Black Swans in the Black Sea –
Scenarios for the Future of NATO-Russia
Relations in the Black Sea Region

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Table of Contents

Table of Figures

Abstract

This research paper demonstrates the value of scenario analysis for the field of Security Studies, by developing an easy-to-replicate framework for "Intuitive Logics" scenario building and applying it to the case of NATO-Russia relations in the Black Sea region. While scenarios are frequently used as strategic management and planning tools in the corporate and public sector, they represent a relatively new addition to the methodological toolkit of Security Studies. Based on the example of the conflict between NATO and Russia in the Black Sea region, this paper shows how scenario analysis can foster a structured and multifaceted understanding of conflict constellations. To this end, this paper compiles a list of "drivers of change" and external forces that have the potential to impact NATO-Russia relations in the next ten to fifteen years, identifies the "critical uncertainties," and develops four different scenario narratives.

1. Introduction

In today's global information age, the world seems to be changing faster than ever before, constantly forcing us to think ahead. As Kuosa (2011) points out, "the human endeavour to be better prepared for the challenges of the future is ages old" (329). Since antiquity, humans have been looking to prophets, sibyls and seers for glimpses of the future. In the second half of the 20th century, "futurology," "futuristics," or now most commonly "futures studies" began to evolve into an academic discipline with institutionalized study programs, specialized periodicals, and a growing body of methodological and conceptional literature (see Son 2015). Rooted in Cold War military-strategic planning, the field quickly branched out to include the study of economic, technological, political, social, and ecological futures on both the local and global level.

One of the most prominent methods in the field of futures studies is scenario analysis. Scenarios are best defined as narrative descriptions of possible futures (e.g. Schwartz 1991, 3; Schoemaker 1993, 195). Unlike forecasts, scenarios do not strive to predict the future. Instead, the method aims to reduce uncertainty and identify critical junctures by illuminating different possible pathways. Often-cited benefits of the scenario approach include "thinking outside of the box," enhanced understanding of complex phenomena, and improved decision-making in the face of uncertainty. Among businesses and public sector institutions, scenarios have enjoyed increasing popularity as strategic management and planning tools for the past decades.

The usefulness of scenario analysis is nevertheless not limited to organizational management. As Ramírez et al. (2015) argue, "scenarios can be used not only for planning purposes but also as a scholarly research method to produce *interesting research*" (71, emphasis added). The term interesting research (Davis 1981) hereby denotes lines of inquiry that go beyond "gap-spotting" and produce new ideas or challenge conventional ideas. Towards this end, Ramírez et al. (2015) find that scenario analysis "involves processes of inquiry that can guide the research of complex issues involving long range dynamic processes in uncertain contexts by

1

accommodating and comparing different perspectives," thus producing usable, rigorous, and interesting findings (72).

On a similar note, Han (2011) commends the value of scenario analysis for research in the field of International Relations (IR), arguing that "the scenario-building method could make a unique contribution to IR research because of the alternatives to a 'scientific' approach it offers to mainstream IR theorizing" (49). Given the increasing uncertainty of the global political environment, Han (2011) praises scenario analysis for harnessing the "power of imagination" and allowing researchers to utilize the theoretical diversity of IR instead of having to choose a particular theoretical framework to analyse world events (52-3). In this way, IR researchers can focus on solving empirical puzzles that are of high interest to real-world decision-makers rather than contributing to the "overflow of grand paradigmatic debate in the discipline" (Han 2011, 60).

Following Han's (2011) call for more scenario analysis in the IR discipline, this study aims to demonstrate the value of scenarios as a unique form of conflict analysis in the field of Security Studies. A small number of authors have successfully imported the scenario method for security research. Notable examples include Stein et al. (1998), who develop scenarios for the Israel-Palestinian conflict with the aim of identifying and connecting "chains of contingencies that could shape the future" (196), Weitz's (2001) analysis of future relations between the United States (U.S.) and China, as well as Celik and Blum's (2007) study of Turkey's future geopolitical environment. All three mentioned studies employ the so-called "Intuitive Logics" (IL) approach, which relies on expert judgments and deductive reasoning to construct scenarios (as opposed to more quantitatively oriented methods).

Building on the pioneering work of these authors, the present research paper develops and applies a step-by-step process that further illuminates how qualitative (IL) scenarios can be used for security analysis. While both Weitz (2001) and Celik and Blum (2007) create informative scenarios, they only briefly discuss methodological questions. Stein et al. (1998), in contrast, provide ample detail about the process of scenario construction in a separate report (see Weber 1997). Since their research team consists of a large collective of authors, who met for several

scenario workshops, researchers working alone can nevertheless not fully replicate Stein et al.'s (1998) approach. In his study on scenario planning for the Intermarium area, Niculescu (2017) has taken important steps towards developing a more universal framework. Niculescu's (2017) work therefore serves as an important inspiration and data source for the present paper.

The practical example chosen for this study relates to the future of relations between the North Atlantic Treaty Organization (NATO) and Russia in the Black Sea region. More specifically, the focal question of the applied scenario study is *how will the relationship between NATO and Russia develop in the Black Sea region in the next ten to fifteen years?*" Given its geopolitical importance and high degree of complexity, the conflict between NATO and Russia in the Black Sea region lends itself as case for scenario analysis. The Russian annexation of Crimea in 2014 has send shockwaves through the region, raising a plethora of unanswered questions about the future of the regional security order. As the Black Sea represents a "key security interface between Russia and the Euro-Atlantic community" (Melvin 2018, 2), regional developments are of particularly high interests to academic researchers and policy-makers alike.

In order to build plausible security scenarios for the Black Sea region, the applied part of this paper collects a comprehensive catalogue of geopolitical, security, economic, political, social and technological factors ("divers of change") and external forces that have the potential to impact NATO-Russia relations in the next ten to fifteen years. Based on a series of interviews with topical and regional experts, the factors with the highest degree of uncertainty and importance for the focal issue ("critical uncertainties") are then identified. By combing different development variants of the critical uncertainties, four scenario storylines for the future of NATO-Russia relations in the Black Sea region are developed. These scenarios cover a wide range of possible futures that policy makers should consider to monitor and prepare for, including an arms race in the Black Sea region (Scenario A – "Flashpoint"), a strategic partnership between Russia and Turkey (Scenario B – "Russo-Turkish Bigemony"), a "grand bargain" between the U.S. and Russia (Scenario C – "Russian Lake"), and the emergence of China as a strategic player in the Black Sea region (Scenario D – "Enter the Dragon"). By developing an easy-to-

replicate framework for IL scenario analysis and applying it to the case of NATO-Russia relations in the Black Sea region, this paper thus strives to make a contribution to the methodological literature in the field of Security Studies and stimulate novel discussions about Black Sea security at the same time.

The first part of this study provides a thorough introduction to methodology of scenario analysis in principle and practice. The first sub-section familiarizes the reader with the history, the strengths, and the limitations of the scenario approach, while the second sub-section covers the steps of the scenario building process, discusses criteria for scenario evaluation, and details the design of this study. The second part of this paper is dedicated to practical applications. After an introductory analysis of the "security ecosystem" of the Black Sea region, the following sub-sections list and discuss the potential drivers of change and external forces, review the critical uncertainties, and develop the scenario storylines, concluding with a discussion of the scenarios and the research process.

2. Scenario Analysis

Over the last decades, the method of scenario analysis has enjoyed increasing popularity. Since the 1970s, a growing number of businesses and institutions worldwide have adopted scenarios as strategic management and planning tools. Academic interest in scenarios is also on the rise, as evidenced by the growing number of scientific publications about use cases and scenario methodologies[1] (Varum & Melo 2010, 364). Where traditional forecasting tools fail in the face of uncertainty, volatility, and unpredictability, scenarios offer a way forward (Godet 1986, 134-5). By embracing uncertainty and stimulating the imagination, scenario analysis encourages planners to think outside of the box (Wilson 2000, 24). By applying system thinking to complex problems, scenario analysis highlights underlying causal structures and key strategic decision points (Mietzner & Reger 2005, 234; MacKey & Tambeau 2013, 674). The following sections provide an overview over the core ideas and the "how to" of scenario analysis.

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[1] As Varum & Melo (2010) point out, the terms "scenario planning," "scenario techniques," "scenario thinking," "scenario building," and "scenario analysis" are hereby often used interchangeably in the literature (356).

2.1 The Principles of Scenario Analysis

The term "scenario" originates in the world of entertainment, where it refers to the script of a theatre play or film (Schwartz 1991, 3). The literature on scenario analysis offers a broad variety of definitions and characterizations for the term. In their seminal study *The Year 2000: A Framework for Speculation on the Next Thirty-Three Years*, Herman Kahn and Anthony J. Wiener (1967) define scenarios as "hypothetical sequence[s] of events leading to a possible future" (6). Peter Schwartz (1991) straightforwardly characterizes scenarios as "stories about the way the world might turn out tomorrow" (3), whereas Schoemaker (1993) develops a more technical definition of scenarios as "focused descriptions of fundamentally different futures presented in coherent script-like or narrative fashion" (195).

While these definitions differ in emphasis and nuance, two fundamental characteristics of scenarios stand out. Firstly, scenarios are narratives. Scenarios have beginnings, middles, and ends, and follow carefully constructed plotlines (Mietzner & Reger 2005, 221; Konno et al. 2014a, 29). By transforming multidimensional causal structures into coherent plots, scenarios provide context and make sense of complexity (Coates 2000, 116; Bootz 2010, 1589). The narrative structure of scenarios resonates with the human storytelling instinct and helps decision-makers to vividly visualize the future (Berkhout & Hertin 2002, 39).

Secondly, scenarios acknowledge the existence of multiple, alternative futures. As will be discussed in more detail below, scenarios do not strive to *forecast* future events, but explicitly address the inherent uncertainty and ambiguity of the future (Wilson 2000, 24). In the words of Godet (1986), scenario analysis relies on the idea that "there are many possible futures ... and there may be more than one path to any particular future" (139). In this sense, the future should not be understood as an empirical reality, but rather as a "possibility space" (Berkhout & Hertin 2002, 39). The aim of scenario building is to create a set of "snapshots" of possible, plausible, and significant futures and the respective paths that lead to them, which can help to reduce uncertainty and identify critical junctures (Wilson 2000, 26; Coates 2000, 118).

2.1.1 A Brief History of Scenario Analysis

Most scholars trace the historical roots of scenario analysis to the work of defence strategist Herman Kahn for the U.S. military and RAND Corporation in the 1950s. Kahn pioneered the use of storytelling to develop alternative military strategies, calling attention to the potential complexities of nuclear war with the Soviet Union (Coates 2000, 116; Chakraborty et al. 2011, 252; Spaniol & Rowland 2018, 35). In the 1960s, he further refined foresight methods for application in the business sector (Schwartz 1991, 7; Mietzner & Reger 2005, 221). Kahn and Wiener first coined the term "scenario" in their 1967 book *The Year 2000: A Framework for Speculation on the Next Thirty-Three Years*. The study, which projected the economic success of Japan among other things, is often credited with popularizing the use of scenarios beyond the military community.

Separately from Kahn's work, the French philosopher Gaston Berger developed the concept of "la prospective" thinking in the 1950s, laying the foundation for a French school of scenario analysis (Spaniol & Rowland 2018, 35). While early scenario analysis in the U.S. was predominantly occupied with military and global questions such as nuclear war, the French school focused more narrowly on socio-political issues in France. The French Office for Regional Planning and Development, for example, used the "la prospective" approach to study the future of France's regions (see Bradfield et al. 2005, 802-3).

From the late 1960s onwards, scenario analysis gained significant currency as a strategic management tool in the corporate sector. The Anglo-Dutch oil and gas company Shell, in particular, was an early and highly successful adaptor of scenarios. Shell first launched a "Year 2000" scenario study in 1967. One year later, the company established a "Group Planning" department responsible for strategic foresight (Schwartz 1991, 7). Under the leadership of Pierre Wack, the Shell scenario team envisioned different scenarios for future of the oil and gas industry, realizing that a spike in oil prices was far more plausible and imminent than industry leaders liked to believe. When the Yom Kippur War erupted and members of the Organization of Arab Petroleum Exporting Countries proclaimed an oil embargo in October 1973, Shell was the only major oil company that was "emotionally prepared" and able to respond quickly (Schwartz 1991, 9; Mietzner & Reger 2005, 222). While

the "energy crisis" paralyzed the industry throughout the 1970s, Shell became the second largest and most profitable global oil company (Schwartz 1991, 9).

The 1973 oil crisis and the success story of Shell inspired a broad wave of interest in scenario planning. In 1985, Pierre Wack published two articles in *Harvard Business Review* (Wack 1985a; Wack 1985b), which established Shell's scenario philosophy as a model for large organizations. In France, Michel Godet further expanded and popularized the "la prospective" approach (Godet 1986; see also Bradfield et al. 2005, 802). The method of scenario analysis made its way into the curricula of business schools and the pages of strategic management textbooks (Spaniol & Rowland 2018, 35). A number of specialized consulting groups such as SRI International, Battelle, The Futures Group, and Global Business Network developed structured scenario planning processes and spearheaded their application in corporations worldwide (Ratcliffe 2000, 129).

In the early 1990s, another scenario exercise attracted global attention and proved that the usefulness of scenarios was not limited to the military and business sector. The Mont Fleur scenario exercise, led by experts of the Shell scenario team, brought together a diverse group of stakeholders in post-Apartheid South Africa to explore the political future of the country. The Mont Fleur group developed four scenarios, three of which highlighted the potential pitfalls of political transition, while one charted an optimistic way forward (Han 2011, 45-7). The scenarios and their catchy titles ("Ostrich," "Lame Duck," "Icarus," and "Flight of the Flamingos") struck a cord in public discourse and echoed in the South African media over years (Spaniol & Rowland 2018, 36). As Schoemaker (1995) argues, the messages of the scenarios shaped the transition negotiations and influenced the political agenda in South Africa to a considerable degree (36).

With the popularity of scenarios on the rise, academic attention also turned towards the subject matter. As Varum & Melo's (2010) bibliometric analysis shows, the peer-reviewed literature on scenario analysis has registered considerable growth since the 1990s. This includes both empirically focused studies, which report on the results of scenario planning exercises or develop scenarios (see for example Chakraborty et al., Page et al. 2010, MacKay & Stoyanova 2017), and a growing body of theoretical

and methodological publications. One of the foundational and most widely cited theoretical contributions is Schoemaker's (1993) article, which explores the cognitive and behavioural mechanisms at the heart of scenario analysis.

A number of authors have furthermore tried to strengthen the conceptional and methodological foundations of scenario analysis by importing methods and theories from various other fields, including potential surprise theory (Derbyshire 2017), structuration theory (MacKey & Tambeau 2013), historical analysis (Bradfield et al. 2016) and social negotiation (Rowland & Spaniol 2015) to name a few (for a more comprehensive overview see Spaniol & Rowland 2018, 40). None of these imports has, however, gained significant traction. The same can be said for the many scenario typologies that have been developed to curb the "methodological chaos" of scenario planning (for example van Notten et al. 2003, Börjeson et al. 2006, Amer et al. 2013; for a more comprehensive overview see Spaniol & Rowland, 40).

Overall, scenario analysis remains a practice-driven approach. Over the past decades, the academic discussion has followed, rather than led, the methodological application in real-world corporations and institutions, sometimes resulting in the perception of "methodological and conceptional chaos." As Spaniol and Rowland (2018) argue, the state of the conceptional discussion should, however, not paralyze the field. In order to move forward, scholars should embrace the wealth of available concepts and methods or focus on empirical studies (Spaniol & Rowland 2018, 41). In order to do so, it is important to gain a clear understanding what scenario analysis can – and cannot – accomplish. While there is no "grand theory" of scenario analysis, academic researchers and practitioners have developed a clear picture of the strength and limitations of scenario analysis.

2.1.2 Methodological Strengths

In their study *The Year 2000: A Framework for Speculation on the Next Thirty-Three Years*, Kahn and Wiener (1967) introduce scenario analysis as a tool for "thinking the unthinkable." Since then, a number of scholars have further explored the value of scenario thinking and a number of practitioners have provided testimonials of successful use cases. From this rich body of literature, Wright et al. (2013) distil three strengths of scenario analysis: Firstly, scenarios can *enhance understanding*, by

uncovering the causal structures, connections, and logical sequences that shape events. Secondly, scenarios *challenge conventional thinking*. Scenario exercises afford participants the opportunity to reframe their perceptions and change their mind-sets. Thirdly, scenarios foster organizational learning and *improve decision-making* (Wright et al. 2013, 633-4). These benefits are closely interlinked. Deeper understanding challenges conventional wisdoms and improves decision-making. Reframing knowledge induces individual and organizational learning, leading to better decisions and a sustained learning process (Wright et al. 2013, 634).

