



Intelligence for a complex environment: transforming traditional intelligence with insights from complexity science and field research on NATO

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5. Approach to case study research

This present chapter connects the preceding theoretical chapters to the empirical part of this research; a case study into NATO Multinational Corps Northeast. It does so by presenting the methods used to examine the research question *How do military intelligence organisations deal with their complex operational environment?* In the same way that the previous chapters followed from one another according the cascading research structure (see section 1.4), this chapter follows from them. In moving from theory to practice this chapter condenses the preceding chapters into a conceptual design with which to engage practice. Where in Chapter 3 great power politics, technological developments and formative events are characterised as the practice dimensions of the intelligence habitus, this chapter builds towards examining the actual performance, or organisation, of intelligence from a complexity perspective.

This chapter is divided into two parts. The first part will present the research strategy and the underlying ontological and epistemological orientation. The second part, research design, addresses the case study approach this research applies. It closer examines the research question, the case study, and issues of data collection, analysis and research quality. The interview questions are given in Annex A. An overview of how theory is operationalised to questions is depicted in Annex B. Annex C shows how answers are coded and analysed.

5.1 Research strategy: A qualitative orientation

A research strategy is '*a general orientation to the conduct of social research*'.⁵³⁸ A research strategy follows from the research question. In this case the research question is explanatory and aims to trace understanding developed over time with reflection on theory and practice. It does not aim to establish any measurements and quantification but emphasises the usage of words and the meaning of social phenomena. Therefore this research employs a qualitative approach.

Intelligence in general is undertheorised as explained in the second chapter but – more importantly, as apparent in Chapter 4 – the intersection of intelligence and complexity is even less extant. This makes generating new qualitative theory a logical step to address a niche in intelligence research and to contribute to the overall body

⁵³⁸ Alan Bryman, *Social Research Methods*, Fifth edition. ed. (Oxford: Oxford University Press, 2016), 32.

of intelligence theory. Contrary, the traditional scientific method (deductive) is more poised to refine and extend existing knowledge.⁵³⁹ This is what Kuhn referred to as the conduct of 'normal science'. This research is abductive in that it draws conclusions on a small empirical base. It does not seek to make a truth claim with regard to explaining the data, but it looks for a probable explanation. In doing so it follows an iterative process to match theoretical concepts and empirical data.

A research strategy also entails the ontological (what is true) and epistemological (what can be known) orientation of a research.⁵⁴⁰ Because intelligence theories have been examined in Chapter 2, ontology and epistemology are only reviewed briefly here. Chapter 2 gave three labels for philosophical approaches that are not positivist; post-positivist, critical theory, and postmodern. As of yet this research did not explicitly adopt such a label. Post-positivism is a broad term that is applicable when the focus is on the problematisation of knowledge and not on a specific version of how the problematisation is done. This is useful when any specifics lack but it is clear that a value-based approach is concerned. For this reason the worldview of the research subjects, i.e. the interview respondents, will be either positivist or post-positivist. When talking about the specific stance of the research as the perspective of the researcher, it is postmodern. It finds that Rathmell's perception of postmodern intelligence offers a better view of intelligence (research) than a strictly positivist one. Furthermore, the pluriformity of postmodernism already has an established link with complexity, connecting it to the central topic of this research. The emancipatory agenda of a critical approach is not present in this research, but its idea of history, culture, and social positioning as constitutive forces is part of a postmodern perspective as well.

5.2 Research design: single-case study

A research design is '*the logical sequence that connects the empirical data to a study's initial research questions and, ultimately, to its conclusions*'.⁵⁴¹ The design of

⁵³⁹ Dennis A. Gioia, Kevin G. Corley, and Aimee L. Hamilton, "Seeking Qualitative Rigor in Inductive Research: Notes on the Gioia Methodology," *Organizational research methods* 16, no. 1 (2013): 15-16.

⁵⁴⁰ Bryman, *Social Research Methods*, 16-34.

⁵⁴¹ Robert K. Yin, *Case Study Research: Design and Methods*, 4th ed., 4th print. ed., Applied Social Research Methods Series ; Vol. 5 (Los Angeles: SAGE Publications, 2009), 26.

this research is a single-case study with one scientific unit of analysis; the intelligence organisation of MNC NE. However, while the unit of analysis is viewed as holistic, the military hierarchy, from headquarters to subordinate units and commands, gives a multi-level approach. This section revisits the research question and explains the case – including the rationale for the case study approach, how the empirical data is collected and analysed, and issues of research quality.

