where A is greater (i.e. more powerful) than B, implying that A is unlike B (see the first equation in the quotation above); symmetry is said to be a situation where A is greater than B, but A is also equal to B plus x, where x denotes the difference in capabilities. (Note that as A is greater than B, x must be negative number. While this makes the equation less intuitive to interpret, it has no consequences for the result.) Asymmetry then, is that A is greater than B, implying that A is unlike B, while symmetry is that A is greater than B, with them equal except for the difference in power, x. However, as x is not zero (it cannot be, as A is greater than B), this second equation is equivalent to saying that A is unlike B, as in the first equation. Asymmetry and symmetry are thus defined as mathematically equivalent relations. Q.E.D.

thesis.[28]

Under the prevalent view that superior power prevails, it follows logically that in situations of asymmetry, a rational weak actor cannot pursue aggressive intentions, as he would almost certainly loose (Arreguin-Toft, 2001, p. 94). But the assumption of the strongest might is disproven empirically (Paul, 1994, p. 4), and criticized theoretically – "[...] power calculations alone do not determine which side wins a war. Clever strategies, for example, sometimes allow less powerful states to defeat more powerful foes" (Mearsheimer, 2001, p. 34). In his analysis of post-World War II asymmetrical conflicts, Mack (1975) concludes that "[...]the simplistic but once prevalent assumption – that conventional military superiority necessarily prevails in war – has been destroyed" (Mack, 1975, p. 177). Habeeb (1988) distinguishes between structural (analogous to material) power and issue-specific power, the capabilities and position an actor has in relation to another over a specific mutual issue, determined by the actors' alternatives, commitment, and control over the issue (pp. 17-23).

With asymmetrical relations defined as a substantial gap in power in a state dyad, states must be categorized as strong or weak, and relationships between states categorized as symmetrical or asymmetrical. For such categorizations it is necessary to measure state's material power in a quantifiable manner.[29] Unlike economic power, which is universally measurable in money, political power has no general unit of measure (Baldwin, 1971).[30] Measurement of power does therefore require the use of proxies, a practice well established in the literature (Arreguin-Toft, 2001; Carroll & Kenkel, 2019, p. 577). I return to this question in Chapter 4.

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28. I return to the precise definition and measurement of asymmetry in Chapter 4.

29. As relational power is based on outcome, the winner would always be the strongest actor. If in analysing how power – political means – affect outcomes – political ends – means are defined in terms of relational power, it would result in a circular logic (Mearsheimer, 2001, pp. 58-60). Furthermore, defining the actor's power ex ante requires power to be measured in terms of material assests as measurement of relative power can only be made ex post (ibid.). Were asymmetrical conflicts analysed in terms of relational power, the victor would always be the strong party – if A conquers B, A is strong and B is weak. The pre-existing gap in the balance of power between A and B, the *asymmetry*, would effectively be removed from the equation.

30. See Section 2.4.

On the definition of relationships as asymmetrical, a variety of thresholds have been used. Paul (1994) uses a difference in power of 2-to-1. It has also been suggested that the military rule of thumb that a 3-to-1 superiority is a necessary condition for a successful offensive action, could be extended to define asymmetry between states (Nutter, 1994, p. 37).[31] Arreguin-Toft (2001) uses a threshold of 5-to-1, but divides the strong actor's power by a factor of 2 – simulating the tendency of major powers to have diverse security interests – resulting in an effective threshold of 10-to-1 (p. 96).[32] Angstrom and Petersson (2019), basing themselves on Arreguín-Toft's work, use the 5-to-1 threshold without the halving operation.[33] Testing the conjecture that prepondarence of power – i.e. asymmetry – promotes peace, Weede (1976, pp. 399-400) also uses a threshold of 10-to-1. There is no general agreement on which threshold to apply, and none of the mentioned works offer any substantiated arguments for the threshold applied. The 10-to-1 threshold is applied in this thesis due to its strictness, and its commonality and lineage in two of the key works on which this thesis is based, namely Arreguin-Toft, 2001 and Angstrom and Petersson, 2019. In summary, a state dyad is considered asymmetrical if the material power of the strong state, measured as the product of latent and actual power, as per the Composite Index of National Capability (CINC) indicators,[34] is ten times greater than that of the weak state, or more.[35]

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31. For a discussion on the 3-to-1 rule's merits and limitations, see Mearsheimer (1981).
32. To show how this is the case, consider the following example: Let a denote the strong state's power, and b denote the weak's. By Arreguín-Toft's criterion (see pp. 94, 96, fn. 2, 9), the dyad is classified as asymmetric if the following condition is satisfied:

$$\frac{a}{2} \geq 5b$$

Multiplying both sides by 2:

$$\frac{2 \times a}{2} \geq 2 \times 5b$$

Solving yields:

$$a \geq 10b$$

Ergo, using a threshold of 5-to-1 where the strong's power is halved is equivalent to use a 10-to-1 threshold with nominal values for both states' power.
33. Prima facie, this difference or modification appears inadvertent. The authors do not discuss classification or measurement in any detail.
34. See Section 4.2.
35. Chapter 4 expands on the details of measurement and ranking. See also Appendix I for a thorough description and comparison of different proxies. In Appendix II, all conflicts

2.5   Escalation

Escalation may be defined as "[...] deliberate changes in quantitative or qualitative dimensions of the use of force" (Angstrom & Petersson, 2019, p. 283).[36] Morgan et al. (2008) emphasises that escalation entails *increasing* intensity or scope *beyond some threshold* one or more of the actors hold as significant (Morgan et al., 2008, p. xi). Such thresholds may be e.g. (the initiation of) military combat or the distinction between conventional and nuclear warfare (see Kahn, 1965, pp. 40-42, 94). Kahn (1965) does however define escalation as encompassing both war, peace, and gradients between, including the use of both potential and actual force (p. 15). Furthermore, escalation is not limited to outright violence, but can take place on a wide spectrum, from sabre rattling to all-out warfare (Angstrom & Petersson, 2019).

Kahn (1965) distinguishes between three types of escalation: *Increasing intensity* – introducing new weapons, attacking previously spared targets – *widening area* – expanding the geographic scope of the conflict – and *compound escalation* – precipitating conflict elsewhere, removing constraints on harm to civilians or the environment (Kahn, 1965, pp. 4-6, see also Morgan et al., 2008). These categories are also labeled vertical, horizontal and political escalation, respectively (Morgan et al., 2008, pp. 18-19). Technological and political developments, such as nuclear proliferation, the increasing reliance on computer networks and advent of cyber attacks makes a wider range of escalatory options available for actors in conflict (Morgan et al., 2008, pp. 38-40, 168–169). Additionally, modern technology enables the crossing of escalatory thresholds to be conducted in shorter time than before (ibid.).

The essence of escalation – as promulgated by Kahn (1965) – is that in conflict between two actors, one side can usually win if it increases its effort while the other side does not (p. 3).[37] The gain of this victory will usually outweigh the

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cited in the thesis are classified as symmetric or asymmetrical using this proxy.

36. An alternative view on escalation conflates the term with the initiation of war or hostilities (see Angstrom and Petersson, 2019). This position is prominent in works on the risks of inadvertent (nuclear) war (see e.g. Talmadge, 2017, pp. 57-59).

37. Consider as an example the Sino-Soviet border clash. If the Soviet Union had increased the intensity of its fighting – by deploying far larger forces or applying nuclear weapons –

cost of the escalatory move.[38] Escalation by one actor often leads the opponent
to respond in kind (Morgan et al., 2008, p. 1). It is the resulting fear that the
other side may react – or overreact – that often results in escalation taking the
form of a competition in risk-taking or resolve (Kahn, 1965, p. 3).

Escalation may be deliberate – intentional and calculated – inadvertent – by
miscalculation, crossing a threshold significant to the opponent but not re-
cognized as such in advance – or accidental – by strictly unintended action
(Morgan et al., 2008, pp. 20-29). Eruption is a term related to, but distinct
from, escalation, which refers to the sudden change from a low-level conflict to
an all-out conflict (Kahn, 1965, p. 6). The ability to control further escalation
has important consequences for an actor's decision to escalate, as it would –
e.g. – be unlikely to execute an otherwise advantageous increase in effort, if
it would likely lead to an all-out nuclear war (Talmadge, 2017). As such, the
decision to escalate is not only contingent on one's own prospects for gaining
an advantage, but must also include calculations of the likelihood that the
opponent will escalate further in response (Smoke, 1978).

The escalation ladder is a metaphorical tool to the analysis of escalation, where
the options available to the parties of a conflict are listed in decreasing order,
with low-level means of conflict in the lower part, levels of increasing intensity
making up the ladder's rungs (Kahn, 1965, pp. 37-51). Escalation dominance
describes the capacity of one side in a conflict to enjoy clear advantages over
the other in a specific region of the escalation ladder (Kahn, 1965, pp. 290-
291). It is the ability of one actor to escalate a conflict in ways that are costly
or disadvantageous or costly to the opponent, while the latter is not able to
respond in kind because it has no escalatory options, or because those that it has
would not be advantageous to use (p. 15). Escalation dominance is a product of

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    while China maintained only limited forces without nuclear weapons in the theater, the
    former would surely win.

38. The war on the Eastern Front of the Second World War (Great Patriotic War) may serve
    to illustrate this point. At the outset of hostilities, Nazi Germany deployed the largest
    invasion force in history, and initially enjoyed great progress. However, when the Soviets
    gradually increased their strength in personnel and matériel, the Germans were unable to
    increase their efforts correspondingly, leading to the German retreat and eventual defeat.
    The costs incurred by the Soviets by escalating was – it may reasonably be argued – offset
    by the avoidance of defeat and the conquest of Eastern Europe.

the competing capabilities the respective actors have on the specific rung of the escalation ladder, what they percieve will result from a move to other rungs, and the means they have to force a move (Kahn, 1965, pp. 290-291).[39]

Holding escalation dominance gives a powerful advantage in conflict (Morgan et al., 2008, pp. 15-16). An actor may hold escalation dominance on a particular rung of the escalatory ladder – say, in conventional ground war – despite the other actor having superior capabilities in, say, nuclear war. However, complete escalation dominance – where the opponent is unable to effectively escalate at any level of conflict – is rarely attainable, even when there is a very large disparity in power between the belligerents (Morgan et al., 2008, p. 16). Besides advantages in power,[40] escalation dominance can be achieved by maintaining an asymmetry in means of conflict, where one possess a tool of coercion which the opponent does not have (Morgan et al., 2008, pp. 16-17).[41] As the opponent cannot respond symmetrically to such escalation, it faces a dilemma of no response or of escalating even further (ibid.). This underpins what Angstrom and Petersson (2019) terms the strategy of *compartmentalisation*, where a nominally weaker states escalates in one domain where it holds escalation dominance, while deterring the stronger adversary from further escalation still (pp. 290-291).[42] A similar logic is found in the concept of *escalate to de-escalate*,

39. As an example, Kardaş (2020) uses variations in the level of escalation dominance to explain variation in Turkey's escalation in the Libyan Civil War, arguing that limited international involvement in Libya in 2019 and the first half of 2020 afforded Turkey escalation dominance, but that this was eroded when a number of states took more decisive interest in the conflict. This increased the level of commitment required by Turkey, and its escalation dominance waned as the cost of maintaining superior escalatory capability became too high.

40. "That side which has least to lose by eruption, or fears eruption the least, will automatically have an element of escalation dominance" (Kahn, 1965, p. 290).

41. E.g. State A may have conventional, chemical, and nuclear weapons, while state B only has conventional and nuclear. If A escalates by using chemical weapons, B may face a serious strategic dilemma – not escalate in return, or go nuclear? If there is significant cost or danger associated with nuclear escalation – and there usually is – the escalation to chemical weapons can be truly beneficial for A.

42. Angstrom and Petersson (2019) discuss the strategic logic of compertmentalisation by reference to the Napoleonic wars, where Britain choose to escalate the war on the seas (where the Royal Navy ruled the waves), while using a series of tactics to dissuade France from escalating further, i.e., invading the British Isles.

which entails the limited use of nuclear weapons to deter the opponent from escalating in the conventional domain (Acton, 2018, p. 68).[43]

Horizontal escalation plays a key role in warfare, especially so in hybrid conflicts (Diesen, 2018; Reichborn-Kjennerud & Cullen, 2016). In hybrid warfare, actors identify escalatory thresholds and operate below them, while exploiting "gray zones" without thresholds or proper defenses established (Reichborn-Kjennerud & Cullen, 2016, p. 2). Actors can achieve ambiguity by maintaining plausible deniability – e.g. through the use of non-attributable forces or proxies – or the use of power not clearly coercive in nature (ibid.). In hybrid warfare, horizontal and vertical escalation is combined, synchronizing efforts through various means enabling the production of good effect without crossing salient escalation thresholds (Reichborn-Kjennerud & Cullen, 2016, pp. 2-3). This compounds difficulties of tacit and explicit agreement on thresholds, deterring and managing escalation, and establishing escalation dominance. Another development is the aversion to heavy casualties in limited conflicts, which may also give escalatory power to the weak (Morgan et al., 2008, p. 40).

Writing on a subset of asymmetrical escalation – war initiation by weaker powers – Paul (1994), argues that different military strategies offer varying levels of room for success for the weak party. Of the three categories of military strategy – attrition/maneuver,[44] blitzkrieg,[45] and limited aims/fait accompli[46] – only limited aims/fait accompli may offer the weak state a reasonable prospect for success in offensive war with a stronger opponent (pp. 24-35).[47] Similarly,

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43. It has been proposed by Western scholars that Russia might use this strategy, employing its advantages in tactical nuclear weapons to offset NATO's conventional superiority in Europe.

44. Attrition/maneuver refers to war where the objective is victory through a series of set piece battles.

45. Blitzkrieg refers to war where the objective is to pierce the enemy's front with a narrow, highly mobile armoured spearhead, to pass the bulk of his forces and penetrate deep into his rear areas to sever his lines of communication.

46. Limited aims/fait accompli refers to war where the objective is to make a minor land grab or achieve some other (minor) political objective without engaging in a large-scale conflict.

47. Paul uses a threshold of power asymmetry of $\geq 2 : 1$, as opposed to the stricter $\geq 10 : 1$ threshold used in this thesis. Nonetheless, several of the cases cited by Paul are also classified as asymmetrical using the definition and threshold adopted in this thesis.

Arreguin-Toft (2001) shows how in asymmetrical wars, the relation between the strategies adopted by the actors are a reliable predictor of the outcome. Weak states adopting an indirect defence – guerrilla – strategy can blunt the strong state's advantage in war by denying him to leverage his full military strength, as deployed in a direct attack – attrition/blitzkrieg/manoeuvre – strategy.

In initiating a limited conflict, the weak party escalates, but in a constrained manner. The conflict is moved gingerly up the escalatory ladder, seeking to dissuade the strong from escalating further, to where he would be able to leverage his full strength. The fait accomplí strategy's viability for weak states is improved by the fact that it places heavy emphasis on strategic surprise and on engaging only a limited portion of the forces of the defender (i.e. the strong state), while establishing a new status quo which the strong may face significant incentives to accept (Mearsheimer, 1983, pp. 53-56).[48] If successful, the defender (strong) state must go on the offensive, which is militarily more difficult than defense (ibid.). A guerilla strategy also enables the weak to offset the power discrepancy, as discussed in Chapter 1. In summary, limited aims strategies are usually easier to achieve than more comprehensive strategies, such as blitzkrieg and attrition (Glaser & Kaufman, 1998, pp. 53-54).[49] An alliance between the weak state and a great power can also ameliorate the advantage held by the strong state. "The great power's defensive support can help ensure that the [strong state] does not escalate the conflict beyond the weaker state's capability limits" (Paul, 1994, p. 31).

Furthermore, Paul does not apply a consistent criterion for classifying states, meaning the difference between the 10-to-1 and 2-to-1 thresholds are prima facie not significant for this discussion. Appendix A1.8 contains calculations of the power balance in Paul's cases using my proxy and threshold.

48. As opposed to an attrition/blitzkrieg strategy which aims to inflict a decisive defeat on the opponent, and thus entails engaging the its main force (Mearsheimer, 1983, pp. 53-56).

49. Nonetheless, limited aims strategy is fraught with danger in the current era, as nation states generally are reluctant to concede parts of their own territory (Mearsheimer, 1983, pp. 53-56). Furthermore, as Schelling (1960) notes, "Limited war requires limits [...] but limits require agreement [...] and agreement on limits is difficult to reach" (p. 53).

Table 2.1: Angstrom & Petersson's four logics of weak party escalation.

		External support	
		Yes	No
Escalation dominance	Yes	Division of labour	Compartmentalisation
	No	Provocation	Reputation

2.6 Operationalisation

Based on the discussions in the preceding sections, I now turn to formulate hypotheses about the mechanisms that can explain why asymmetrically weak states escalate conflicts with their more powerful adversaries. The hypotheses are derived from the discussions of this chapter, and serve as the basis for the game theoretic analysis in the next chapter. These hypotheses are based on the rationalist assumptions outlined in this chapter, are conditioned on ceteris paribus constraints, and assume optimal behaviour – "[a]ctual state behavior is not always optimal, but analysis performed assuming optimality remains useful" (Glaser & Kaufman, 1998, p. 56).

The hypotheses follow a deductive-statistical approach, which means that they have limited ability to explain the outcomes of specific cases (Hovi & Rasch, 1996, pp. 55-58). Rather, the hypotheses describe mechanisms, which explain behaviour without deterministically forecasting any specific outcome (ibid.). As such, the hypotheses does not stipulate that the dependent variable – weak state escalation – will occur if the particular independent variable is present; but rather, that weak state escalation may be a rational strategy under the conditions of the independent variable. Thus, they predict that the dependent variable occurs more frequently when the independent variable is present, than when – ceteris paribus – it is not.

As noted earlier, Angstrom and Petersson (2019), propose four mechanisms that can explain weak party escalation. These are shown in figure 2.1. I take these

as a starting point for my hypotheses, but based on my theoretical discussion, a number of refinements are in order.

Angstrom and Petersson (2019) specifies strategically logical explanations for weak party escalation for each combination of values on the two variables "External support" and "Escalation dominance". To illustrate this, consider the mechanism labeled "Reputation". The rationality of escalating to forge a reputation is contingent on specific factors of the players' private information and likely long-term consequences of submission (see Fearon, 1995, p. 400). Merely the absence of escalation dominance and alliance support is neither a sufficient or necessary condition to rationally engage in such costly signaling (see Elster, 1989, pp. 6-10.)[50] Ergo, while the mechanism of "Reputation" may very well explain weak party escalation in the absence of support and escalation dominance, the absence of support and escalation dominance does not provide an explanation for the occurence of "Reputation"-escalation.

In the preceding discussion, three distinct explanations of weak party escalation were identified. The first is support from a strong state, the second is limited strategic advantage, and the third is costly signaling. The hypotheses propose that each of these respective independent variables could make weak party escalation a rational act. As noted in Section 2.4.1, rational behaviour models attain their descriptive value by the established connection between rational and actual behaviour. Chapter 3 aims to demonstrate how each of these variables may – given certain assumptions – make weak party escalation rational. Chapters 4 and 5 are devoted to inquire about the descriptive validity of this approach, focusing on the mechanism in Hypothesis 1.[51]

Of the two alliance-related mechanisms, the difference between them is essentially a distinction between balancing and bandwagoning. The "Division of labour" mechanism is essentially an instance of offensive (Walt, 1985, pp. 7-8) or jackal (Schweller, 1994, pp. 93-94) bandwagoning, while the "Provoca-

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50. I.e., the rationality of signaling is derived from factors other than the state's (lack of) capability. Just because a state cannot be victorious if the conflict escalates, does not make it rational to escalate for reasons of signaling.

51. Reference the discussion in Section 2.4.1 on the connection between rational and actual behaviour.

tion" equates to external balancing, where a minor act of escalation serves to establish credible extended deterrence (see Angstrom and Petersson, 2019, pp. 292-293). However, in the framework of this thesis, both mechanisms have the same means and ends, even though the precise intent is different. While the difference between balancing and bandwagoning is in no way insignific-ant, in the context of weak party escalation, it is not pertinent to distinguish between escalation in external balancing and bandwagoning strategies. As such, I consider external support to be a single independent variable.