With regard to the understanding of complex situations, Schoemaker (1993) argues that scenario analysis helps to "deepen the realization as to what is significant vs. ephemeral" (200). Rooted in systems thinking, scenario analysis takes a holistic approach that explores how different forces interact and shape complex situations over time (Wack 1985b, 140). By paying special attention to macro-level and environmental forces, scenario analysis illustrates how a system (such as a corporation) relates to its wider environment (such as the economic and political system) (Wollenberg et al. 2000, 67). Schoemaker (1993) hereby views the scenario building process as a way to "decompose complex phenomena into more analysable subsystems" (Schoemaker 1993, 194). Different scenarios focus on different facets of a complex phenomenon, highlighting different (and even antithetical) interaction mechanisms. This segmentation allows the human mind to make sense of highly complex and uncertain situations. Even though scenarios explore multiple alternative futures, they therefore simplify matters and serve as "complexity-reduction devices" (Aligica 2005, 819).

Scenario building furthermore allows researchers to run "an exploratory analysis of the conditions on which the scenario is predicated" (Aligica 2005, 821). The construction of coherent narratives about the future requires analysts to draw on a wide range of hypotheses, models, implicit assumptions, and theories on how the world works. Scenarios hereby make a twofold contribution to knowledge creation. On the one hand, scenario analysis produces novel insights through deductive reasoning. On the other hand, the process of scenario building helps to refine the analyst's theoretical framework, by testing models, hypotheses and theories through repeated thought experiments (Aligica 2005, 821).

Besides enhancing the understanding of complex phenomena, the most frequently cited benefit of scenario analysis is mental flexibility. In his *Harvard Business Review* articles, Pierre Wack (1985b) famously refers to scenario analysis as "the gentle art of reperceiving" (147). The process of scenario building forces analysts to acknowledge their implicit assumptions and tacit knowledge, while also challenging them to question their preconceptions of what is possible and what is impossible (Ramírez & Selin 2014, 66). The thought-experimentation of scenario analysis will often lead to unexpected results that defy conventional wisdom (such as the Shell scenario team's realization that the oil price was bound to rise). By inviting participants to "think the unthinkable," scenario exercises enable them to adjust their mental models and to think more flexibly in the face of uncertainty (Wollenberg et al. 2000, 67).

As Schoemaker (1993) and Aligica (2005) point out, scenario thinking can furthermore counter a number of psychological biases. Since scenarios juxtapose multiple worldviews and help users to broaden their view, they can alleviate framing effects (Schoemaker 1993, 200). By encouraging analysts to consider a wide range of factors and to vividly imagine future developments, scenario analysis can moreover help to move past the so-called availability bias, i.e. the human tendency to overvalue things that are easy to imagine and recall from memory (Schoemaker 1993, 2000; Aligica 2005, 819). Lastly, scenario analysis can overcome anchoring effects. As Schoemaker (1993) argues, most decision-makers use the past as a mental anchor (such as oil industry managers in the late 1960s who used past oil prices as a reference point), causing them to underestimate the potential for major discontinuities (201). Constructing different scenarios can help to shift these reference points and "perceptual anchors," allowing decision-makers to envision more radical changes (Schoemaker 1993, 201; Aligica 2005, 819; Wright et al. 2013, 633).

The final benefit of scenario analysis, which is often cited in the literature, pertains to organizational learning and decision-making. Scenario thinking does not only foster the critical thinking abilities of analysts, as discussed above, but can also serve as collective learning tool. Scenario planning efforts in organizations are often credited

with structuring collective thought and creating a common language (Godet 2000a, 8). As demonstrated by the Mont Fleur scenario exercise, the compelling logic of scenarios can rally diverse stakeholders around an issue and provide shared frames of reference. The process of scenario planning can furthermore help organizations to recognize "weak signals" (i.e. disruptive events, technological discontinuities) and address them in long-range planning (Mietzner & Reger 2005, 235). By allowing decision-makers to see and communicate more clearly, scenarios can thus help to improve the quality of strategic decisions.

The capacity of scenario analysis to enhance understanding, challenge conventional thinking, and improve decision-making is not only valuable for corporations and institutions, but also for academic research. As Han (2011) shows, scenarios analysis has a threefold benefit for academia, particularly in the field of IR. Firstly, scenario analysis frees IR scholars from having to choose a single theoretical lens. Instead of getting bogged down in theoretical turf wars, the "eclectic" nature of scenario analysis allows scholars to take a problem-driven approach and to actually profit from the theoretical diversity of the field (Han 2011, 53-6). Secondly, scenario analysis alleviates the problem of prediction in social science, by enabling researchers to analyse the logic of future events without making point predictions based on single theories (Han 2011, 56-9). Thirdly, scenario analysis can bridge the gap between academia and the real world of global politics. By focusing on empirical puzzles rather than grand theories, the scenario approach provides insights that are actionable and highly relevant to policy makers (Han 2011, 56-61).

In order to reap these benefits and successfully apply scenario thinking for the study of complex phenomena, it is also important to consider the method's limitations. While the methodological flexibility of scenario analysis renders it highly adaptable to different organizational and research requirements, it is - like any method - not a jack-of-all-trades approach. The following sections explores in more detail which kind of questions scenario analysis can and cannot answer.

2.1.3 Methodological Limitations

With regard to the limitations of scenario analysis, it is first important to point out that scenarios are not forecasting tools. Scenarios present narratives about possible

futures, but do not predict what will happen (see, for example, Wilson 2000, 25-6; Weitz 2001, 20; Miesing & van Ness 2007, 149). As Wilson (2000) argues, "one cannot, reasonably and at the same time, 'forecast' three or four quite different futures" (26). While some more quantitatively oriented scenario methodologies assign probabilities to different scenarios, the qualitative scenario approach considered in this study refrains from making probabilistic judgments about the likelihood of events. Although some scenarios might seem more plausible than others, all scenarios within a set are equally probable in theory (see Bradfield et al. 2005, 809-10).

Since scenarios cannot *forecast* the future, scenario analysis is more adequately understood as a *foresight* activity. Mietzner & Reger (2005) hereby define foresight as "the ability to see what one's future needs are likely to be" (235). While scenarios cannot tell decision-makers what will happen, they can alert them to possible eventualities to prepare for (Miesing & Van Ness 2007, 149). As Bootz (2010) points out, scenarios should not be viewed as descriptions of the future, which are as accurate as possible, but rather as "an image in front of which the decision-makers react by elaborating action plans and making decisions" (1589). In contrast to forecasting-based planning approaches, scenario analysis acknowledges that uncertainty grows the further one looks into the future and stresses the importance of adaption to changing circumstances (Berkhout & Hertin 2002, 40; Bradfield et al. 2016, 60).

While scenario building can help decision-makers to devise robust plans, learning effects not happen automatically. Just as scenarios cannot predict the future, they cannot tell decision-makers what to do. In the words of Wilson (2000), "scenarios are not an end in themselves" (24). In order to reap the benefits of organizational learning and improved decision-making, scenarios have to be used, i.e. the lessons of the scenarios exercise have to be translated into action. In corporations and public institutions, this requires a thorough transformation of the corporate culture (Wilson 2000, 29). Instead of looking at scenarios for "answers," planners and decision-makers have to integrate scenarios into institutional planning processes. Deriving strategic insights or policy recommendations requires focused efforts and additional analyses subsequent to the initial scenario building exercise.

Besides these inherent limitations of the scenario approach, a number of psychological factors can impair the usefulness of scenarios. Although scenario analysis strives to "think the unthinkable," the human imagination remains limited in reality. O'Brien (2004), for example, analyses the pitfalls of scenario exercises, which were conducted by MBA students at the University of Warwick. He finds that the students tended to construct their scenarios around a predictable and limited set of factors (business students for instance were very prone to consider economic factors such as inflation) and mostly chose predictable themes such as optimistic vs. pessimistic (713-4). Students furthermore focused disproportionately on current issues that were widely discussed in British society at the time. A vivid example of this phenomenon is the "Millennium Bug," which dominated scenarios in 1998 and 1999, but was completely forgotten after the turn of the millennium (O'Brien 2004, 714). At the same time, O'Brien (2004) finds that students were led by deeply ingrained implicit assumptions such as a peacetime bias that made it difficult to imagine violent conflict (714).

As Schoemaker (1995) points out, knowledge can be divided into three categories: Type 1 knowledge consists of things *we know we know*, type 2 knowledge refers to things *we know we don't know*, and type 3 knowledge consists of things *we don't know we don't know* (36). While scenario analysis is particularly adept for utilizing knowledge of type 2, knowledge of type 3 remains challenging (Postma & Liebl 2005, 167). Despite all attempts to envision contingencies, scenario planning is not surprise-proof. In particular, paradoxical trends and combinations of events that seem logically inconsistent, can easily escape the framework of scenario analysis (Postma & Liebl 2005, 167). Whether scenario analysis can successfully tap into the "unknown unknowns" and develop useful "wildcard scenarios" ultimately depends on the creativity and mind-set of the analysts involved.

2.2 Scenario Analysis in Practice

As the preceding discussion has shown, scenario analysis is a practice-driven approach that is characterized by conceptual and methodological plurality. When it comes to "doing" scenario analysis, the major dividing line lies between quantitative and qualitative approaches. Quantitative approaches such as the French "La

Prospective" school and the Anglo-Saxon "probabilistic modified trends" school employs highly formalized and often computer-based modelling to generate scenarios (for more details see Amer et al. 2013, 27-8). The qualitative "Intuitive Logics" (IL) approach, in contrast, relies on subjective expert judgments. While quantitative modelling requires sophisticated software tools and quantifiable (time series) data, the IL approach largely uses generic tools such as brainstorming or stakeholder analysis (Amer et al. 2013, 28).

As the aim of this study is to demonstrate the value of scenario analysis for security scholars, the following discussion focuses on the IL framework. On the one hand, the IL approach is the most widely used scenario technique and has received most attention in the literature (Amer et al. 2013, 26). On the other hand, the IL framework is accessible for the broadest possible number of interested International Relations experts, as it does not require access to specialized software or detailed knowledge of statistics. The flexibility of the approach renders it suitable for a variety of analytical puzzles.

Given the plurality of scenario methodologies, it should not come as a surprise that the IL "school" is an umbrella term rather than a unified approach. A number of authors have proposed step-by-step processes for scenario building, which differ in terminology and number of suggested steps (for an overview, see Mietzner & Reger 2005, 230-2). The following section provides an overview over the generic steps that can be found in the majority of these guidelines.

2.2.1 The Process of Scenario Building

As Wright et al. (2013) point out, IL scenario building is commonly characterized by an explorative approach, which starts with the analysis of past and present trends and develops multiple scenarios that cover a wide scope of possible developments (634). In contrast to so-called normative or anticipatory scenarios, which envision an ideal (or feared) future and then "retro-projectively" retrace the steps that might lead to this future, exploratory scenario analysis is inherently open-ended (Godet 2000, 11). Explorative scenarios respond to the question "*what can happen*?" (Börjenson 2006, 727) and aim to explore the "limits of possibility" for the future (Wright et al. 2013, 634).

In order to develop explorative scenarios, the wide majority of authors recommend a methodical multi-step process, which includes a thorough system analysis and the identification of key variables. The scenario building steps can hereby be as iterative as necessary. After developing a first set of scenarios, it might for example, be advisable to re-visit the initial research stage and refine the understanding of the most important system forces (Schoemaker 1991, 555-6). Most authors furthermore commend the value of teamwork for scenario building. This typically takes the form of expert workshops, which foster discussions among different stakeholders and illuminate different aspects of the issue in question. Overall, the process of scenario building usually takes several weeks to months, including an initial research period, one or two scenario workshops, supplementary research, and the presentation and evaluation of the results (for a typical timeline, see Konno et al. 2014, 35).

The first step of any scenario project consists in **agenda setting**. As scenario analysis is a highly flexible approach, it is important to precisely define the issue of concern and the scope of the project (Wright et al. 2013, 634). The degree of specificity will hereby vary from case to case. The Mont Fleur scenario project, for example, focused on the rather broad question of how the South African transition would play out. Corporate planners might be interested in open-ended issues such as the future of certain markets or narrow issues such as the consequences of a particular investment decision (Konno et al. 2014, 36). A key part of agenda setting furthermore involves determining the geographic scope and time frame of the scenarios (Schoemaker 1993, 197; Wright et al. 2013, 634; Konno et al. 2014, 36). Scenarios for the corporate and public sector typically have a 10-year horizon, but shorter or longer time frames are possible depending on the issue. The Nuclear Waste Management Organization of Canada, for instance, has developed 10,000-year scenarios for nuclear waste management (Konno et al. 2014, 37). As a rule, the time frame should exceed five years to stimulate the imagination and allow for different scenarios to diverge, but remain manageable with view to the number of uncertainties that have to be considered.

The second step of the scenario building process can be summarized as **system analysis**. Some authors separate this stage into different steps, but regardless of

terminology the aim is to gain a comprehensive and multi-facetted understanding of the focal issue. In order to imagine the future, it is crucial to identify the variables that influence developments, commonly referred to as **drivers of change** or key factors. In the words of Schwartz (1991), drivers of change "are the elements that move the plot of a scenario, that determine the story's outcome" (197). To ensure a holistic understanding of the system, this should include a full set of political, economic, social, technological, ecological and legal (PESTEL) factors (Wright et al. 2013, 634). In addition to these drivers of change, it is important to consider **external forces** that manifest in the larger world and might impact the focal issue (e.g. geopolitical developments, migration patterns, global environmental problems) (Konno et al. 2014, 37). It is usually advisable to involve diverse resources and people in the brainstorming process to move beyond the obvious and discover the widest possible range of variables.

In order to gain a full picture of how the identified variables interact, it is furthermore necessary to analyse current trends, predetermined elements and actors involved in the focal issue (Schoemaker 1993, 197). Current trends can be an important starting point for projecting developments into the future. Schoemaker (1993) hereby suggests examining whether various perceived trends are mutually compatible and which evidence supports them (196). As Liebl & Potsma (2010) argue, a detailed trend analysis can sometimes reveal patterns or "trend landscapes," which resemble broad-brush micro-scenarios (325). Of equal importance are predetermined elements, i.e. "events that have already occurred (or that almost certainly will occur) but whose consequences have not yet unfolded" (Wack 1985a, 77). Predetermined elements are independent of any particular chain of events and will therefore manifest in all scenarios (Schwartz 1991, 115). Examples include slow-changing phenomena such as population growth, constrained situations such as resource limitations, developments that are already in the pipeline such as a generation coming of age, and inevitable collisions such as imprudent economic policies (Schwartz 1991, 117). To round off the analysis, Schoemaker (1993) recommends looking at the interests, current roles, and power positions of major actors, who might be affected by the focal issue or might influence the course of events (197).

After listing and analysing the drivers of change and environmental forces, the third step is to identify **critical uncertainties**. As it would be exceedingly complex to project all drivers of change into the future and map their possible interactions, it is necessary to focus on the variables whose resolution would have the greatest perceived impact on the focal issue (Schwartz 1991, 197; Goodwin & Wright 2001, 3). While the initial system analysis requires analysts to think comprehensively and outside of the box, this step requires prioritization based on expert judgments and experiences. The most widely used framework is hereby the "2x2 matrix method," which identifies the two (causally independent) variables that rank highest in terms of uncertainty and potential impact (Ramírez & Wilkinson 2014, 255). The combination of these two variables yields four possible combinations (or three, if one combination is ruled out as implausible), which form the basis for scenarios. If the number of critical uncertainties cannot be reduced to two, other methods of systematization such as Wilson matrices or cross-impact matrices can be used (Pillkahn 2008, 200-5; Amer et al. 2013, 34-6).

Based on the critical uncertainties, the fourth and fifth step of scenario building concentrate on defining the **scenario logics** and **writing** the scenarios. As discussed in the previous sections, scenarios employ narrative plotlines to paint a vivid picture of the future. Schwartz (1991) describes scenarios as movie scripts, in which the drivers of change act as the main characters (143). The scenario plotlines imagine different resolutions for the critical uncertainties and explore how the system of variables would behave under these conditions. The number of alternative scenarios hereby depends on the aims of the analysis and the chosen method. Two scenarios typically represent "extreme worlds," which cluster all "negative" and all "positive" resolutions of the critical uncertainties (Goodwin & Wright 2001, 3). Most authors recommend building three to five different scenarios in order to depict a range of possible developments. For more than five scenarios, the added benefits do usually not justify the required effort (Pillkahn 2008, 2000).

As Schwartz (1991) points out, scenario logics often follow archetypical narratives such as "winners and losers," "challenge and response," "evolution," "revolution," or "cycles" (147-64). He nevertheless cautions against plotlines that are too linear (e.g. a situation that becomes gradually worse until it is devastating), without taking into

account reactions and counter-trends (166). As discussed earlier, scenario analysis faces the challenge to incorporate "unknown unknowns." To stimulate the imagination in this regard, it might be useful to introduce disruptive "wild card" events or (seemingly) paradoxical developments into some of the scenario plotlines (Postma & Liebl 2005, 169-71). To this end, Berkhout and Houtin (2002) suggest "to build up an inventory of 'shock' events by scanning conventional and unconventional sources and through brainstorming" (50). While it has to be stressed again that wild card scenarios do not represent predictions, they can alert decision-makers to the existence of low-probability high-impact ("black swan") events and paradoxical trends (Postma & Liebl 2005, 171).