5.2.1 Research question, case selection, and secrecy

The purpose of this research is to examine intelligence through a complexity perspective. The case study is aimed at the research question *How do military intelligence organisations deal with their complex operational environment?* The case study investigates how military intelligence practitioners, that make up organisations, experience and handle complexity. The practitioners are not seen as private individuals but as members and representations of the military intelligence organisation of MNC NE. This has an effect on how the practitioners see the world. They are shaped by the organisational (sub)cultures of the military and intelligence professions that have their own norms and rules regarding uniformity, discipline, hierarchy, etc.⁵⁴² How these different (sub)cultures manifest themselves within the MNC NE intelligence organisation will emerge in the research results.

The research question is not only about to what extent they perceive complexity but also how they are equipped to address this complexity. Assuming the world is socially constructed, the qualitative focus is '*on the means by which organization members go about constructing and understanding their experience*'.⁵⁴³ The intelligence cycle, intelligence theory, and paradigm debate are part, or means, of constructing and understanding, or organising, intelligence practice. Questioning practitioners on these, results in a thick description and interpretation of the world view of military intelligence practitioners. Therefore a case study approach is chosen, because it 'is

⁵⁴² John A Gentry, "Intelligence in War: How Important Is It? How Do We Know?," *Intelligence and National Security* 34, no. 6 (2019); Jeff Rogg, "Military–Intelligence Relations: Explaining the Oxymoron," *International Journal of Intelligence and CounterIntelligence* (2023); Joseph Soeters, "Organizational Cultures in the Military," in *Handbook of the Sociology of the Military*, ed. Giuseppe Caforio and M. Nuciari (Cham, Switzerland: Springer, 2018), 836.

⁵⁴³ Gioia, Corley, and Hamilton, "Seeking Qualitative Rigor in Inductive Research: Notes on the Gioia Methodology," 16.

an empirical inquiry that investigates a contemporary phenomenon in depth and within its real-life context'.⁵⁴⁴

Furthermore, case study research enables a detailed and extensive analysis of a case. This often relates to the complexity and particular nature of the case.⁵⁴⁵ Case study research '*focuses on understanding the dynamics present within single settings'*.⁵⁴⁶ The interrelatedness of case and context, where it is often unclear where the border between the two is, is in line with both the postmodern approach and the complexity lens of this research. It is also very much applicable to operational military units, and intelligence in particular, as military operations are about the dynamics between the environment and the self, as is implied in the research question.

In short, with the unit of analysis being the intelligence organisation of MNC NE, the broader organisation (corps and its echelons, as well as NATO at large) is considered just as external as the operational environment. Together, the higher organisation and the operational environment, form the environment of the intelligence organisation of MNC NE. This research takes the form of a single-case study because it is interested in the dynamics within the corps' intelligence organisation (internal) as well as between the intelligence part and the higher organisation, and the operational environment (external). Other research methods are less suited for this research aim: An experiment as research method deliberately separates a phenomenon from its context. A survey is extremely limited to investigate context because it seeks to limit the variables to be analysed in order to put effort into maximising the amount of surveys to be held. A history does deal with the entanglement between phenomena and context but, as the name implies, does not deal with contemporary events.⁵⁴⁷

In selecting a case study the criteria, as apparent from the research question, are that it must be a military intelligence organisation, excluding civilian intelligence organisations. It must be operational, i.e. to some degree directly exposed to the environment it seeks to understand. It must be about intelligence at the level of military operations, excluding strategic or national security intelligence. Obviously, this operational environment must be complex. Furthermore, the interviews have to

⁵⁴⁴ Yin, *Case Study Research: Design and Methods*, 18.

⁵⁴⁵ Bryman, *Social Research Methods*, 60-61.

⁵⁴⁶ Kathleen M. Eisenhardt, "Building Theories from Case Study Research," *Academy of management review* 14, no. 4 (1989): 534.