- Hypothesis 1: External support from a strong state enables a weak state to rationally escalate against another strong state.

Such escalation requires two conditions to be met. For one, the weak state's ally must be able to match or dominate the adversary on some higher rung of the conflict's escalatory ladder, to deter further escalation, and the ally must maintain a credible extended deterrent posture over the weak state.

- Hypothesis 2: Adopting a limited aims strategy enables the weak state to rationally escalate against a strong state.

This hypothesis rests on the argument made by Paul (1994) to explain weak party war initiation – that is, the weak actor can under certain conditions utilise a limited aims strategy to achieve his political objectives in face of superior opposition. The limited nature of the escalation may make further escalation irrational for the superior state, or at least reduce the likelihood that such escalation will occur. In using a limited aims strategy, the weak state may mitigate its disadvantage in power and attain a better outcome compared to the outcome of maintaining the status quo. Limited aims strategy here refers to both offensive fait accomplí-type assaults and guerilla strategy defence (see Arreguin-Toft, 2001; Mack, 1975; Paul, 1994). For this type of escalation to be rational, such a strategy must both be viable – i.e., the prerequisites to carry it out must be present – and the strategy must be adopted and carried through. The weak state must furthermore be able to preempt the strong state from conducting further escalation.

- Hypothesis 3: A need to communicate private information about resolve

enables a weak state to rationally escalate against a strong state.

This hypothesis is conditioned on the weak state facing a predicament between an untolerable status quo and an unwinnable conflict. In essence, it can either escalate and be defeated, or do nothing and be defeated. Otherwise private information regarding the cost of conflict can be communicated through escalation as costly signaling. This may be advantageous either by tricking the other to make concessions, or if war ensues, to improve its bargaining position and deter future aggressors (see Angstrom and Petersson, 2019; Fearon, 1995, pp. 395-396).

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Modelling asymmetrical escalation

*The one with many strategic factors in his favour wins, the one
with few strategic factors in his favour loses*

Sun Tzu[1]

The previous chapter laid out the overall theoretical framework, and positioned the thesis in central debates on IR scholarship. A key point was that in a conflict between states with power asymmetry – ceteris paribus – the strong actor is destined to prevail, but that certain factors may allow the weak state to offset this disadvantage. The chapter concluded by positing a list of hypotheses about possible such factors. The purpose of this chapter is to formalise the hypotheses into game theoretical models, which enables a thorough discussion on the mechanisms that may explain the phenomena of interest. Here, the hypotheses form the foundation for analysing the prerequisites of weak party escalation.

The game theoretical framework enables a more stringent analysis of how the hypothesised conditions influence escalation in asymmetry. von Neumann and Morgenstern (1944) argue that sociological problems – which in today's parlance would extend to problems of political science and international politics – are best approached through game theory (ibid., p. xxvii.). The use of models for analytical clarity is common in IR scholarship. "While the simplicity of game models leads to a clarity that illuminates social phenomena, the deductive apparatus of game theory allows us to infer new understandings about international politics." (Snidal, 1985, p. 28).

3.1   Threats and deterrence

Threats and deterrence plays a key role in strategy in general, and in inter-state conflict in particular. It is therefore pertinent to briefly review these concepts as they pertain to inter-state conflict and escalation. The classic definition of deterrence is "[...] the *discouragement of military aggression by the threat (implicit or explicit) of applying military force in response to the aggression*"(G. H.

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1. Sun Tzu, 1988, p. 56.

Snyder, 1960, p. 167). This definition marks deterrence as a negative form of relational power (ibid.). Deterrence is a game of strategy, i.e., a situation in which the best course of action for one player depends on the action of another (Schelling, 1960, pp. 9-10). There are two categories of deterrence: Deterrence by denial – denying the opponent the ability to make the move being deterred; and deterrence by punishment – granting the opponent the move, but denying him the gain by the prospect of inflicting a greater cost in retaliation (G. H. Snyder, 1960).[2] Deterrence requires that the involved parties are both in a conflict and share potential common interest (Schelling, 1960, p. 11). Ergo, deterrence is a strategic non-cooperative, non-zero-sum game.

Deterrence is a form of threat, and to be effective it therefore must be credible (Schelling, 1960, p. 6). G. H. Snyder (1960) defines credibility as the to-be-deterred's perception of the probability that the deterrer will follow through with the threat if his conditions are not met, or make true the promise if the conditions are met (p. 164). Furthermore, a threat can only constrain an opponent insofar as it carries some appearance of obligation (Schelling, 1960, p. 123). The commitment to a deterrent threat can be visibly established through several mechanisms, such as staking one's reputation on fulfillment, relinquishing one's own initiative in such a manner so the other party must choose in one's favor, or establishing a status quo from which one can only be dislodged by an overt act.[3]

2. In contemporary military matters, deterrence by denial can be achieved stationing forces to block the aggressor from making his gain. Deterrence by punishment is commonly achieved by maintaining strategic nuclear forces, preferably Nuclear Ballistic Missile Submarine (SSBN)-based second strike forces.

3. An example of such behaviour is the stationing of tripwire forces, such as the American contingent in West Germany during the Cold War. This deployment committed the United States to fulfill its deterrent threats in the case of a Soviet attack. As such, the mere presence of these forces influenced the credibility of American extended deterrence over West Germany, even without regard for the deterrent effect these forces themselves may have had (in reference to their military capability).

3.2　Asymmetrical escalation as a game

von Neumann and Morgenstern (1944) define a game as the totality of its rules of play. Hovi (2008) considers a ten-step procedure for analysing such a game, which includes defining the players and rules of the game, and then analyse the game's equilibria and solution, if any. There exists several variations of such procedures. In the thesis, Hovi's procedure is used as it is fairly extensive, yet concise. The ten-step procedure consists of two segments: First, the players, moves, their order, outcome, utility, level of information, and ability to violate commitments are defined. Secondly, the game's equilibria, solution, and the question of Pareto optimality are analysed (Hovi, 2008, pp. 26-35):

3.2.1　Players and game structure

There are two players in the Asymmetrical Escalation Game. These represent the strong and the weak state, respectively.[4] The players are "Weak" (W) and "Strong" (S). All games considered in the following are two-player games with Weak and Strong as the players.

In games including weak actor alliance support, the allied's decision to intervene or not must be modeled. There are several options: Either make the allied state a player who can decide to intervene or not, make the act of intervening a game event controlled by nature, or subsume the alliance support variable in the other players' utility functions, so that their preferences change depending on the level of strong actor support enjoyed by the weak state. The last option has the advantage that all models can be analysed in a single game, and is the one chosen in this thesis.

I model asymmetrical escalation as a *non-cooperative game*. As opposed to *cooperative games*, where all commitments are final, in non-cooperative games players are unable to make binding commitments (Hovi, 2008, p. 33). The

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4. It has been argued that game theoretical models should yield no significance to the name of the players, and it is common for games to use non-descriptive player names, e.g. "Column" and "Row", "A" and "B", "Player-n", etc. However, Schelling (1960) argues that it is precisely the naming of the players that give the game its meaning (pp. 106-108).

assumption of asymmetrical escalation as a non-cooperative game is in line with general realist and deterrence theory. Its rationale is derived from the realist assumption that the lack of a supranational authority to enforce agreements hampers cooperation in the international system (see e.g. Mearsheimer, 2001; Waltz, 1979). Furthermore, Fearon (1995) shows that commitment problems is an important feature of inter-state escalation and conflict.

Regarding moves, the key distinction is between static and dynamic games. In a static game, the players make their moves simultaneously, so they cannot know in advance what move their opponent will make (Hovi, 2008, pp. 29-30). In dynamic games, they make their moves sequentially: One player makes his move first, and the other makes his subsequently, either aware of what the other player has chosen (in case the node is a singleton), or ignorant of it (Hovi, 2008, pp. 29-30, 37–38).

Escalation is by nature a sequential phenomenon. An escalation event is initiated by one party (Challenger, C) changing some aspect of the use of force. As noted by Kahn (1965), the Defender (D) then has a choice of escalating or not. If D escalates in return, he can choose to either respond in kind, or escalate more than C, relative to the escalatory threshold crossed by C, which can be either formal or tacit.[5][6]

Zagare and Kilgour (2000) specify the *Asymmetric Escalation Game* as a model to analyse extended deterrence.[7] This game has also been used by Devlen (2010) to analyse the asymmetric U.S.-Iran standoff. The game has two players,

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5. A formal threshold can be a legal ban on the use of specific weapons, or defined areas being declared neutral ground. A tacit threshold is constituted by some act which both parties know the other to view as significant, with both knowing the other knows he does so. The distinction between conventional and nuclear weapons constitute a widely held tacit threshold.

6. An example of responding in kind would be the outbreak of World War I, when Germany – in response to the Russian escalation of ordering full mobilisation – choose to respond by doing exactly the same. An example of escalating beyond the threshold crossed by the opponent, was the United States' – albeit ambiguous – threat to the Iraqi government before the 1991 invasion, that the use of chemical weapons would not be answered by American chemical, but nuclear weapons (Kaufmann, 2004, pp. 14-15).

7. Note that *asymmetric* in the game's name refers to the structure of the game itself, not the relative power between the players.

Challenger and Defender, and is shown in extended form in figure 3.1. The game consists of four nodes, with node 3 divided into 3a (after move D in node 2) and node 3b (after move E in node 2). Challenger moves in odd-numbered nodes and Defender moves in even-numbered nodes. The game can come to a conclusion in any one of the four nodes. The game allow the players three types of moves: Cooperate/Concede (C), Demand/Defy (D), and Escalate (E). As noted by Zagare and Kilgour (2000), the two levels (D) and (E) represent "[...] empirically possible *and* psychologically distinct forms of conflict" (p. 175, emphasis in original). In the context of escalation, C entails maintaining the status quo, D is a lesser form of escalation – either a demand for concessions or to match the opponent's escalatory move – and E is to escalate beyond the level to which the opponent escalated.

Challenger makes the first move, where he can play *cooperate* (C), which gives Status Quo (SQ) and ends the game, or *demand* (D). Playing status quo is to maintain the current situation, while demand is an act of escalation. The range of possible actions that fall into this category is broad – it could be a "[...] simple request for special consideration [or] a direct military strike [...]" (Zagare & Kilgour, 2000, p. 176). If Challenger plays (D), Defender can play *concede* (C), *defy* (D), or *escalate* (E) in node 2. Concede gives Defender Concedes (DC), which ends the game. Defy is to respond in kind to Challenger's escalation, while escalate is to move the conflict beyond the level established by Challenger. Defy here leads to node 3a where Challenger can play (D) which leads to Limited Conflict and ends the game, or (E) which leads to node 4. In node 4, Defender can play (D), which ends the game with Challenger Wins, or (E) which ends in All-Out-Conflict. If Defender plays (E) in node 2, Challenger can play defy (D), which ends the game with Defender Escalates and victory for Defender, or Challenger can play escalate (E), which ends the game with All-Out Conflict.

The model has several desirable properties. For one, its structure is asymmetric in that the players do not have the same options, which is congruent to the theoretical discussion on asymmetrical inter-state relations and escalation. E.g., Challenger can terminate the game without giving Defender any moves, by playing (C) in the first move; and Defender can Escalate first (in node

Node 1–Challenger

C   *D*

Status Quo   **Node 2–Defender**

C   *D*   *E*

Defender Concedes   **Node 3a–Challenger**   **Node 3b–Challenger**

D   *E*   *D*   *E*

Limited Conflict   **Node 4–Defender**   Def. Escalates   All-Out Conflict

D   *E*

Challenger Escalates   All-Out Conflict
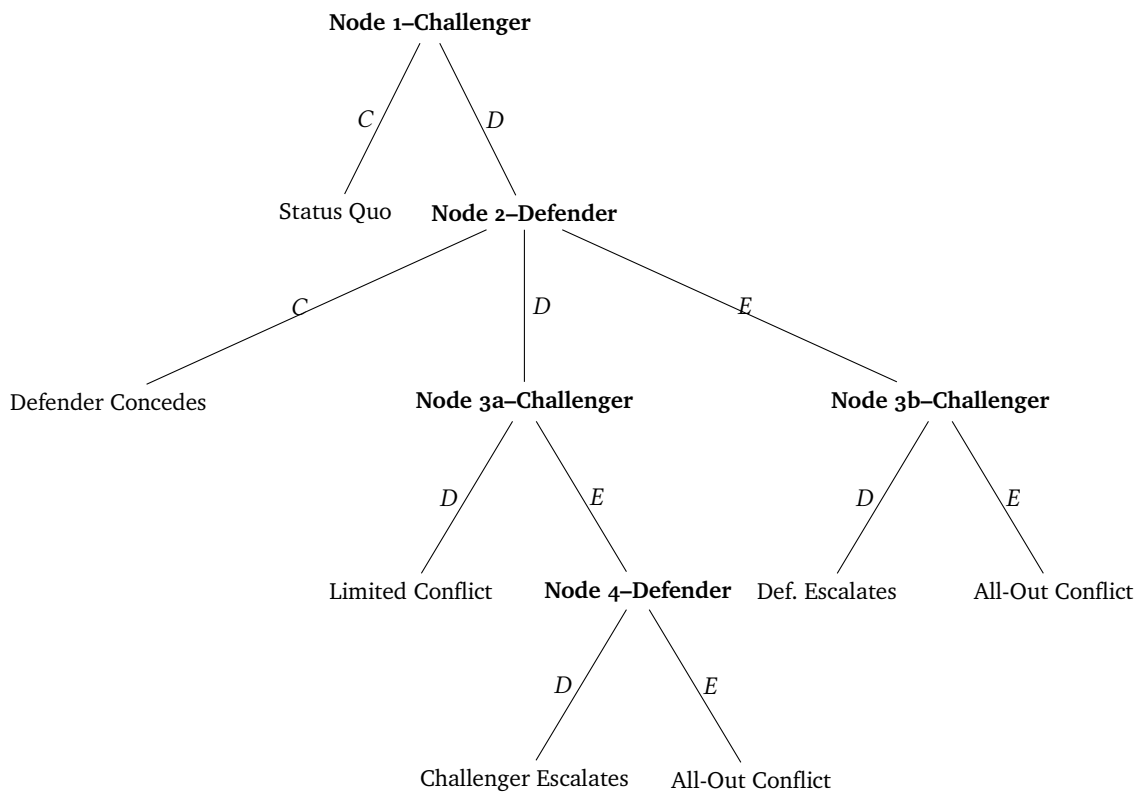
Figure 3.1: Original Asymmetric Escalation Game

2) or Escalate in response to Challenger's escalation (in node 4). Secondly, as demonstrated by Zagare and Kilgour (2000) the game is highly dynamic to changes to the players' utility functions. This becomes important when analysing how variations in the players' preferences alter the dynamics and outcome of an escalation situation. Furthermore, both players can escalate, both can respond in kind, both can counter-escalate and both can capitulate.

I modify the game by changing the player names – Challenger becomes Weak (W) and Defender becomes Strong (S), Challenger Wins is renamed Weak Wins, etc. The modified game is depicted in figure 3.2. The central question is whether any reasonable combination of the game's other parameters can make Weak's escalatory move in node 1 rational. Due to the discrepancy in power between the player's, Strong would ceteris paribus be expected to stand a better chance if the conflict escalated. So long that is the case, Weak's best strategy would be expected to be (C) in node 1, maintaining the status quo,
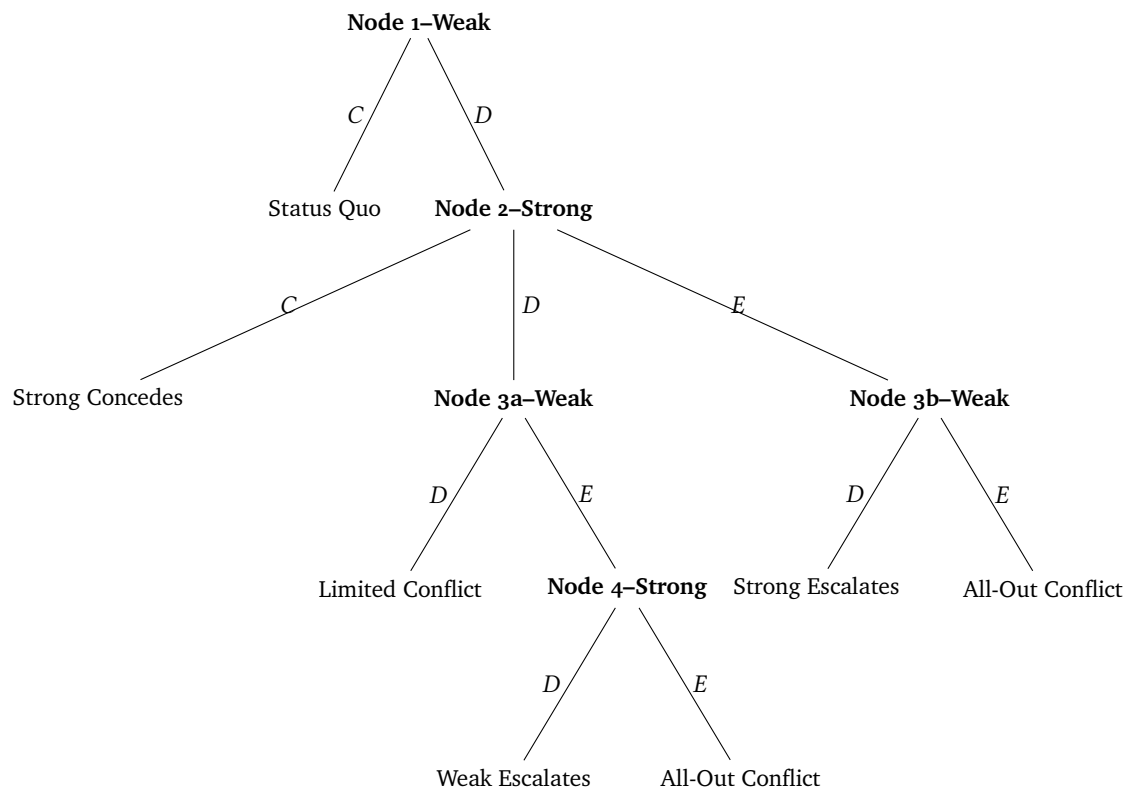
Figure 3.2: Modified Asymmetric Escalation Game

i.e., no escalation.

Outcomes are commonly defined as combinations of strategies (Hovi, 2008, p. 32). This game has seven possible combinations of moves – of which two lead to the same outcome – giving six possible outcomes, see table 3.1. These outcomes represent distinct ideal types of continuity or change in the level of conflict between two states. It does not, however, represent the entirety of their interaction. Rather, the game models the process of escalation, including the initiation, response, and counter-response.

Obviously, status quo is the maintaining of the current state of affairs, be it peace, negotiations, conflict with limited use of force, or war. Strong concedes is an outcome where the weak increases its level of violence and the strong does not respond in kind.[8] Limited Conflict describes the outcome where both states

8. As Kahn (1965) notes, a state faced with an escalatory move by its opponent will usually

Table 3.1: All possible outcomes of the Modified Asymmetric Escalation Game

Nr.	Node 1	Node 2	Node 3	Node 4	Outcome
1	C	-	-	-	Status Quo (SQ)
2	D	C	-	-	Strong Concedes (SC)
3	D	D	D	-	Limited Conflict (LC)
4	D	D	E	D	Weak Escalates (WE)
5	D	D	E	E	All-Out Conflict (AOC)
6	D	E	D	-	Strong Escalates (SE)
7	D	E	E	-	All-Out Conflict (AOC)

increase their level of violence, but apply less than their maximum effort.[9] The outcome Limited Conflict is of special importance in this analysis, as this is a type of conflict that may offer the weak state a reasonable chance of success. Weak Escalates is similar to Strong Concedes in that (S) does not match (W)'s escalation, but different in that (S) does respond to the initial escalation and only concedes after (W) escalates even further.[10] Strong Escalates is similar to Weak Escalates, except that it is (S) who escalates the most strongly, and (W) who does not respond in kind.[11] All-Out Conflict is, of course, a situation where both sides commit its maximum available effort to the fight.[12]

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not fail to respond. Accordingly, examples of this outcome are few and far between.