When it comes to scenario writing, most authors underline that both the scenario narratives and the modes of presentation should be as creative and engaging as possible. As the Mont Fleur scenario project has proven, meaningful and "catchy" scenario titles tend to resonate with the audience (O'Brien 2004, 718). To stimulate the audience's imagination scenario presentations sometimes employ visualizations and multi-media elements (Pillkahn 2008, 206-8). O'Brien (2004) also commends creative presentation formats such as newspaper headlines, news broadcasts or letters/memos from the imagined future (718-9). The appropriate level of creativity and informality will however depend on the audience. As Coates (2000) points out, some people are "almost allergic" to the perceived playfulness of scenarios, which can reduce their educational value (118).

While it may seem that the presentation of the scenarios concludes the scenario building process, this is not necessarily the case. As addressed in the previous section, scenarios do not tell decision-makers what to do. The final step of the scenario process therefore involves analysing the **implications** of different scenarios and devising **policy recommendations**. As Wilson (2000) shows, the initial scenarios can be used as a sensitivity assessment or "test bed" for evaluating the viability of existing policies in different futures (26-7). Some strategic options might present themselves as "no brainers," as they would be beneficial in all imagined futures (Konno et al 2014, 41). If strategy development is the primary aim of the scenario exercise, some authors suggest developing another set of "decision scenarios" (Schoemaker 1993) or "planning-focus scenarios" (Wilson 2000), which

concentrate more closely on different strategic options and help decision-makers to develop resilient strategies. To monitor developments over time, it is furthermore useful to compile a list of early indicators for each scenario. These indicators can alert decision-makers to critical junctures and suggest the direction in which the future is moving (Konno et al. 2014, 42-3).

2.2.2 Scenario Evaluation

As the scenario building process is time consuming and resource intensive, only a limited number of scenarios can be developed in detail. This raises the question of which scenarios to choose and how to measure their merit. Since scenarios are not forecasts, they cannot be "right" or "wrong," even when looking at them ex post facto. Given the astronomical number of possible variable combinations and outcomes, a set of scenarios can never represent the full range of possible futures. The literature on scenario analysis offers a variety of criteria, which can help to pick scenarios and evaluate their quality (for an overview see Mietzner & Reger 2005, 234; Amer et al. 2013, 36). The most commonly cited criteria are hereby plausibility, consistency, novelty, and utility.

Since the IL approach does not assign probabilities to scenarios, the baseline criterion is **plausibility**. In principle, scenarios must be capable of happening. This means that there has to be a rationally conceivable route from the present to the imagined future (Enserink 2000, 570). The second major criterion relates to the **internal consistency** of scenarios. Scenarios should not contain logical incompatibilities or contradictions (if for example both the population and GDP of a country remain constant, the GDP per capita cannot rise). As Schoemaker (1993) points out, three types of consistency have to be checked (196). Firstly, scenarios should be trend consistent, i.e. major trends have to be compatible within the chosen time frame of the scenarios. Secondly, scenarios have to yield a consistent outcome. In each scenario, the critical uncertainties have to be resolved in a mutually compatible way. Thirdly, scenarios should be stakeholder consistent. The major actors cannot find themselves in positions that run against their interests, if they have the power to change the situation. As discussed above, consistency can nevertheless be a double-edged sword. In order to introduce creative "wild cards" it

might sometimes be necessary to allow (seemingly) inconsistent developments beyond what is "extreme but consistent" (Postma & Liebl 2005, 167).

The third suggested criterion for scenario evaluation is **novelty**. This relates to the objective of scenario analysis to challenge conventional wisdoms. High-quality scenarios should produce new insights and perspectives on the focal issue. In the words of Ramírez & Selin (2014), a scenario should be judged by "the extent to which it causes productive discomfort" and forces the audiences to consider issues that they commonly ignore or do not understand well (67). On a similar note, many authors suggest to evaluate scenarios based on their **utility** to decision-makers. Scenarios should relate to the specific concerns of their users and lead to some form of action. As Wack (1985b) argues, "if scenarios do not push managers to do something other than indicated by past experiences, they are nothing more than interesting speculation" (146-7).

Other criteria that are occasionally cited in the literature include differentiation, transparency, and completeness. All scenarios of a set should be archetypical, i.e. they should present fundamentally different futures instead of variations of the same theme (Schoemaker 1995, 30). The criterion of transparency mainly concerns the process of scenario building. For scenarios to be credible the audience must be able to understand how they were developed (Godet & Roubelat 1996, 169). Given the multitude of possible futures, the last criterion of completeness is more difficult to define. High-quality scenarios should address a wide range of futures and not overlook important variables. As Wack (1985b) puts it, "in five to ten years, managers must not be able to say that the scenarios did not warn them of important events that subsequently happened" (146). Overall, completeness is a highly ambitious criterion, particularly when considering how difficult it is to foresee "black swans," and should perhaps rather be treated as an ideal.

2.2.3 The Design of This Study

As Oligvy (2005) rightly points out, "scenario planning neither can be nor should be reduced to some paint-by-the-numbers, fill-in-the-blanks routine" (335). It is therefore important to develop an approach that is appropriate for the scope and context of the given project. As the methodology described above was mainly developed for the

practical needs of businesses and organizations, the use of scenario analysis for academic research in the field of security studies requires certain adaptations.

The first step of agenda setting remains largely unchanged. Instead of working on a corporate or organizational problem, researchers in the field of security studies will likely choose an analytical puzzle or particular conflict constellation as the focal issue. As Han (2011) demonstrates, scenario analysis is hereby particularly suited to puzzles that are still in the process of unfolding and that have a high impact on real world policy-making. In the following, this research paper focuses on the case study of NATO-Russia relations in the Black Sea region. Since the Russo-Georgian war of 2008 and the Russian annexation of Crimea in 2014, the security situation in the Black Sea region is at the forefront of both political and academic debates. As will be discussed in more detail below, the conflict constellation in the Black Sea region is characterized by a high degree of complexity, uncertainty, and a polarized information environment, which make it a particularly interesting case for scenario planning.

For the identification of drivers of change, external forces, and critical uncertainties, scenario projects in corporate and organizational settings usually involve multi-day expert workshops. As expert workshops are not always feasible in the academic context due to time and resource limitations, this study pursues a more decentralized approach. In the spirit of Wilburn and Wilburn's (2011) Abbreviated Scenario Thinking (AST) technique, potential drivers of change and external forces are identified based on existing academic research in the field of Black Sea studies and existing scenario publications. Wilburn and Wilburn (2011) suggest utilizing data from existing global scenarios such as Shell's *Global Scenarios to 2025* as a starting point for scenario building. For the present study on NATO-Russia relations in the Black-Sea region, Niculescu's (2017) research on "security scenario planning in the geopolitical area from the Baltic Sea to the Wider Sea" represents a particularly valuable data source. Niculescu (2017) compiles a comprehensive catalogue of drivers of change and external forces for the confrontation between Russia and the West in the Intermarium area, many of which are highly relevant for the focal issue of this study.

Furthermore, a series of interviews with topical and regional expert was conducted, in order to gain a better understanding of the potential drivers of change and identify critical uncertainties. Depending on the preference and availability of the experts, the interviews took the form of semi-structured telephone interviews or email-exchanges (free-text questionnaires). The interviews aimed to collect the opinions, ideas, and intuitions (tacit knowledge) of the experts regarding the current state and likely development of NATO-Russia relations in the Black Sea region. The experts were asked to identify the most important drivers of change and brainstorm potential "black swan" events in the Black Sea region. Furthermore, contributors were asked to sketch the "most pessimistic" and the "most optimistic" scenario for NATO-Russia relations. In total, thirteen experts have been interviewed between May and June 2019[2] (for a list of participating experts, see annex 1). In order to encourage the open expression of opinions, participants received the assurance that Chatham House rules apply. In the following, ideas collected through interviews will therefore only be attributed to the group of experts rather than individual participants.

While this decentralized approach cannot fully replace the interactivity of scenario workshops, it entails certain advantages. By relying on telephone and email interviews, it was possible to collect input from a diverse set of experts with different backgrounds and areas of expertise. Most of the contributors currently reside in the region of interest. The expert interviews thus infuse the research process with a measure of "team work" and fresh ideas, without overstretching the resources typically available to academic researchers.

For the identification of critical uncertainties and scenario construction, this study applies what Pillkahn (2008) calls the "standard approach" of scenario planning (201-2). As the preliminary evaluation of the related literature and the interviews suggests that the number of critical uncertainties for the focal issue exceeds two, a more differentiated assessment beyond the "minimal approach" (2x2 matrix) is required. In the standard approach, all drivers of change and external forces are evaluated based on their possible impact on the focal issue and estimated level of uncertainty (Pillkahn 2008, 201). The interviews and topical literature hereby provide an ample

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[2] Particular thanks are due to George Vlad Niculescu, the head of research of the European Geopolitical Forum, who has facilitated contact to the majority of interviewees.

data source. By organizing the factors in the form of a Wilson matrix, it is then possible to distinguish the critical elements (see figure 1). In the next step, possible development variations (future states) for each of the critical uncertainties are developed and entered into a morphological box (or "Zwicky box") (see figure 2). In order to develop rudimentary scenario narratives, different variations are combined into plausible strands. Given the high number of possible combinations, the abovementioned criteria of plausibility, consistency, novelty, and utility serve as reference points for the choice of scenarios.
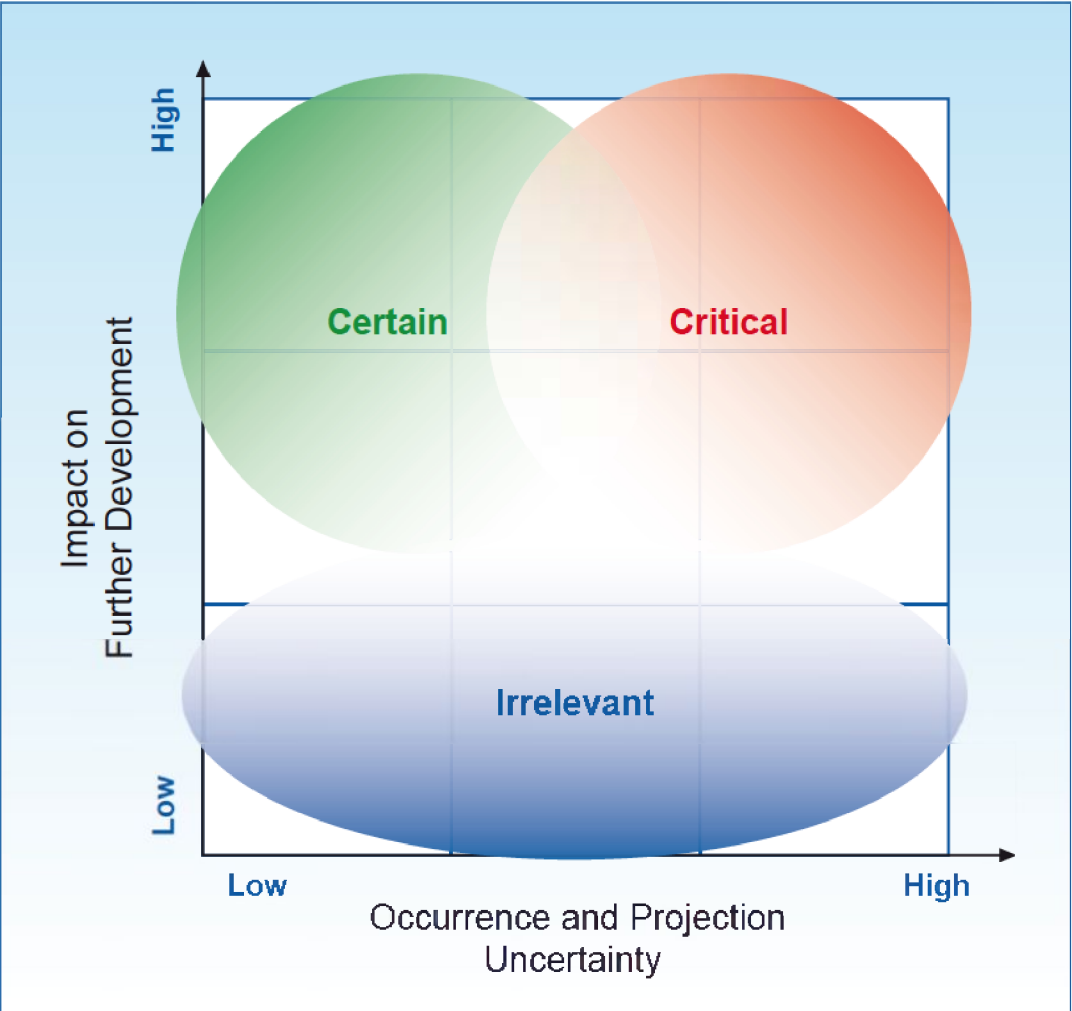

Figure 1: Wilson Matrix – Model (Pillkahn 2008, 202)
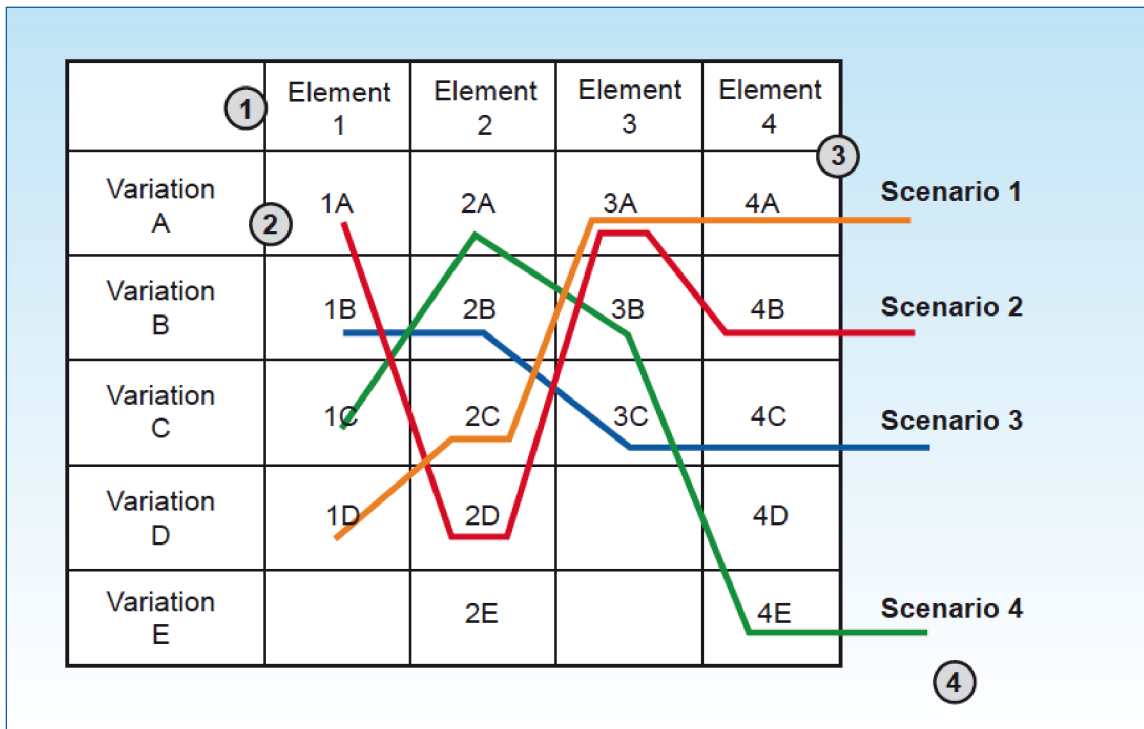
Figure 2: Morphological Box – Model (Pillkahn 2008, 203)

3. The Future of NATO-Russia Relations in the Black Sea Region

Located at the intersection of strategic east-west and north-south corridors, the Black Sea is often described as one of the world's geopolitical crossroads. Since the end of the Cold War, the region has once again emerged as a competition field between regional and international actors (Delanoë 2014, 367). A combustible combination of geopolitical competition and protracted regional conflicts renders the Black Sea a potential flashpoint for violent conflict. Formerly a "Soviet lake," the Black Sea now marks the border between the Euro-Atlantic and the Russian security systems (Proedrou 2018, 448). In the words of Melvin (2018), the Black Sea is "one of the two key security regions in Europe, alongside the Baltic Sea" (3). With tensions running high, the region has become an epitome for the failed efforts to incorporate Russia into a pan-European security framework (Melvin 2018, 3).