⁵⁴⁷ Yin, *Case Study Research: Design and Methods*, 18.

take place in the working environment of the respondents so the respondents are actively living what they are talking about. This makes matters pressing and provides much colour and depth for a thick description. The condition of respondents being interviewed in their working environment of a military mission also brings several other advantages. It means that, because of the more austere working conditions and reality of working closer to a conflict, there is less bureaucracy and strict compartmentalisation than is the case with strategic intelligence and national services. This means it is more feasible to generate an overview of working relations and processes that is needed for answering the research question. A final criterion was the possibility of access. While getting access is an issue with doing interviews and field work in general, it is especially pertinent when doing research into the secret practice of intelligence. The role of secrecy in intelligence research is described shortly, for now it is enough to underline the importance of access to the point that it is practically considered a criterion.

Considering these criteria, the first and most practical consideration, would be to look for national opportunities. However, at the time the Netherlands was not actively deployed with a large number of troops to provide enough intelligence respondents. Research access to military missions, and especially their intelligence officers, of other nations deemed too difficult. NATO offered several points of access through Dutch nationals working for the alliance. The current NATO operations in Kosovo (Kosovo Force, KFOR) and Iraq (NATO Mission Iraq, NMI) do not offer enough intelligence volume – mainly because they are peace-support (KFOR), and non-combat advisory and capacity building missions (NMI). However NATO's reaction to Russia since 2014 offers other opportunities. The details of NATO's changing its posture from deterrence to defence are presented in Chapter 6. In short, for now, NATO is moving from its peace support legacy form to a warfighting form – with far reaching implications. It means NATO units and commands are being strengthened and organised to defend the alliance territory. In this changed security context and environment, NATO troops actually responsible for holding the border area against a possible Russian attack are planning and practicing to do so in quite some detail. Their environment, even with the absence of actual war, has become more operational than it ever was since the Cold War ended. Overall, the Russian

aggression against Ukraine and hybrid warfare against its member states is challenging NATO to adapt to a complex environment.⁵⁴⁸

This presents the situation that there are military units with a large enough intelligence organisation that is tasked to understand its complex and operational environment. This covers the criteria derived from the research question. The two other, related, criteria are that the interviews can be held at the respondents' working environment and that there already exists some form, or potential, of access. Exploring research possibilities through Dutch contributions to enhanced Forward Presence (eFP) units and NATO Force Integration Units (NFIU) in NATO states that border Russia proved difficult to realise. Then the opportunity to do research at MNC NE presented itself based on earlier contact with the corps headquarters and a contribution to an internal conference by MNC NE. As a case study the corps meets all the criteria and is a very relevant case given it is responsible for defending NATO's North-eastern flank.

As already mentioned, the big issue of research into intelligence is secrecy. While intelligence is not unique in this it poses a more severe challenge.⁵⁴⁹ Secrecy influences '*the bounds of the possible*' in researching intelligence.⁵⁵⁰ For instance, it '*limits research opportunities and influences key methodological choices*'.⁵⁵¹ Practically, this means topics regarding sources and methods are off-limits for research. Another consequence for this particular research is that the fieldwork took place in restricted working areas. Data carriers were not allowed, so interviews were recorded with pen and paper. These notes were later worked out, compared between researchers, and transcribed on a Word-file. As such, secrecy permeates the entire case study.

⁵⁴⁸ *Coping with Complexity in the Euro-Atlantic Community and Beyond*. Riga Conference (Latvian Institute of International Affairs, 2016); Denis Mercier, "NATO's Adaptation in an Age of Complexity," *PRISM* 7, no. 4 (2018); Jamie Shea, "NATO in the Era of Global Complexity," *New Perspectives on Shared Security: NATO's Next 70 Years* (2019).

⁵⁴⁹ Coulthart, Landon-Murray, and Van Puyvelde, "Introduction: A Pluralistic Approach to Intelligence Scholarship," 2.

⁵⁵⁰ M. Phythian, "Framing the Challenges and Opportunities of Intelligence Studies Research," *ibid.*, 12.

⁵⁵¹ Damien Van Puyvelde, "The Why, Who and How of Using Qualitative Interviews to Research Intelligence Practices," *ibid.*, 49.