9. The Sino-Soviet border conflict serve as a good representation of this point. The belligerents escalated to the use of military force, but both sides committed only marginal proportions of their war fighting capability to the conflict.

10. Strong states retreating from conflicts with inferior opponents, such as the US in Vietnam and the Union of Soviet Socialist Republics (USSR) in Afghanistan, may under certain assumptions fall into this category.

11. The Gulf War is an example of this outcome. The United States clearly escalated (horizontally) by launching strikes on targets in, and invading, Iraq. Iraq did not escalate further in response, but for the most part maintained its level of violence rather unchanged. One could argue that Iraq escalated horizontally by launching SCUD-attacks on Israel. However, for Iraq to be said to have escalated-in-kind (play E in node 3b), it must have applied all its available weapon systems – including chemical weapons – when the Coalition forces posed an existential threat to the state's survival. The attacks on Israel were also not directed at its main opponent, the United States.

12. The World Wars are the best examples of this outcome.

3.2.2 Utility

In determining the players' utility, the overruling distinction is between zero-sum and non-zero-sum games. Strategy of conflict is principally congruent with both types (Schelling, 1960, p. 5).[13] According to this theory, rational actors seek to win conflicts with their opponent(s) (Schelling, 1960, pp. 4-5). Winning, in this sense, is not strictly competetive, but is rather to gain relative to one's own value system, in a situation of mutual dependence and opposition with another actor. This means strategy does not pertain to the efficient application of force, as such, but rather with the exploitation of potential force (ibid.). While under offensive realism, states are assumed to pursue a zero-sum logic, the assumption of zero-sum utility functions is a severe restriction in game theoretical models, where a zero-sum game entails all payoffs being Pareto-optimal, entailing severe restrictions on the dynamics of the game (see Schelling, 1960). As such, I find the use of variable sum game more pertinent.

"Rationality means that [actors] have consistent, ordered preferences, and that they calculate costs and benefits of alternative courses of action in order to maximize their utility in view of those preferences" (Keohane, 1984, p. 27). The players' utility functions can be either on the ordinal or the cardinal level. In principle, the specifying cardinal utility requires introspection to assign precise values to the utility experienced by the players (Mercer, 2005, p. 84). However, given the high level of abstraction in this game, and in accordance with the literature (see, e.g. Devlen, 2010; Zagare and Kilgour, 2000), I find it appropriate to define utility on the cardinal level, despite only the ranking of preferences being empirically or theoretically determined. All utility functions must be transitive (e.g. for all outcomes, if X is preferred over Y and Y is preferred over Z, X is preferred over Z) and complete (covers all possible outcomes) (Hovi, 2008, pp. 32-33). For cardinal utility functions there are also requirements regarding continuity, monotony and substitutiveness (ibid.).

13. Variable sum games, also labeled non-zero-sum games or mixed games, are games in which the sum of all the player's payoffs is not equal to zero. In a two-player variable sum game, both A and B can gain, as opposed to a zero-sum game, where the players' payoffs are Pareto optimal. Pareto optimality is a condition where there are no other outcomes which are better for any player without being worse for one or more players (Hovi, 2008, pp. 33-34)

I define utility in the same manner as in the original game, assuming that the player's cardinal utility for each outcome is the inverse of his preference for that outcome – i.e., the least-preferred outcome yields 1, the second-least preferred yields 2, etc. (see Zagare and Kilgour, 2000, pp. 187-189). Assuming that Strong holds escalation dominance, that both players prefer winning to losing, and that both prefer lower levels of conflict to higher level – i.e., the cost of conflict making winning or losing at a lower level of conflict preferable – gives the following utility functions (see Zagare and Kilgour, 2000):

$$WEAK_{dove} : W_{SC} > W_{SQ} > W_{WE} > W_{LC} > W_{SE} > W_{AOC}$$

$$STRONG_{hawk} : S_{SQ} > S_{SE} > S_{LC} > S_{SE} > S_{SC} > S_{AOC}$$

Given Strong's superior power, Weak prefers Strong Escalates (SE) to All-Out Conflict (AOC), as both entail defeat, but the latter at a greater cost through total war. Strong on the other hand, prefers All-Out Conflict to Weak Escalates (WE), as he can defeat Weak at this level of conflict. As noted by Zagare and Kilgour (2000), this is equivalent to assuming that only Strong has a credible end-game deterrent. Due to the cost of conflict, both players prefer the Status Quo (SQ) to war (i.e., WE, SE, AOC), and both prefers winning over Limited Conflict (LC). Strong has SQ as his most preferred outcome, while Weak most strongly prefers Strong Concedes (SC), as this entails Strong yielding for the initial escalatory act, or demand. This makes Weak dovish – as he prefers capitulation to war – and Strong hawkish – as he prefers war to capitulation.

3.2.3   Information

The level of information plays a crucial role in game theoretical analysis, and changes in the level of information may completely alter the nature of the game and its outcome (Zagare & Kilgour, 2000). The level of information can be equal to the real world situation modeled, or a simplification of it (Hovi, 2008, pp. 30-32). There are four key distinctions with regards to information levels in games (ibid.).:

- Complete vs. incomplete: With complete information, all the player's

strategies and preferences are known to all others, all others know they are, et cetera ad infinitum.

- Perfect vs. imperfect: With perfect information, all players are informed about all previous occurances when deciding on their own move.

- Symmetric vs. asymmetric: With symmetric information, all players alway knows what all others know.

- Certain vs. uncertain: With certain information, all moves made by nature are made known to the players before anyone has to make any decisions.

I begin my analysis under the assumption of complete and perfect information, and subsequently tackle the game under incomplete and asymmetric information.

3.3   Playing with complete information

Under complete and perfect information, subgame perfect equilibria can be determined through backwards induction (Hovi, 2008). In node 4, Strong chooses AOC, his next-worst outcome, over his worst, WE. In node 3a then, Weak chooses D – which leads to LC – over E – which leads to AOC, as the latter is his very worst outcome. In node 3b, Weak plays D to yield SE, his next-worst outcome, over E, which would have given him his worst. In node 2, Strong plays E, which gives him his next-best outcome, SE in node 3b. In node 1, Weak anticipates Strong's escalatory response – which in lieu of the latter's escalation dominance will yield Weak's second-worst outcome, S.E. – and plays C in node 1, ending the game with Status Quo. This is the subgame perfect equilibrium.

The game is consistent with the theoretical arguments presented in the previous chapter, insofar as there is no mechanism to intervene in the power disparity between Weak and Strong. Strong is able to leverage his full power advantage, and so is able to confront Weak with a credible deterrent. Weak realises he is doomed to failure should the conflict escalate, and therefore chooses to

maintain the status quo. This is also the game's solution. It realises Strong's most preferred outcome and Weak's second most preferred, yielding outcomes of 6 and 5, respectively. The solution is Pareto optimal, as the only possible improvement in the players' payoffs – a payoff of 6 to Weak (SC) – would reduce Strong's payoff to 3. It follows that in the Modified Asymmetric Escalation Game, with complete and perfect information Status Quo is the game's solution.

3.3.1   Player types

A dovish weak is congruent with the aforementioned position in IR theory that power equates outcomes. The three hypotheses presented in Chapter 2 posited three mechanisms that could allow a weak state to overcome its opponent's advantage in power. These were external support, limited aims, and reputation. It should be re-emphasised that the difference between these types is not psychological, but rather pertain to the structural incentives they face: External support is alliance with a great power, limited aims is facing an opponent that is vulnerable to a limited conflict scenario, and reputation is having lower-than-expected cost of conflict.

Beginning with 'external support'. I assume this type has an increased preference for WE, as its great power ally is provides backing for a more assertive policy, and AOC as its great power ally provides an improvement in deterrence credibility on the higher rung of the escalatory ladder.

$$WEAK_{externalsupport} : W_{SC} > W_{WE} > W_{SQ} > W_{LC} > W_{AOC} > W_{SE}$$

The 'limited aims' type has an increased preference for the outcomes LC and WE. Its limited strategic advantage grants it a higher-than-expected utility for the scenario where it can increase the level of conflict while its opponent offers only minor resistance. This is what the these two outcomes represent. Consequentially, the outcome for SQ is reduced. The utility for the remaining outcomes is as for $WEAK_{dove}$, as these are not affected by this type. This include the player's end-game deterrent, which is not credible.

$$WEAK_{limitedaims} : W_{SC} > W_{WE} > W_{LC} > W_{SQ} > W_{SE} > W_{SE}$$

Playing the game with Weak enjoying external support, changes the game in several respects. Most notably, Weak now has a credible deterrent in node 3b. This means that it is no longer rational for Strong to play Escalate in node 2, because this will lead to All-Out-Conflict. Therefore, Strong will play Defy in node 2. There is no change in rational choices in node 3a (or 4), and so Weak will play Defy in node 3a, realising Limited Conflict. However, as Weak prefers Status Quo to Limited Conflict, rational play remains Status Quo. The implications of this is that with Weak possessing a credible deterrent – provided by its great power benefactor – Strong becomes more reluctant to escalate in face of a demand from Weak. However, Weak still has more to gain by maintaining the status quo.

With Weak as 'limited aims', it has an improved preference for LC and WE that surpasses that of SQ. This changes the late-game dynamics. While choices in node 3a and 4 remain the same, Weak now lacks a credible deterrent in face of Strong playing Escalate, and will choose SE in node 3b. That makes it rational for Strong to Escalate in node 2. Realising this, Weak's preferred strategy is to Cooperate and realise Status Quo in node 1. This shows how the absence of a credible deterrent makes weak party escalation detrimental to Weak. Despite enjoying a considerable preference for escalation – preferring both WE, LC, and SC to Status Quo – Weak is still deterred from making any escalatory moves against Strong.

The 'reputation' type has a vastly decreased preference for SQ, due to its decreased cost of conflict. This is equivalent to assuming that Weak faces an untenable status quo and can only improve its position by costly communicating its resolve (see Angstrom and Petersson, 2019). However, as was demonstrated with the two previous types of Weak, merely reducing the preference for SQ by one or two positions is not enough to offset the status quo. Furthermore, this type of Weak enjoys no other strategic advantage that could improve the preference for the other outcomes. In order for the 'reputation'-type to offset the status quo, it must prefer SQ less than even SE:

$$WEAK_{resolve} : W_{SC} > W_{WE} > W_{LC} > W_{SE} > W_{SQ} > W_{AOC}$$

Under this – quite exaggerated – assumption, Weak plays Demand in node 1, Strong plays Escalate in Node 2 and Weak plays Defy in Node 3b. This realises the outcome Strong Escalates. This is equivalent to Weak instigating a losing war, but surrendering quickly when attacked by Strong.

3.4   Playing with incomplete information

Complete information entails that the strategies available to all players and all payoffs associated with all strategies are known to all players, and are common knowledge among them (Dixit et al., 2021, p. 309). Therefore, information in games is usually incomplete (ibid.). And, because players generally known their own preferences and capabilities better than they know their opponent's, information is often asymmetric (Dixit et al., 2021, p. 315).

So far I have found that variations in the preference of a weak state in an asymmetrical conflict of interest – variation that is deductible from theory and observational data as discussed in the previous chapter – can influence the dynamics of the escalatory process. However, this did not change the equilibrium of the game. Maintaining the status quo remained – with exception for the exaggerated 'resolve' type – the dominant strategy of the weak player. Because the 'limited aims' type lacks any means to deter the strong from counter-escalation, and the 'external support' type prefers maintaining the status quo from instigating great power war, both types would refrain from escalate.

However, even powerful states may under certain conditions find it hard to leverage its power and exert a powerful deterrent against an inferior adversary. Perhaps the most pertinent example of this is the British failure to deter the inferior Argentina[14] from invading the Falklands. As such, it is pertinent to introduce the possibility that Strong may be dovish. Given that the Strong may

14. See Appendix II.

be physically separated from the contested territory (as in the Falkland's war), have deficiency in their military capabilities (such as in the Six Day War),[15] or in some other respect lack the specific capabilities that are necessary to prevail in the matter, it may not prefer conflict as would otherwise be expected. I therefore assume that Strong can be of dovish type that prefers Limited Conflict to Strong Concedes to Strong Escalates.[16][17]

$$STRONG_{dovish} : S_{SQ} > S_{SC} > S_{LC} > S_{SE} > S_{AOC} > S_{WE}$$

In analysing the game under incomplete information, the Bayesian perfect equilibrium replaces the subgame perfect equilibrium (Hovi, 2008, pp. 97-98). The Bayesian perfect equilibrium is distinguished by being the players' best strategy given their assumptions about the opponent (ibid.). I assume that Strong knows its own and Weak's type, and that Weak knows its own type, but not know Strong's. Strong can be either hawkish or dovish as described above. I focus on Weak's choice in node 1, as it is this that pertains to the problem statement.

With Weak as 'external support' and Strong as hawkish, Weak's utility is 4 if playing Cooperate and 3 if playing Demand in node 1. With Strong as dovish, Weak's utility if playing Cooperate remains 4, while for Demand it is now 6. Make Strong dovish with probability p. Weak's payoff if playing Cooperate is

15. Again, I am referring to the state's overall material resources – where Egypt was superior to Israel – not exclusively military power, in which the balance was quite different, see Appendix II and Paul, 1994.
16. An alternative, and equally reasonable, assumption would be that Strong prefers Strong Escalates to Strong Concedes to Limited Conflict, i.e. that Strong retains a strong preference for Strong Escalates: $S_{SQ} > S_{SE} > S_{SC} > S_{LC} > S_{AOC} > S_{WE}$. It can be shown that under this assumption, Weak as 'limited conflict' would have Cooperate in node 1 as its dominant strategy under incomplete information, and even under complete information with Strong as dove. This is because Strong would still have a credible first-level deterrent (in node 2).
17. Another plausible alternative is that Strong prefers Limited Conflict to Strong Concedes, $S_{SQ} > S_{SC} > S_{LC} > S_{SE} > S_{AOC} > S_{WE}$. In this case, Weak as 'external support' would retain Cooperate in node 1 as its dominant strategy even with perfect information and dovish Strong. The dominant strategy for Weak as 'limited aims' would depend on the probability of Strong's type.

then given by (see Hovi, 2008, pp. 101-102):

$$p \times 4 + (1 - p) \times 4 = 4$$

Weak's payoff if playing Demand is:

$$p \times 6 + (1 - p) \times 3 = 3p + 3$$

Demand is then Weak's dominant strategy if,

$$p > \frac{1}{3}$$

Ergo, 'external support' Weak has Demand as its dominant strategy – and thus, escalates – if the probability of Strong being dovish is greater than one-third. With Weak as 'limited aims' and Strong as hawkish, Weak's utility is 3 if playing Cooperate in node 1, and 2 if playing Demand. With Strong as dovish, Weak's utility remains 3 if playing Cooperates, but becomes 6 if playing Demand. Weak's payoff if playing Cooperate is then,

$$p \times 3 + (1 - p) \times 3 = 3$$

Weak's payoff if playing Demand is,

$$p \times 6 + (1 - p) \times 2$$

Demand is then Weak's dominant strategy if,

$$p > \frac{1}{4}$$

Ergo, 'limited aims' Weak has Demand as its dominant strategy if p – the probability that Strong is dovish – is greater than one-fourth.

3.5 Concluding remarks

In this chapter I have modeled weak party escalation as a sequential game played with two players, Weak and Strong. Weak has the first move, and must choose between maintaining the status quo or escalating the situation. Strong

seeks to deter Weak from escalating, but may or may not be successful in doing so, dependent on the players' payoffs and level of information.

Recall the research question 1 and 2.[18] What makes weak party escalation conceptually distinct, is the requirement of some factor to intermediate between the power of the weak and the strong. If the two operate under equal constraints – they meet on a level playing field – all theory and analysis so far predict a strong party victory. However, changes in the weak player's preferences, and uncertainty about Strong's commitment to its deterrent threats, could make escalation a rational course of action.

One especially noteworthy observation from the game analysis was that for the 'reputation' type player to escalate – to play Demand in node 1 – its payoff structure needed to be extremely skewed against the Status Quo. With no effective means to secure any favorable outcome if the asymmetrical conflict intensifies, the weak must prefer an all-out loosing war to peace, for escalation to become viable. This calls into question this mechanism's validity as a determining factor for a weak state to escalate against a superior adversary. However, the game's sensitivity to changes in Weak's preference for Status Quo makes it a pertinent possibility that this mechanism could reinforce the other mechanisms in asymmetrical conflict escalation.

Furthermore, I have found that against a hawkish Strong, the Weak would under most assumptions have maintaining the status quo as its dominant strategy. Given its superiority in power, the limited aims type Weak player is effectively deterred from escalating due to the dangers of much more severe counter-escalation. And the external support player can only achieve major conflict, rendering escalation irrational. However, this relies on Strong being hawkish, which points to the credible communication of deterrence as an important determinant. While the arbitrary nature of the utility functions entails caution in interpreting the results too literally, it is worth noticing that escalation became rational for Weak even with a relatively minor probability that Strong was dovish.

18. They are: Which strategies are available to weak parties in asymmetrical relations? And: What defines weak party escalation as a distinct strategy?

4

Methods and Data

4.1   Introduction

In chapter 1, I presented the research statement and the reasons why it merits attention. Chapter 2 laid out theoretical arguments about the nature of international politics, conflict and cooperation. And Chapter 3 discussed game theory as a rigorous and coherent analytical tool for the examination of the research statement, and analysed weak party escalation as a game based on the hypotheses. This chapter has three purposes. For one, to describe the measurement of power and the procedure applied to classify state dyads as symmetric or asymmetric. For another, to discuss my case selection and outline how I measured the dependent and independent variables. And finally, to describe the framework of reasoning used to evaluate the existence of a causal relationship between the variables.

In principle, cases are sampled from a population of units, and in drawing conclusions, the results found in the sample may under certain conditions be extended to the population. A population thus constitutes an uncountable number of units – in this study the population would be every asymmetrical state dyad, while the sample is those instances of asymmetrical relationships that are selected for scrutiny. Crucially, the population of cases comprise both instances where the weak party escalated and where it did not. This is necessary because if the population was defined from the occurence of escalation, weak party escalation would not vary, and could therefore not be applied as a variable, which is what is desired in this study.

Variables are the attributes of the units that may take on different values. The occurence of weak party escalation is the dependent variable (Y) in this inquiry. The independent variables (X) are the factors hypothesised to be determinants of the dependent variable: external support, limited aims strategy, demonstration of resolve. Control variables are variables included to control for effects on Y caused by confounding factors. While control variables are most pertinent in statistical methods, they play an important function in any comparative study, enabling the researcher to single out the effect of X on Y.

Hempel[1] defines explanation as logical deduction from general laws and premises that are statements of initial conditions. In this thesis, that would be to apply the general hypotheses about weak party escalation to explain specific cases. Mechanisms are notions about causal effects that offer explanations and understanding of social phenomena, that replace the general laws of the natural sciences (Elster, 1989, p. 10). An explanation of an event generally consists of citing another event and a mechanism that connects the two (Elster, 1989, pp. 3-4). The former event is the outcome – e.g. victory in battle – and the other event is the cause – e.g. deploying a vastly larger force than the adversary. The mechanism is what connects the events – e.g. that numerically superior forces win battles – it is the causal effect, while the one event is the cause and the other is the outcome. This is similar to how Waltz (1979) defines theory: "[It] is not collections of deterministic laws about associations of phenomena, but statements by which to explain observations" (pp. 5-6).