Given the geopolitical importance and volatile nature of the region, the Black Sea lends itself as a case study for security scenarios. Developments in the Black Sea

region are of profound interest both for academia and policy makers alike. The Black Sea security environment is characterized by a uniquely high degree of uncertainty, which impedes policy planning (Terterov et al. 2010, 202; Melvin 2018, 3). The Russian annexation of Crimea, in particular, has send shockwaves through the region and reshuffled the balance of power among the key actors. The long-term implications of the conflict on both the regional and international level are complex and not fully understood. As security scholars are seeking to make sense of the situation and provide policy advice, scenario analysis can offer new insights. As discussed in the previous sections, scenario analysis can facilitate a more nuanced understanding of complex phenomena and enhance communication in the face of uncertainty. This is particularly important with view to the polarized information environment and conflicting threat perceptions surrounding Black Sea security.

The focal question of the following scenario study is "*how will the relationship between NATO and Russia develop in the Black Sea region in the next ten to fifteen years?*" The particular focus on NATO-Russia relations helps to narrow the scope of the project, while directly addressing the "elephant in the room" of Black Sea security studies. Although other regional developments and conflicts have to be taken into account (and would certainly deserve their own studies), the confrontation between the Euro-Atlantic and Russian security communities lies at the heart of regional dynamics. The geographic scope of this study, the Black Sea region, will be defined in more detail below. Like the topical focus on NATO-Russia relations, the geographic focus helps to narrow the spectrum of variables and potential developments that have to be taken into account. The time frame of ten to fifteen years allows for potential futures to diverge in a meaningful way, while maintaining recognizable links to the current situation. As the recent history of the Black Sea region has shown, some trends can continue and some things can change dramatically in a time span of ten years.

The sections below loosely follow the steps of the scenario building process discussed in the first part of this paper. The first section provides a comprehensive overview of the focal issue, addressing the geostrategic importance of the Black Sea, sources of instability, the key actors and their interests, as well as major turning points in NATO-Russia relations in the last decades. The second and third sections

discuss the drivers of change and critical uncertainties that have been identified in the research process. The fourth section details the potential scenarios and the fifth section evaluates the findings of the scenario building process.

3.1 Overview: The Black Sea Region

Defining the Black Sea region is not a trivial task. As Melvin (2018) points out, "the boundaries ascribed to the region can … vary substantially depending on the particular geographical, historical, or cultural perspective" (1). In the narrow sense the Black Sea region consists of the six littoral states Bulgaria, Georgia, Romania, Russia, Ukraine, and Turkey. The European Commission applies a wider definition, which also includes Armenia, Azerbaijan, Greece and Moldova (Konoplyov & Delanoë 2014, 356). In addition to these ten countries, membership in the Black Sea Economic Cooperation (BSEC), the most important regional cooperation scheme, extends to Albania and Serbia. For the sake of analytical clarity, it is therefore useful to distinguish between the Black Sea region in the narrow sense and the Wider Black Sea region, which involves countries in the neighbourhood with relevant ties to the littoral states.

As the varying definitions show, the Black Sea region partly encompasses or is closely connected to several regional and sub-regional structures, including the Balkans, the Mediterranean, the Caucasus, and the Caspian region (Antonenko 2009, 261; Celikpala 2010, 288). While the focus of the subsequent analysis will lie on the six littoral states of the Black Sea, it is important to keep interregional ties in the wider neighbourhood in mind. Given the fluid boundaries of the Black Sea region, the regional identity of the Black Sea countries remains relatively vague (Antonenko 2009, 260). The founding of the BSEC as a regional organization in the early 1990s marked the emergence of some form of "regionality" or willingness to be considered a region (Aydın 2009, 272). The BSEC did however not evolve into a deeper form of political or economic cooperation. Three decades after the end of the Cold War, the Black Sea region is still bereft of effective political institutions and regional conflict solving mechanisms (Celikpala 2010, 289-90).

3.1.1 Geostrategic Importance

The geostrategic importance of the Black Sea derives in large part from the region's unique geography. The Black Sea is a so-called "narrow sea," i.e. a semi-enclosed body of water (Delanoë 2014, 368). The only entry route to the Black Sea leads through the Turkish-controlled Dardanelles and Bosporus straits. Since 1936, the Montreux Convention regulates access to the waters of the Black Sea. While the convention guarantees the free passage of civilian ships in peacetime, it imposes restrictions on the passage of war ships. Under the Montreux provisions, transiting war ships of non-littoral states cannot exceed a tonnage of 30,000 tons (45,000 tons under certain conditions) and cannot remain in the Black Sea for more than 21 days. Submarines of non-littoral states are banned from the Black Sea and modern aircraft carriers cannot enter due to the tonnage restrictions. In case of war, Turkey reserves the right to block entrance for both commercial and war vessels of the belligerent parties.

The Black Sea's geographical location between Europe, Central Asia, and the Middle East renders the region a strategic transport hub. The Black Sea lies at the intersection of the east-west axis from Central Asia to the Europe and the north-south axis from Russia to the Mediterranean (Celikpala 2010, 292). Located at the doorstep of major energy producers (Russia and Azerbaijan) and energy consumers (the European Union), the region serves as a principal transit corridor for hydrocarbon resources. On the one hand, the Caspian-Black Sea corridor plays a key role in the European Union's (EU) strategy to diversify external oil and gas supplies. In order to reduce dependence on Russian gas, the EU has pursued the Southern Gas Corridor (SGC), a mega-project designed to bring gas from Azerbaijan's Shah Deniz field via Georgia and Turkey to the European markets. On the other hand, the Black Sea is central for Russia's energy export strategy. The BlueStream and the soon-to-be-completed TurkStream I pipelines connect Russia to Turkey via the Black Sea, bypassing Ukraine and potentially opening a Southern door to the Balkans and the EU.

Besides its position at a geographical crossroads, the Black Sea region also lies at a fault line between political security systems. From the 15th century until World War I, the Black Sea was regarded a "Turkish lake" under Ottoman rule. After World War II,

it largely transformed into a "Soviet lake," with the exception of Turkey as the sole outpost of NATO (Melvin 2018, 5-6). As the Soviet domination provided a degree of stability, the Black Sea region did not witness any military confrontations during the Cold War period (Özdamar 2010, 341). The dissolution of the Soviet Union fundamentally changed the strategic balance of the region. The accession of Bulgaria and Romania to NATO in 2004 and the EU in 2007 severely titled the scale in favour of the Euro-Atlantic community, a trend further reinforced by Georgia's and Ukraine's growing ties with NATO (Melvin 2018, 13-4). Both NATO and Russia have a vested interest to maintain a strong position in the region. For NATO, the Black Sea represents a strategic intersection of the Eastern and Southern fronts, while for Russia it is the "soft underbelly" (Terterov et al. 2010, 191) and entry point to the Mediterranean.

3.1.2 Regional conflicts

After the dissolution of the Soviet Union, the Wider Black Sea region was shaken by a number of violent conflicts, which deeply fragmented the region and undermined all efforts to build a cooperative security system (Melvin 2018, 59). As Antonenko (2009) remarks, the Wider Black Sea region "is particularly 'rich' in conflicts – latent or still active – which is one form or other involve the absolute majority of Black Sea states" (261). Three decades after the end of the Cold War, these unresolved conflicts and long-standing tensions continue to shape the Black Sea security environment. As "hard security issues" such as border disputes and ethnic conflicts are far from settled, on-going and potential military conflicts constitute a palpable threat to regional stability (Celikpala 2010, 297-8).

Most notably, the Wider Black Sea region is host to a number of "frozen" or "protracted" conflicts, which erupted during and after the collapse of the Soviet Union and have been simmering without peace agreements for decades. While these conflicts began as armed separatist movements, they have since "become, in effect, state-to-state conflicts as the breakaway regions have become de facto independent states" (Melvin 2018, 59). The **Nagorno-Karabakh** conflict, which began in late 1987 and escalated after the independence of Armenia and Azerbaijan, is often dubbed the "original frozen conflict" of Eurasia (Cornell 2017, 1). The separatist movement in Nagorno-Karabakh, an ethnically Armenian enclave on the territory of Azerbaijan,

triggered large-scale hostilities between Armenia and Azerbaijan. The Russian-brokered ceasefire of 1994 left Armenia in control of Nagorno-Karabakh and seven surrounding districts, accounting for approximately 20% of Azerbaijan's territory (Cornell 2017, 1; Warsaw Institute 2019, 3).

While the Nagorno-Karabakh conflict involves two warring state actors, other "frozen" conflicts in the region exist in a grey-zone between intra- and inter-state conflicts (Melvin 2018, 60). While the main conflict parties are the central government and the breakaway regions, Russia is acting as a de facto "protector state" for the secessionists (Morar 2010, 12). The **Transnistria** conflict in Moldova erupted over the status of Moldova's Russian and Russian-speaking population and potential unification with Romania, spiralling into civil war in 1992 (Warsaw Institute 2019, 3). With active support from the Russian military forces stationed in Moldova, the Transnistrian separatists were able to consolidate their position as a de facto state (Sanchez 2009, 154, Vahl & Emerson 2004, 7). A ceasefire agreement signed by Moldova and Russia in July 1992 and the subsequent deployment of a trilateral Russian-Moldovan-Transnistrian peacekeeping force ended open hostilities. Until today, the remnants of Russia's 14th Army and large amounts of ammunition remain in Transnistria, "freezing" the status quo of de facto independence (Sanchez 2009, 154).

The Black Sea littoral country Georgia is facing not only one, but two "frozen" conflicts in **South Ossetia** and **Abkhazia**. Among rising ethnic tensions, South Ossetia declared full independence as a Soviet republic in September 1990. In response, Tbilisi revoked South Ossetia's autonomy and, in January 1991, sent troops into South Ossetia (Aphrasidze & Siroky 2010, 129). A Georgian-Russian ceasefire agreement paused the bloody military confrontation in the spring of 1992 and established a Russian-Georgian-South Ossetian peacekeeping force (International Crisis Group 2004, 4). At the same time, tensions in Abkhazia reached a critical level and war broke out in August 1992. After several broken ceasefire agreements, Georgia and Abkhazia signed a Russian-guaranteed ceasefire in May 1994 and the UN Security Council subsequently endorsed the deployment of a Russian peacekeeping force (Auch 2004, 232).

While violence on a smaller scale continued throughout the 1990s and early 2000s, the relationship between Georgia and the breakaway regions further deteriorated between 2004 and 2008 (MacFarlane 2009, 26-7). In August 2008, the conflict in South Ossetia turned "hot" and Russia intervened under the pretence of "peace enforcement," pushing Georgian forces out of South Ossetia and advancing on Georgian territory (Cheterian 2009, 155). Hostilities also spilled over to Abkhazia, where separatist forces retook sections of the border region left under Georgian control. Russian troops moved into strategic locations in Georgia such as the port of Poti and the city of Gori, cutting the main transport links from central Georgia to the Black Sea (MacFarlane 2009, 30). A EU-mediated ceasefire agreement ended the "August war" after five days, but Moscow strengthened the position of the breakaway regions by officially recognizing South Ossetia and Abkhazia as independent states (Cheterian 2009, 156).

In addition to these decade-old "frozen" conflicts in the Wider Black Sea region, **Ukraine** has become a conflict hotspot since the end of 2013. In the words of Melvin (2018), "the crisis in Ukraine ... represents both an intensification of long-term regional problems and the creation of a new situation with the formal annexation of territory" (60). In November 2013, large-scale protests erupted in Kyiv and other cities, after Ukrainian President Yanukovych refused to sign an association agreement with the EU. The protests, which came to be known as the "Euromaidan," eventually forced Yanukovych to flee the country. In response to these developments, Russia staged a covert military intervention in **Crimea** and formally annexed the peninsula in March 2014 (see for example Götz 2016, 249-50; Melvin 2018, 15).

At the same time, "anti-Maidan" protests against the new Ukrainian government flared up in the eastern Ukrainian oblasts of **Donetsk** and **Lukansk**. The protests quickly escalated into violent clashes between the Ukrainian armed forces and separatist military units supported by Russia. In May 2014, the separatist-held areas declared themselves independent. With direct support from Moscow (including heavy weaponry, advisors, and clandestine troops) the Eastern Ukrainian separatists were able to consolidate their positions and inflict heavy losses on the Ukrainian forces (Katchanovski 2016, 9-10; Malyarenko & Wolff 2018, 203). After the first ceasefire

agreement ("Minsk Protocol"), which was signed by representatives of the Organisation for Security and Co-operation in Europe (OSCE), Ukraine, Russia, and the two self-declared people's republics in September 2015, failed to end the fighting, an addendum ("Minsk II") mediated by France and Germany was negotiated in February 2015. The Minsk II agreement has since lowered the intensity of the fighting and decreased active hostilities, resulting in a stalemate between the conflict parties. While it is too early to call the Donbas conflict a "frozen" conflict, the status quo is likely to remain in place for the time being (Peters & Shapkina 2019).

Apart from the abovementioned conflicts, a number of other disputes impair neighbourly cooperation in the Wider Black Sea region. The border between Armenia and Turkey remains closed, as the two countries are locked in conflict over the Armenian genocide and territorial claims. Turkish-Greek relations remain severely strained because of the Cyprus conflict. While relations between Romania and Ukraine are generally friendly, Bucharest and Kyiv disagree over who owns the "Snake Island" and the adjacent oil and gas reserves in the Black Sea (Antonenko 2009, 261). The instable situation in the Northern Caucasus and the conflicts in the Balkans pose additional security threats to the wider region (Antonenko 2009, 261; Melvin 2018, 6).

As a result of the numerous protracted conflicts, the Wider Black Sea region lacks a cooperative security system, which includes all regional stakeholders (Antonenko 2009, 232; Celikpala 2010, 289). While the Black Sea Economic Cooperation (BSEC) remains the most inclusive and multidimensional regional cooperation scheme, it has "failed to produce any viable structures to resolve the security problems in the region" (Celikpala 2010, 290). The naval cooperation initiatives BLACKSEAFOR and Operation Black Sea Harmony, which were initiated by Turkey in 2001 and 2004 respectively to counter terrorism, organized crime, and other asymmetric threats, were impaired by a lack of assets and mistrust among the littoral states from the beginning (Sanders 2009, 109). After the annexation of Crimea, BLACKSEAFOR was effectively suspended (Melvin 2018, 7).

Other attempts at (sub)regional cooperation include the GUAM Organization for Democracy and Economic Development of Georgia, Ukraine, Azerbaijan, and

Moldova (GUAM-ODED) and the Romanian-sponsored Black Sea Forum (BSF) for Dialogue and Partnership (see Tsantoulis 2009, 246). As a loose "alliance formation" with the primary aim to counter Russian influence in the Wider Black Sea region, GUAM-ODED does however not provide sufficient incentives for deeper cooperation among its members (Triantaphyllou 2009, 233). The BSF was meant to serve as consultative mechanism for the countries of the Wider Black Sea region, but there has not been any summit since the inaugural event in 2006. The EU's Black Sea Synergy initiative, which was launched in 2007, has since tried to fill the cooperation void. As Papatulica (2015) points out, the reach of the initiative was nevertheless limited due to insufficient financial support (471). Overall, the Black Sea region therefore remains highly fragmented and in lack of regional conflict-solving mechanisms.

3.1.3 Key Actors

As discussed above, the Black Sea currently marks the border between the Euro-Atlantic and the Russian security systems. In order to project the future of NATO-Russia relations in the region it is important to take a closer look at the interests, motivations and threat perceptions of the focal actors. Particularly with regard to NATO, this is not an easy task, as the alliance includes both regional actors, whose interests are sometimes at odds, and international actors such as the United States (U.S.), which have a vested interest in the region.

Russia considers the Black Sea region as part of its "near abroad" or natural sphere of influence (Tsantoulis 2009, 251). As Celikpala (2010) points out, "Russia's main concern in its 'near abroad' is to maintain and consolidate its power and restrict the presence of other powers" (295). The Black Sea is a particularly important component of Russia's national security strategy, as Russia's major population and economic centres are located in its vicinity (Prevelakis 2001, 149). Approximately 20 per cent of Russia's seaborne exports and imports are shipped via the Novorossiysk Commercial Sea Port on the Black Sea shore, rendering it one of Russia's biggest transportation hubs (Leca 2019). At the same time, the Black Sea is constitutes a primary transit corridor for Russian oil and gas. The ports of Novorossiysk and Tuapse are important outlets for ship-based oil exports (Tsereteli 2018). The BlueStream natural gas pipeline carries Russian gas directly to the Turkish port of

Samsun. A second Black Sea pipeline (TurkStream), which will run to Kıyıköy in the European part of Turkey, is expected to become operational by the end of this year. Given the Russian economy's dependence on energy revenues, controlling the energy transport routes to Europe and preventing competing energy projects in the Wider Black Sea region are key objectives for Russia (Tsantoulis 2009, 252; Celikpala 2010, 295-6).

