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

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8. Case Study, part III: The Organisation of Intelligence – analysis

This last chapter of the case study research deals with the organisation of intelligence on the level of second order, researcher-centric, themes. In four sections this chapter examines the interpretation of the intelligence cycle, the dominant intelligence theory, the prevailing intelligence paradigms, and the problem of alignment within the intelligence organisation of MNC NE. The fifth and last section answers the research question *How do military intelligence organisations deal with their complex operational environment?* While Chapters 6 and 7 can be read independently from each other, this chapter builds on both these preceding chapters to present an aggregate perspective. Furthermore, this chapter falls back on the theoretical Chapters 2, 3, and 4.

8.1 The intelligence cycle as missing procedure

Interviewing about the intelligence cycle means it is inevitable to use associated terminology. In other words, the researcher and respondents shared the same professional culture and language. As a result the data that features in section 7.1 is straightforward and little interpretation is needed here in this chapter to connect it to existing intelligence theory. The workings of the intelligence cycle are analysed with two concepts from Chapter 2: the proceduralist-conceptualist approaches, and the cycle as cybernetic feedback loop.

The critique of the corps' personnel on the intelligence cycle was largely of procedural nature. It concerned problems with outdated intelligence requirements, limitations on collection, and a faulty OSINT process. In their daily practice, many respondents regarded the intelligence cycle as stovepiped and IRM&CM, meant to enable interaction and feedback, was often ignored. Still, there was quite some non-linearity present in the daily practice of the intelligence cycle that is not present in doctrinal depictions of the cycle. Often this concerned respondents going against the unidirectional and linear nature of the cycle. This can be explained because there was also a strong conceptual tendency among the respondents. Regardless from doctrine, a vast majority of respondents seemed to have an expectation of the cycle that more closely resembles Hulnick's description of the cycle as a 'matrix of interconnections', or Omand's 'interactive network' (section 2.2.), than the doctrinal cycle as unidirectional and linear. However, this critique is still procedural as it

primarily concerns the workings of the cycle, independent from environmental complexity or the question if the model is still valid.

The intelligence cycle at the intelligence organisation of the corps is a manifestation of the cycle as a cybernetic feedback loop. While there was an expectation of more feedback and interconnection among the respondents, this did not manifest at the level of organisation. Intelligence direction was the only input that can make adjustments. Otherwise it was a closed and fixed system. At the corps, intelligence direction and its problems permeated the entire cycle. A lack of direction in the form of unclear and outdated intelligence requirements, combined with the lack of ISR, severely affected generating useful intelligence (collection and analysis) and contributing to decision-making (dissemination).

As a result the rest of the cycle is left to its own devices to try and adjust as it sees fit - while leverage for actual change can only come from direction. Even then, as stated in Chapter 2, the cycle only passes information but is not shaped by it. This cybernetic frame explains the challenges of open source intelligence at the corps. It is an instance of adaptation to an absence of ISR, the developments in information and (tele)communication technology, and the growing importance of open source information. However, without explicit requirements or direction on this, the internal agency to improve is limited in resources as well as expertise. The cybernetic frame also explains the observation that almost no respondent was in contact with non-military organisations outside NATO such as think tanks or NATO centres of excellence.

All respondents saw a need to improve the intelligence cycle. This underlines the value of the cycle and its doctrinal status in contributing to interoperability between NATO member states. This also means the respondents saw problems with intelligence performance as a mere malfunction of the system, without questioning the system itself. In this they mirror most of the literature on the intelligence cycle. No respondent questioned the viability of the intelligence cycle. There was no discussion if the concept applies to very different environments such as hybrid/grey zone, peace time or modern combat operations. Or puzzles, mysteries, and complexities. There was also no reflection on the cycle being geared only towards known unknowns; intelligence requirements in a collection plan, while unknown unknowns are not considered. It is more focussed on reducing the α chance, or Type I error while intelligence should focus on the β , or Type II error. In general, the cycle was very much embraced as a Jominian rule, ignoring any Clausewitzian friction or fog of war (see section 4.1.3).