4.2 Measuring power

As noted in Chapter 2, measuring states' power with quantifiable proxies is well established in the literature (Arreguin-Toft, 2001; Carroll & Kenkel, 2019, p. 577). It is important to note, however, that such proxies can only serve as approximations of power, and should not be taken at face value (Keohane, 1984, p. 20). The procedure for constructing a power proxy consists of listing the indicators of power, selecting those relevant for the proxy, and aggregating them into a single measure of power (Organski & Kugler, 1981, p. 31). As previously defined, material power consists of a latent and an actual component. Mearsheimer (2001, pp. 60-75) argues that population and wealth are the two most important components of latent power, and that wealth subsumes both factors. However, there is no single, reliable measure of wealth (ibid.). Furthermore, latent power does not equate actual – military – power, because states may find increased military spending impossible or unbeneficial, different states have different levels of efficiency in converting latent to actual power and have different types of military forces (Mearsheimer, 2001, pp. 75-82).

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1. Quoted in Elster, 1989, p. 6.

A huge number of various power proxies have been adopted by various schol-
ars. Arreguin-Toft (2001) uses a simplistic measure of population times armed
forces.[2] At the other end of the spectrum, Mearsheimer (2001, pp. 83, 128–137)
argues for an intricate composite measure, accounting for sizes of standing and
reserve armies, number and quality of weaponry, organization, size and quality
of air forces, naval forces, air defence, reconnaissance and battle-management
(i.e., Command and Control (C2)). Another intricate, though less general meas-
ure, is the Armoured Division Equivalent (ADE)[3] and Motor Rifle Division
Equivalent (MRDE)[4] ratings used by U.S. and Soviet intelligence analysts, re-
spectively, to assess the conventional balance in Europe during the Cold War –
based on thorough assessments of the quantity and quality of weapon systems
in terms of firepower, mobility, and survivability (Central Intelligence Agency,
1977, see also Mearsheimer, 1981).[5]

Other proxies appraise factors beyond military power. As Wegge (2011) notes,
economic factors are usually deemed important for states' power, as economic
strength can be transformed into pertinent capabilities (pp. 168-169). Weede
(1976) uses Gross National Product (GNP) and defence expenditures, arguing
that these variables are closely related to perceptions of power (pp. 400-401).
Nutter (1994) argues for the use of the composite military capabilities index
GLOBUS (p. 45), while J. Singer et al. (1972) construct a national material
capability index based on demographic (total and urban population), indus-
trial (energy consumption and iron/steel production) and military variables
(expenditure and active service members) (pp. 25-26). The CINC measures

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2. The precise measure of armed forces is not specified. It appears to be the number of service
   members.
3. The unit of measure is – as the name implies – a U.S. armoured division. As such, a unit
   with the full complement of personell and matériel as per the Order of Battle (OOB) of
   a U.S. armoured division would get a score of 1. Using this as an "ideal model", a unit's
   power is measured using the criteria outlined in the main text.
4. The concept is largely similar to the ADE proxy, but using a standard Soviet motor rifle
   division as the unit of measure. The Soviet motor rifle division was principally equivalent
   to the U.S. armoured division.
5. Interestingly, these measures prima facie appear to be highly accurate in their estimates, as
   the difference between American and Soviet assessments of the conventional balance (in
   the mid '70s, that is) differed by less than 4 percentage points (1.92-to-1 versus 1.86-to-1),
   see table 2 in Central Intelligence Agency (1977).

states' capabilities – ie. latent and actual material power – as a fraction of the sum of capabilities in the world system in any given year (Correlates of War Project, 2017; J. D. Singer, 1987; J. Singer et al., 1972).

While simple measures, like Arreguín-Toft's, are attractive owing to their simplicity, they are of limited validity.[6] More complex measures, like Mearsheimer's, offer a high degree of validity, but suffer in that they require immense data material and analytical resources to employ. The CINC strikes a middle ground, measuring both latent and actual power through a series of proxies well founded in theoretical reasoning (Correlates of War Project, 2017; J. D. Singer, 1987; J. Singer et al., 1972).[7]

Carroll and Kenkel (2019) use machine learning on CINC power data with outcome data from the Militarised Interstate Dispute dataset (MID) to produce a proxy for expected conflict outcomes. While this approach shows promising results for predicting conflict outcomes, it is less suited to the application of classifying state dyads, as probability of victory is not an independent variable (see Carroll and Kenkel, 2019, pp. 590-591). Additionally, as this proxy gives probabilities for expected outcomes of conflicts, it is effectively a relational measure of power, and therefore unsuited for reasons previously discussed.[8][9] I opt to follow Arreguin-Toft (2001) in defining power as the product of latent and actual power. However, I use the full range of CINC variables in place for the insufficient proxies population and troop numbers.

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6. The chief issue with using population and the number of servicemen as a measure of power, is that it inflates the power of populous states with numerically large armed forces, while it omits power derived from economic factors and deflates the power of developed states with technologically or otherwise superior forces. As an example, the United States had 1.35 million active armed forces personnel in 2020, while North Korea had 1.19 million (Institute for Strategic Studies, 2020b, pp. 529-531) – a ratio of about 1 to 1.08. It should require no further argument to conclude that this figure does not represent the true disparity in military power between the U.S. and North Korea.

7. The CINC power proxy has been applied in more than 1000 peer-reviewed studies (Beckley, 2018).

8. See Section 2.4.

9. In not using a machine learning-based proxy, I also avoid the intrinsic problems with such techniques, such as their liability to misspecification through over-fitting, and lack of transparentness, i.e. black box-esque nature, see Spiegelhalter (2019).

4.3   Case study

In defining the case study method, Lijphart (1971) emphasises similarities
between comparative case-studies and statistical methods, with the key dis-
tinguishing feature being that the number of cases is too small to include
systematic controls (pp. 684-685). Similarly, King et al. (1994) argue that case
studies are distinguished by the small number of cases. The definition of case
studies as constrasted to larger number of 'intances of a phenomenon' was
prevalent in the 1960s and 1970s however also implied that large-N methods
are always preferable given sufficient data (George & Bennett, 2005, p. 17).
Yet, different methods have different advantages in answering specific types
of questions (ibid.). George and Bennett (2005) define a case as an instant
of a class of evens, where "class of events" refers to a phenomenon of sci-
entific interest (p. 17). In this study, this scheme would entail defining a weak
party ecalation event as a case – as opposed to defining such an event as a
value.

George and Bennett (2005) further define case study methods to include both
within-case analysis of single cases and comparison of a small number of cases
– i.e., cross-case comparison (p. 18). More specifically, Blatter and Haverland
(2014) list four characteristics that identify cases studies: small number of
cases, large number of observations per case, diversity of observations on
each case, and reflection on the relationship between empirical observations
and theoretical concepts (p. 19). These characteristics are all present in this
study.

Accordingly, case studies can be distinguished from the statistical and experi-
mental methods by the number of instances of a phenomenon. Likewise, case
analysis can be differentiaded based on the sample size. As discussed above,
statistical analysis uses large ($N > 30$) samples and falls outside the classi-
fication of case studies. Qualitative Comparative Analysis (QCA) is generally
applied to sample sizes in the range of 10 to 40. The technique uses Boolean
algebra to identify the variables that are necessary and sufficient conditions
for the dependent variable (Rihoux & Ragin, 2009).

Ordinary comparative case studies identify similarities and differences between

a small number of cases to analyse a problem. Single case studies inquire on the specifics of a single unit or event, either because of a special interest in it, or because of its special significance for theory. While the emphasis thus far has been on the numerology divide, where research methods are classified as "quantitative" or "qualitative" based on sample size, this is challenged by Moses and Knutsen (2012). They rather emphasise a continuum of sample sizes and research techniques (pp. 312-313).

In summary, case studies can be distinguished from other methods by the number of phenomena examined – although this is not a universally accepted definition. Likewise, there is no generally accepted criteria for categorising different types of case studies. Lijphart (1971) lists six types, which are distinguished by their relation to theory: Atheoretical, interpretative, hypothesis-generating, theory-confirming, theory-infirming, and (theoretically) deviant case studies (p. 691). Blatter and Haverland (2014) lists three types, which are rather distinguished by their relation to causality (pp. 26-27). The Co-Variance Analysis (COV) examines the effect of an independent variable by testing whether variation in values of X is associated with variation in values of Y; Causal Process Tracing (CPT) examines the temporal interplay between conditions or mechanisms in leading to outcomes; and Congruence Analysis (CON) focuses on the power different theories have for explaining a specific outcome.

George and Bennett (2005) define the method of structured, focused comparison as based on applying general questions to cases, standardising data collection, and performing systematic comparison of the cases (p. 67). This method requires that the universe of cases is identified, a research plan formulated, and that variables of theoretical interest are measured (George & Bennett, 2005, p. 69). This study applies the COV approach, which builds on the logic of the method of difference Mill (1843). The research questions must be formulated so they reflect both the research objective and the theoretical framework (George & Bennett, 2005, p. 69). These are:

- Is there variation in the weak state's use of escalation, or the willingness to escalate (including both deliberate and inadvertent escalation)?

- Is there a variation in the level of external support enjoyed by the weak state?

- Is variation in escalation congruent with variation in the level of external support?

- Is variation in escalation congruent with changes in other factors of relevance to security policy, such as technology, actors, and the nature of the dispute?

4.3.1   Case selection

The universe of cases this study applies to, is asymmetrical inter-state conflicts of interest. This study compares two cases: Norwegian security policy in relation to the USSR from 1945 to 1952, and Norwegian security policy in relation to Russia from 2014 to 2021. The purpose is to identify continuity and change on the dependent, independent, and control variables in an attempt to falsify my hypotheses. The choice of case was made based on a desire to compare two instances of adaption to a new security challenge in an asymmetrical relationship, while comparing two cases as similar as possible.

The Russo-Norwegian relationship has seen a large variation in the level of conflict and appeasement from both sides. It has, however, never escalated into military engagement. On the one hand, this may be considered a disqualifying factor for the case. But as previously discussed, the topic of this thesis is not war or conflict, but the escalatory process in itself. Precisely because the relationship (or conflict) between Norway and the Soviet Union/Russia did not escalate to war – but rather involved the pursuit of opposing interest by various diplomatic and coercive means – it serves as a suitable case for examining the dynamics of inter-state asymmetrical escalation.

The analysis considers and compares events at two different times: The period after the end of the Second World War, and the period after the 2014 Russian annexation of Crimea. I made no absolute delimitation of the time periods, but sought to analyse equally long periods of time. The analysis of the post-war

period is therefore largely constrained to the years 1945-1952. The analysis of the post-2014 period follows event up until present time (2021). The choice of these time periods are based on a desire to compare the formative years of both security challenges.

4.3.2   Data

The data for this study comes from both first-hand sources – primarily in the form of government inquiry reports and white papers – and second-hand sources – primarily journal articles and books by historians and social scientists. Two caveats should be noted: Firstly, there are a number of historical works on Norwegian foreign and security policy concerning the earliest period under consideration. The works of this category examined in this thesis are all written a number of years after the period examined. For the latter period, this is not the case, given the timeframe. Rather, the second-hand works applied here are of more recent, or contemporary, nature.

Secondly, neither the first- nor second-hand sources examined provide direct access to the data of interest. In foreign, security, and defence policy, information is tightly controlled. Therefore, it is necessary to judge the validity of the analysis in lieu of the fact that possibly crucial pieces of data were not examined. This is most pertinent for the analysis of events after 2014, given that a number of documents from the 1945-1952-period that were initially classified have later been made available to researchers. These factors have implications for the reliability of the data and associated results. The difference in timeframe introduces the possibility that perceptions and measurements have changed over time (see Jacobsen, 2018, p. 172. Furthermore, it is necessary to consider the possibility that the data material could contain inaccurate, misguided, or misguiding information (see ibid., pp. 170-174).

4.3.3   Hypothesis testing

In conducting any scientific inquiry, one must first determine what type of methodological approach is appropriate for the question at hand (Waltz, 1979,

pp. 12-13). If the object of study is complex and organised – such as international politics – the approach must be systemic, as opposed to strictly experimental or statistical (ibid.). The inquiry must be guided by theory to inform collection and analysis of data (Waltz, 1979, pp. 7-8).

It is crucial to be cognisant of the limitations that apply to inductive and deductive reasoning. Hume (1748/1777) first demonstrated that inductive inference is not logically consistent (p. 32). Later, Popper and Miller (1983) proved that hypotheses cannot be supported by inductive evidence, only by deductive evidence (p. 688). Popper (1994)'s critical rationalism contends that evidence cannot support a hypothesis, only criticise it, so that a hypothesis that passes its test is not proven true. In Waltz' words: "Even if all tests are passed, one must remember that a theory is made credible only in proportion to the variety and difficulty of the tests, and that no theory can ever be proven true" (Waltz, 1979, p. 14).

The hypothesis examined in this case study is that Norway has been more willing to escalate against the Soviet Union/Russia during periods were the state enjoyed strong external support, than during periods without, or with lesser, external support. Findings that would support this hypothesis are escalatory events – or increased levels of assertiveness in policy – during periods of closer alliance integration – or vice versa – and that implementation of more or less assertive policies are made in connection with an increase or decrease, respectively, of alliance support. Findings that would contradict this hypothesis include increased assertiveness in policy during periods of lesser external support – or vice versa – or changes in security policy being determined by factors other than considerations of external support (see King et al., 1994).

4.4   Validity and reliability

In hypothesis testing it is not possible to distinguish between a correct positive and a type I error, nor between a correct negative and a type II error. In frequentist statistics, probabilistic knowledge about the distribution of the

test observator under the null hypothesis[10] is used to specify the accepted probability of committing a type I error (level of significance) and/or to quantify the probability of committing such an error (p-value) (Hill et al., 2018). Type I errors are the most severe – as they put the researcher at risk of drawing false inference – and the objective is to minimise the probability of such errors. It is however not possible to completely prevent type I errors, as in doing so, one would also be prevented from reaching any correct positives (Spiegelhalter, 2019, pp. 283-285).[11]

In a case study approach it is not only impossible to guarantee against false inference, but also impossible to quantify the probability of drawing invalid conclusions. Validity thus has to be evaluated by other means. In COV studies, like this, generalisation is limited to cases with values on all independent and control variables equal to those in the cases examined (Blatter & Haverland, 2014, p. 69). While this is a significant limitation, it is not a decisive argument against this design in prelimenary theory-oriented studies examining the plausibility of a particular explanation, which is what this study aims to achieve (Blatter & Haverland, 2014, pp. 69-70). "The co-variational approach is therefore well placed as a first step in a combined design or a sequence of research projects [...]" (Blatter & Haverland, 2014, p. 70).

While selection bias is a grave concern for the application of statistical methods, this is not equally so in case study methods, where deliberate selection based on cases' values on specific variables can be beneficial (George & Bennett, 2005, pp. 23-24). Likewise, prelimenary knowledge of the cases – while raising the possibility of cognitive bias – does allow for significant improvements in research design (ibid.).[12]

10. The null hypothesis is inverse and mutually exclusive with the hypothesis under examination, the alternative hypothesis.
11. This results from the properties of the distributions of the (commonly applied) test observators (e.g., t, f, normal, chi-squared, etc.). As the accepted probability of committing a type I error – i.e. the level of significance – approaches zero, the value on the test observator required to falsify the null hypothesis approaches infinity, so that for a zero percent probability of committing a type I error, the only possible outcomes are correct negatives and type II errors.
12. George and Bennett (2005) caution against selecting cases based on variation in independent and dependent variables that conform to the hypothesis (p. 24). To be clear, in

While the approach suffers in terms of external validity, George and Bennett (2005) emphasise that case studies are inducive to high conceptual validity (p. 19). As the above discussion on measurement of power serves to illustrate, it is intrinsically difficult derive precise numerical measures on many of the central variables of political science (ibid., p. 19). The contextual comparison of case studies allows for conceptual refinements that offer an improvement in validity, and also serves to identify pertinent variables and causal paths (George & Bennett, 2005, pp. 19-20). Furthermore, the case study technique allows for identifying peculiar aspects of causal mechanisms and the conditions that precipitate a causal mechanism entering into effect (George and Bennett, 2005, p. 21, see also Elster, 1989). This is especially useful for the application in this study, as details of the cases may shed light on unforeseen dynamics in weak party escalation or in the conditions that precipitate the hypothesised mechanisms entering into effect.

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this study, case selection was based on prior knowledge about variation on the dependent variable only.

5

Analysis

5.1   Introduction

This chapter presents the empirical analysis of Norwegian foreign and security policy towards the Soviet Union and Russia in the 1945-1952 and 2014-2021 periods. The purpose is to determine whether there is variation in the inclination to escalate against the Soviet Union/Russia and whether this correspond to variation in the level of external support. Furthermore, to the extent possible, to establish whether variation in the level of alliance support was a considered factor in decicionmaking relevant to Norwegian escalation and de-escalation.

5.2   1945-1952

While maintaining close ties with Great Britain in particular, Norway adopted a policy of neutrality in both world wars (Holst, 1966). The Norwegian neutrality policy failed in 1940 however, leading to five years of German occupation. This precipitated a reappraisal of the country's geopolitical position and, consequentially, its security policy.

From 1941, Norwegian territory was an assembly area for the stalled German campaign on Murmansk, and in 1944, a Soviet offensive forced the Germans to retreat westwards, enacting a scorched-earth policy in their wake (Jaklin, 2006, pp. 97-100, 277). During the period leading up to the Soviet withdrawal in late 1945, the Norwegian government was concerned Soviet forces would not leave the conquered territory, but require concessions (Suprun, 2004, p. 414). Fears remained with regards to the Svalbard archipelago, on which the Norwegian government was subject to considerable Soviet pressure (Jaklin, 2006, pp. 311-312).

Devoting considerable attention to forging a favourable post-war situation, the Soviet Union gained considerably in power and influence, and would become the most powerful state in Europe (Beckley, 2018, p. 33). "Everyone imposes his own system as far as his army can reach. It cannot be otherwise."[1] The

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1. Joseph Stalin, quoted in Trachtenberg (1999, p. 36).

Western powers, on the other hand, gave comparably little importance to the post-war political situation, and especially the coming balance of power in Europe (Williams, 1954). The Soviet's emphasis on the post-war settlement became more prominent as the military situation improved over the course of the war, and resulted in American and British acceptance at the Tehran and Yalta conferences of Soviet demands for a sphere of influence covering the balance of Central Europe (Williams, 1954, pp. 56-57).

With the total defeat of Germany and Japan, and the enormous cost of the war paid by Britain and France, the Soviet Union and the United States were the sole remaining great powers in the system, leading to the emergence of a bipolar world order characterised by mutual security and economic competition (Mearsheimer, 2019, pp. 17-18). Relations between the Western powers and the Soviet Union deteriorated quickly, and early in 1946 the Cold War was a fact (Trachtenberg, 1999, p. 34).[2]

Pursuing the balancing policy of containment, the United States sought to maximise its own relative power vis-á-vis the Soviet Union. In March of 1946, Churchill infamously commented that an "Iron Curtain" had descended across Europe. The US and the USSR would go on to establish their separate bounded orders to facilitate their competition (Mearsheimer, 2019, pp. 18-19). In 1947, these efforts would materialise in the American Marshall plan, and the Soviet refusal to allow such aid to countries within its sphere of influence, as well as the Truman doctrine (Sverdrup, 1996, pp. 216, 277–279). In 1949, and 1955, respectively, the United States and the Soviet Union would formalise their alliances into North Atlantic Treaty Organisation (NATO) and the Warzaw Treaty Organisation (WP).

5.2.1   Rearmament and bridge building

After the war, Norway was in a "[...] state of defenselessness [...]", and the government recognised an urgent need to establish modern armed forces, based on wartime experience and developments of military technology and

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2. The term "Cold war" first appeared in 1947 (Sverdrup, 1996).

modi operandi (Norwegian Ministry of Defence, 1946b). Furthermore, the armed forces had to be adapted to the prevailing political situation and be capable of quick mobilisation to counter a future invasion, all within the severe constraints placed by the state's limited financial capacity (ibid.). There was broad public and political support for establishing a capable national defence.[3] Due to its limited power, the Norwegian state was largely forced to adapt its security policy to those of other states, including the strategic significance they placed on the country (Holst, 1966, pp. 22-24). In 1946, parliament enacted legislation that called for an immediate establishment of a limited defensive military capability, while launching a commission to study long term defence requirements (Stortingstidende, 1946).