In addition to these economic concerns, the Black Sea is of high importance for Russia's military strategy. The Black Sea is the Russian Navy's gateway to the Mediterranean. Considering Russia's shortage of ports, which are ice-free throughout the year, the warm-water naval base in Sevastopol (Crimea) is an immensely valuable asset for Moscow. As Strauss (2009) puts it, "what Russia has in natural gas, it lacks in good parking space for its navy." Sevastopol serves as the headquarters for Russia's Black Sea Fleet and Mediterranean Task Force. Prior to the annexation of Crimea, Moscow leased the naval base from the Ukrainian government based on a 20-year agreement that would have expired in 2017. By extending Russian sovereignty to Crimea, Moscow has secured Russia's warm-water access in the long run and opened opportunities modernize and enlarge the Black Sea Fleet (Delanoë 2014, 375-6).

Since Russia views the Black Sea as its natural sphere of influence, curbing NATO's expansion and keeping Western actors out of the region has been on top of Russia's agenda (Celikpala 2010, 295). As Melvin (2018) argues, "Russian security concerns in the Black Sea area region were [initially] dominated by the civil wars on or near Russia's borders – in Georgia's breakaway regions, Nagorno-Karabakh, Trans-Dniester and, most importantly, the North Caucasus within Russia's borders" (48). After the turn of the century, concerns about the rise of Euro-Atlantic influence in Russia's "near abroad" nevertheless took centre stage. The accession of Bulgaria and Romania to NATO brought U.S. military installations and advanced weapons systems to Russia's doorstep. The "coloured revolutions" in Georgia and Ukraine and new governments' path of Euro-Atlantic integration raised concerns among the Russian leadership about potential regime-change attempts in Russia and further heightened Russia's sense of "encirclement" on the Southern flank (Melvin 2018, 49-50).

In response, Russia has hardened its military stance in the Black Sea region and sought to re-establish itself as a "great power" on the international stage, for example with the intervention in the Syrian civil war. Control over the Crimean peninsula is essential to both of these objectives. As Blockmans (2015) points out, the "move to annex Crimea was a strategic decision made irrespective of the destructive effect on the post-Cold War order, and Russia's own place therein" (186). Over the past years, Moscow has transformed the peninsula into "a naval and air force bastion fitting the description of an anti-access/area denial (A2/AD) system" (New Strategy Center & Hudson Institute 2017, 7). The militarized peninsula serves as a "strategic *place d'armes,*" which allows Russia to exert control over maritime traffic in the Black Sea, protect its trade and energy transportation routes, intimidate neighbouring NATO members, and deny NATO forces access to the Black Sea in case of conflict (New Strategy Center & Hudson Institute 2017, 8). As an "unsinkable aircraft carrier" Crimea furthermore serves as a platform of power projection in the wider region. The capacity build-up in Crimea and the modernization of the Black Sea Fleet have allowed Russia to use the Black Sea as a "jumping point into the eastern and central Mediterranean" and sustain operations in Syria (Peterson 2019).

The Euro-Atlantic community became increasingly engaged in Black Sea security in the early 2000s, as the enlargement initiatives of the EU and NATO extended to the region. For **NATO**, the accession of Bulgaria and Romania in 2004 turned the Black Sea into a "key strategic intersection linking NATO's Eastern and Southern flanks" (Melvin 2018, 53). With three littoral states as members, NATO's security commitments and strategic weight in the region increased significantly. At the same time, NATO supported the Euro-Atlantic aspirations of Ukraine and Georgia, just stopping short of offering Membership Action Plans (MAPs) to the two countries in 2008. Overall, the alliance's strategic vision for the Black Sea did, however, remain underdeveloped. While the summits in Bucharest (2008) and Lisbon (2010) formally recognized the importance of the Black Sea for Euro-Atlantic security, this did not fully translate into NATO's defence strategies (Rîjnoveanu 2017, 23).

After the annexation of Crimea, NATO slowly revised its approach to Black Sea security. At the Wales summit (2014), the alliance members affirmed their

commitment to defend the Eastern flank, but NATO's focus largely remained on the Baltic region (Melvin 2018, 27). Two years later, the allies agreed on a more proactive security response for the Black Sea. At the Warsaw summit (2016), NATO committed to develop a Tailored Forward Presence (TFP) in Romania and Bulgaria, consisting of land, air, and maritime components (Rîjnoveanu 2017, 27; Melvin 2018, 27). With regard to Russia, NATO follows a "dual-track" strategy, which combines a strong deterrence and defence position in the Black Sea with continuous dialogue offers (Melvin 2018, 53). In the light of Russia's aggressive actions and military build-up in the Black Sea region, NATO's main objectives are to guarantee the safety of its member states, to maintain access to the Black Sea's air and naval space, and to protect the right of the states in the region to freely choose their security alignments (Melvin 2018, 54-5).

As NATO has 29 members with different priorities, the alliance's positions are often shaped by compromise. In order to understand NATO as an actor in the Black Sea region, it is therefore necessary to take a closer look at some of the key member states. **Turkey** is arguably the heavyweight among the alliance's Black Sea countries. As discussed above, Turkey controls the entry to the Black Sea via the Bosporus Strait. Despite the recent modernization of the Russian Black Sea Fleet, the Turkish fleet remains the largest navy in the Black Sea for the time being (Wezeman & Kuimova 2018a, 12). From the 1990s onward, Ankara took a leading role in the region by initiating the BSEC and other regional initiatives. Given the various security threats that Turkey is facing in its neighbourhood, Black Sea security does, however, not seem to be a priority for Ankara at the moment. As Wezeman & Kuimova (2018a) point out, "Turkish defence policy, posture and spending now seem to be largely directed southwards, towards the Middle East, with Russia, NATO, and the Black Sea to the north becoming secondary issues" (13).

It is furthermore important to note that Ankara does not always see eye to eye with the other allies when it comes to Black Sea affairs. In the words of Antonenko (2009), Turkey "has been reluctant to act as NATO's anchor in the region ... It chose instead to separate its role and obligations as a NATO ally from its interests in the Black Sea region, which it still viewed as a matter of historic legacy and national identity" (262). Turkey's rocky bilateral relations with the U.S. in particular, have led Ankara to block

proposals for expanded NATO activities in the Black Sea (Aydın 2009, 280). After the annexation of Crimea, Turkey initially called for a greater NATO presence in the Black Sea. Since then, Turkey has nevertheless opposed the expansion of NATO's TFP and sought to improved relations with Russia. Overall, it has been Turkey's interest to preserve the status quo, particularly with regard to the Montreux Convention, and keep international actors such as the U.S. out of the Black Sea, even at the expense of NATO's influence in the region (Aydın 2009, 282; Celikpala 2010, 297).

Romania, in contrast, has been the leading advocate for a strong NATO and U.S. presence in the Black Sea. Since 2015, Bucharest hosts NATO's Multinational Divisional Headquarters Southeast, the regional command centre for forces on the south-eastern flank, and a NATO Integration Force Unit. Within the TFP, Romania serves as the framework nation for NATO's Multinational Framework Brigade based in Craiova (see Rîjnoveanu 2017, 27). Bucharest has been lobbying to strengthen the TFP and transform it into a regular multinational force like NATO's forward presence in Poland and the Baltics (Melvin 2018, 39). Romania furthermore attaches great value to its bilateral defence partnership with the Washington. The Aegis Ashore ballistic missile defence system, a key element of the U.S. anti-ballistic missile shield for Europe, is located in Deveselu in southern Romania. In addition, Romania has initiated an ambitious defence procurement program, which aims to increase Romania's contribution to NATO's defence efforts in the Black Sea and enhance key capabilities vis-à-vis Russia's military build-up in Crimea.

Compared to Romania's tough anti-Russia stance, the course of **Bulgaria**'s defence policy is more ambiguous. While Bulgaria takes part in NATO initiatives in the Black sea region and hosts NATO forces, Sofia tends to tread carefully in order to maintain friendly relations with Russia. As Melvin (2018) observes, "leading Bulgarian political figures have generally sought to avoid a military build-up targeted at Russia, believing that it does not represent a direct threat and that militarization of the Black Sea will promote escalation and potential conflict" (40). In 2017, for example, Bulgaria vetoed the Romanian proposal to establish a "NATO Black Sea fleet" together with Turkey (Rîjnoveanu 2017, 28-9; Melvin 2018, 40). Due to the lack of

funds and political controversy, Bulgaria's own military modernization is progressing only slowly (Wezeman & Kuimova 2018b).

Among the non-Black Sea NATO allies, the **United States** has demonstrated a longstanding commitment to Black Sea security. After the events of 9/11, Washington came to perceive the Wider Black Sea region as the "back door" to the Broader Middle East, Central Asia, and North Africa (Aydın 2009, 273; Özdamar 2010, 342). At the same time, the U.S. saw an increasing need to contain Russia's "assertiveness" in regional affairs (Celikpala 2010, 292). The core elements of Washington's Black Sea policy can be summarized as democracy and market reform, energy, and security (Celikpala 2010, 292; Konoplyov & Delanoë 2014, 357). The U.S. strongly supported Euro-Atlantic integration in the Black Sea region and favoured Ukraine and Georgia's bid for NATO membership. With regard to energy, Washington endorses projects that will connect Europe directly to the Caspian region and Central Asia, while bypassing Russia and Iran (Tsantoulis 2009, 250; Celikpala 2010, 293). In terms of security, the U.S. has been engaged in maritime security, anti-terrorism, anti-organized crime, border security and similar initiatives (Celikpala 2010, 293).

Over the past years, the U.S. has been pushing for a greater role of NATO in the region, while also fostering bilateral relations with Romania, Bulgaria, Ukraine, and Georgia (Celikpala 2010, 292). In the framework of Operation Atlantic Resolve, the U.S. is deploying land units as well as advanced fighter jets and warships to the Black Sea region on a rotational basis (see Melvin 2018, 29-33). The U.S. furthermore takes the lead on major multinational exercises in the Black Sea such as the annual exercise "Saber Guardian" and regularly engages in bilateral training exercises with friendly littoral states. As mentioned above, Washington stations an Aegis Ashore system in Romania and has authorized the sale of advanced weapons systems such as the Patriot system to Bucharest (Melvin 2018, 33). Apart from the U.S., a number of other NATO countries such as the United Kingdom, Canada, Poland, Italy, Portugal and Germany contribute to the alliance's efforts in the Black Sea in different capacities (see Melvin 2018, 34).

While **Ukraine** and **Georgia** are not NATO members, they have emerged as close partners of the alliance. As both countries feel immediately threatened and have experienced Russian aggression in the recent past, their foreign policy is characterized by a distinctly anti-Russian stance. After applying for a NATO MAP in 2008, Ukraine temporarily abandoned its Euro-Atlantic path under President Yanukovych. Since the Euromaidan protests and the annexation of Crimea, the new government under President Poroshenko nevertheless made NATO-membership a policy priority again. The cooperation between NATO and Ukraine has significantly intensified since 2014, including comprehensive assistance packages from NATO and large-scale military exercises to improve readiness and interoperability (see Melvin 2018, 42). As Wezeman and Kuimova (2018c) observe, "the civil war [in Eastern Ukraine] has become by far the most important security issue for Ukraine, overshadowing all other security considerations for the moment. It has also driven Ukraine more towards NATO" (3).

For Georgia, Euro-Atlantic integration has been a main policy priority since the Rose Revolution of 2003. Like Ukraine, Georgia is the recipient of NATO assistance and engages in military exercises with NATO. Georgia strongly supports an increased military presence of NATO in the Black Sea and actively partakes in strategic discussions on Black Sea security (Wezeman & Kuimova 2018d, 6). While NATO continues to reaffirm its support for Georgia's Euro-Atlantic aspirations, membership remains unlikely due to Georgia's unresolved territorial conflicts.

3.1.4 Turning Points in NATO-Russia Relations

The relationship between NATO and Russia has been a "tough nut," which has shaped Russia's post-Cold War relationship with the West (Cross 2015, 153). Over the past decades, the Black Sea region has hereby emerged as a particular flash point. While the initial post-Cold War relationship between NATO and Russia is often described as a "honeymoon period," the cooperative spirit did not last long (Fornsberg & Herd 2015, 44). By the end of the millennium, the Kosovo crisis and NATO's enlargement plans in Central and Eastern Europe had turned relations sour. As Alexandrova-Arbatova (2015) points out, "Russia's post-Soviet euphoria was replaced with a sense of loss of empire and status of world power equal to the US," causing Moscow to become more assertive in its neighbourhood (131).

While the Euro-Atlantic community prioritized reforms in Central and Eastern Europe in the 1990s, the attention of NATO and the EU increasingly turned towards the Black Sea region in the early 2000s. The **accession of Romania and Bulgaria to NATO in 2004** marked a first major turning point for NATO-Russia relations in the region, as it shifted NATO's Eastern flank to the Black Sea and "outnumbered" Russia among the Black Sea littoral states. The Euro-Atlantic aspirations of Georgia and Ukraine further reinforced Russia's sense of "encirclement." As Cross (2015) observes, "Vladimir Putin's posture toward NATO became increasingly combative in the latter stage of his first presidency," as evidenced by his famous speech at the Munich Security Conference in 2007 (154).

In this context, **NATO's Bucharest summit in April 2008** represents another watershed moment. While NATO did not offer Ukraine and Georgia MAPs due to the opposition of Germany and France, the summit's final declaration stated that both countries "will be members of NATO" one day. Moscow perceived the result of the summit as a serious blow. In the words of Forsberg and Herd (2015), "for Russia, the wording of the declaration turned out to be more important than the fact that [Georgia and Ukraine] ... were not accepted to MAP" (49). In June 2008, Russian President Medvedev proposed a new "European Security Treaty" to reorder the European security architecture. Among the NATO members, this initiative did however merely receive "a lukewarm hearing" (Forsberg & Herd 2015, 50).

Only a few months later, these negative developments culminated in the **Russo-Georgian War of August 2008**. Russia's invasion of Georgia shocked the Euro-Atlantic community allies and "prompted a fundamental reassessment of Moscow's intentions toward neighbouring nations and the wider international community" (Cross 2015, 155). In response, NATO and Russia froze most of their political and military cooperation (Forsberg & Herd 2015, 49). While NATO-Russia relations "modestly improved" in the course of President Obama's subsequent "reset policy," key disagreements such as Georgia's status as an aspirant NATO-member and the U.S. plans for a missile defence shield in Eastern Europe remained unresolved (Forsberg & Herd 2015, 50). Over the following years, the Wider Black Sea region increasingly emerged as the fault line between competing integration projects,

namely the EU Eastern Partnership initiative and the Russian-led Eurasian Economic Union (Melvin 2018, 15).

The **crisis in Ukraine in 2014** represented the next watershed for Black Sea security and demonstrated the ultimate failure of integrating Russia in a cooperative pan-European security system. Russia's swift annexation of Crimea came as a major surprise for the Euro-Atlantic alliance (Forsberg & Herd 2015, 51). As Cross (2015) summarizes, "NATO reacted by suspending all practical civilian and military cooperation with Russia, though political channels of communication have remained open" (161). In addition, the EU and U.S. imposed harsh sanctions on Russia. In consequence, the Black Sea's regional cooperation mechanisms such as BLACKSEAFOR have effectively broken down and "militarization has become the dominant security paradigm" (Melvin 2018, 17). Crimea and Eastern Ukraine continue to be regional flashpoints with great potential for escalation, as shown for instance by the Russian-Ukrainian naval clashes and Russia's blockade of the Kerch Strait in November 2018.

As Forsberg and Herd (2015) rightly point out, NATO-Russia relations have experienced "ebbs and flows" over the past decades (53). Particularly with view to Schwartz' (1991) warning against oversimplified plotlines, it is important to keep these "ups and downs" in mind. The current state of play nevertheless looks dire. The vast majority of experts interviewed for this study characterize the current state of NATO-Russia relations in the Black Sea region as "conflicted," "tense," or "very tense." Since the Ukraine crisis, relations seem to linger at a continuous low, which some experts even view as a form of Cold War. Communication and interaction between NATO and Russia have been reduced to a bare minimum. The informational sphere is highly contested with fundamentally different narratives on the Russian and Euro-Atlantic sides. After the upheavals of the Ukraine crisis, the Black Sea region seems to approach a new status quo, albeit one of perpetual crisis and constant risk of escalation between the opposing camps.

3.2 Drivers of Change and External Forces

Based on the preceding analysis of the security "ecosystem" of the Black Sea, the next step of the scenario building process is to collect potential **drivers of change** and **external forces**, which will influence the course of NATO-Russia relations in the Black Sea region in the next ten to fifteen years. In this context, Niculescu (2017) provides a comprehensive list of drivers and external forces, which shape the confrontation between Russia and the West in the geopolitical area from the Baltic Sea to the Wider Black Sea. While Niculescu's (2017) research has a broader regional scope, the majority of his drivers are highly relevant for the Black Sea region. Augmented with a number of drivers that are more specific to the Black Sea context, they form the backbone of the following analysis.