Furthermore, the respondents see intelligence as serving the commander, staying very true to the book *Intelligence is for Commanders* (1948) mentioned in Chapter 2 that introduced the intelligence cycle.⁵⁹⁹ This is a very traditional view whereas there is widespread consensus that intelligence should also be for the warfighters, a central idea in Network Centric Warfare (see section 3.3.1). And within government, intelligence is no longer reserved for a few high officials but for entire departments. Brown describes the complexity of the intelligence environment as an argument to broaden intelligence dissemination: *'In an age in which the speed, scale, and scope of overlapping national security issues have eclipsed the ability of any individual leader to keep track of them all, we must think seriously about broadening the intelligence audience. [...] in a period of renewed great power rivalry that takes place under globalized, digital conditions, intelligence must no longer be for commanders—it must be for entire organizations.'*⁶⁰⁰

Overall, despite some non-linear appraisal, the respondents did not think outside the intelligence cycle. This is in stark contrast with critical perspectives and critique in academic literature that problematise the traditional understanding of intelligence as a command-driven cycle, applicable in any circumstance and environment. This forms another dimension in the gap between the practical dimensions of intelligence (external drivers) and theory (internal drivers), as described in section 3.7. However, where Chapter 3 draws the conclusion that the internal drivers are lagging behind a changing environment, the conclusion here is that critique on the intelligence cycle from the internal driver of debate is ahead of any critical reflection on the cycle in practice.

8.2 Nuanced positivism

Collecting data on the intelligence cycle was quite straightforward with a clear relation between question and answer, and linking the answer to theory. Interviewing on intelligence theory took a more interpretative approach. No respondent, on their own account, talked about intelligence theory or definitions. Instead, intelligence theory is the respondent-centric level look at the issues of products, frameworks, prediction, objectivity, bias and multiple perspectives – as

⁵⁹⁹ Glass and Davidson, *Intelligence Is for Commanders*; from: Omand, "The Cycle of Intelligence," 62.

⁶⁰⁰ Zachary T. Brown, "Intelligence Isn't Just for Commanders Anymore" (26-2-2022), Thecipherbrief.com.

appeared during the data collection. The analysis will use the positivist and post-positivist perspectives from Chapter 2.

The majority of the respondents adhered to a positivist notion of intelligence. This means they acknowledged there is an objective reality that can be observed and measured. The role of intelligence within MNC NE is then 'speaking truth to power'. As seen in section 3.5.1, this is firmly grounded in the Kentian approximation of intelligence analysis, in general, to positivist social science. This means that, at least in theory, the world is fully knowable, even predictable, and any fundamental uncertainty is excluded. In a Jominian way there is only uncertainty as a result of suboptimal analysis. This is in line with positivism being the dominant intelligence theory as stated in Chapter 2 and it is therefore no surprise conclusion.

The idea that intelligence is objective (and independent) is based on scientific ethos, as are the ideas on biases and the need to counter these. This firmly fits in the, again, Kentian and positivist tradition in intelligence. The role and perception of different national and cultural perspectives, within the corps' intelligence organisation, with regard to understanding the environment warrant more attention. Whereas all other respondent terms testify of a fact-based idea of understanding, the differences in Russian threat perception point more to a value-based approach. The geographic proximity to Russia and a shared Soviet past generate a cultural familiarity that is important in understanding Russia. In a sense, this understanding is socially constructed and therefore does not fit the otherwise dominant positivist persuasion. Still, however, the general awareness of co-existing perspectives where proximity to Russia and familiarity with Russian culture are valued over perspectives that are more distant is not full blown post-positivist. It exists more at the epistemological level than the ontological. Stated differently, the respondents still believe there is a single reality it just takes different perspectives to objectively ascertain the truth about this reality.