The three year plan for the initial restoration[4] of Norwegian defence, considered how to organise, staff, equip, and fund the defence forces for the interim period (Norwegian Ministry of Defence, 1946a). In the government's view, the then-existing military vacuum in the country would not only threaten national security, but also lead the great powers to be anxious about a fait accomplí on the northern flank (Norwegian Ministry of Defence, 1946a, p. 3). A capable national defence would therefore – in the government's view – benefit both great power fractions (ibid.). The government expressed a clear and profound belief that the United Nations (UN) would become an effective mediator in inter-state conflicts, although it would not immediately make national defence forces obsolete (see ibid., pp. 2-4). "It is however necessary for Norway to also prepare for the worst case scenario, even though the country puts all its effort behind inter-human understanding and an active participation in the United Nations" (Norwegian Ministry of Defence, 1946a, pp. 2). Likewise, although expressing concerns about the rising East-West tension, the government was cautiously optimistic regarding the prospects for consolidation between the fractions (ibid.).

The revitalisation of the armed forces coincided with an urgent need for both

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3. This was a point in the political parties' joint programme presented after the German capitulation (Representatives of Labour, the Conservatives, the Agrarian Party, the Liberal Party, the Christian Democratic Party, the Communist Party, 1945, see also Sverdrup, 1996, pp. 223-224).
4. Lit. "reisning", could also be translated as "erection".

manpower and economic resources to reconstruct parts of the country and reinvigorate the economy (Norwegian Ministry of Defence, 1946a, pp. 4-5).[5] The Army's existing stockpiles of weapons and matériel had been lost during the war, and while large stockpiles were captured from German forces after their capitulation, there was an urgent need for new procurement (Norwegian Ministry of Defence, 1946a, p. 10). The Navy and Air Force however, possessed significant quantities of war surplus matériel (ibid., pp. 39-51). Furthermore, German occupation forces had constructed a number of airfields, although they generally required some further investment and repair (Norwegian Ministry of Defence, 1946a, p. 48). Under the three year plan, defence expenditure was estimated to account for approximately 19 percent of the national budget, and 4 percent of GNI (Norwegian Ministry of Defence, 1946a, pp. 4-5). Despite concerns for the economic impact, conscription service was increased to the point where 80 percent of all males in each yearly cohort would be enrolled as conscripts for a one year term, with additional reserve training in subsequent years (ibid., pp. 9-12). However, the defence – and especially the army – remained severly limited, with a large portion of its standing forces at any given time deployed in Germany (Holst, 1966).

> It is hard to imagine that Norway should defend itself against attack without allies, and it is necessary to recognise that Norway, with its limited military and economic resources, would not be able to hold out for long against a great power. But, Norwegian defence must hold out on its own until we recieve effective support from those who would become our allies. (Norwegian Ministry of Defence, 1946a, p. 3)[6]

In the immediate post-war years, Norway pursued the so-called *bridge-building*

5. The post-war Gross National Income (GNI) was only 80 percent of the pre-war level (ibid.). As noted above, Norway east of Lyngen had been subject to a scorched earth policy, while several cities in other parts of the country had been subject to air strikes and other forms of destruction.

6. Note the expression "those who would become our allies" ("dem som måtte bli våre allierte"). It reflects Norwegian reservations from visibly choosing side between East and West. In practice, Great Britain was Norway's principal ally at this time (Sverdrup, 1996, pp. 223-224).

policy. The central tenet of this policy was that Norway would not partake in either great power bloc, but rather exercise a restrained foreign policy and to some extent attempt to act as a mediator between them (Sverdrup, 1996, pp. 201, 224). This policy was founded on a desire to keep a good working relation with the Soviet Union, while also maintaining strong ties with the United States and Great Britain in particular (ibid., pp. 201, 223-224). The somewhat ambitious military rearmament programme must be viewed, in light of this desire, to have been aimed at ensuring political stability and the preservation of the status quo.[7]

However, while Norway maintained what was effectively a neutral – or UN-based – foreign policy in the beginning Cold War, extensive defence cooperation with Great Britain continued (Sverdrup, 1996, p. 222). As early as 1946, it was attempted to coordinate defence plans with Britain (ibid., p. 224). Norway furthermore decided to procure British weapons and contribute forces to the British occupation force in Germany (ibid., pp. 227-229). The *Germany Brigade* as it became called, was viewed as an obligation given the war victory, however, and did not elicit Soviet protests (ibid.).

One of the lessons learned from the war, was that the defence of Norway would not only require outside assistance, but also that preparations to recieve such support would need to be completed during peacetime (Tamnes, 1987, p. 60). Attempts were made to establish a regional defence cooperation, but this failed due to several factors, including Finland's unique position vis-á-vis the USSR (cf. "Finlandisation"), and the inadequacy of the military capability such an alliance would be able to muster. This combined with growing pressure on the bridge-building policy – from both blocs – to make Norway join NATO in 1949 (ibid., Sverdrup, 1996; Holst, 1966, pp. 63-64).

5.2.2   Deterrence and reassurance

The entry of Norway into NATO increased the deterrent effect on any Soviet prospect of escalation, by increasing the likely costs associated with an attack

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7. I.e., as a no-escalation policy.

(Holst, 1966, pp. 32-33). However, it remained in Norwegian interest to pursue supplementary policies to ensure Soviet non-aggression (ibid.). Norway therefore implemented a policy of *averting* the Soviet Union, based on the dual principle of *deterrence and reassurance* (Holst, 1966, p. 33). This was based on an acknowledgement that it was "[...]important to deter expansionist plans, but equally important to avoid provocations that may move the Soviet Union to a preemptive strike or compensatory push on the northern flank" (Holst, 1966, p. 33). The security dilemma would with time become especially pertinent for Norwegian policy because of the proximity of the important Kola base areas (ibid.).

While the policy Norway adapted in relation to the Soviet Union has been described as deterrence and reassurance, Tamnes (1987) coined the term *integreation and screening* to describe Norwegian policy towards NATO, and especially the United States (US). On the one hand, NATO had to be integrated to ensure credible deterrence and capable defence – on the other, NATO had to be screened to minimise the security dilemma jeopardising Norwegian security by precipitating a Soviet preemptive strike or by the US making use of Norway as a staging area for an attack eastwards (ibid.). The policy of integration manifested itself in Norwegian efforts to secure a strong NATO presence on the Northern flank in the process of allied defence integration that took place after the outbreak of the Korean war (Tamnes, 1987, pp. 67-71).

Meanwhile, the policy of screening included a number of self-imposed, conditional restrictions on military activity in Norway. The *base declaration* of 1949 made it clear that Norway would not "[...] enter any agreement with other states that include any requirement that Norway establish bases for the armed forces of foreign powers on Norwegian territory as long as Norway is not attacked or threatened with attack."[8] The declaration was made in a diplomatic note in response to Soviet inquiries about the prospect for allied bases in Norway in light of Norway's entry into NATO, and pertained in particular to the question of strategic bombers (Holst, 1966, pp. 83-84; Moen, 1998, pp. 7-8). It was never specified what constituted a "base", and the interpetation of this commitment became a topic of dispute between Norway and the Soviet

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8. Quoted in Holst (1966, p. 83), own trans.

Union, with the latter repeatedly insisting on more restrictive interpretations than Norway applied, concerning – inter alia – exercises, port visits, and NATO base facilities (Holst, 1966, p. 87). Furthermore, strict geographic limits were placed on allied activity, and allied aircraft, ships, and ground troops operating in or from Norway were restricted from operating within specified areas near the Soviet border (Moen, 1998, p. 7). Lastly, nuclear weapons would not be allowed on Norwegian soil in peacetime (ibid.).

In not allowing allied forces to be stationed in the country, Norwegian alliance policy was more restrictive than that of a number of other members (Holst, 1966, p. 69). Turkey, the only other NATO member[9] to border the Soviet Union, would not only allow allied troops in the country, but also that the US based substantial nuclear forces there. In 1951, the Norwegian minister for defence clarified a number of aspects regarding the base policy, including that it would be voided in case of attack or threat thereof, that it did not restrict Norway from making agreements and preparations for reception of allied support, and that it did not preclude allied forces from visiting or exercising in Norway (Holst, 1966, pp. 87-88, see also Moen, 1998, p. 8).

While the base policy could be viewed as a product of domestic political consider-ations, Holst (1966) argues that it was in effect a concession to the Soviet Union (pp. 83-85). In general, the reassurance policy was a policy of appeasement, in that Norway made concessions that aimed to reduce the opponent's insecurity, in the hope that this would prevent it from escalating (see Mearsheimer, 2001, pp. 163-164. In conceding to Soviet security interests, Norway aimed to ameli-orate the security dilemma, but in doing so also weakened the NATO security guarantee, by, inter alia, an absence of tripwire forces (Holst, 1966, p. 69, see also Schelling, 1960).

Norwegian NATO-membership and the policy of deterrence could be seen as either a policy of bandwagoning or external balancing. As noted, this policy was a consequence of pressure from both blocs. However, the Soviet Union was both the most powerful state in Norway's immediate surroundings and – to some degree – a rival (cf. the Svalbard question). Accordingly, the decision to

9. Turkey became a member of NATO in 1952.

join NATO and establish a policy of deterrence against the USSR is congruent with both balance-of-power and balance-of-threat definitions of balancing (see Mearsheimer, 2001; Walt, 1985). The bridge-building policy was not a realist policy at all, but rather an ideological policy, which sought the establishement of a liberal international order (see Mearsheimer, 2019). As offensive realism predicts, this failed when the great powers pursued an alternative (realist) international order (see ibid., pp. 10-12).

5.3   Intermezzo

Before presenting my analysis of the Russo-Norwegian relation as it played out following the events of early 2014, it is in order to briefly discuss a selection of important developments in the preceding years.

The end of the Cold War and demise of the Soviet Union fundamentally changed the security landscape in Europe, something which was recognised and acted upon by NATO and its core European member states as early as in 1990 (Waltz, 2000, p. 19). No longer constrained by effective opposition, the United States and its allies sought to expand the geographic scope of the liberal institutions that had constituted the bounded Western order during the Cold War – NATO, EU, General Agreement on Tariffs and Trade (GATT)/World Trade Organisation (WTO), etc (Mearsheimer, 2019, p. 23). This policy was not aimed at balancing, but was rather fueled by liberal political thought, and included attempts to spread democracy through support to movements such as the colour revolutions in Eastern Europe (ibid.).[10] Russia and China were also integrated into Western institutions, including cooperative efforts between NATO and Russia (Mearsheimer, 2019, p. 26). NATO's eastward expansion was however met with criticism in Russia, where it sparked fears that the country would yet again be rebuffed and surrounded, as the alliance gradually intruded into Russia's traditional sphere of influence (Waltz, 2000, p. 22).

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10. Waltz (2000) considers the continued American military presence in South-East Asia and Europe as an element of containment – i.e. realist policy (p. 37). However, it is evident that U.S. and Western foreign policy in general took a distinct liberal form in this period.

In terms of Norwegian defence and security policy these Cold War develop-
ments had two key consequences. For one, the defining conflict – the Cold War
– had ended, and the opponent – the Soviet Union – had literally ceased to exist.
The successor state – the Russian Federation – was politically, economically,
and militarily marginalised. For another, Norway became actively engaged in
the Western policy of expanding its liberal institutional order, including in
armed conflicts in the Balkans, Afghanistan, Iraq, Libya, and Syria. Norwegian
security policy was slow to adapt to the end of the Cold War, but major restruc-
turing of the Armed forces commenced around the turn of the century (Heier,
2006).[11]

The inclusion of Russian border states into NATO induced fears of destabil-
ising events in the border regions (Waltz, 2000, pp. 22-23). Russian resistance
to NATO's expansion continued into the 21st century, but the country was
long too weak to offer any effective resistance (Mearsheimer, 2019, pp. 34;
Mearsheimer, 2014, p. 78). In 2008, after NATO openly considered admitting
Georgia and Ukraine in the alliance, Russia invaded the country and estab-
lished effective control in the separatist regions of South Ossetia and Abkhazia
(Mearsheimer, 2014, pp. 78-79). While this halted admission plans, NATO con-
tinued its expansion in the Balkands the following year (Mearsheimer, 2014,
p. 79). Furthermore, NATO continued its cooperation with Georgia through
several initiatives, including the *NATO-Georgia Joint Training and Evaluation
Centre* to which Norwegian Special Operations Forces (SOF) personnel was
deployed (Johansen & Mørkved, 2020, pp. 3, 17–20, 23).[12]

The Russian invasion of Georgia marked a shift in the country's foreign policy.
But while the military operations were successful, they highlighted severe
problems within the armed forces (Ravndal, 2016, pp. 28-30). In the aftermath,
a substantial military reform programme – State Armament Programme (GPV)
2020 – was launched, which included large changes in organisation, person-
nel, C2, in addition to procurement and modernisation of matériel (ibid., pp.

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11. A pertinent example of the delayed response is the construction of the static defenses
    of the Frøy line, which were continued for years after the end of the Cold War and the
    collapse of the Soviet Union (Dalmo, 2013, pp. 76-79).
12. Georgia has also cooperated with the European Union on several issues following the 2008
    war (Johansen & Mørkved, 2020, pp. 17-18).

30-35, Institute for Strategic Studies, 2020c, p. 168). Defence spending was also increased in subsequent years (Institute for Strategic Studies, 2020c, p. 194).[13]

In 2014, amid domestic political turmoil and prospects for closer EU alignment in Ukraine, Russia invaded and annexed the strategically important Crimean peninsula, while providing close support to the separatists in the conflict in Eastern Ukraine (Mearsheimer, 2014, pp. 80-82; Mearsheimer, 2019, p. 29). This coincided with mounting problems facing the international liberal order (Mearsheimer, 2019, pp. 28-29, 49). Russian aggression in Ukraine was met by strong condemnation by the West, and led to immediate and dramatic worsening of East-West relations. It furthermore brought power politics to the fore again (Mearsheimer, 2019, p. 44). The emerging international political situation was by some labeled a *New Cold War*.[14]

5.4   2014-2021

Norway followed suit in the massive Western response to Russian actions in Eastern Ukraine, condemning "[...]Russia's use of military power to alter state borders[...]" (Norwegian Ministry of Foreign Affairs, 2014b). The day after the European Union (EU) decided to impose punitive measures, in March 2014, Norway declared it would implement identical actions (Norwegian Ministry of Foreign Affairs, 2014c). Targeted at individuals and entities thought to be responsible for Russian actions in Ukraine, the measures consisted of travel bans and the freezing of financial assets (ibid.). The U.S. implemented similar sanctions, while Canada, Australia, New Zealand, Japan, and Iceland also implemented restrictive measures (ibid.). Norway also followed the EU when it expanded the scope of the sanction scheme later the same year (Norwegian

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13. As an early sign of its renewed assertiveness, Russia had already ended its unilateral moratorium on strategic bomber patrols in 2007 (Kramer, 2007).
14. However, the current situation differs in significant ways from the Cold War, which has led to criticism of the New Cold War label (Westad, 2018). Westad (2018) emphasises multipolarity, the absence of ideological contestation, and the rise of nationalism as key differences between the Cold War and the present world order.

Ministry of Foreign Affairs, 2014a). [15]

A defence policy review commissioned by the government after the 2014 crisis – Tamnes et al. (2015) – identified a new threat scenario that demanded a boost of the defence posture and "[...] creating a new normal situation" (p. 5). This included enhancing the Armed Forces' capabilities and promoting stronger security guarantees through NATO. The necessary improvements identified were improved intelligence and surveillance, more robust C2, credible deterrence through high-readiness national forces and allied forces, in addition to improved logistical support (Tamnes et al., 2015, pp. 5-6, 94–96).

Before 2014, Norway had already procured, or made the decision to procure, cruise missile capable fighters (F-35), frigates (Nansen-class), and corvettes (Skjold-class). Later, plans were made to procure submarines of the cruise missile capable Type-212 class,[16] and a ground-based LRS capability (Norwegian Ministry of Defence, 2020b). It has been emphasised that the defence policy needs to manage the particular challenges of asymmetry in power and distance to allied states (Tamnes et al., 2015, pp. 63-64). The report envisioned a shift of emphasis away from large-scale maneouver warfare – for which the required forces were not available – to a greater reliance on LRS capabilities already available or under procurement at the time (ibid., pp. 62-66).

When NATO shifted its focus towards out-of-area operations from the 1990s on-wards, Norway sought to maintain the alliance's traditional functions (Ulriksen, 2002, pp. 238-239). Norway attempted to maintain interest in exercises and other NATO activities in the country, but its influence diminished in parallel with the reduction in interest for Russia (Ulriksen, 2002, pp. 240-241). At the same time, the Norwegian Armed Forces were largely under-funded, with only

15. This included expanding the list of persons and entities subject to travel bans and freezing of financial assets, restrictions on imports from and investment in Crimea and Sevastopol, restrictions on exports to the Russian petroleum sector, a ban on trading long-term financial instruments with a number of Russian financial institutions, and a ban on the import or export of defence matériel to/from Russia, and a ban on the export of products and technology with military application for military end-use in Russia (Norwegian Ministry of Foreign Affairs, 2014a).

16. It has not been possible to establish with certainty whether the cruise missile capability will be utilised.

minor quantities of modern matériel (Ulriksen, 2002, pp. 229-238). From 2003, however, the number of NATO units deployed on exercises to Norway grew (Bragstad, 2016, p. 27). From 2006, Norway hosted the biannual joint winter exercise Cold Response, with substantial allied participation.

In this period, there were made substantial investments in defence matériel. Concurrently, a number of units were staffed with contracted personnel. This was part of a delayed shift from territorial defence to out-of-area operations, and high-intensity war fighting ability was not prioritised. As an example, the main operating facility for the new F-35 fighter aircraft – at Ørland Main Air Station – was constructed for peace time operations only (Norwegian Ministry of Defence, 2017, p. 3).

5.4.1   Deterrence and reassurance recast

> From a Norwegian perspective it is important that the combined allied activity in the north during peacetime is unmistakable, but at the same time predictable and coordinated, so that the likelihood for unintended misunderstandings (sic) and escalation is minimised, and that our strategic main theme of balance between deterrence and reassurance is maintained. (Norwegian Ministry of Defence, 2020b, p. 14)(own trans.)

With the re-emergence of a tangible security threat from Russia, Norwegian defence and security policy reverted to the old policy of deterrence and reassurance. It was decided to procure a new Maritime Patrol Aircraft (MPA) platform and extend the service life of the Skjold class corvettes, while the aforementioned procurement programmes have been continued. In Finnmark, the Border Guard light infantry battalion at Garrison in South-Varanger (GSV) was supplemented with a ranger company, and a mechanised battalion was established in place of the previously disbanded light infrantry battalion at Garrison in Porsanger (GP).

The Norwegian nuclear weapons policy[17] has been maintained, while the

17. Norwegian policy with regards to nuclear weapons remains based on the Bratteli doctrine,

base policy has been substantially altered, with the deployment of United States Marine Corps (USMC) units to Værnes and Setermoen garrisons, and later with the Supplementary Defence Cooperation Agreement (SDCA) (see below).

The geographic restrictions on allied activity in Norway were lifted after the end of the Cold War, and have not been reinstated (Moen, 1998). The afore-mentioned Cold Response series of exercises has been continued: In 2016, the exercise was held in Trøndelag while in 2020 it was planned to be held in Troms.[18] In 2018, the NATO high-visibility exercise Trident Juncture was held in Trøndelag. It involved approximately 50,000 personnel, 250 aircraft, and 65 ships. Additionally, the biannual exercise series Joint Viking, initiated in 2015, has involved American and British forces deploying to Finnmark.