Niculescu (2017) firstly identifies a range of **geopolitical** factors that impact the confrontation between Russia and the West. Of particular importance for NATO-Russia relations in the Black Sea region are hereby **the unity of the transatlantic alliance** (Geo1), **the cohesion of the Russian regime and state of the Eurasian integration project** (Geo2), and **the state of the West-Russia security dialogue and cooperation** (Geo3). As NATO is an alliance, the internal cohesion and degree of concordance among the member states will critically impact the alliance's posture and scope of action in the Black Sea region. A key question, for example, is the U.S.' future commitment to protecting weaker allies such as Bulgaria and Romania. In parallel, the cohesion of the Russian regime constitutes a potentially important factor. Internal weakness might increase Russia's unpredictability and assertiveness on the international stage. The overall dialogue or absence of dialogue between Russia and the West will open or close opportunities for de-escalation in the Black Sea region. In addition, two Black Sea-specific drivers have to be considered: **The status of the partnership between NATO and Ukraine/Georgia** (Geo4) has proven to be a major stumbling block for NATO-Russia relations in the past, while **the bilateral relationship between Turkey and Russia** (Geo5), the regional heavyweights, has potentially serious implications for regional stability.

Secondly, Niculescu (2017) lists two **ideological** factors, which are both relevant for the context of the Black Sea. With view to the on-going informational war between Russia and NATO, **anti-Western ideologies and policies in Russia** (Id1) and

"Russophobia" in the West (Id2) contribute to conflicting narratives and threat perceptions. The continued consolidation of adversarial ideologies will likely deteriorate the informational sphere even further and impede the re-establishment of cooperative mechanisms in the Black Sea region. The factor of anti-Russian ideologies in Russia is potentially linked to the factor of regime cohesion, as a weakened regime might seek to brush over domestic problems by ramping up anti-Western rhetoric. In the case of NATO, different perceptions of the "Russian threat" have the potential to driven wedges between allies, as already observed in the case of Romania and Bulgaria/Turkey.

The third category of drivers that Niculescu (2017) identifies relates to **security** factors. Both **Russian interventionism abroad** (Sec1) and **Western interventionism abroad** (Sec2) can be expected to have an impact on Black Sea security. The trend towards greater Russian interventionism in conflicts such as the Syrian civil war raises the risk that clashes in other theatres will spill over to the Black Sea region. Greater Western interventionism bears a similar risk, while shrinking interventionism could reduce the willingness of key allies to uphold a strong deterrence position vis-à-vis Russia. Another important factor is the **status of the unrecognized states in the Wider Black Sea region** (Sec3). If any of the "frozen" conflicts turns "hot," the security of the entire region would be affected. The status quo of the de facto states remains a critical hurdle to the Euro-Atlantic integration of NATO-partner states such as Georgia and reinforces Russia's "protectorate" in the breakaway territories. Further security factors are the level of **hybrid threats in the Black Sea region** (Sec4), the trend towards **refocusing security on territorial defence** (Sec5) and the **militarization of the Black Sea region** (Sec6). As the Ukraine conflict demonstrates, hybrid threats will likely play a major role in the confrontation between Russia and NATO. The focus on territorial defence and the overall militarization of the Black Sea region continue to raise mutual threat perceptions and heighten the risk of military incidents that might spiral out of control.

With regard to the fourth category of **economic** factors, it is important to consider the impact of **economic growth in the Black Sea region** (Econ1), **trade among the Black Sea countries** (Econ2), and **Western sanctions against Russia** (Econ3). Weak economies and the growth of Black markets will likely contribute to regional

instability. While economic growth might improve stability, it also allows countries to invest more in their militaries. As the example of the BSEC shows, trade has been a major driver for regional cooperation in the past, but it can potentially lead to new conflicts over trade routes in the future. Western sanctions against Russia have both an economic and a symbolic impact. It is, however, uncertain whether the U.S. and the EU will increase or cut back on sanctions in the long run.

Drivers of Change	
Geopolitical (Geo1)	Unity of the transatlantic alliance
Geopolitical (Geo2)	Cohesion of the Russian regime and state of the Eurasian integration project
Geopolitical (Geo3)	State of the West-Russia security dialogue and cooperation
Geopolitical (Geo4)	Status of the partnership between NATO and Ukraine/Georgia
Geopolitical (Geo5)	Bilateral relationship between Turkey and Russia
Ideological (Id1)	Anti-Western ideologies and policies in Russia
Ideological (Id2)	"Russophobia" in the West
Security (Sec1)	Russian interventionism abroad
Security (Sec2)	Western interventionism abroad
Security (Sec3)	Status of unrecognized states in the Wider Black Sea region
Security (Sec4)	Hybrid threats in the Black Sea region
Security (Sec5)	Re-focusing security on territorial defence
Security (Sec6)	Militarization of the Black Sea region
Economic (Econ1)	Economic growth in the Black Sea region
Economic (Econ2)	Trade among the Black Sea countries
Economic (Econ3)	Western sanctions against Russia
Political (Pol1)	Nationalism/re-nationalization of foreign and security policies in the Black Sea countries
Political (Pol2)	Political populism in the Black Sea countries
Political (Pol3)	Political cooperation among the Black Sea countries
Social (Soc1)	Unemployment rates in the Black Sea countries
Technological (Tec1)	Russia's access to modern technologies

Figure 3: Drivers of Change for NATO-Russia Relations in the Black Sea Region (author's own representation)

Among the **political** factors, **nationalism/the re-nationalization of foreign and security policies in the Black Sea countries** (Pol1) as well as **political populism in the Black Sea countries** (Pol2) are potentially relevant for NATO-Russia relations in the Black Sea region. Nationalism and political populism have the potential to harden foreign policy positions and reinforce existing threat perceptions. A "populist

turn" in one of the Black Sea countries might reignite protracted conflicts or create new conflicts. A third factor is **political cooperation among the Black Sea countries** (Pol3). The absence of regional cooperation mechanisms contributes to the current fragmentation of the region. While the prospects for region-wide cooperation seem dire, it is also important to look at the future development of regional alliance structures such as GUAM-ED.

Niculescu's (2017) last categories consist of **social** and **technological** factors. With view to the Black Sea region it is hereby particularly important to consider **unemployment rates in the Black Sea countries** (Soc1) and **Russia's access to modern technologies** (Tec1). Like economic turmoil, rising unemployment rates are a potential source of instability and might advance political populism. The question of technological access is linked to economic prosperity and sanctions. Western sanctions have restricted Russia's access to foreign technologies, but the Russian military industry continues to develop competitive weapons systems, many of which are deployed in the Black Sea theatre.

In addition to these various drivers, a number of **external forces** might impact NATO-Russia relations in the Black Sea region. In the realm of security, this particularly concerns **global terrorist and transnational organized crime threats** (Ex1) as well as **conflicts in the wider neighbourhood of the Black Sea** (Ex2). Terrorism and transnational organized crime constitute a security threat in the Black Sea region, which is exuberated by the current lack of cooperation among the littoral states. Global terrorism has, however, been a field of cooperation between NATO and Russia in the past and could become one in the future. As mentioned above, conflicts in the wider neighbourhood such as the Middle East, North Africa, and Central Africa can potentially spill over to NATO-Russia relations in the Black Sea. The events in Syria, for example, had a decisive impact on Turkey-Russia relations over the past years. An additional concern in the context of these conflicts is large-scale migration to Europe and its impact on the Black Sea region as a crossroads.

External Forces	
Security (Ex1)	Global terrorist and transnational organized crime threats
Security (Ex2)	Conflicts in the wider neighbourhood of the Black Sea
Economic (Ex3)	Availability of energy sources at the global level
Economic (Ex4)	Economic globalization
Economic (Ex5)	Development of Eurasian infrastructure projects
Social (Ex6)	Aging populations
Technological (Ex7)	Pace of the technological revolution

⬚

Figure 4: External Forces for NATO-Russia Relations in the Black Sea Region (author's own representation)

With regard to global economic forces, it is important to keep in mind **the availability of energy sources at the global level** (Ex3), the effects of **economic globalization** (Ex4), and the **development of Eurasian infrastructure projects** (Ex5). As discussed in the previous sections, the Wider Black Sea is key region for the production and transport of hydrocarbon resources. Demand and supply on the global energy markets will likely influence the patterns of competition among the Black Sea countries. Economic globalization is a potentially important factor due to its wide-ranging impact on the economic, political, and social situation in the Black Sea countries. Eurasian infrastructure projects and the Chinese Belt and Road Initiative in particular will affect trade and economic relations and potentially introduce new players such as China to the stage of Black Sea affairs.

Finally, the trend towards **aging populations** (Ex6) and the **pace of the technological revolution** (Ex7) deserve consideration in the long run. Similar to globalization, the aging of the populations in both Russia and the NATO countries has wide-ranging economic, political, social, and also military consequences. The pace of the technological revolution will potentially impact the pace of militarization as well as the development of energy projects in the Black Sea region.

3.3 Critical Uncertainties

Since it would be prohibitively complex to project all of the abovementioned drivers and external forces into the future, the next step of scenario analysis requires condensation. In the course of the interviews with regional and topical experts, some common themes could be isolated and a subset of factors stood out as particularly important and/or uncertain (see figure 5).
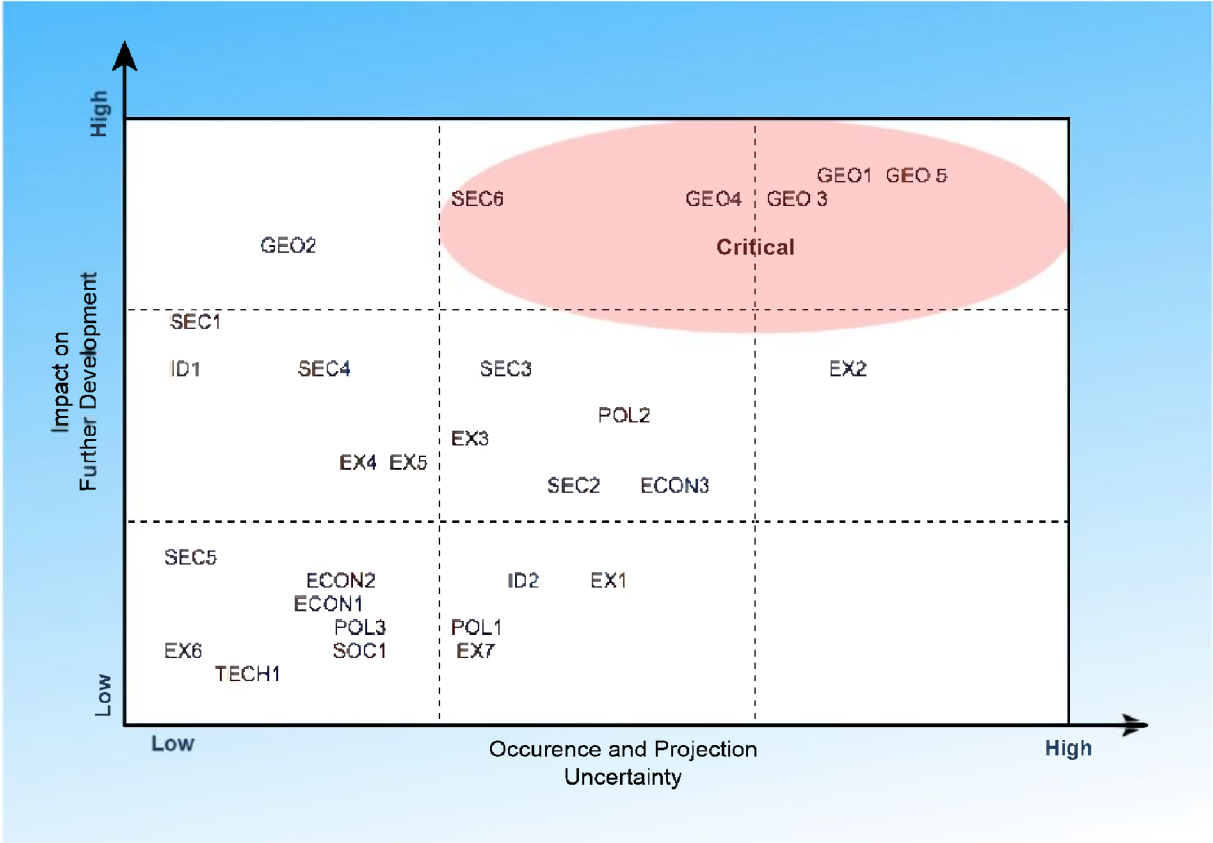

Figure 5: Wilson Matrix – Critical Uncertainties for NATO-Russia Relations in the Black Sea Region (author's own representation based on Pillkahn 2008, 202)

3.3.1 Turkey-Russia Relations

The first factor that the majority of experts highlighted as particularly critical are bilateral relations between Turkey and Russia. This notion is also echoed in the literature on Black Sea security. In the words of Rijnoveanu (2017), "the dynamic of Russian-Turkish relations has always played an important part in the evolution of the Black Sea strategic balance" (26). Over the past decades, relations between the two regional powers have not always been smooth. After the end of the Cold War, Russia

and Turkey began to cooperate, particularly in the economic sector, but frictions emerged over the Nagorno-Karabakh conflict, Turkey's involvement in Central Asia, Turkey's indirect support of the Chechen insurgency, and Russia's indirect support of the Kurdistan Workers' Party (see Öniş & Yilmaz 2015, 6-7). From the early 2000s onwards, Ankara and Moscow's increasingly "problematic relationship" with the U.S. and EU as well as Turkey's pragmatic "zero problems with the neighbours" foreign policy fostered a Turkish-Russian rapprochement (Erşen 2017, 86). Economic relations between the countries deepened significantly and the BlueStream pipeline strengthened ties in the energy sector.

During the Russo-Georgian War of 2008 Turkey strongly opposed Russia's military move, but insisted on the Montreux regulations and denied U.S. warships passage to the Black Sea at the same time (Öniş & Yilmaz 2015, 12; Ekinci 2017, 163). In response to the crisis, Turkey pursued a "multidimensional and soft power approach" (mainly in the form of the regional "Caucasus Solidarity and Cooperation Platform") in order to balance relations with the U.S. and Russia (Öniş & Yilmaz 2015, 12-13). In a similar fashion, Ankara condemned the Russian annexation of Crimea in 2014, but did not join NATO's sanction regime against Russia (Erşen 2017, 86). Shortly after the crisis, Ankara and Moscow announced a new bilateral pipeline project in the Black Sea (TurkStream) (Ekinci 2017, 165).

In the wake of the Arab Spring, Russian-Turkish relations took a dramatic turn for the worse, as both Turkey and Russia became involved in the Syrian civil war. Turkey harshly criticized Russia's military presence in Syria and Russian airstrikes on Turkish-supported rebel groups. After the "fighter jet crisis" of November 2015, when Turkey shot down a Russian SU-24 fighter bomber near the Syrian-Turkish border, relations between Russia and Turkey hit rock bottom (Erşen 2017, 90-2). Russia accused Ankara of aiding terrorism and imposed a series of retaliatory economic sanctions on Turkey. Despite Turkey's dependence on Russian gas, the TurkStream project was temporarily cancelled. While Russia and Turkey had been able to compartmentalize (geo)political and economic interests before, the fighter jet crisis "revealed [that] disagreements about regional conflicts could very easily overshadow strong bilateral economic links between the two countries" (Erşen 2017, 92).

Since their low point in late 2015 and early 2016, Turkey-Russia relations have made a surprisingly swift recovery. With regard to the situation in Syria, both countries are cooperating in the framework of the Astana Process and have effectively divided Western Syria. The TurkStream project is back on track. TurkStream I, the first phase of the project that will provide gas for the Turkish domestic market, is expected to become operational by the end of this year. Despite harsh objects on part of the U.S. and threats to remove Turkey from the F-35 program, Ankara and Moscow have agreed on the sale of the Russian S-400 air defence system to Turkey.

Given Turkey and Russia's strategic weight in the region as well as Turkey's role as NATO member and gatekeeper of the Bosporus, the future state of Turkey-Russia relationship will critically impact NATO's scope of action in the Black Sea region. Will Russia and Turkey move further towards a strategic partnership, which would allow them to negotiate and shape Black Sea politics in their interest? Will their relations be pragmatic and compartmentalized like in the past (e.g. close economic cooperation despite geopolitical differences)? Will relations turn hostile again, causing Russia and Turkey to embark on a confrontational course in the Black Sea region? With view to the on-going fighting in Western Syria's Idlib province, which brings Russian and Turkish assets in direct contact, both countries involvement in the Libyan civil war, and the combustive potential of the Nagorno-Karabakh conflict, many potential sparks are conceivable.

3.3.2 Unity of the Transatlantic Alliance

The second driver that the majority of interviewed experts judged as highly important and uncertain is the unity of the transatlantic alliance. The key question is whether the allies will maintain their consensus to guarantee the defence of the small Black Sea members Bulgaria and Romania. The credibility and resilience of transatlantic solidarity will hereby be critical for NATO's deterrence posture vis-à-vis Russia. As most experts point out, there have long been deep-seated tensions within the alliance, including the question of burden sharing and military spending, disagreements over interventions abroad, as well as the U.S.' "pivot to Asia" (see also Forbrig 2015, 3-4).