Not only does secrecy impacts data collection and analysis, it also requires 'strategies of access, ethics and (data)security'.⁵⁵² Regarding access, outside researchers often lack access because intelligence organisations remain very closed and inside contacts are hard to obtain. There is also the practical matter of needing a security clearance to even enter a working place. This was made easier because this researcher is on active duty and in possession of a security clearance. Having experience in the military and with intelligence, knowing the language, social codes, and culture also helped in establishing contact with the respondents and interviewing them. Furthermore, given the secrecy associated with intelligence work and it being a particular 'tradecraft' shared among a select few, the insider status of this researcher generated a level of trust and willingness to share information and experiences with the respondents that is unreachable for outside researchers.⁵⁵³ Sjøgren et al. reflect the experience of this researcher when they state '*the researcher's position as either insider or outsider directly implicates the level of access that can be granted to them, the questions that they can ask, and, ultimately, the research that can be carried out*'.⁵⁵⁴ All in all, especially given the context of the war in Ukraine, the possibility to do this research is unique.

There is also an ethical dimension to this trust. Intelligence researchers should always be aware of the potential damage that information gained, can do to intelligence organisations and intelligence practitioners that reveal the information. While classified information is off-limits for this research, there is still the possibility that some information gained can be sensitive or damaging nonetheless. The closeness of the researcher to the respondents, and the associated trust, has the risk that the respondents may reveal information of the sensitive or damaging kind. It is the responsibility of the researcher to guard against this by simply not taking notes, or asking if the interview at that point is still unclassified to make the respondent aware. Secrecy also requires the researcher to think about issues of data security.

⁵⁵² Esmé Bosma, Marieke de Goede, and Polly Pallister-Wilkins, "Introduction: Navigating Secrecy in Security Research," in *Secrecy and Methods in Security Research*, ed. Marieke De Goede, Esmé Bosma, and Polly Pallister-Wilkins (Routledge, 2020), 1.

⁵⁵³ Van Puyvelde, "The Why, Who and How of Using Qualitative Interviews to Research Intelligence Practices," 56.

⁵⁵⁴ Søren Sjøgren et al., "Military Security and Research Ethics: Using Principles of Research Ethics to Navigate Military Security Dilemmas," *Scandinavian Journal of Military Studies* 7, no. 1 (2024): 36.

For this research, the respondents remain anonymous and the data is aggregated and generalised. Administration and correspondence containing any identity information are stored on an encrypted flash drive.

5.2.2 Data collection

In the same way that the research question is leading in choosing a qualitative research strategy and case study method, it also influences the way data is collected. As previously stated, the research question is explanatory and seeks insights that developed over time from reflection on theory and practice. This requires interviews with persons involved in the events because it must be a contemporary event, as opposed to a historical event to be able to conduct interviews.⁵⁵⁵ Going back to the research question, it requires probing respondents' experience and perspectives. This asks for enough space for the respondents to tell their own story. Yet some structure in the form of questions is needed to initiate these stories, making the interviews semi-structured.

The data collection is done according to two sets of questions, see Annex A. The first set is aimed at how military intelligence practitioners see their environment. The underlying assumption here is that this environment is complex and is characterised by self-organisation, emergence, non-linearity and adaptation – along which the questions are formulated. The second set of questions is specifically designed to question the sources about the intelligence cycle and intelligence theory. Annex B provides a more detailed account of how theory is operationalised to questions.

As stated, the respondents are seen as representing the intelligence organisation. Everything outside this is considered as external, this pertains the broader non-intelligence NATO organisation as well as the operational environment. The intelligence paradigm is seen as the dynamics between the intelligence organisation and its organisational and operational environment. While the paradigm concept was initially meant to operationalise questions, it is better suited to infer answer to other questions, and serve as analysis framework. See the last chapter for a reflection on this methodological adjustment.

⁵⁵⁵ Yin, *Case Study Research: Design and Methods*, 9-11.

The data collection is done during six visits to MNC NE locations between May and October 2022:

- Headquarters Multinational Corps Northeast, Szczecin, Poland (two visits).
- Multinational Division Northeast, Elblag, Poland.
- Multinational Division North, Adazi, Latvia.
- NATO Force Integration Unit, Tallinn, Estonia.
- MNC NE intelligence conference, Szczecin, Poland.

Additionally, during these visits, several interviews were held with personnel from both the Polish and Latvian NFIU and eFP, and the Latvian Mechanized Infantry Brigade. The visit to the internal intelligence conference was not for pure data collection but preliminary findings were discussed, and validated.

During several of the field visits the researcher was supported by prof.dr.ir. Sebastiaan Rietjens (Szczecin 2x, Adazi and Tallinn), and by dr. Erik de Waard during the first visit to Szczecin. Different empirical data was collected during the visits. Next to interviews, data was also gathered by informal conversations, participant observations, (insight into) documents, and desk review. The interviews form the bulk of the data. The characteristics of this data are discussed next.