In 2021, Norway and the US signed the SDCA, a ten-year agreement that would give US forces "[...] right to unhindered access to and use of [...]" parts of Rygge, Sola, and Evenes Air Stations, and Ramsund Naval Station (Norwegian Ministry of Foreign Affairs, 2021; The Government of Norway and the Government of the United States of America, 2021).[19][20] The agreement includes provisions for exclusive American use of these facilities, including restricting Norwegian access to them, and partially exempting deployed personnel from Norwegian jurisdiction, including criminal law (The Government of Norway and the Government of the United States of America, 2021, Art. III, XII). The agreement gives the U.S. near complete freedom in deciding which activit-ies to perform at these facilities, including exercises, operations, movements,

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formulated by the then prime minister in 1975: "During calls by foreign warships, our prerequisite has been, and is, that there are no nuclear weapons on board. Norwegian authorities assume that both our allies and other nuclear powers respect this" (Norwegian Ministry of Foreign Affairs, 2016). Cognisant of the fact that allied warships could not be inspected, the wording of the declaration was chosen carefully to in practice allow nuclear armed ships in Norwegian waters (Tamnes & Eriksen, 1999, p. 15). In effect, the policy was one of 'ask no questions and you will be told no lies.' When the government later sought to ensure compliance, US and British opposition forced it to back down (Tamnes & Eriksen, 1999, p. 16).

18. It was severely truncated due to the Covid-19 pandemic.

19. Evenes and Ramsund are situated in the Ofoten region of Northern Norway.

20. As of this writing, the agreement was pending approval by parliament before entering into effect.

construction, and storage of matériel and supplies (The Government of Norway and the Government of the United States of America, 2021, Art. III). It substantially broadened the scope of American military activities on Norwegian territory, "[...] extending further than previous agreements in terms of American rights and opportunities in Norway" (Norwegian Ministry of Foreign Affairs, 2021).

While the agreement places few restrictions on American activity, the text explicitly states that "[...] nothing in this agreement changes the Norwegian base policy or Norwegian policy with regards to storage or deployment of nuclear weapons on Norwegian territory" (The Government of Norway and the Government of the United States of America, 2021, Art. I). Furthermore, the Norwegian government emphasised the continuity in Norwegian-American military cooperation, with the agreement serving to adapt the framework for such cooperation (Norwegian Ministry of Foreign Affairs, 2021). The Norwegian government expressed the view that the agreement would not serve to increase political tension in the region, but rather that it would maintain the established policy of reassurance and deterrence (Norwegian Ministry of Foreign Affairs, 2021). The agreement was a prerequisite for Congressional approval of future American investment in military infrastructure on Norwegian soil (Norwegian Ministry of Foreign Affairs, 2021). It specifies that general clearances for military movements on Norwegian territory excludes Svalbard and Jan Mayen (The Government of Norway and the Government of the United States of America, 2021, Art. XI).

While several of the restrictive measures that constituted the policy of reassurance have been discontinued, not reinstated, or significantly changed, reassurance has manifested in some distinct policy choices. While Norway supports the NATO Ballistic Missile Defence (BMD) shield with financing and personnel, the government decided not to procure sensors or missiles to include in the system (Norwegian Ministry of Defence, 2020a). Furthermore, it has maintained national control with intelligence gathering operations within its borders, confining US activities in-country to Norwegian facilities.

5.5   Discussion

Before considering the dependent and independent variables, it is necessary to discuss the contextual similarities differences between the two periods covered. The overall geopolitical context is similar in that the Norwegian-Russian border, and the adjoining seas and airspace, constitute a flank in a broader great power rivalry between Russia/USSR and the US, with Norway residing in a US-led bounded order. In both cases, Russian aggression seemed feasible, although not imminent. A difference is that the international system was bipolar in the former case, but multipolar in the latter. Another difference is that military technological developments during the latter part of the Cold War greatly increased the strategic significance Russia attaches to (near-) Norwegian areas. In particular, this pertains to the preservation of the SSBN borne second-strike deterrent, and to access to the Atlantic.

Disputes over natural resources and territory remain an important determinant of conflict in the international system. The Russo-Norwegian relationship contain only one significant such dispute, the disagreements over the status of the Svalbard archipelago. This remains a fairly constant feature of the relation in both periods, however, and so is of no significance in consideration of variation in contextual variables. Furthermore, inter-state cooperation regarding the exploitation of natural resources in the Barents Sea has not been significantly affected by changes in the states' security policies.

In both timeframes considered, the relation in question, between Norway and Russia, was an extended part of a broader great power competition, to which Norwegian territory was of secondary importance. In both periods, Norway faced an assertive Russia, that actively opposed the West – and in consequence, Norway.

Turning to the independent variable, external – or great power – support. From 1945, Norway maintained defence cooperation with Great Britain and later the United States. However, this cooperation was not on the level of a mutual defence arrangement, but rather bore close resemblance to the pre-war situation, which had proven to be insufficient. This changed with the entry into NATO and especially with the NATO reforms following the outbreak of

the Korean War. From this period onwards, which is outside the scope of this inquiry, Norway did also further increase its national military capability and allow substantial allied activity in the country.

When the 2014 crisis occurred, Norwegian security policy was founded on a high-degree of reliance on NATO security guarantees. While the alliance had previously shifted focus towards out-of-area operations, it remained the world's superior military alliance and possessed a most respectable deterrent capability. While there were fears regarding the sufficiency of the security guarantees, they were considerable both formally and operationally. Throughout this latter period, the reliability and credibility of the collective security guarantee increased with an overall change in focus towards high-intensity peer conflict throughout the alliance, with larger exercises, and the deployment of US tripwire forces in Norway.

Lastly, consider the dependent variable, weak party escalation. Recall that escalation is a broad concept, describing the increase in the intensity or scope of the use of coercion or force beyond a threshold the opponent views as significant (see Kahn, 1965; Morgan et al., 2008. It is therefore necessary to evaluate the specific policies implemented by the Norwegian government in relation to Soviet/Russian perceptions of thresholds. As noted, Norwegian policies from 1945 were by no standards assertive towards Russia. Rather, the bridge-building policy was largely a policy of neutrality. After the security political situation was seen worsening, Norway joined NATO in 1949, replacing the bridge building policy with the policy of deterrence and reassurance. This entailed maintaining a strict balancing act between the integration and screening of NATO, where alliance members were given severe restrictions on their activity in the country, in an effort to reduce the security dilemma vis-á-vis the Soviet Union.

Viewed in terms of the offensive realist grand strategy types, there are significant differences between the two periods. In the 1945-1952 three distinct strategies play a significant role. From 1945 to 1947 the policy is ideological – liberal – with an emphasis on supporting a UN-based liberal world order and maintaining a distinctly neutral position in relation to the great power blocs (see Mearsheimer, 2019). From 1947, this policy gradually transitions to a policy of balancing against the Soviet Union, culminating in NATO membership in 1949. The policy

of balancing becomes more prominent in the early 1950s, with increasing NATO integration. Concurrently, Norway adapts a policy of appeasement towards the Soviet Union, yielding for Soviet demands in the question of US and NATO forces in Norway. This combination of balancing and appeasement – "deterrence and reassurance" – with variation in the weighing of the two elements, is maintained through the Cold War.

The policy implemented after the 2014 Ukraine crisis was a continuation of Norwegian policy of external balancing against Russia, this policy gaining considerable traction. With time and closer allied integration over the following years, the balancing policy was gradually reinforced. Insofar as could be established, Norway has not yielded to Russia in significant questions of national security. Two of the main tenets of the appeasement policy of the Cold War – disallowing NATO forces to be based in country during peacetime, and restricting exercising allied forces from the border area – have been discontinued. As such, there is little evidence to support the conjecture that policy during this time has relied substantially on appeasement.

In the framework of considering the Norwegian state a purposeful and self-interested actor pursuing a balancing policy, the implementation of punitive measures against Russia constitutes an instance of escalation. While the sanctions were a EU (and/or US) scheme, not being a member of EU, Norway was in a position to choose whether or not to join in. Neither were the sanctions a response to Russian actions against Norway. As such, it constitutes an instance of increasing the scope of coercion – or perhaps more accurately, introducing an element of coercion.[21] Furthermore, Norway adopted a balancing policy making few concessions towards Russia, largely abandoning the policy of reassurance – "[t]he policy initiatives taken in recent years, made acceptable by the changes in official representations of the Russian Other, have largely abandoned the Cold War practice of "balancing" between deterrence and reassurance […]" (Wilhelmsen & Gjerde, 2018, p. 393).

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21. An alternative, functionalist explanation could view the Norwegian sanctions as an instance of spillover, see Wolf (1974). Furthermore, a neo-liberal explanation could emphasise the measures as an instance of the international liberal order collectively penalising Russian actions, as pursuant to the rules and norms of that order.

In summary, the policy adopted by the Norwegian government to an assertive Russia was clearly different in 2014-2021 compared to 1945-1952. In both cases, the policy evolved over the years to a similar picture, where national forces were deployed so as to buy time to introduce reinforcements in case of a Russian attack, with an emphasis on peacetime preparations of allied response by constructing infrastructure and conducting multi-national exercises. However, my findings are not congruent with categorising Norwegian policy as escalation in terms of the Asymmetrical Escalation Game. While there have been elements of escalatory policy in the latter period, it is questionable whether these events are severe enough to be categorised as weak choosing Demand.

While the data supports the conjecture that variation in the level of reservation in Norwegian security policy in relation to Russia was linked to the level of external support, there are also alternative explanations. Norwegian foreign and security policy has a long tradition of following suit to US and EU policy, and that Norway followed their policy decisions could thus be viewed as an extension of this tradition. On a more general level, this explanation is equivalent to categorising Norwegian policy in this respect as a bandwagoning strategy – i.e., to argue that Norwegian foreign policy is based on bandwagoning with the US and the EU, not balancing against Russia. This explanation is contradicted, however, by Norwegian policy in the early 2000s to increase NATO and US commitments to Norwegian security, which rather supports the conjecture that Norwegian foreign policy was based on external balancing against Russia.

Furthermore, of the observed differences in security policy, some stem naturally from geopolitical and technological changes. The continued introduction of new cruise missile capabilities in the Norwegian Armed Forces is one instance of a change in defence policy that appears to be dictated more by the evolving nature of military technology than by changing political priorities.

Other changes, however, reflect more profound differences in the policy choices. Norwegian screening policies – such as the ban on allied bases in Norway in peacetime, and allied manoeuvres in Finnmark – represent tacit or explicit points of agreement between Norway and Russia, Schelling-points that constitute escalatory thresholds. The continued relevance of these thresholds is

substantiated by both Russian and Norwegian references to the reassurance policy in recent discourse. The removal of these limitations is, consequentially, an escalatory policy. In fact, due to the increased speed and range of weapon systems, geographical restrictions like those implemented in Finnmark would need to be expanded in scope to exert a similar level of reassurance.

Another factor in that merits consideration in evaluating Norwegian security policy of this period, is the risks associated with maintaining the status quo after the 2014 crisis (see Tamnes et al., 2015). The government has pointed to increased great rivalry as posing an especially potent risk for small states (Norwegian Ministry of Defence, 2020b, p. 20). This correlates with the third hypotheses formulated in Chapter 2, that a weak state could rationally escalate to communicate private information regarding its own resolve. It was deemed that Norwegian security was not sufficiently maintained by the status quo, and that maintaining the pre-2014 policy was therefore not a viable alternative in light of international developments. Furthermore, insecurity regarding the credibility and longevity of US security guarantees – in the context of NATO's out-of-area focus and the emergence of a multipolar world order in which Russia is only one of the United States' opponents – may have altered Norway's bargaining position in relation to NATO, reducing the level of reservation in Norwegian policy that was acceptable by the US.

In summary, while I have found that Norway has generally been reluctant to increase tension with Russia and the Soviet Union, there are important exceptions. These exceptions correlate with the level of reliable and credible external great power support enjoyed by Norway. However, despite enjoying such close support, Norway has not escalated beyond minor thresholds. This has two important consequences. Firstly, it does not reject – i.e., it does lend some support to – the hypothesis that external support enables weak party escalation. Secondly, it makes pertinent the distinction between necessary and sufficient conditions (George & Bennett, 2005, pp. 26-27): While the data supports the conjecture that external support could be a necessary condition for weak party support, it has not been seen to be a sufficient condition. This is congruent with the discussion in Chapter 3: External support enables weak party escalation, but in the case of external balancing it does not in itself provide a rationale for

it.

6

Conclusion

6.1   Summary

This thesis project consisted of two main parts. First, I sought to establish a coherent theoretical explanation for weak party escalation. This comprised of an offensive realist understanding of international relations, which was combined with theory on escalation and power asymmetry in IR. From this I extrapolated three hypotheses about the causes of rational weak party escalation. These were formalised in a game theoretical framework, adapting a model for analysing the dynamics of weak party escalation. Utilising this model, I identified how the three hypothesised variables – external support, limited aims strategy, and demonstration of resolve – influenced the outcome of asymmetrical escalation.

Secondly, I sought to examine whether this formal model was congruent with observable behaviour. This was done by comparing the strategic situation faced by Norway in relation to Russia in 1945-1952 and 2014-2021. The overall purpose was to extend our understanding of weak party escalation under rationalist assumptions. My findings are comprehensive albeit far from conclusive, and the remainder of this chapter is devoted to discussing these and the limitations of my work.

6.2   Discussion

I have shown how, under anarchy, states are locked in a struggle for survival where they inevitably compete for power and influence (Mearsheimer, 2001, pp. 33-34). Faced with opposition, they apply the tools at their disposal to increase their own power relative to the other states in the system (ibid.). In international politics, military force is the ultima ratio, and the awareness that it may be used is omnipresent, influencing all negotiations, bargaining, and disputes (Waltz, 1979, pp. 113-114). "[...] [W]ar is not merely an act of policy, but a true political instrument, a continuation of political intercourse, carried out with other means." (von Clausewitz, 1832/1993, p. 99). The appreciation of the possibility of war, and the huge costs associated with it, however acts as a constant incentive for actors to resolve their differences through other means

(Waltz, 1979, p. 114).

With force serving as a constant and ultimate means for states to resolve their differences, variations in military capacity – the balance of power – is what sets states appart (Waltz, 1979, pp. 97-98). With states possessing a wide variety of power capabilities, political, and geographical constraints, the purposeful application of different levels of force and coercion, is of exceptional importance in their interaction. The Asymmetrical Escalation Game elucidates these key concepts of escalation under power asymmetry, showing how variations in the states' interests and information about the opponent influences the likelihood of escalation, concession, and counter-escalation.

While power is of fundamental importance for conflicts between states, power cannot be deterministically equated to outcomes (Mearsheimer, 2001, pp. 55-60). If it could, and if power could be reliably measured, states would have little reason to go to war at all. Furthermore, if power equates outcome, weak party escalation is self-defeating behaviour. This was shown in the Asymmetrical Escalation Game played under complete and perfect information: With both players' actions informed by knowledge about the other's preference, Weak would choose to play Cooperate, realising Status Quo, the game's equilibrium and solution. Under these conditions, the Weak player would not have any rational incentive to escalate. The conclusion is that given perfect information, and the absent of any special circumstances, a rational weak state would not escalate an asymmetrical conflict.[1]

Information problems have been found to be an important explanation of wars (Fearon, 1995, p. 381).[2] This was substantiated by my game analysis in two ways: Firstly, the game showed that under general and very reasonable assumptions, weak party escalation was not a rational policy. Secondly, it highlighted how the status quo was highly sensitive to variations in the weak state's perception about the strong state's deterrence credibility.

Other factors have been introduced to explain failure of the strong to unilat-

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1. See Chapter 3, and especially, Section 3.4.
2. Reference the argument of Blainey (1973), that a common cause of war is that states disagree on their relative power, and go to war to settle the dispute (Blainey, 1973, p. 246).

erally realise its most preferred outcome. Such explanations emphasise asymmetry in interest (Mack, 1975), strategy (Arreguin-Toft, 2001), issue-specific variables (Habeeb, 1988), and failure to translate power resources into effective means of coercion (Mearsheimer, 2001). In modeling asymmetrical escalation, these essentially material conditions were subsumed into the player's utility functions. The analysis however showed that the weak state could quite reasonably be deterred from making any escalatory moves. This highlighted an all important caveat of asymmetrical escalation, that even if the weak state would be able to forge a favorable outcome in, say, a limited conflict, any escalation remains hazardous for the weak state as its opponent often has a high degree of escalation dominance. This enables the strong to force the conflict to an even higher level of violence, where the weak becomes powerless.

In wars of attrition – such as the Second World War – the opponents' total power resources are employed in an attempt to destroy the opponent's forces (see e.g. von Clausewitz, 1832/1993). In such conflicts, the balance of power is a crucial causal factor. States can however apply strategies that preclude or hinder the opponent's attempt to leverage his complete power repertoire, such as in guerrilla (Arreguin-Toft, 2001; Mack, 1975) or limited-aims/fait accomplí strategies (Mearsheimer, 1983; Paul, 1994), or by exploiting the external support of a great power (Angstrom & Petersson, 2019; Paul, 1994; Schweller, 1994). A limited aims strategy could be viable for an inferior state because it relies on achieving the objective without entering into an all-out-confrontation with the opponent, in which the latter would be able to leverage his full power advantage. A good example is the Falklands war, where Argentina was able to make a land grab from the superior United Kingdom, because the latter had only minor forces available to counter the invasion.

While establishing a fait accomplí in the Falklands, Argentina was defeated when the British counter-escalated. The successful recapture of the Falklands, illustrate how a weak state is highly vulnerable to counter-escalation. Due to variety of factors – including a failure to effectively utilise its military advantage – Argentina was not able to counter the British naval invasion, and so eventually lost even if the conflict remained fairly limited in scope. While counter-escalation can be deterred through various means, the most pertinent

for a weak state is to be supported by some greater power. The Cod Wars illustrate this point – Iceland was not in a position to unilaterally force the conflict with the United Kingdom to a preferred outcome, but rather leveraged US support to bring about a favourable settlement. Likewise, weaker states can exploit more explicit extended deterrence policies to forge favourable outcomes in their contestation of more powerful adversaries. E.g., a tenet of Norwegian defence policy is to escalate any minor conflict with Russia to the point where US and NATO security guarantees are called into play (see Angstrom and Petersson, 2019).

Conditions in the late 1940s were not inducive for Norway to escalate the confrontation with the Soviet Union. Rather, under the then-prevailing conditions, it appears clear that the security interests of Norway were best served by maintaining the status quo (Holst, 1966, p. 33). That is, to abstain from any action that could upset regional stability, and to maintain incentives for the Soviet Union to do the same. With the increased credibility of allied support that resulted from entry into the alliance and its reorganisation in the early 50s, Norway was able to maintain a less restrictive security policy despite Soviet protests – with bridge building yielding to a policy of deterrence based on external balancing. The conditions did however, not warrant any substantial escalation, which precipitated the dual policies of deterrence and reassurance, and integration and screening (see Holst, 1966; Tamnes, 1987). This security policy thus combined external balancing in the form of US/NATO extended deterrence – "deterrence" – with appeasement in the form of security concessions – "reassurance".

The end of the Cold War had lead to the reappraisal of the need for a strong defence policy towards Russia, which manifested in policy changes throughout the early 2000s. When the security landscape was altered overnight by the Ukraine crisis in 2014, Norway again found itself in a highly vulnerable position vis-á-vis Russia. The policy implemented bears close resemblence to the policy of the early '50s, but with far less emphasis on reassurance. This more assertive – bordering on escalatory – policy was made possible by the security guarantees and mutual defence schemes already in existence.

There were, however, no rationale for further escalation than that which was

required to establish a credible extended deterrent and reliable defensive posture vis-á-vis Russia. This illustrates one of the limitations of weak party escalation with external support: That the level of escalation that the weak can rationally perform is constrained by the benefactor's policy and interests. Norway has no unilateral rationale for escalation – e.g. a viable limited aims strategic option – and so any escalation is tied to US policy. Should the US therefore adopt a more aggressive policy, an escalatory strategy based on jackal bandwagoning could become a viable alternative.