After the annexation of Crimea, the allies managed to close their ranks to some degree. In the words of Alexandrova-Arbatova (2015), "the Ukrainian conflict has ... provided 'glue' to the Euro-Atlantic partnership" (130). Despite the reluctance of some allies, the U.S and EU have for example agreed on a concerted sanctions regime against Russia (Forbrig 2015, 4). Since then, fears of a "Euro-Atlantic split" within the alliance have nevertheless resurfaced. In recent years, the Trump administration has openly questioned the value of NATO for American interests, rending the U.S.' political and military commitment to the alliance increasingly uncertain. At the same time, the European allies have been working towards a permanent structured cooperation (PESCO) within the EU framework to complement NATO defence structures, or, as some commentators suggest, provide an alternative should ties with the U.S. further deteriorate (see for example Shapiro 2017). In addition, relations between the U.S. and Turkey have taken yet another hit due to Turkey's acquisition of the Russian S-400 air defence system.

Given these developments and tensions, different paths forward are conceivable. Will disagreements prevail and will the U.S. reduce its commitment to NATO? Will the divide between the U.S. and the European allies widen? In this case, will more and more NATO members try to rebuild their relations with Russia, as the security guarantees of the alliance are eroding? As some experts point out, the opposite has to be considered as well, particularly when considering a time frame of ten to fifteen years. Will the alliance close ranks again and refocus on shared values? Will the U.S. rekindle its appreciation for the transatlantic alliance in the face of China and Russia's growing influence on the international stage? However, even if the U.S. and the EU reconcile their differences, Turkey's role in the alliance remains a wildcard. Will Turkey be further isolated and increase its military cooperation with Russia?

3.3.3 West-Russia Security Dialogue and Cooperation

The third critical driver, the overall state of the West-Russia security dialogue and cooperation, acknowledges the fact that the Black Sea region is only one theatre in a wider confrontation between the Euro-Atlantic community and Russia. As MacFarlane (2016) among other scholars argues, "the Ukraine crisis is an extreme manifestation of a problem in Russia-West relations that has been brewing for a long time" (348). Niculescu (2017) considers the conflict/cooperation rate in relations

between Russia and the West to be one of two critical uncertainties for the situation in the wider Intermarium area. With regard to the Black Sea in particular, the availability or lack of communications channels can be expected to open or close avenues for de-escalation.

Since the annexation of Crimea, all practical cooperation between NATO and Russia stands suspended. Some channels of communication nevertheless remain open both in the NATO-Russia Council and the Euro-Atlantic Partnership Council at ambassadorial and higher levels. Given the "ups and downs" of NATO-Russia relations since the end of the Cold War, the key question is whether the current "ice age" will be permanent for the next ten to fifteen years. In this context, Herd and Roloff (2016) map three different options. Will the Euro-Atlantic community maintain its current "policy mix of dialogue, defence, and deterrence" (Herd & Roloff 2016, 2), with cooperation and communication between Russia and the West at a minimum? Will the situation deteriorate even further and will all communications channels close? On a more optimistic note, is a "reset 2.0" possible? Will the West and Russia be able to re-establish cooperative measures and dialogue formats? The majority of experts interviewed for this study remain highly sceptical about the prospects for an amicable turn in West-Russia relations. Particularly with view to China's growing role on the global stage, a "reset" in some form can however not be ruled out completely.

3.3.4 Partnership between NATO and Georgia/Ukraine

As the review of the major turning points for NATO-Russia relations shows, the growing partnership between NATO and Georgia/Ukraine has been a decisive factor in the past. While the majority of interviewed experts considered the likelihood of full NATO membership for Georgia or Ukraine to be extremely low in the next ten to fifteen years, any move towards membership would provoke a strong reaction on part of Russia and change the regional balance of power. As Wolff (2015) points out with regard to Georgia's potential NATO membership, "any serious discussion of this topic risks war with Russia" (1117). Although this driver has a slightly lower level uncertainty than the previous ones, it is therefore important to consider the future development of the NATO partnerships in the Black Sea region.

Both Georgia and Ukraine have been promised MAPs for more than ten years. Especially in Georgia the wish for Euro-Atlantic integration has been unbroken, but despite the expansion of the partnership (e.g. Substantial NATO-Georgia Package of 2014) no substantial steps towards eventual membership have been taken since the Bucharest summit of 2008. The country's unresolved territorial disputes in Abkhazia and South Ossetia remain a critical stumbling block for NATO membership. Due to the war in Eastern Ukraine and the annexation of Crimea, Ukraine's prospects seem even more remote.

The principal question is whether the current status quo of cooperation and "aspirant membership" without a clear timeline is sustainable over the next ten to fifteen years. Will NATO be able to nurture the partnerships with Georgia and Ukraine without offering further steps towards membership? Will the unlikely case come to pass, in which Georgia (and/or Ukraine) receives a MAP or immediate membership? This would either imply that a solution for the territorial disputes can be found, that a bellicose NATO is willing to confront Russia heads on, or that NATO makes the decision to exclude the disputed territories from article 5 protections (see for example Coffey 2018). In the other extreme, will NATO and Georgia and/or Ukraine turn their backs on each other? Will Georgia and/or Ukraine realign their foreign and security policies (e.g. voluntary or involuntary neutrality, rapprochement with Russia, multi-vector foreign policy)?

3.3.5 Militarization of the Black Sea Region

A fifth critical factor, which featured prominently in the interviews and is frequently discussed in the academic literature, relates to the militarization of the Black Sea region (see for example Delanoë 2014; Gosu & Manea 2015; Melvin 2018). In comparison with the other critical drivers featured in this section, the question of militarization displays the lowest degree of uncertainty. The wide consensus among the interviewed experts is that the current trend towards militarization and arms build-ups will continue over the next ten to fifteen years. Some aspects of militarization even fit the description of a predetermined element. Military modernization and procurement are anchored in the long-term strategic planning documents of the Black Sea states (e.g. Russia's revised military doctrine and revised national security strategy, Romania's framework for defence planning and strategic concept, and the

respective armament programs) (see Bugajski & Doran 2016, 4; Kuimova & Wezeman 2018, 4-5). Given the length of military procurement processes, many acquisitions are currently "in the pipeline" and will enter the Black Sea theatre in the coming years. With view to the potential impact of militarization on regional security dynamics, it is nevertheless important to consider the level of future militarization as a critical factor for NATO-Russia relations. As the example of the U.S. Aegis Ashore anti-ballistic missile system in Romania demonstrates, militarization is not only a by-product of the conflicted situation, but has been a driver for tensions between NATO and Russia.

As Melvin (2018) rightly points out, "the militarization of the Black Sea region has been under way for more than a decade" (61). The decade-old hotspots include Nagorno-Karabakh, southern Russia and the North Caucasus, Georgia's breakaway regions, and Russia's forward deployments in Armenia (Melvin 2018, 61). Since the annexation of Crimea, the militarization of the Black Sea has reached an unprecedented level. As discussed in the previous sections, Russia has swiftly transformed Crimea into an A2/AD complex and is in the process of modernizing its Black Sea Fleet. This Russian military build-up is exacerbating the security dilemma for the other states in the neighbourhood, causing them to ramp up their defences. Romania, for example, has recently purchased advanced American weapons such as the Patriot surface-to-air missile system and the HIMARS artillery rocket system and Bulgaria has ordered the latest version of the F-16 fighter jet. The prospect of having these U.S.-made systems at its doorstep has heightened Russia's threat perceptions in turn. Lately, the termination of the Intermediate-Range Nuclear Forces (INF) Treaty has raised additional concerns that Russia or the United States might deploy nuclear-capable land-based missiles in the Black Sea region.

The build-up of military forces in the Black Sea entails a growing risk of accidental clashes and unwanted escalation. As Melvin (2018) points out, "the Black Sea has already been the location of a series of incidents involving opposing forces brought into an uncontrolled and, therefore, dangerous proximity to each other" (62). As the scale and intensity of Russian and NATO military are increasing, they present another source of potential misunderstandings. These developments raise the question whether the militarization of the Black Sea region will spiral into an arms

race in the coming years. Will the arms build-up affect the power balance across the region? Will the logics of territorial defence and deterrence provoke a tit-for-tat escalation? Or can the dynamic of militarization be mitigated, for example in the form of strategic arms control agreements and confidence building measures?

3.4 Scenarios

Based on the critical uncertainties that have been identified in the research process, this section sketches four possible scenarios for the future of NATO-Russia relations in the Black Sea region. This set of scenarios does not lay any claim to completeness. Even after reducing the number of critical elements to five (with three development variations each), the amount of possible combinations remains exceedingly high. In the process of narrowing down possible scenarios, some combinations can be ruled out as inconsistent (e.g. a high degree of transatlantic unity and a strategic partnership between Turkey and Russia are difficult to image at the same time, as serious conflicts of interest would arise; a "reset" in West-Russia relations is inconsistent with an on-going arms race in the Black Sea region). Other options such as for example full NATO membership for Georgia and/or Ukraine were ruled out as implausible in the next ten to fifteen years (although they have to be considered as "black swan" events). Figure 6 shows four combinations that fulfil the requirements of plausibility, consistency, and novelty. In order to increase utility for present-day decision-makers, these scenarios represent differentiated security environments that could potentially unfold.
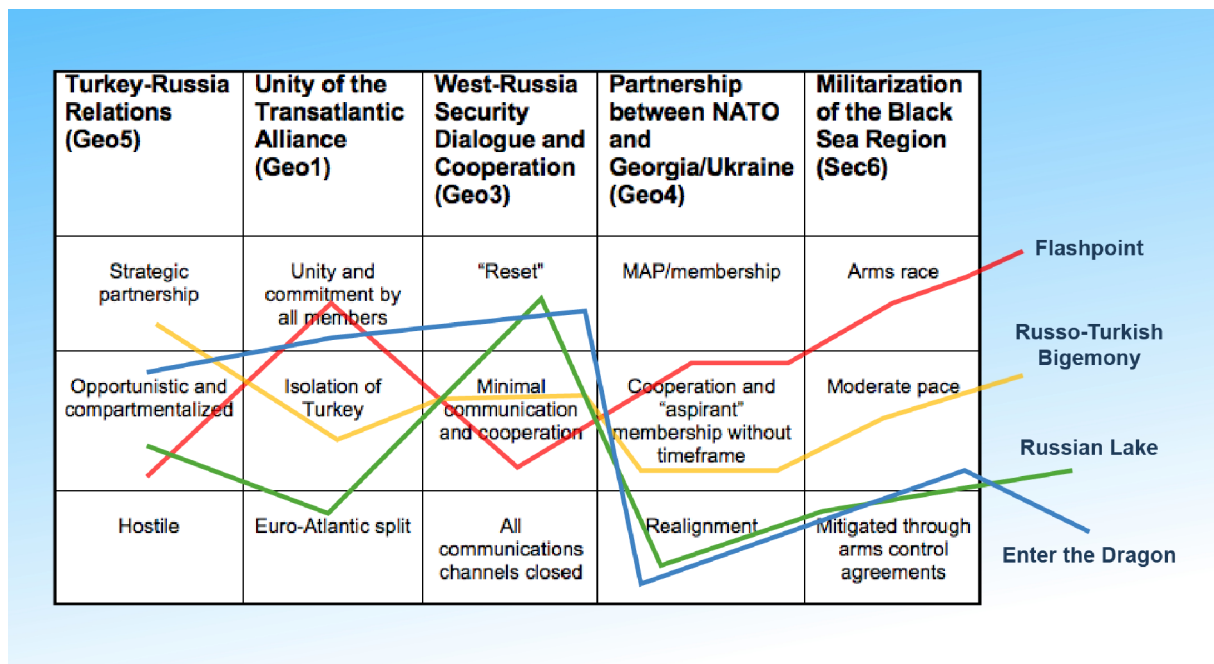
Figure 6: Morphological Box – Development Variants of Critical Uncertainties and Possible Scenarios (author's own representation based on Pillkahn 2008, 203)

3.4.1 Scenario A: Flashpoint

In this scenario, NATO and Russia climb an escalation ladder towards full front collision in the Black Sea region.

In the early 2020s tensions boil high, when Russian Intelligence accuses the U.S. of arming the Mk.41 vertical launch systems of the Aegis Ashore in Romania with Tomahawk cruise missiles. As the re-negotiation of the INF-Treaty has failed, Moscow deploys a plethora of its latest nuclear-capable intermediate- and long-range assets to "fortress Crimea," including the Backfire bomber, the SSC-8, the SSC-9 "Skyfall" and the SS-18 "Satan" systems. Increasingly alarmed by this unprecedented build-up of nuclear-capable systems at their doorstep, the European members of NATO seek to repair their relations with Washington and strengthen the transatlantic bond. This resonates with the new U.S. administration, which by 2025 has come to appreciate the transatlantic alliance as an anchor for U.S. power on the global stage and counterweight to Russian and Chinese influence again.

Moscow has furthermore continued to modernize and reinforce its Black Sea Fleet, shifting the balance of naval superiority in the Black Sea further towards Russia. The

Black Sea Fleet's offshoot, the Syria-based Mediterranean Task Force, has matured into a nuclear-capable force and has intensified its activities in the Eastern Mediterranean. These developments heighten the security dilemma for Turkey and the rest of the littoral states, who increasingly fear to lose freedom of navigation in the Black Sea. Due to these developments, Turkey is feeling increasingly encircled and is harshly criticizing Russia's extensive build-up in the region. While Turkey continues to rely on Russian gas and pursue economic cooperation, the two countries have not deepened military cooperation beyond the S-400 deal. Welcomed back into the F-35 program, Turkey increasingly seeks to reconcile its differences with the U.S. and strengthen its position within NATO.

Given the deteriorating security environment in the region, NATO revives the Black Sea Fleet initiative of 2016. Despite initial scepticism on part of Bulgaria, all littoral states including Turkey eventually agree that NATO should re-establish the balance of power in the region. With American and British support, Romania, Bulgaria, Turkey, Ukraine, and Georgia establish a multinational Black Sea-based maritime group under NATO command and headquartered in Constanta, Romania. While their membership status remains unresolved, Georgia and Ukraine receive unprecedented defence aid from NATO and are de facto integrated under the Alliance's joint commands, however without Article 5 (collective defence) privileges.

By 2030, military incidents are a usual occurrence. Russian vessels and fighter aircraft periodically harass the NATO Black Sea maritime group's exercises and patrols on the high seas. Turkish authorities are constantly delaying the Bosporus transit of Russian warships and supply ship bound for Syria. Due to the rapid pace of militarization and the increased tension in the Black Sea, the dialogue and cooperation between the West and Russia remains near-frozen. As both NATO and Russia are interested to avoid all-out confrontation, some channels of communication remain open and the parties have been able to de-conflict several close calls between their militaries (e.g. accidental naval fire exchanges during exercise conducted in close proximity to each other, NATO advisors embedded with Ukrainian military killed by separatist shelling near Mariupol, Romanian Navy intercepts Russian submarine entering Romanian territorial waters to recon the deep shell exploitations).

A concerning new development are a series of separatist attacks on American drones surveilling Eastern Ukraine for ceasefire violations. Many believe that Russia is targeting NATO's eyes-in-the-sky to conceal troop deployments for an upcoming offensive in Donbas. In response, NATO is considering a limited cruise missile strike on the separatist surface-to-air missile systems in Donbas. The NATO BSMG is furthermore planning to conduct a "freedom of navigation operation" in the Azov Sea, which would involve sailing through the Russian-held Kerch Strait and conducting a port-call in Mariupol at the invitation of the Ukrainian authorities.

3.4.2 Scenario B: Russo-Turkish Bigemony

By 2030, Turkey and Russia have consolidated a wide-ranging strategic partnership and are exercising a shared hegemony (or "bigemony"[3]) in the Black Sea region. The rift between Turkey and the other NATO allies seems irreconcilable and Ankara is blocking all NATO initiatives in the region.

After Ankara went through with the S-400 purchase from Russia in 2019, the U.S. retaliated by excluding Turkey from the F-35 Joint Strike Fighter program and imposing further sanctions, sending relations into a new tailspin. In a tit-for-tat fashion, Turkey purchased Su-57 stealth fighters from Russia, deepening its defence cooperation with Moscow, while straying further and further from NATO's defence standardization requirements. Due to growing distrust over Ankara's reliance on advanced Russian technology, NATO has slowly phased out Turkey's participation in joint military exercises, intelligence sharing networks, and, ultimately, unified commands. This has set Turkey and Russia on course to become strategic allies. By the late 2020s, Turkey has become a primary buyer of Russian arms and even co-developed Moscow's S-500 "Prometheus" aerial defence system.