In this period the team conducted 49 semi-structured interviews (46 in person and three via video conference) with a total of 56 key persons (42 intelligence personnel, 14 non-intelligence). The respondents worked at nine units and commands within MNC NE, including the headquarters. They served in functions such as analysis, intelligence requirements management and collection management (IRM&CM), or command positions such as branch and section heads, e.g. intelligence production, intelligence operations, or serve as general intelligence officer. The non-intelligence respondents are from joint operations division (J3), joint plans division (J5), civil-military coordination division (CIMIC), strategic communications (STRATCOM), political advisor (POLAD), or commanders, that have staff relations with their intelligence divisions. See Table 12.

49 interviews	56 respondents	9 units/commands
46 in person.	42 intelligence.	analysis, IRM&CM, branch & section heads, general intelligence officers.
3 video conference.	14 non-intelligence.	operations, plans, CIMIC, STRATCOM, POLAD, commanders.

Table 12: Interview data characteristics.

The interviews lasted between 30 minutes and three hours, with most interviews being around 90 minutes. Most interviews are with one respondent, and several interviews were with more respondents. Of the interviews, 20 took place in Szczecin, nine in Elblag, eight in Adazi, while 12 interviews were held in Tallinn.

The respondents are all military except one civilian, and have 14 different nationalities, the biggest groups being United States (16) and five nationalities with one respondent, see Table 13.

Nationality	# Respondents
United States	16
Poland	9
Denmark	7
Estonia	6
Netherlands	4
Germany	3
Lithuania	2
Canada	2
Hungary	2
Slovakia	1

Romania	1
United Kingdom	1
Latvia	1
Croatia	1

Table 13: Number of respondents per nationality.

The rank of the respondents varies from colonel to corporal but most are major (20), see Table 14.

Rank	# Respondents
Major	20
Lieutenant-colonel	13
Captain	9
Colonel	3
Lieutenant	3
OR-8	2
OR-7	2
Corporal	2
OR-6	1
Civilian	1

Table 14: Number of respondents per rank.

As with intelligence, social science research aims for a triangulation of sources. Collected data is more valuable if it is corroborated by multiple sources. *'Data supported by different strategies of data collection make them much stronger and*

convincing'.⁵⁵⁶ Therefore the interviews are supported, where relevant, with secondary research, containing popular media, practitioner and academic publications. Regarding MNC NE there is hardly any literature. The only publications that have the corps as its main subject are a research report and an article derived from it by Gareis & Vom Hagen.⁵⁵⁷ All other publications only mention the corps as part of bigger NATO developments. Contrary, a lot is written about the operational environment of the corps, with Russian military activities as the most covered subject.

Some remarks can be made regarding interviews. While they are very suited for research that aims at a deep understanding of social phenomena, interviews are not perfect. Events or practices can be remembered inaccurately because of memory lapses, personal attitudes or political preferences.⁵⁵⁸ Still, given the challenging nature of intelligence as a research field and the ability of interviews to conduct research in a manner that is both probing and explanatory, interviews have become increasingly common in intelligence research.⁵⁵⁹ However, underlining the underrepresentation of military intelligence in the context of intelligence studies, empirically-based research into intelligence as part of military operations is thin.⁵⁶⁰

⁵⁵⁶ Chiara Ruffa and Joseph Soeters, "Cross-National Research in the Military: Comparing Operational Styles," in *Routledge Handbook of Research Methods in Military Studies*, ed. Joseph Soeters, Patricia M Shields, and Sebastiaan Rietjens (Routledge, 2014), 222.

⁵⁵⁷ Sven Bernhard Gareis et al., "Conditions of Military Multinationality the Multinational Corps Northeast in Szczecin ; Report of the Trinational Research Team Strausberg, Copenhagen, Warsaw," *Forum International* 24 (2003); Sven Bernhard Gareis and Ulrich vom Hagen, "The Difficult Practice of Military Multinationaly: The Multinational Corps Northeast in Szczecin," in *The European Armed Forces in Transition: A Comparative Analysis*, ed. Franz Kernic, Paul Klein, and Karl W. Haltiner (New York: Peter Lang, 2005).

⁵⁵⁸ Van Puyvelde, "The Why, Who and How of Using Qualitative Interviews to Research Intelligence Practices," 50.