There is, however, another post-positivist tendency among the respondents. For this it is necessary to repeat Warner's statement from Chapter 1 who stated that it is '*a logical next step to explain intelligence as a reflexive activity, for intelligence systems under comparative scrutiny always interact with other systems (and with the world around them) in dynamic relationships and also in complex manners. Intelligence systems and the regimes that wield them, after all, comprise people, with their tendencies to biases, habits, and non-linear reactions to events*'.⁶⁰¹ Taking from

⁶⁰¹ Warner, "Intelligence and Reflexivity: An Invitation to a Dialogue," 169.

Warner, the awareness – and sometimes utilisation – among respondents of the different perspectives, combined with the institutional dynamics as experienced by the respondents, constitute a reflexive activity among the respondents that contrasts with their otherwise positivist persuasion. While Chapter 2 states positivist and post-positivist worldviews are mutually exclusive, or incommensurable, paradigms – at least some form of combination exists among the respondents, perhaps even flirting with Bourdieu's theory of practice. Though, it must immediately be stated that the overall stance of the respondents was a positivist one and nuances exist few and far between. The larger implication of this is that the military intelligence workforce employs a worldview, and methods, that are increasingly out of touch with the complexity of the practical dimensions of intelligence from Chapter 3.

8.3 Co-existing and conflicting paradigms

This section examines the dominant intelligence paradigm within MNC NE. To do so, the Cynefin framework from section 4.2.1 is used. This section first positions the two preceding sections on the intelligence cycle and intelligence theory in the Cynefin framework. Then, raw data is analysed and placed in the framework as well. The analysis in this section is done by matching the data to the three characteristics used to describe the Cynefin domains; type of constraints, required practice, and the decision model needed to address the problem – as explained in section 4.2.1. These three characteristics determine to which domain the data applies.

The predominantly proceduralist approach to the intelligence cycle relates to the clear domain; The doctrinal cycle is a best practice, it allows a standard, categorised response that anyone can apply because causality is fixed, enabling exact prediction. While there are definite conceptualist notions regarding the cycle among the respondents, these are not broadly reflected in practice to label them good practice as property of a complicated paradigm.

The implicit theoretical stance of the intelligence personnel qualifies as positivist. Their view of speaking truth to power and an objective reality point to knowable cause-effect relations, even if this is difficult to measure, and to a certain degree prediction. This places intelligence theory in the ordered paradigms (clear and complicated) of Cynefin. Then, however, it gets diffuse to relate the data to a single domain. In theory the processing phase of the cycle, containing different instances of analysis, can be seen as a good practice in the complicated domain. The data on

the value attributed to subject matter experts, i.e. people with knowledge on Russian language and culture, be it professional or accidental, points towards the need to analyse and not categorise. However, SATs (as good practices) are hardly used and analysis in general comes down to experience, subject knowledge or reporting. This contradicts the label analysis from the complicated domain, but it also contradicts best practices from the clear domain. Then again, the use of frameworks and product formats provided by doctrine does fit best practices. Overall, the implicit theoretical stance of the corps' intelligence organisation is a bit more clear than complicated.

The raw data on Cynefin, meaning the data that point toward a position in Cynefin inferred from the interviews as a whole and coded in NVivo, shows an entirely different outcome. Specifically, the data is selected because it very clearly fits one of the domains, according to the three characteristics. The data can be a respondent's observation about reality, an opinion on how things should be within the corps, or usage of certain keywords relating to a specific domain.

Remarkably, most data falls in the complex domain, whereas the intelligence cycle and theory fall in the ordered domains of clear and complicated. The reason behind this is that most data is about the organisational and operational environment of the intelligence organisation. It is about the problem of complex environmental phenomena within an organisation that is not necessarily suited to deal with complexity. Table 15 shows the number of data points for each domain, with each five respondent quotes that are illustrative for the data. Below the figure the domains are described based on the data.