6.3   Limitations

The rationalist research agenda that I have subscribed to in this thesis, and the offensive realist theoretical framework applied, are substantive and widely utilised approaches to questions of international relations in general, and strategic and security studies in particular. Nonetheless, they have been, and remain, subject to substantial criticism. As such, the validity of all findings are limited by the assumptions underlying the theoretical framework. This is perhaps most pertinent in respect to the assumption of rational actors that both offensive realism and game theory are based on. Importantly, the assumption is heroic and its applicability has been repeatedly called into question. Furthermore, the assumption that even lesser states adhere to (offensive) realist principles is not universally accepted, which calls for supplementing this analysis with research applying other frameworks.

Another attribute of rationalism and structural realism is the exclusion of all domestic-level variables. Domestic politics is treated as a qualitatively different subject, removed from inter-state relations. However, the assumption that domestic politics has no influence on international politics is at best heroic, and domestic variables are often included in studies of inter-state relations – "[...] most quantitative analyses of dyadic behavior [...] include variables measured at the national level, such as democracy" (Gleditsch, 1999, p. 343). Including variables at the domestic level in the analysis of asymmetrical escalation therefore holds some promise of revealing influential factors not considered herein. For example, an inquiry into institutional constraints and determinants

of escalatory behaviour, could cast additional light on the political decision making in asymmetrical conflict and escalation.

The empirical analysis of Norwegian security policy with regards to Russia also found that domestic political factors had – at the very least – been considered in relation to the pertinent foreign and security policy questions. Variation in Norwegian defence and security policy has been in part contributed to domestic political considerations (see e.g., Moen, 1998, p. 77, (Holst, 1966)). The aforementioned issue of allied naval vessels bringing nuclear weapons into Norwegian waters and ports is an example of this. In that case, however, domestic political considerations eventually yielded for the requirements of security policy. It would nonetheless be desirable to more carefully scrutin-ise the causal path behind the referenced policy decisions with, e.g., a CPT approach.

The purpose of the case study in Chapter 5 was to scrutinise the theoretical model. Adopting a hypothetic-deductive framework, I sought the falsification of the theoretical model by the data. The chosen approach has two important caveats. Firstly, while the data analysis constituted a valid test of the model, it did not consider the full range of causal mechanisms. As such, it is not possible to derive any conclusive inference as to the validity of all aspects of the model considered in Chapter 3. Secondly, it is not possible to generalise in any significant respeoct. Furthermore, as with all deductive hypotheses tests, the failure to reject does not constitute a success insofar as no hypothesis can be proven true. The failure to reject does strengthen the hypothesis, but there is a dire need for additional empirical analysis.

The case study was inconclusive in respect to the relationship between the dependent and independent variable. This indicates that the model requires further refinement, and that other cases and designs should be investigated. Furthermore, as discussed, there are important reservations about the validity of my findings. An important improvement would have been to consider a pair of cases with greater variation on the dependent variable, i.e., with more distinct weak party escalatory behaviour. Lastly, the significant variations seen on some control variables also weakens the validity of the results.

A weakness of the model as such is the small number of gradients into which escalatory acts are classified. Both players can essentially choose to Cooperate, i.e., not escalate; to Defect, i.e., escalate some; or Escalate, i.e., apply their maximum level of force. These three are pertinent analytical categories as they pertain to the thresholds identified as central to escalation dynamics (see e.g. Kahn, 1965). However, the small number of categories also limits interpretation of more complex situations, e.g. where plausibly deniable and asymmetrical tactics – such as cyber attacks, sabotage, and misinformation – are employed, or in cases where only minor adjustments of the status quo are pursued.

As an example of a possible improvement in the game structure, in node 3a,[3] Weak has the choice of Defy or Escalate, with Defy leading to the outcome Limited Conflict, Escalate leading to Strong facing the option of counter-escalation in Node 4. This gives Strong incentives to immediately counter-escalate in node 2, to avoid the realisation of Limited Conflict, which under all reasonable assumptions is the subgame-perfect equilibrium in node 3a. It may be more pertinent however, to allow the model a choice for Strong to counter-escalate after a limited conflict is established. Returning to the example of the Falklands war, Strong initially chose not to escalate – i.e., by striking Argentinian territory with conventional or nuclear weapons – but to Defy and oppose the invasion with the in-situ forces. To the extent that the conflict involved an element of British counter-escalation, it followed after the establishment of a limited conflict.[4]

Another possible improvement to the game theoretical model would be to further refine the structure of the game in consideration of the theoretical arguments so as to reduce the reliance on arbitrary variation in the player's preferences. For example, to specify conflict outcomes – not only escalation outcomes – as a combination of moves by the players and nature. This would allow for defining a larger number of game parameters with empirical data, e.g., by deriving the probability of a weak state accomplishing its objectives in a limited conflict from empirical data, and/or similar on of the determin-

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3. Which follows the choices 'Weak: Demand', 'Strong: Defy'.
4. The British re-conquest of the Falklands could also reasonably viewed as maintaining a limited conflict, seeing that it applied a level of coercion largely similar to that previously employed by Argentina, although with far more proficient units.

ants of Strong's deterrence credibility in asymmetrical escalation. In turn, this would increase the external validity of the model. Lastly, a more comprehensive analysis under incomplete information, including uncertainty regarding Weak's type and Bayesian updating of preferences, could provide additional clarity.

6.3.1   Avenues for further research

Further empirical tests are required to provide a comprehensive test of my hypotheses and model. In brief, these tests fall in two groups. For one, additional case studies are desired, both at the single-case level and in comparative frameworks. In particular, the use of a CPT approach would be suitable to improve knowledge about the necessary conditions and causal paths in asymmetrical escalation (see George and Bennett, 2005. For another, statistical tests of the hypotheses using a large-N dataset would allow a more stringent deductive test of the hypotheses.

In a recent article, Moghadam and Wyss (2020) construct a power proxy using net – rather than gross – figures for national material capability. By controlling for states' subsidience costs and efficiency in power measurement, their power proxy shows promising results in predicting conflict outcomes compared to gross indicators such as Gross Domestic Product (GDP) and CINC. This approach promises improved clarity and validity to the classifications of symmetry and asymmetry in state dyads.

As states interact repeatedly, it is a priori reasonable to assume that previous outcomes may influence future decisions. It would therefore be pertinent to include learning theory in the analysis, as Holmberg (1998) does in his analysis of military balance and escalation (see also Gleditsch, 1999). Another option for pursuing this question would be to model escalation as a repeated game. In this study, the repeated game option was not viewed as suitable, however, because repeated variable-sum games played over an indefinite period of time do not have a determinate solution, and arbitrary assumptions about the actors are be required to reach a unique solution (Keohane, 1984, p. 28). It could nonetheless be a pertinent approach to explore in future studies.

6.4   Concluding remarks

Returning to the research questions put forward in Section 1.3, I now briefly summarise my findings as they pertain to each one.

The strategies available to weak states in asymmetrical relations are principally not too different from those available to stronger states. A substantial difference however, is the degree of freedom the weak has to forcefully produce a favourable settlement. For the weak to rationally pursue an escalatory policy is dependent on the availability and exploitation of specific strategic conditions. The uniqueness of weak party escalation lies in the fact that a lesser power contravenes established dogma of the international relations and foreign policy literature. It is defined by a weak state – one being the lesser party in an asymmetrical relationship – escalating – increasing the level of tension, conflict, or use of force – against a vastly stronger one.

Weak states can utilise escalation to exploit a loophole in the capabilities of its stronger opponent, and thus forge a more favourable settlement than what is available through inactivity, appeasement, or bandwagoning. It is however fraught with danger, especially of counter-escalation from the strong state. Due to the power imbalance, the stronger is generally capable of enjoying some degree of escalation dominance, and the weak therefore faces a significant challenge in avoiding counter-escalation. It can be achieved through, e.g., external balancing or establishing a fait accomplí, though neither of these strategies are certain to succeed. Furthermore, the applicability of weak party escalation is limited by the necessity of favourable strategic conditions being available and exploited.

On the question of escalation in Norwegian security policy, there is no clear answer. Massive escalation is no viable alternative: The possible gains Norway could make are too small, if any, and the strategic importance Russia attaches to its assets in the region – and thereby its deterrence credibility – is too great. However, the reserved, but nonetheless somewhat escalatory, policy implemented by Norway after 2014 is likely a sound course of action in light of the need to muster stronger US commitments to effectively balance against Russia.

This becomes especially relevant given multipolarity and the pivot to Asia, where Norway's role as a prioritised allied of the US is not guaranteed to the same extent as during the Cold War. Despite Trump's failed bid for re-election, concerns about the long-term reliability of US commitments in Europe remain (Meijer & Brooks, 2021, pp. 7-8). In this respect, the more assertive Norwegian policy vis-á-vis Russia serves as a display of commitment and resolve – a costly signal – to the US. Concurrently, the abstention from imposing significant restrictions on US activity in Norway serves to increase the credibility of extended deterrence through preparations, exercises, and the deployment of tripwire forces.

<p style="text-align:center">* * * *</p>

In conclusion, I have found that inter-state asymmetrical escalation is a rare occurrence, but nonetheless one of significance for IR theory and foreign policy practice. This thesis has shown how weak party escalation is a distinct phenomenon, with its own logic. It has highlighted critical conditions for successful weak party escalation, including the requirement that the weak is able to avoid confronting the massed power of the strong. Furthermore, it has shown how weak states finding themselves in a position where an offensive limited aims or defensive guerilla strategy is likely to achieve their immediate objectives, must remain cognisant of the possibilities of counter-escalation.

A more general point is that my analysis has revealed the limitations of the strongest-might-dogma in IR theorising. Understanding the conditions under which superior power might become an insufficient means for imposing one's will, is not only important to prevent the recurrence of unwinnable foreverwars or to enable strong actors to choose favourable strategies in their interactions with lesser states, but also for advancing international relations theory.

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Appendix I – On the implications of using different measures of power and thresholds for asymmetry

This appendix illustrates key implications of choosing different measures of power and applying various thresholds for asymmetry for the categorisation of state dyads as symmetric or asymmetric. The purpose is to substantiate my positioning on these matters as discussed in Chapter 2. I do this by applying different measures of power and thresholds of asymmetry on a number of state dyads. The variation in the distributions of symmetric and asymmetric state dyads is then discussed. There is a large number of power proxies and asymmetry thresholds applied in the referenced literature, but substantiated discussions on these assumptions are far between, despite their vast theoretical and empirical implications.[5]. Generally, authors applying quantifiable proxies do not discuss their implications in light of empirical data. This appendix is an attempt at elucidating some important considerations when applying a material power proxy to categorise state dyads as symmetric or asymmetric.

The dyads chosen comprise all states with a shared land border as per 2020. This choice reflects an interest in analysing a large sample of state dyads ($n = 309$), while keeping the sample size within reasonable limits – e.g. all state dyads in the world would give $n \approx 20,000$. [6] It does *not* reflect a position that contiguous state dyads are the key unit of analysis, or that these state dyads are more interesting than others.

A1.1   Contiguous state dyads list

A list of land boundaries was downloaded from the CIA World Factbook[7], and the entire list was copied to a CSV-file. A number of entries were removed from the data set as they were listed without any land borders, are not states, or both (see table below). Then, all miscellaneous information was removed from the data. Additionally, the spelling of state names was standardised, double

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5. For a discussion of this point, examples, and implications, see Chapters 1, 2, and 4. See also Carroll and Kenkel (2019).
6. The number of possible state dyads is the halved product of all possible combinations of all states (halved because UK-US is the same as US-UK). Assuming that there is currently 200 states in the world system, the number of state dyads is $\frac{200 \times (200-1)}{2} = 19,900$.
7. https://www.cia.gov/library/publications/the-world-factbook/fields/281.html, downloaded on August 21st, 2020, at 15:21 CEST.

entries were removed, and all units matched to ISO standard country codes
(ISO-3166-1 Alpha-2).

Table A1.1: States, territories, and other entities removed from the state dyad data set

American Samoa	Antarctica
Anguilla	Antuiga and Barbuda
Aruba	Ashmore and Cartier Islands
Australia	Bahamas
Bahrain	Barbados
Bermuda	Bouvet Island
British Indian Ocean Territory	British Virgin Islands
Cabo Verde	Cayman Islands
Christmas Island	Clipperton Island
Cocos Islands	Comoros
Cook Islands	Coral Sea Islands
Curacao	Dominica
European Union	Falkland Islands
Faroe Islands	Fijii
French Polynesia	French Southern and Antarctic Lands
Greenland	Grenada
Guam	Guernsey
Heard Island and McDonal Islands	Howland Island
Iceland	Isle of Man
Jamaica	Jan Mayen
Japan	Jarvis Island
Jersey	Johnston Atoll
Kingsman Reef	Kiribati
Maldives	Malta
Marshall Islands	Mauritius
Micronesia	Midway Islands
Montserrat	Nauru
Nowassa Island	New Caledonia
New Zealand	Niue
Norfolk Island	Northern Mariana Islands
Palau	Palmyra Atoll

Paracel Island	Phillipinnes
Pitcaira Islands	Puerto Rico
Saint Barthelemy	Saint Helena, Ascension and Tristan da Cuhna
Saint Kitts and Nevis	Saint Lucia
Saint Pierre and Miquelon	Saint Vincent and the Grenadines
Samoa	Sao Tome and Principe
Seychelles	Singapore
Solomon Islands	South Georgia and South Sandwhich Islands
Spratly Islands	Sri Lanka
Svalbard	Taiwan
Tokelau	Tonga
Trinidad and Tobago	Turks and Caicos Islands
Tuvalu	United States Pacific Island Wildlife Refuges
Virgin Island	Wallis and Futuna
West Bank	Western Sahara
World	

A1.2   Weede, 1976

In defining asymmetry (i.e. preponderance) in power, Weede (1976) uses Gross
National Product (GNP) and defence expenditure as proxies for power. The
proxies are used separately, and the respective state's values on the two proxies
are compared, without aggregation into a single indicator. I substitute GNP
for its successor, GNI, and use World Bank World Development Indicators (WB
WDI) data on 2010 for this and military expenditure figures.

Table A1.2: Variables used to calculate Weede (1976) power proxy.

Name	Description	Unit of measure
MS.MIL.XPND.CD	Military personell	Current US Dollars
NY.GNP.MKTP.CD	Gross National Income	Current US Dollars

A1.3 Arreguin-Toft, 2001

Arreguin-Toft (2001) uses the product of population and armed forces – assumed
to be measured by number of service members – as a proxy for power in coding
state dyads as symmetric or asymmetric. The key point here is that a proxy
for potential power – population – is multiplied with a proxy for actual power
– armed forces – to produce a proxy for power. As will be shown, the use
of multiplication has the consequence of exaggerating differences in power
compared to using a single measure, addition, or averaging. I again use 2010
WB WDI data on population and armed forces service members to compute
power.

Table A1.3: Variables used to calculate Arreguin-Toft (2001) power proxy.

Name	Description	Unit of measure
SP.POP.TOTL	Population	Individuals
MS.MIL.TOTL.P1	Armed forces personnel	Individuals

A1.4 CINC

The CINC is a composite quantitative measure of power. In reference to the
discussion on the index in Chapter 2, this section is restricted to describe
variables and aggregation processes. For the sources of the data, see Correlates
of War Project (2017). The CINC scores are aggregated from values on six
variables (see table).

Table A1.4: Variables included in the Composite Index of National Capability power
proxy

Name	Description	Unit of measure
milper	Military personell	Thousands
milex	Military expenditure	Thousands of current U.S. dollars
irst	Iron and steel production	Thousands of tons
pec[8]	Energy consumption	Thousands of coal-ton equivalents
tpop	Total population	Thousands

8. Note that this variable is called *energy* in the codebook, *pec* in the data set.

| upop | Urban population | Thousands |

The CINC score is calculated by averaging the share of world total on each of the six variables. E.g. A state's *milper* score is calculated as that state's share of total world system military personnel. A score on each of the remaining five variables is calculated in the same fashion, and all scores are averaged to produce the total score for that state. If one or more scores have missing values, these are excluded from the average.

$$CINC_i = \frac{\frac{milex_i}{\sum_i^n milex} + \frac{milper_i}{\sum_i^n milper} + \frac{irst}{\sum_i^n irst} + \frac{pec_i}{\sum_i^n pec} + \frac{tpop_i}{\sum_i^n tpop} + \frac{upop_i}{\sum_i^n upop}}{j}$$

where $1 \geq j \geq 6$ is the number of variables without missing values.

A1.5 CINC adaptation

The thesis adapts the CINC to conform to the same theoretical concept as Arreguin-Toft (2001). Specifically, that total power is measured as the product of actual/military and latent/potential power. The CINC score, however, is computed as the average over six indicators, where two measure actual and four measure latent power. The key discrepancy here is that the CINC score gives latent power twice the weight of actual power. To converge these measures, I make two alterations to the CINC score. Firstly, combined scores on latent power and actual power are computed separately. Secondly, the potential and actual power scores are not averaged, but multiplied. The procedure is:

$$CINCMOD_i = \left(\frac{\frac{irst}{\sum_i^n irst} + \frac{pec_i}{\sum_i^n pec} + \frac{tpop_i}{\sum_i^n tpop} + \frac{upop_i}{\sum_i^n upop}}{j} \right) \times \left(\frac{\frac{milex_i}{\sum_i^n milex} + \frac{milper_i}{\sum_i^n milper}}{k} \right)$$

where $1 \geq j \geq 4$ is the number of latent power variables without missing values, and $1 \geq k \geq 2$ is the number of actual power variables without missing values.

A1.6   Method of comparison

A separate data frame was constructed for each power proxy to be evaluated. To produce each data frame, the contiguous state dyads data set was matched to a data set with data on the applicable proxies. The data was merged twice, once to each of the states in each dyad. This produced data frames with state dyads as units and the relevant power proxies for both states in the dyad as variables. All data sets had $n = 309$. The number of missing observations varied between 23 and 45, except for Weede's military expenditure data set, which had 67 NAs.

The comparison was performed by dividing the power proxy of state X by that of state Y for each dyad in all data sets. For those data frames where the power proxy was composite, the applicable aggregation was performed in advance. A state dyad was then categorised as either asymmetric (TRUE, 1), symmetric (FALSE, 0) or missing (NA), based on the fraction of the division. The criterion for classification for each threshold of asymmetry is given in the table below. Because the order of the states within each dyads was not sorted, it was necessary to define both lower and upper bounds for symmetry and classify all dyads outside that range as asymmetric.[9]

The result of all comparisons was copied to separate vectors, and the vectors were averaged to give the proportion of asymmetric state dyads for all possible combinations of power proxy and asymmetry threshold.

Table A1.5: Operation for categorising state dyads as symmetric or asymmetric for different thresholds.

Threshold	Criterion for asymmetry
2-to-1	x is outside range $(\frac{1}{2}, 2)$
3-to-1	x is outside range $(\frac{1}{3}, 3)$
5-to-1	x is outside range $(\frac{1}{5}, 5)$
10-to-1	x is outside range $(\frac{1}{10}, 10)$

9. To account for state X being greater than state Y and vice versa.

A1.7 Results

The table and figure contained in this section describe the variation in the share of state dyads classified as asymmetric for the different power proxies and asymmetry thresholds considered. The key finding is that the key discrepancy is observed between multiplicative and additive/averaging power proxies. The within-group variation is limited. The greatest discrepancy observed between the two multiplicative proxies is 1.5 percentage points, and the observed variation between the three others is consistently within a range of 10 percentage points.

Table A1.6: Percentage of state dyads classified as asymmetric for different power proxies and asymmetry thresholds.

	AT	C-MOD	CINC	GNI	MIL
2-to-1	75.7%	74.8%	66%	66%	56.0%
3-to-1	66.3%	68.3%	55%	54%	45.6%
5-to-1	57.9%	59.5%	41%	43%	37.2%
10-to-1	47.9%	50.8%	27%	30%	27.5%

Note: AT is Arreguín-Toft (2001), C-MOD is adaptation of CINC, GNI is Weede (1976)'s economic power proxy, and MIL is Weede's military power proxy.