⁵⁵⁹ Ibid., 48.

⁵⁶⁰ Johnson, "The Development of Intelligence Studies," 13.

5.2.3 Data analysis

This section explains how the collected data is exactly analysed with the so called 'Gioia method' propagated by Dennis Gioia.⁵⁶¹ This method focuses on staying close to the words and worldview of research subjects to exclude theoretical assumptions on the side of the researcher.⁵⁶² The method performs '*extraordinary efforts to give voice to the informants in the early stages of data gathering and analysis and also to represent their voices prominently in the reporting of the research*'.⁵⁶³

The method consists of a first and second order analysis. In the first order analysis the focus is on respondent-centric terms. The interviews are conducted without any preconceived terminology or statements on the researcher's part nor do they contain directive leading questions. The goal here is to stay as close as possible to the respondents' world view and experience. While trying to avoid 'going native' and adopting the respondents' view this first order analysis comes down to making elaborate and detailed notes (thick description). In the end, by making explicit the respondents terms when formulating theory is to pursue scientific rigor and credibility.

In the second order analysis the researcher considers him/herself as a knowledgeable agent who simultaneously thinks at the level of the respondents and at a more abstract theoretical level. The second order analysis has two abstraction levels; themes and aggregate dimensions. First is the level of themes where the abstraction takes the form of trying to connect respondents' terms to existing literature and/or highlight terms that lack any firm theoretical ground. When further coding or enrichment of categories no longer provides or promises new knowledge or links to relevant existing literature the second level of abstraction investigates if it is possible to distil the emergent themes even further into 'aggregate dimensions'. Annex C presents the terms, themes, and aggregate dimensions in a table.

⁵⁶¹ Gioia, Corley, and Hamilton, "Seeking Qualitative Rigor in Inductive Research: Notes on the Gioia Methodology."

⁵⁶² Ibid., 17. e.g. ; Dennis A. Gioia and Evelyn Pitre, "Multiparadigm Perspectives on Theory Building," *The Academy of Management Review* 15, no. 4 (1990); Rajiv Nag and Dennis A. Gioia, "From Common to Uncommon Knowledge: Foundations of Firm-Specific Use of Knowledge as a Resource," *The Academy of Management Journal* 55, no. 2 (2012).

⁵⁶³ Gioia, Corley, and Hamilton, "Seeking Qualitative Rigor in Inductive Research: Notes on the Gioia Methodology," 17.

The terms, themes, and dimensions provide a clear overview how the respondent's worldview connects into higher aggregate levels of observation – however it is yet not a theory. To formulate such a theory, grounded in the data, it is necessary to describe the dynamic relationships among the data, themes and dimensions and make clear all relevant raw data-to-theory connections. What needs to be established is '*that the essential concepts [...] contained in the data structure are well represented in the model, but that the relational dynamics among those concepts are now made transparent*'.⁵⁶⁴ Bryman characterises this quality of theoretical reasoning in case study research as follows: '*How well do the data support the theoretical arguments that are generated? Is the theoretical analysis incisive? For example, does it demonstrate connections between different conceptual ideas that are developed out of the data? The crucial question is not whether the findings can be generalized to a wider universe but how well the researcher generates theory out of the findings.*'⁵⁶⁵

To make sure the data and theory are logically connected, they are compared continuously. This enables a constant refining of emergent constructs to better match the data quality and quantity and so validate the constructs on which theory is based.⁵⁶⁶ Practically, analysis means that when the interviews are transcribed, these transcripts are loaded into NVivo to enable digital coding. The coding results from using the Gioia method. Coding from the respondent-centric first level of analysis will be more descriptive and categorising, while the second level of analysis will produce codes that relate back to theory and concepts from Chapters 2, 3, and 4. The coding is a mix of emergent labels and existing ones that are inherent to the research questions.

The coding also includes the paradigm concept. This is inferred from answers to other questions, including questions on the intelligence cycle and intelligence theory, which concepts are also incorporated in the paradigm. Still, the idea of an intelligence paradigm is too vague to have any analytical value and generate labels from. To operationalise the idea of a paradigm (shift) the Cynefin framework, already introduced in section 4.2.1, is used. As explained there, the domains of Cynefin are based on different understandings of causality, knowledge creation and the role of

⁵⁶⁴ Ibid., 22.