Domain	Data points	Illustrative respondent quotes
Clear	15	<ul style="list-style-type: none"> • <i>'As intel creatures we very rigidly live in our own doctrine.'</i> • <i>'Cause and effect [in the operational environment] are easy to understand.'</i> • <i>'We have six SOPs [standard operating procedure] at our section, it contains all I need.'</i> • <i>'Assignments are not difficult, provided you have enough time, a good team, and good leadership.'</i> • <i>'We still use Russian doctrine and doctrinal templates from before the war [in Ukraine], while things have changed.'</i>
Complicated	11	<ul style="list-style-type: none"> • <i>'It's important to know who you can go to for SME opinion [subject matter expert]'</i> • <i>'There is a repetition; it's looking back. A good chunk of my predictions becomes true.'</i> • <i>'Making intel assessments takes guts and requires seeing patterns.'</i> • <i>'[cause and] effect are difficult to see, but not impossible.'</i> • <i>'We look to the Russian psyche and culture to understand Russia, more than we use Russian doctrine or tactics.'</i>
Complex	38	<ul style="list-style-type: none"> • <i>'Yes environment is complex, the question is – how is it complex?'</i> • <i>'We [NATO] suffer from self-imposed complexity.'</i>

		<ul style="list-style-type: none"> • <i>'He [the commander] is looking for certainties where there are none.'</i> • <i>'The complexity is that a warfighting corps is different from NATO structure and experience.'</i> • <i>'The problem with intelligence and the military in general is that they want to know everything and want to do too much. That is impossible with complexity.'</i>
Chaos	1	<ul style="list-style-type: none"> • <i>'The Russians are good at chaos management because with them everything is always in a bad condition.'</i>
Confused	10	<ul style="list-style-type: none"> • <i>'It takes you years to realise what you should be doing.'</i> • <i>'It is in NATO's military culture that it's not always clear what to do. Often there's no job description and people do not feel empowered or comfortable to do their job.'</i> • <i>'Decision-making processes for exercises and operations run parallel, making it quite confusing.'</i> • <i>'I'm in the first year of my position, I'm still landing. Understanding the work comes after the first year.'</i> • <i>'At least the basics of the intelligence cycle should be known to new personnel. Often this is not the case and people are not up to the task.'</i>

Table 15: Data per Cynefin domain.

Data in the clear domain speaks about causality that is obvious, looking for certainties, standard solutions, and the value of doctrine. A noteworthy issue that manifests from this data is that on several instances a new intelligence requirement was answered by taking an older product and updating it with recent information and other products. While this is understandable regarding the challenges of

collection and time constraints, it is also a way to make complicated questions clear, thereby actively moving between domains.

Data relating to the complicated domain mainly concerns the value of subject matters experts and the need for analysis, as good practices. This is needed because cause and effect, in this case Russian culture and military activities, are difficult to understand and require specific knowledge. On several instances analysis was described as finding patterns in data but also with regard to Russian troop movements and activities. This ties back to a positivist worldview and causality that is knowable.

Data relating to the complex domain often has the words complex or complexity in it. More than just jargon it refers to an actual, albeit implicit, understanding of complexity. Situations such as NATO organisational constraints, the Russian speaking minorities in the Baltics, or hybrid warfare are called complex by the respondents because of ambiguity, uncertainty, and their interconnectedness. As such there is no standard response or analytic method. Re-purposing of existing capabilities to solve complex problems is not observed.

The chaos domain has only one data point. It concerns a respondents who stated the Russian Armed Forces are good at chaos management because they always struggle with poor logistics, old technology, etc. to such a degree that every endeavour is uncertain and full of risk.

Several data points fall outside, or between, the domains as they are about confusion. These concern respondents that did not know how to do their job properly because of a lack of training, mentoring or missing procedures and processes.

The result of plotting data and earlier conclusions in Cynefin reinforces the conclusion that intelligence is not geared towards its complex environment. The case study confirms the theory from Chapters 2 and 3 that intelligence missed the complexity turn while its environment is becoming increasingly complex.