Russia and Turkey increasingly converge on the shared goal of expelling outside powers from the Black Sea region. On the political and economic level, Moscow and Ankara seek to revive regional cooperation initiatives such as the BSCE and regional dialogue formats under Russo-Turkish leadership. Ankara is happy to share the lead

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[3] The term "bigemony" was coined by Proedrou (2018), who critically discusses this regional governance option for the Black Sea region.

in the Black Sea with Russia (and even accept a junior position in certain matters), as a stable backyard allows Turkey to focus on more pressing security matters in the Eastern Mediterranean and Middle East. While Romania, Ukraine, and Georgia remain sceptical of any Russian-led cooperation initiatives for the Black Sea region, they lack viable alternatives.

The strategic partnership between Russia and Turkey has severely impacted NATO's scope of action in the Black Sea region. By the late 2020s, Turkey has closed its bases for NATO armies, including the strategic Incirlik Air Base and its naval ports in the Black Sea. Instead, those installations now regularly welcome visits from Russia's military forces. Turkey and Russia have agreed on a common policy of impeding the presence of foreign militaries in the Black Sea. The Turkish and Russian militaries are periodically conducting joint war games aimed at deterring foreign forces. On rare occasions, the Turkish and Russian air-naval forces even harass NATO standing maritime groups or U.S. guided missile destroyers, which are transiting the region or conducting port calls in the remaining friendly harbours of Romania, Bulgaria, Ukraine and Georgia. These constants aggressions have discouraged NATO members from sailing through the Turkish straits.

Romania and Bulgaria remain poorly defended by a small and largely symbolic land-exclusive multinational NATO contingent. The two countries ramp-up defence spending, but their means remain limited. Ukraine and Georgia's membership prospects look worse than ever, as Ankara vows to veto any accession attempts and opposes the deepening of cooperation with Kyiv and Tbilisi. While NATO has thus far shied away from formally expelling Turkey from the alliance for fear of creating a dangerous precedent, calls for an expulsion of Turkey grow louder and louder by 2030.

3.4.3 Scenario C: Russian Lake

In this scenario, an increasing Euro-Atlantic split emerges within NATO. In his second term in office, President Trump strikes a "gentlemen's agreement" with Russia, which effectively turns the Black Sea into a Russian lake and shatters Georgia and Ukraine's prospects for Euro-Atlantic integration.

The differences between the U.S. and the European allies over defence spending, trade, security commitments, and shared values continue to grow, resulting in an unprecedented Euro-Atlantic split within NATO. In the early 2020s, the U.S. initiates a massive troop drawdown from its Germany-based European Command and dedicates full attention to the Asia-Pacific theatre. The withdrawal of American forces from Europe leaves NATO's Eastern European allies, and particularly the Black Sea countries Romania and Bulgaria, poorly defended and isolated against Russia. Despite all attempts to strengthen the EU's Permanent Structured Cooperation (PESCO), NATO's European members do not have the financial and military capabilities to fill the vacuum left by Washington.

During his second term in the White House, President Donald Trump eventually strikes a "gentlemen's agreement" with his Russian counterpart. The U.S. de facto recognizes Russia's sphere of influence in Eurasia, Central Asia and the Black Sea, while Russia vows to refrain from further interventions in the Western hemisphere. They furthermore agree to cooperate in the fight against terrorism in the Middle East. With regard to strategic weapons, Russia and the U.S. renegotiate the INF-Treaty under the provision that Russian inspectors are allowed to evaluate the Aegis Ashore facilities in Romania and Poland, while American inspectors are permitted to investigate Moscow's SSC-8 missile. President Trump publicly states that Ukraine and Georgia will never be granted NATO membership, as long as Russia refrains from expanding its foothold in the region. Abandoned by the U.S., Tbilisi and Kyiv are forced to reconsider their relationship with Russia and adopt a more neutral foreign policy. While both countries strive to uphold their political cooperation with the EU in the framework of the Eastern partnership, their path towards Euro-Atlantic integration is effectively halted.

With a questionable collective defence commitment from Washington, Bulgaria and Romania are left in a vulnerable position. Sofia actively tries to improve relations with Russia, while Bucharest comes to prioritize regional initiatives such as the "Bucharest Nine" format to strengthen defence cooperation with the Intermarium countries and fellow Eastern European NATO members. Turkey strives to maintain its foothold in the region, but does not contest this new order, as Ankara appreciates

the de-escalation in its backyard and the departure of U.S. forces. Russo-Turkish relations remain pragmatic without serious disruptions.

By the late 2020s, most EU and European NATO countries have come to view this path change as an opportunity to reset cooperation and dialogue with Russia. After the U.S. removes sanctions from Russia, the EU follows suit. The next White House administrations post-Trump are unwilling to reverse the decision, as China's ambitions in Asia-Pacific, the unresolved issue of North Korea, and a growing nuclear Iran demand all of America's diplomatic and military assets.

3.4.4 Scenario D: Enter the Dragon

Disheartened by the dead-end of Euro-Atlantic integration, Georgia and Ukraine are seeking to diversify their strategic partnerships. This opens the Black Sea region to a steady influx of Chinese capital and influence, triggering a paradigm shift in the regional security dynamics.

Throughout the 2020s, first Georgia and later Ukraine grow increasingly frustrated with the perceived dead-end of Euro-Atlantic integration. Their unresolved territorial disputes continue to render NATO-membership unrealistic, while the EU's internal problems halt the block's expansion indefinitely. Both NATO and the EU fail to offer meaningful cooperation initiatives without taking further steps towards membership. In response, Georgia begins to shift towards a "multi-vector" foreign policy and seeks to build a strategic partnership with China in the framework of the One Belt, One Road (OBOR) initiative. At the invitation of the Georgian government, Chinese investors buy a majority share in the Anaklia port on Georgia's Black Sea coast and massively expand the deep-water port complex. While China maintains its official position of neutrality over political and security questions and border disputes, Georgia has come to regard the large-scale Chinese investments as an "insurance policy" against Russian aggression.

Seeing the quick development of Anaklia, Ukraine also authorizes Chinese companies to purchase several terminals in the port of Odessa and Bulgaria welcomes Chinese investments in its two Black Sea ports Varna and Burgas. While Romania is hesitant at first, Bucharest eventually accepts Chinese investments in the

port of Constanta and other infrastructure projects, for which EU funds are unavailable. Turkey seeks to compete with China's emerging influence in its backyard, but quickly finds itself out-financed by Beijing. By 2030, China has developed a tight-knit naval trade network in the Wider Black Sea region, which encompasses the ports of Anaklia, Varna-Burgas, and Constanta on a strategic east-west axis and the ports of Piraeus (Greece) and Odessa on a north-south axis.

Beijing strongly condemns the militarization of the Black Sea by both Russian and NATO, citing the unfavourable consequences for economic development and business. As an alternative to failed regional cooperation schemes, Beijing encourages the establishment of a Georgia-based Black Sea Forum for Security Consultations and Development, with the aim of de-conflicting the Black Sea region. China's growing assertiveness on the international stage and influence in the Black Sea region in particular forces the NATO members and Russia to adapt to the increasingly multipolar environment and reconsider their strategies. As both the U.S. and Russia come to see China as their biggest competitor, they begin to pursue a "reset 2.0." As part of the reset, the NATO-Russia Council is revived with a dialogue focused on areas of mutual interest.

3.5 Discussion

The scenarios developed above present four different snapshots of possible futures for NATO-Russia relations in the Black Sea region. They should, however, be understood as a "work in progress" rather than finalized products. As Schoemaker (1991) points out, the initial set of scenarios should be treated as "learning scenarios," which provide impetus for further research and refinement (555). This section takes a critical look at the scenarios and the scenario building process in order to identify areas for improvement.

With regard to the scenarios, the first note is to stay vigilant of "black swans." All four scenarios, for example, operate under the implicit assumption that the political and economic situation in Russia will not undergo drastic changes in the next ten to fifteen years, which would fundamentally alter the vector of Russian foreign policy. While the majority of interviewed experts agreed that the Russian government under President Putin (or his potential successor) will be unlikely to give up the ideas of the

"near abroad" and Russia's role as a global power, "black swan" cases (regime change, economic collapse etc.) have to be kept in mind. In a similar fashion, the protracted conflicts of the Black Sea region represent a source of potential "black swans." A "black swan" case that frequently came up in the expert discussions is the "re-ignition" of the conflict in Eastern Ukraine, either because of a "populist turn" in Kyiv or because of aggressive Russian actions (e.g. offensive to establish a land bridge to Crimea). Furthermore, the "spill over" option remains a concern. Spill overs could hereby come in a plethora of different forms, including – but not limited to – a confrontation between NATO and Russia in the Baltic region, clashes between the U.S./Turkey/other NATO members and Russia on battlefields worldwide akin to the "fighter jet incident" between Turkey and Russia, or a large-scale conflict in the wider neighbourhood (e.g. U.S.-Iran war). While it is impractical to create scenarios around all of these possible "black swans," they serve as an important "robustness test" in order to further refine the initial security scenarios.

It should furthermore be noted that the critical uncertainties identified in the research process are extremely "geopolitics-heavy." On the one hand, this reflects the geostrategic importance of the Black Sea region and the impact of geopolitical developments in the past. On the other hand, this focus might be the symptom of a bias that overestimates the importance of geopolitical and security factors and underestimates social, economic, political, and technological factors. As Schoemaker (1991) points out, initial learning scenarios allow for a first exploration of the system in question and its behaviour over time, but it is important to "identify topics for further study that would provide stronger support for ... [the] scenarios, or might lead to revisions" (556). For the present case study, this could imply going back to the drawing broad and refining the list of drivers of change and external forces for a more multi-facetted perspective.

In summary, all four scenarios fulfil the basic criteria of plausibility and internal consistency. Their degree of novelty varies slightly – variants of scenario C, for example, have been periodically discussed in the press and academic literature (e.g. Inozemtsev & Barbashin 2014; Caro 2017). Likewise, authors such as Proedrou (2018) have discussed the option of a Russo-Turkish bigemony in the Black Sea region (scenario B). All scenarios nevertheless contain novel elements and a unique

focus. The scenarios' utility to decision-makers, lastly, remains somewhat subjective. Developing policy-recommendations for different audiences would take further research steps.

4. Conclusion

This research paper has set out to demonstrate the value of scenarios for the field of security studies, by developing an easy-to-replicate framework for "intuitive logics" scenario analysis and applying it to the case of NATO-Russia relations in the Black Sea region. Since the 1970s, a growing number of businesses and public institutions have adopted scenarios as strategic management and planning tools. Scenario thinking is often credited with enhancing the understanding of complex situations, challenging conventional wisdoms, and improving organizational decision-making. In the context of academic research and particularly the discipline of IR, scenario analysis provides the opportunity to produce *interesting research* and policy-relevant insights. While scenario analysis remains an inherently practice-driven approach, the steps of scenario analysis can be easily adapted for the requirements of academic research.

The conflict between NATO and Russia in the Black Sea Region has lent itself as a case study for scenario analysis due to the high complexity and uncertainty of regional security dynamics. The "systems-perspective" of scenario thinking hereby allows for a structured and holistic analysis of the "security ecosystem" of the Black Sea. Strategically located at the crossroads between continents and transportation corridors, the Black Sea region lies at the fault line of the Euro-Atlantic and the Russian security communities. The security environment of the Black Sea is furthermore characterized by a severe lack of regional institutions and conflict solving mechanisms and a number of protracted conflicts impede neighbourly cooperation. In short, the Black Sea region is best described as a deeply fractured security space, shaped by the mutual threat perceptions of the Euro-Atlantic community and Russia.

The toolkit of scenario analysis can contributes to an enhanced understanding of this conflict constellation, by drawing attention to the full range of factors that have the potential to shape the relationship between NATO and Russia. Instead of focusing on a particular aspect of the confrontation, the first steps of scenario analysis require the

researcher to think broadly and creatively and to consider the potential impact of geopolitical, security, economic, political, social, and technological factors on both the local and global scale. By ordering these potential drivers according to their expected degree of uncertainty and importance for the focal issue, it is then possible to gain a clearer picture of the key conflict dynamics. Based on a series of interviews with regional and topical experts, the internal unity of the transatlantic alliance, the dynamics of bilateral relations between Russia-Turkey, the state of the West-Russia security dialogue and cooperation, the status of the partnership between NATO and Georgia/Ukraine, and the pace of militarization have been identified as critical uncertainties for the future of NATO-Russia relations in the Black Sea region.

The four scenarios developed in the course of this research represent fundamentally different, yet plausible and internally consistent development paths for the next ten to fifteen years. Scenario A ("Flashpoint") envisions a future in which the current conflict dynamic escalates into an arms race between Russia and NATO. Scenario B ("Russo-Turkish Bigemony"), in contrast, describes a situation in which NATO's influence in the region is severely limited, as Russia and Turkey tighten their cooperation and develop a strategic partnership. Scenario C ("Russian Lake") asks what would happen if an Euro-Atlantic split manifests within NATO, taking up the idea of a "grand bargain" between the U.S. and Russia. In this scenario, a weakened NATO effectively cedes the Black Sea region to Russia. Scenario D ("Enter the Dragon") introduces an outside player to the conflict dynamic, sketching a future in which NATO and Russia approach a "reset" due to China's raising influence on the regional and global level.

As discussed throughout this study, these scenarios do not represent predictions for the future of NATO-Russia relations. Instead, they mean to stimulate discussions and "outside of the box" thinking. In order to reap the full benefits of the scenario approach, additional analysis is required. The scenarios devised in this study are "learning scenarios," which need further refinement. In order to increase the scenarios' utility for decision-makers, it is furthermore necessary to specify early warning indicators and critical junctures for each scenario. As the development of "planning-focus scenarios" would have exceeded the scope of this study, additional research efforts are needed to develop strategic options and policy-

recommendations based on the results of the scenario exercise. Lastly, more methodological and conceptional groundwork is necessary to establish scenario analysis in the toolbox of Security Studies (e.g. comparing and testing different frameworks for scenario development). This study has demonstrated that the cross-fertilization of Futures and Security Studies yields a promising field of research. The potential synergies of the disciplines should be explored further.

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Annex A: List of Contributing Experts

Name	Country	Interview Format
Anonymous	Romania	Questionnaire
Anonymous	Romania/Turkey	Telephone interview
Dr. Nika **Chitadze***	Georgia	Questionnaire
Viorel **Cibotaru****	Moldova	Questionnaire
Dr. Grazvydas **Jasutis****	Lithuania	Questionnaire
Eugene **Kogan****	Georgia	Questionnaire
Dr. Elena **Mandalenakis****	Greece	Questionnaire
George Vlad **Niculescu***	Romania	Questionnaire
Dr. Benyamin **Poghosyan***	Armenia	Questionnaire
Dr. Carmen Sorina **Rîjnoveanu****	Romania	Questionnaire
Fuad **Shahbazov***	Azerbaijan	Telephone Interview
Dr. Jack **Sharples***	United Kingdom	Questionnaire
Serhii **Yershov**	Ukraine	Questionnaire

* European Geopolitical Forum (EGF)-affiliated experts
** EGF-suggested contacts

Annex B: Ethics Approval Form

University | College of
of Glasgow | Social Sciences

Ethics Committee for Non Clinical Research Involving Human Subjects

NOTIFICATION OF ETHICS APPLICATION OUTCOME – UG and PGT Applications

Application Type:　　**New**　　　　　　**Date Application Reviewed:** 15/04/2019

Application Number:　2338634
Applicant's Name:　　Greta Kristina Wagner
Project Title:　　　　Black Swans in the Black Sea – Scenarios for the Future of NATO-Russia Relations in the
Black Sea Region

APPLICATION OUTCOME

(A)　　**Fully Approved**　　☒　*Start Date of Approval: 20/04/2010*　　*End Date of Approval: 30/09/2019*

(B)　　**Approved subject to amendments**
　　　　If the applicant has been given approval subject to amendments this means they can proceed with their data collection with effect from the date of approval, however they should note the following applies to their application:

Approved Subject to Amendments without the need to submit amendments to the Supervisor	☐
Approved Subject to Amendments made to the satisfaction of the applicant's Supervisor	☐

　　　　The College Ethics Committee expects the applicant to act responsibly in addressing the recommended amendments.

(C)　　**Application is Not Approved at this Time**

Subject to Amendments made to the satisfaction of the School Ethics Forum (SEF)	☐
Complete resubmission required. Discuss the application with supervisor before resubmitting.	☐

　　　　Please note the comments in the section below and provide further information where requested.

If you have been asked to resubmit your application in full, send it to your supervisor who will forward it to your local School Ethics Forum admin support staff.

Where resubmissions only need to be submitted to an applicant's supervisor.
This will apply to essential items that an applicant must address prior to ethics approval being granted. As the associated research ethics risks are considered to be low, the applicant's response need only be reviewed and cleared by the applicant's supervisor before the research can properly begin. For any application processed under this outcome, it is the Supervisor's responsibility to email socpol-pgt-ethics@glasgow.ac.uk with confirmation of their approval of the re-submitted application.

APPLICATION COMMENTS

Major Recommendations:

Minor Recommendations:

Please retain this notification for future reference. If you have any queries please do not hesitate to contact your School Ethics forum admin support staff.

1