⁵⁶⁵ Bryman, *Social Research Methods*, 64.

⁵⁶⁶ Eisenhardt, "Building Theories from Case Study Research," 541-42.

the self. As such, they are equated with paradigms for this research. These three characteristics help to operationalise and formulate coding concerning paradigms.

5.2.4 Research quality

Regarding qualitative research in general, and case study method in particular, there are many questions and reservations with the reliability, replicability, and validity of social science when compared with the applications of these criteria, or measurements, in the natural sciences. With regard to case study research, a pertinent issue is the external validity, or generalisability. The answer to that is pretty clear according to Bryman who states '*It is important to appreciate that case study researchers do not delude themselves that it is possible to identify typical cases that can be used to represent a certain class of objects*'.⁵⁶⁷ This seems a common understanding, also within academic intelligence studies, as '*few intelligence researchers have sought to generalize their inferences beyond the limited number of cases they looked at*'.⁵⁶⁸ The case study here is not seen as a statistical representation of all potentially comparable units of analysis.⁵⁶⁹ However, MNC NE being a NATO unit, works with NATO doctrine that, in different degrees, is adopted by member states, or overlaps with national doctrine. Research into a single NATO entity therefore has value for the whole of NATO, and its member states. More general, NATO intelligence doctrine, and practice, can be seen as a specific case, or variation, of the Western intelligence system as described in Chapters 2 and 3.

In other words, while full generalisability is ruled out, the sampling logic is based on the expectation that topics are present, or will emerge, that are transferable to other cases. For example, the archetypical intelligence cycle is a widespread conceptualisation of intelligence, and military intelligence in general tends to follow it. The cycle is very often used by respondents to describe their work and is also widely used by NATO and many Western intelligence organisations. Therefore an examination of the intelligence cycle within the MNC NE intelligence organisation has much value for other intelligence organisations.

Another way to ensure the credibility of this research's findings is using multiple sources, as is already explained. Being a qualitative case study this research is concerned with in depth investigation of phenomenon within their context. This

⁵⁶⁷ Bryman, *Social Research Methods*, 62.

⁵⁶⁸ Van Puyvelde, "The Why, Who and How of Using Qualitative Interviews to Research Intelligence Practices," 51.

⁵⁶⁹ Yin, *Case Study Research: Design and Methods*, 54-56.

requires a rich account of the culture regarding the subject. This is known as a ‘thick description’ that acts as a way to judge issues of transferability, or relatability, of findings to other settings. The road to this thick description, consisting of e.g. concepts and their explanations used in the semi-structured interviews, transcripts and the methods used for analysis, are kept and archived. This is done to establish an audit trail that provides a look beneath the final result and to scrutinise the road taken should any other researcher wish to do so.

Next to the description being ‘thick’ another quality indicator is its coherence. Does the research logically links its questions to appropriate methods to findings and to conclusions? The interview process, where most interviews were done with at least two researchers who both made notes, is another quality indicator – as is the volume of interviews and respondents. From the 49 interviews, nine were done by only the lead researcher, ten were held with three interviewers and the remaining thirty were done with two interviewers.

An initial report with the research findings was provided to five respondents and four of their colleagues who were not interviewed. The initial report was checked for security issues and factual errors only. While this is inherent in the choice to examine the intelligence organisation of MNC NE, only several revisions were deemed necessary but these rather meant taking away several details without impacting overall results. This member check, or respondent validation, further solidifies the credibility of the research results.

The final criterion to ensure the quality of this research stems from its postmodern stance and is called reflexivity. It is about acknowledging and mentioning the role of the researcher and his/her particular position in social space and the implications this can have on the knowledge construction of the research.⁵⁷⁰ The researchers’ knowledge of and proximity to the practice of intelligence are obviously of influence, as already mentioned in section 5.2.1. Next to enabling access that is not available to others, this can also have negative consequences. The position of the researcher brings with it inherent bias. This is a scientific constant but even more so when the researcher is closely connected to the research subject and case study as with this particular research. More important, closeness of the researcher to the subject can lead to emotional involvement or preconceptions and interpretations too far

⁵⁷⁰ For a detailed account of alternative criteria for qualitative evaluation, see: Bryman, *Social Research Methods*, 384-90.

removed from the respondent's data. This is countered by staying close to the idea of thick description and the wording of the respondents explaining their worldview.