8.4 Design properties

The alignment problems of the intelligence organisation of the corps, internally, with other divisions/sections, and with think tanks, academia, or NATO organisations outside the chain of command impairs performance. Issues of alignment manifest throughout all chapters and several major issues feature in section 7.3. This section focuses on how this problem can be further analysed with complexity science. It does so by using the three design properties of complex systems from section 4.4: requisite variety, sensemaking, and organisational learning.

8.4.1 Requisite variety

For MNC NE to match the variety and complexity of its operational environment, as the law of requisite variety prescribes, diversity of the workforce is most important. Within MNC NE diversity was most visible through the different nationalities of the staff. At each level of MNC NE the staff had very diverse nationalities. Staff originated from MNC NE's host nation countries (Poland, Baltic States), other Eastern European countries (e.g. Romania, Hungary), western continental European countries (e.g. Germany, Denmark) and from the Anglo-Saxon countries (e.g. US, UK, Canada). In most units, host nationals were largely represented: units that were based in Poland had relatively much Polish personnel, while the NFIU Estonia had a large share of Estonian staff.

As a result of their multinational nature, MNC NE's units were internally varied on a number of issues. These included the level of Russian language capabilities, cultural understanding, the threat perception, and the national network to tap into. However, apart from having different nationalities, most staffs were rather homogenous. With a few exceptions, they were male, had an army background, and were between 35 and 50 of age.

Within MNC NE only few staff brought different cognitive backgrounds with them. Most often these different backgrounds were the results of academic education. Examples included economics, political studies, public administration, and leadership. These perspectives clearly facilitated diverse thinking and stimulated discussion. An example is that, regardless of any expertise or background, the intelligence personnel is mainly responsible for the PMESII format of intelligence products. However, sufficient knowledge to cover the other topics is lacking and therefore done by other staff disciplines such as CIMIC and STRATCOM, see section 7.1.3. Also, MNC NE units had hardly any civilian staff, nor were civilian partners or partners outside the chain of command considered, reflecting a traditional military model. This makes sense for tactical units in case of war, but it also impairs getting

knowledge during peace conditions. Furthermore, the respondents signalled the value of outside knowledge because, regardless of peace time, organic intelligence missed expertise on various topics. In order to not become too complex itself by trying to cover a broad and diverse set of information requirements, an organisation must seek answers from partners instead.⁶⁰²

Overall, while acknowledging some diversity, the respondents considered the extent of different ways of thinking too limited. A clear example is the staff's limited experience with social media, that was considered a very important source (see section 7.1.2). The respondent's observation of too little diversity, or not actively managing the present diversity, is in line with an important prerequisite for the law of requisite variety. The law does not mean that an equal variety is of itself an effective response, but it is necessary. The different states of the system that come from its variety must still generate effective responses that match against the environmental conditions.⁶⁰³

Diversity was only managed insofar as there was the opportunity given other tasks and only concerned functional diversity. This is in line with other empirical findings on diversity in a military setting.⁶⁰⁴ Diversity management proper however is concerned with leveraging the qualities and capacities, not job title, of different individuals.⁶⁰⁵ In lacking all this, the intelligence staff's ability to address the variety and complexity in MNC NE's operational environment was severely strained.

8.4.2 Sensemaking

The second design property for organisations to address complexity is sensemaking. As for MNC NE, many instances of sensemaking were observed. Informal mechanisms to conduct sensemaking consisted of discussion amongst colleagues on

⁶⁰² S. Rietjens, "The Future of NLD DISS: A Complex Perspective," *Militaire Spectator* 191, no. 9 (2022): 16.

⁶⁰³ Bar-Yam, "Multiscale Variety in Complex Systems," 37.

⁶⁰⁴ Femke Bosman, "Uniformed Diversity: A Multifaceted Approach Towards the Diversity Climate in the Netherlands Defence Organisation." (University of Tilburg / Netherlands Defence Academy, 2008); Fleur Ter Meulen, "Diversiteit in Inlichtingenorganisaties" (Netherlands Defence Academy, 2022).