A closer examination of the categorisation of specific dyads reveals that the modified CINC proxy may have greater validity than the Arreguín-Toft proxy. E.g. applying the 10-to-1 threshold, the Russia-North Korea dyad is classified as symmetric by the Arreguìn-Toft proxy, but asymmetric by the modified-CINC proxy – the latter result appearing far more accurate. The discrepancy is a result of the Arreguín-Toft proxy relying purely on headcount-variables, which leads the enormous staffing levels in the North Korean military to inflate that state's power value. The modified CINC proxy, on the other hand, accounts for a range of other factors, and so evens out this outlier.

Another noteworthy result is that – as postulated above – the multiplicative proxies inflate differences in power. I.e., these proxies categorise approximately 50 percent of dyads as asymmetric by the 10-to-1 threshold. This is similar

to the result for the additive/averaging proxies using the 3-to-1 threshold.
Furthermore, the discrepancy in the share of dyads classified as asymmetric is
greater for the stricter thresholds.

Figure A1.1: Variation in share of state dyads categorised as asymmetric for different proxies for power and thresholds for asymmetry.
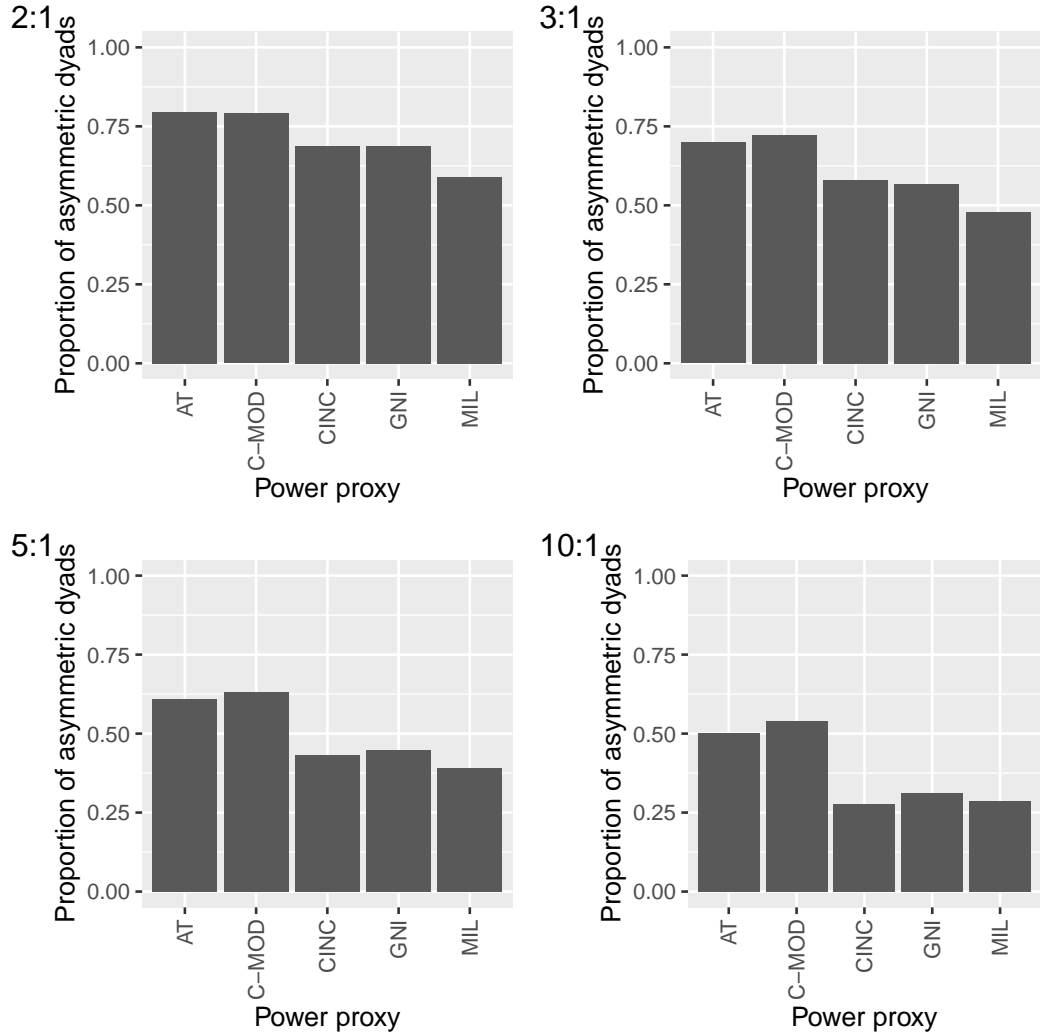
Note: AT is Arreguín-Toft (2001), C-MOD is adaptation of CINC, GNI is Weede (1976)'s economic power proxy, and MIL is Weede's military power proxy.

A1.8   Concluding remarks

The distribution of asymmetrical state dyads in this data set shows limited vari-
ation for individual power proxies, such as GNI vs. population. However, there is
a large discrepancy between the different types of proxy aggregation processes.
This leads to the conclusion that the aggregation processes deserves close
attention when comparing quantitative power proxies. Furthermore, there is
reason to be aware of the possibility of over-emphasising the significance of
variations in the precise indicators used to construct such proxies. Lastly, it
makes plain that discussions of various thresholds for asymmetry are meaning-
less in the absence of reference to the composition of the proxy applied and its
aggregation method.

I hope to have demonstrated the desirability of the power proxy I have chosen
to apply in this thesis. The CINC-adaptation yields results similar to those pro-
duced by the proxy adopted by Arreguin-Toft (2001), while vthere is anecdotal
evidence that my proxy has greater robustness to outlier values on specific
indicators compared to Arreguín-Toft's. While there is no clear benchmark to
use as reference, the 10-to-1 rule appears to produce a reasonable distribution
of symmetric vs. asymmetric state dyads compared to the less-strict bench-
marks. In Appendix 2 I apply this power proxy to those state dyads that are of
theoretical and/or empirical importance to this thesis.

Appendix II – Material power balance in selected conflicts

In this appendix, I measure the relative power of a select number of state dyads at times of mutual conflict. The first section is a proof of concept for the power proxy and asymmetry threshold applied in this thesis. Using my modified CINC power proxy, I compute the relative power of clearly symmetric states dyads at times of conflict, and demonstrate that these dyads are classified as symmetric with the 10-to-1 threshold. This is done to verify that the proxy is in fact capable of distinguishing symmetric from asymmetric dyads.

In the second section, I apply the same procedure to clearly asymmetric state dyads at times of mutual conflict. The dyads are chosen based on references in the literature quoting them as asymmetric. These tests are intended to show that the cases I quote as asymmetric do in fact fulfill my criterion for classification as asymmetric.

I use the Correlates of War Project (2017) National Material Capability dataset (version 5) for all comparisons. As this data set has no observations after 2010, all state dyads who acquired prominence later – e.g. the post-Crimea Russo-Norwegian standoff – are examined with data from 2010. The Gulf War U.S.-Iraq dyad is examined in 1990 (not '91) as that was the year Iraq escalated.

The tables contain the respective state's values on all pertinent variables in the quoted year, their computed latent and actual power score, their modified CINC score, and information on the relative power of the state dyad, i.e., "symmetric", "weak", or "strong". For a thorough description of data and measurement, see Appendix I.

A2.1   Symmetrical conflicts

The symmetric conflicts examined are listed below. The state dyad examined, and the year of comparison is specified in the parentheses.

- The First World War (German Empire, Russian Empire, 1914)

- The Second World War (Nazi Germany, USSR, 1941)

- The Cold War (US, USSR, 1950)

- The Sino-Soviet Border Conflict (USSR, China, 1969)

- The Cold War (US, USSR, 1980)

	Russian Empire	German Empire
milex	0.115571904941906	0.240718611810154
milper	0.187562118415448	0.122391026551186
irst	0.0761986009213445	0.235625319911278
pec	0.0404932596271027	0.156692654553484
tpop	0.143588498815456	0.055590316017703
upop	0.1014129488048	0.138188328655763
latent	0.0904233270421759	0.146524154784557
actual	0.151567011678677	0.18155481918067
cincmod	0.0137051934658263	0.0266021664275107
Power	Symmetrical	Symmetrical

Table A2.1: Distribution of power in the World War I, Eastern Front (1914)

	Soviet Union	Nazi Germany
milex	0.113381047217318	0.47597388415293
milper	0.169377566631774	0.285852323053386
irst	0.107098432420917	0.143191923634639
pec	0.0722663769869644	0.129843164370968
tpop	0.131910920436504	0.0607822264793101
upop	0.151996749531811	0.118679450596153
latent	0.115818119844049	0.113124191270268
actual	0.141379306924546	0.380913103603158
cincmod	0.0163742855128556	0.0430904867893549
Power	Symmetrical	Symmetrical

Table A2.2: Distribution of power in the World War II, Eastern Front (1941)

	United States	Soviet Union
milex	0.326434670173629	0.347767228560009
milper	0.0834667276469243	0.245826663617654
irst	0.521009898523821	0.162083138110799
pec	0.540566093585132	0.119257141464196
tpop	0.071016489410325	0.0839837810913717
upop	0.164164223968933	0.124672802972312
latent	0.324189176372053	0.12249921590967
actual	0.204950698910277	0.296796946088831
cincmod	0.0664427982765991	0.0363573931802664
Power	Symmetrical	Symmetrical

Table A2.3: Distribution of power in the Cold War (1950)

	China	Soviet Union
milex	0.0918559493036421	0.307935840040786
milper	0.113993394022396	0.169177475227584
irst	0.0233711221995855	0.193438553059285
pec	0.0444559457468864	0.167923447815614
tpop	0.226846140764302	0.0673963638788393
upop	0.148577985513257	0.116118450797769
latent	0.110812798556008	0.136219203887877
actual	0.102924671663019	0.238556657634185
cincmod	0.0114053709074374	0.0324959979850815
Power	Symmetrical	Symmetrical

Table A2.4: Distribution of power in the Sino-Soviet Border Conflict (1969)

	United States	Soviet Union
milex	0.22664545793292	0.316401032389808
milper	0.0767158146845296	0.145947159643739
irst	0.1411273103101	0.205870938395904
pec	0.241978443757459	0.176955579870041
tpop	0.0516244778634032	0.0601840496082474
upop	0.0605960763042083	0.106797710788998
latent	0.123831577058793	0.137452069665797
actual	0.151680636308725	0.231174096016774
cincmod	0.0187828524033906	0.0317753579506253
Power	Symmetrical	Symmetrical

Table A2.5: Distribution of power in the Cold War (1980)

A2.2   Asymmetrical conflicts

The asymmetric conflicts examined are listed below. The state dyad examined, and the year of comparison is specified in the parentheses.

- The Continuation War (Finland, USSR, 1941)

- The Russo-Norwegian Standoff (Norway, USSR, 1945)

- The Kashmir border conflict (Pakistan, India, 1965)

- The Six Day War (Israel, Egypt, 1967)

- The Falklands War (Argentina, Great Britain, 1982)

- The invasion of Kuwait/(second) Gulf War (US, Iraq, 1990)

- The US-North Korea Standoff (US, North Korea, 2010)

- The Russo-Norwegian Standoff (Norway, Russia, 2010)

	Finland	Soviet Union
milex	0.00154538344283176	0.113381047217318
milper		0.169377566631774
irst	0.000426084625904571	0.107098432420917
pec	0.000688513125947811	0.0722663769869644
tpop	0.00248851827182803	0.131910920436504
upop	0.00145710642948212	0.151996749531811
latent	0.00126505561329063	0.115818119844049
actual	0.00154538344283176	0.141379306924546
cincmod	0.00000195499599904072	0.0163742855128556
Power	Weak < 1:10	Strong > 10:1

Table A2.6: Distribution of power in the Continuation War (1941)

	Norway	Soviet Union
milex	0.000781137097975326	0.0605309085251671
milper	0.0000774983531599954	0.242182353624985
irst	0.000305921650984737	0.101301407239595
pec	0.00137381620517703	0.0725809702223058
tpop	0.00190349320406499	0.109752632546577
upop	0.0014272963050288	0.122894843207922
latent	0.00125263184131389	0.1016324633041
actual	0.000429317725567661	0.151356631075076
cincmod	0.0000053777705308651	0.0153827472535699
Power	Weak < 1:10	Strong > 10:1

Table A2.7: Distribution of power in the Russo-Norwegian standoff (1945)

	Iceland	Great Britain
milex	0	0.0415011031213773
milper	0	0.0312866242038217
irst	0	0.0743611227482195
pec	0.0000151061517375177	0.0597607455317487
tpop	0.0000624461448188914	0.0191558168029643
upop	0	0.0451529875877995
latent	0.0000193880741391023	0.049607668167683
actual	0	0.0363938636625995
cincmod	0	0.00180541471191413
Power	Weak < 1:10	Strong > 10:1

Table A2.8: Distribution of power in the The First Cod War (1958)

	Pakistan	India
milex	0.00283151612136211	0.0119215714861611
milper	0.0133461816429776	0.0587810166225006
irst	0.0000284931506849315	0.0141808219178082
pec	0.00167830302983457	0.0122426263848174
tpop	0.0344195519348269	0.146898279646492
upop	0.0144630353892892	0.0681770978177837
latent	0.0126473458761589	0.0603747064417253
actual	0.00808884888216985	0.0353512940543309
cincmod	0.000102302469552783	0.00213432400086533
Power	Weak < 1:10	Strong > 10:1

Table A2.9: Distribution of power in the Pakistani Offensive in Kashmir (1965)

	Israel	Egypt
milex	0.00260018190420198	0.00301675281921868
milper	0.00317783144782001	0.00932163891360536
irst	0.000170424458344408	0.000411859107665652
pec	0.00126168885465621	0.00177535397333174
tpop	0.00079300913523157	0.00902307116227391
upop	0.001337731808749	0.0153566320245389
latent	0.000890713564245296	0.00664172906695254
actual	0.00288900667601099	0.00616919586641202
cincmod	0.0000025732774335182	0.0000409741275056722
Power	Weak < 1:10	Strong > 10:1

Table A2.10: Distribution of power in the Six Day War (1967)

	Argentina	Great Britain
milex	0.00542782394303976	0.0316337833180877
milper	0.00642484763932741	0.0122989940524268
irst	0.00425056066625067	0.0211663093642076
pec	0.00601122446834734	0.0295934044305503
tpop	0.0063410918998604	0.0123288549891714
upop	0.0124055149782157	0.0353457614158615
latent	0.00725209800316852	0.0246085825499477
actual	0.00592633579118358	0.0219663886852572
cincmod	0.0000429783679573486	0.000540561689285389
Power	Weak < 1:10	Strong > 10:1

Table A2.11: Distribution of power in the Falklands War (1982)

	Republic of Iraq	United States
milex	0.0102805238053206	0.345973655657454
milper	0.0489522803310442	0.0767740799436521
irst	0	0.110888793590335
pec	0.00248088131535342	0.216695721021814
tpop	0.00339301610753598	0.046904440556809
upop	0.0105234743772318	0.050753955406243
latent	0.0040993429500303	0.1063107276438
actual	0.0296164020681824	0.211373867800553
cincmod	0.000121407789023466	0.0224713096907612
Power	Weak < 1:10	Strong > 10:1

Table A2.12: Distribution of power in the Invasion of Kuwait (1990)

	North Korea	United States
milex		0.453564086715656
milper	0.0549947789766794	0.0732932226144896
irst	0.000261647454475523	0.0827651949578791
pec	0.00183924851936101	0.187639069228954
tpop	0.00367088022198243	0.0459636195467859
upop	0.00273619416663218	0.0958880159357813
latent	0.00212699259061279	0.10306397491735
actual	0.0549947789766794	0.263428654665073
cincmod	0.000116973487405785	0.0271500042569123
Power	Weak < 1:10	Strong > 10:1

Table A2.13: Distribution of power in the North Korean-U.S. standoff (2005)

	Norway	Russia
milex	0.00390987439470805	0.027659937866695
milper	0.0011572399826414	0.0495202275905299
irst	0.000363193166380885	0.0467555325843638
pec	0.00306673466179656	0.0650964035012518
tpop	0.000710009522924699	0.0208485274306685
upop	0.00045787895984993	0.0270459617676167
latent	0.00114945407773802	0.0399366063209752
actual	0.00253355718867473	0.0385900827286124
cincmod	0.00000291220764170463	0.00154115694182646
Power	Weak < 1:10	Strong > 10:1

Table A2.14: Distribution of power in the Russo-Norwegian standoff (2010)

A2.3   Conflicts with ambiguous power balance

The conflicts listed below are cited by Paul (1994) as asymmetric. However, Paul's categorisations of these cases are to a greater or lesser degree at odds with the broader academic literature,[10] and these conflicts are not classified as asymmetric by the criterion applied in this thesis. Note that while the Egyptian offensive in Sinai (Egypt-Israel) is classified as asymmetric, it is with Egypt as the strong and Israel as the weak, opposite of Paul's classification. This stems from Paul basing his classification on the military-strategic/operational power balance, not the balance of power between the states as a whole. As Paul also notes, the Egyptian state was broadly in possession of far more material resources than Israel.

The three other cases are classified as symmetric, but with a marked power advantage (generally on the order of 5-to-1) in favour of the state Paul categorises as asymmetrically weak. The remaining two cases covered by Paul are the Kashmir border conflict (1965) and the Falklands war (1982). On these conflicts, my and Paul's classifications coincide, see Section A2.2.

- The Chineese intervention in the Korean War (China, US, 1950)

- The Egyptian offensive in Sinai (Egypt, Israel, 1965)

- The Russo-Japaneese War (Russian Empire, Empire of Japan, 1904)

- The Attack on Pearl Harbor (Empire of Japan, US, 1941)

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10. See e.g. Arreguin-Toft (2001), Mack (1975).

	Empire of Japan	Russian Empire
milex	0.130549420890503	0.174584061058876
milper	0.20103986135182	0.0377816291161178
irst	0.077351156352247	0.00167789927011382
pec	0.0440320023993599	0.0140622638569475
tpop	0.125099943015916	0.0407590810101644
upop	0.101283629330051	0.0583787585721822
latent	0.0869416827743934	0.028719500677352
actual	0.165794641121161	0.106182845087497
cincmod	0.0144144650940504	0.00304951829141353
Power	Symmetrical	Symmetrical

Table A2.15: Distribution of power in the Russo-Japaneese War (1904)

	United States	Empire of Japan
milex	0.103775482492997	0.0482548088143841
milper	0.0725098639181899	0.123802238505516
irst	0.516455800592395	0.0470342448337239
pec	0.506422521156309	0.0328256735838827
tpop	0.0894806777623727	0.0484409198261123
upop	0.178322739733704	0.0994288329604947
latent	0.322670434811195	0.0569324178010534
actual	0.0881426732055935	0.0860285236599499
cincmod	0.0284410346886699	0.00489781185181608
Power	Symmetrical	Symmetrical

Table A2.16: Distribution of power in the Japaneese Attack on Pearl Harbor (1941)

	China	United States
milex	0.0573542060789988	0.326434670173629
milper	0.228675966155957	0.0834667276469243
irst	0.00359407156116742	0.521009898523821
pec	0.0128651697131574	0.540566093585132
tpop	0.266718870384915	0.071016489410325
upop	0.141763596646814	0.164164223968933
latent	0.106235427076513	0.324189176372053
actual	0.143015086117478	0.204950698910277
cincmod	0.0151932687520746	0.0664427982765991
Power	Symmetrical	Symmetrical

Table A2.17: Distribution of power in the Chineese intervention in the Korean War (1950)

	Egypt	Israel
milex	0.0027051223672329	0.00193557285867783
milper	0.00987713803902674	0.00313177547578897
irst	0.000392328767123288	0.000184109589041096
pec	0.0025247011036026	0.00114901437137551
tpop	0.00894699508948822	0.000780262969626673
upop	0.0151002045277732	0.00137818628572636
latent	0.00674105737199682	0.000872893303942409
actual	0.0062911302031298	0.0025336741672334
cincmod	0.000042408869634002	0.0000221162721494989
Power	Strong > 10:1	Weak < 1:10

Table A2.18: Distribution of power in the Egyptian Offensive in Sinai (1965)