⁶⁰⁵ Andri Georgiadou, Maria Alejandra Gonzalez-Perez, and Miguel R. Olivas-Luján, "Diversity within Diversity: Equality and Managing Diversity," in *Diversity within Diversity Management*, Advanced Series in Management (Emerald Publishing Limited, 2019).

(the quality of) intelligence products. These took place frequently, but mostly occurred within one branch only. Cross-disciplinary discussions between members of different branches were rare. Another informal mechanism was the establishment of small communities to reflect and discuss intelligence related topics. Formally, the coordination boards and meetings were designed to facilitate collective sensemaking. However, as section 6.3 outlined, there was little room for discussion and intelligence fusion.

The level of sensemaking depended on several issues. First of all, the diversity of the staff, both culturally and cognitive, see sections 6.2.3 & 7.2.3. Second, the amount of slack resources, i.e. buffer capacity. Many staff had a unique background and position in the intelligence production process. This implied that when one staff member was inactive due to leave or illness, there was often no replacement. This hampered the (sustainment of the) intelligence process. Third, while several respondents stated that they were open to new insights and different analytical frames, others were less responsive. When a staff member in Adazi introduced the highly relevant theoretical concept 'reflexive control' to assess the Russian way of warfare, only few colleagues were open to discuss and reflect on this concept.⁶⁰⁶ Finally, the lack of interoperable ICT systems (see section 7.3) hampered the quick exchange of different viewpoints amongst the staff.

The little sensemaking effort there is, besides the issues mentioned so far, is often geared towards the interpretation of available intelligence by comparing and aligning assessments. However, Weick states interpretation is a component of sensemaking but is not the same.⁶⁰⁷ While interpretation often relates to a product or some end state, sensemaking is about a process or an activity. Furthermore, interpretation implies that there is something to be discovered or approximated, whereas sensemaking '*is less about discovery than it is about invention*'.⁶⁰⁸ '*Sensemaking is about the ways people generate what they interpret.*'⁶⁰⁹ In other words '*sensemaking thus involves not merely interpretation and meaning production but the active authoring of the situations in which reflexive actors are embedded and*

⁶⁰⁶ Timothy Thomas, "Russia's Reflexive Control Theory and the Military," *Journal of Slavic Military Studies* 17, no. 2 (2004).

⁶⁰⁷ Weick, *Sensemaking in Organizations*, 7.

⁶⁰⁸ *Ibid.*, 13.

⁶⁰⁹ *Ibid.*

are attempting to comprehend.⁶¹⁰ This is reminiscent of the comment from the first chapter that instead of describing the world as it is, intelligence analysis 'actively creates' the world.⁶¹¹

Using a sensemaking lens finds that while efforts are made to align intelligence perspectives in the corps they are far from being a constant and reflexive process about inventing the dots.

8.4.3 Organisational learning

The third design property is organisational learning. Learning is present when actors within an organisation reflect on major challenges or problems that may arise and take corrective actions to adjust organisational behaviour. From organisational learning literature a helpful concept in analysing MNC NE's efforts is single/double/triple-loop learning. Whereas single loop learning refers to actors making simple adaptations and taking corrective actions, double loop learning involves reframing and seeing things in novel ways. Triple loop learning entails actors developing new processes or methodologies for arriving at such re-framings.⁶¹²

At the individual and unit levels, single loop learning happened through working groups, briefings and presentations. Often, however, there were no formal procedures to codify experiences or lessons learned. While some staffs and units recorded their experiences and lessons, often in self-developed formats and reports, most paid no attention to this. This led to fragmentation and hampered structural comparison and analysis of the lessons learned. And, although during exercises NATO's Lessons Learned system was applied (see section 6.2.2), this did not lead to many corrective actions.

At the level of double loop learning, i.e. of reframing, one saw a debate what strategy to follow: preparing for a future Article 5 situation or addressing current grey zone threats. This had many implications such as the intensity and frequency of exercises, and the focus of the intelligence efforts. Also, the intelligence efforts were directed

⁶¹⁰ Andrew D. Brown, Ian Colville, and Annie Pye, "Making Sense of Sensemaking in Organization Studies," *Organization studies* (2015): 267.

⁶¹¹ Fry and Hochstein, "Epistemic Communities: Intelligence Studies and International Relations," 25.

⁶¹² A Georges L Romme and Arjen Van Witteloostuijn, "Circular Organizing and Triple Loop Learning," *Journal of organizational change management* 12, no. 5 (1999).

at conventional land forces and emphasised tangible issues such as the forces' disposition, their capabilities, and leadership. Air and naval issues as well as less tangible aspects including morale of the troops and their mode of operation were, however, often not addressed (see section 7.1.1). Although many individual respondents recognised the importance of these, MNC NE was not able to embed this at an organisational level, because of the larger organisational design of military command hierarchy. In other words, the organisation was geared towards solving puzzles according to the traditional intelligence paradigm, with individuals questioning the validity of this.

Finally, triple loop learning seeks to enhance the fullness and depth of learning about complex issues and dilemmas.⁶¹³ To this end, actors link together in an overall learning infrastructure, but also develop new processes and methods to use this infrastructure. Within MNC NE, linking the different actors inside and outside the organisation happened to a limited extent as section 7.3 on alignment illustrates. In terms of new processes and methods, the use of open sources is particularly challenging. Although many respondents considered open sources of great importance, MNC NE was not able to establish an effective process to optimise the OSINT process. The analysis showed many different challenges, including technical access, the absence of specific open source collection tools, the staff's limited knowledge of and experience with conducting OSINT, language capabilities, circular reporting and information overload. The same goes for the integration of data science and quantitative methods. Until now the corps mainly experiences the challenges of the information revolution and none of its benefits (see section 3.3.2). MNC NE could significantly benefit from improving its OSINT process, and incorporating more qualitative methods.

8.5 Conclusion: How do military intelligence organisations deal with their complex operational environment?

The research data show the perception of the intelligence cycle and which intelligence theory the respondents adhere to, clearly fall in the ordered domains of Cynefin. The codes directly relating to Cynefin however, show the most data in the complex domain. This is because this data is about the need for more complexity

⁶¹³ de Waard et al., "Learning in Complex Public Systems: The Case of Minusma's Intelligence Organization."

awareness and not the actual presence of this awareness. This is in line with the institutional dynamics and the moderate operational complexity perceived by the respondents in the previous chapter. This makes that MNC NE and its intelligence organisation do not cope well with its, even moderately experienced, complex operational environment. The environment is only partially recognised as complex, and only at the individual level. Meanwhile the organisation is modelled on clear and complicated problems and standard solutions, even though a large number of respondents experience difficulties because of this misalignment.

In conclusion, this misalignment means the schemata used by the intelligence organisation of the corps do not fit its complex environment; broader organisation and operational environment. There is in fact little actual dealing with, or adapting to, the complexity of the environment. As such, there is no sufficient co-evolution between the intelligence organisation and its environment. Only the environment poses an influence and the organisation merely reacts but does not evolve to, in its turn, influence its environment. Here as well, the habitus is crooked as the theory of practice does not fit the environment. This underlines the conclusion of Chapters 2 and 3 regarding the contrast between a complex environment and an intelligence system built for clear and complicated problems. This is a far-reaching conclusion given the overlap between NATO and national intelligence doctrine and procedures – collectively seen as the Western intelligence system.

This misalignment between the intelligence organisation of the corps and its environment is further examined with the design properties of requisite variety, sensemaking, and organisational learning. All three properties are minimally present. There are some initiatives for improvement that fit the category but these only exist locally or temporarily. The design properties make clear why the corps is hindered to show more complex behaviour. This logically means the same properties, among other concepts, can provide opportunities to improve. This will be the subject of the final, concluding chapter.