



National Security Journal

<http://nationalecurityjournal.nz>

Published by:
Centre for Defence
and Security Studies,
Massey University

ISSN: 2703-1926 (print) ISSN: 2703-1934 (online)

The Application of the Devil's Advocacy Technique to Intelligence Analysis.

Author: Elianne Shewring

To cite this article: Shewring, E. (2024). The Application of the Devil's Advocacy Technique to Intelligence Analysis. *National Security Journal*. Published 02 October 2024. doi: 10.36878/nsj20240925.03

To link to this article: <https://doi.org/10.36878/nsj20240925.03>

View CrossRef data: <http://search.crossref.org/?q=10.36878%2Fnsj20240925.03>

THE APPLICATION OF THE DEVIL'S ADVOCACY TECHNIQUE TO INTELLIGENCE ANALYSIS

Elianne Shewring¹

Understanding evolving situations and predicting future events are significant challenges in the intelligence sphere. These necessitate advanced techniques for intelligence collection and robust evaluation procedures to enhance the accuracy of predictions. The Devil's Advocacy technique can be employed to improve analysis procedures by challenging prevailing views and mitigating the risk of cognitive biases. This paper examines the effectiveness of the Devil's Advocacy technique when applied to intelligence analysis, by evaluating its strengths, weaknesses, and applicability, through a comprehensive literature review and empirical research involving experienced practitioners in New Zealand. Previous studies examining the Devil's Advocacy technique primarily focused on its contribution to decision-making on the final intelligence product and on the perceptions of the devil's advocate. However, this paper is also concerned with the analysts' experience of practically applying the technique for intelligence analysis. This paper contends that the Devil's Advocacy technique is an attractive complementary technique which is effective in specific situations. It also reveals that New Zealand intelligence practitioners define, perceive, and apply the Devil's Advocacy technique differently across their organisations. It therefore argues that New Zealand practitioners may have an inconsistent understanding of the technique, indicating potential gaps in the training and education of New Zealand intelligence professionals. However, the inherently subjective nature of the technique itself could also be a contributing factor.

Keywords: Structured Analytic Techniques (SATs), Devil's Advocacy technique, intelligence analysis, cognitive biases.

¹ Elianne Shewring holds a Master of International Security from the Centre of Defence and Security Studies, Massey University, New Zealand, and is currently a Researcher at Mitvim, The Israeli Institute for Regional Foreign Policies. She wishes to acknowledge her supervisor Dr John Battersby for his insights, support, and encouragement during this research. Correspondence with the author can be addressed to the Managing Editor NSJ, CDSS@massey.ac.nz.

Introduction

The task of predicting the future and understanding the dynamics of situations as they unfold is a key challenge in the intelligence sphere.¹ It has become even more challenging, as the nature of warfare has expanded from traditional conflicts between states to long-running confrontations involving non-state actors such as terrorist and guerrilla organisations. Globalisation has also compounded this problem. The availability and convenience of international travel, coupled with the ubiquity of internet access, have magnified the spread of information and disinformation. As a result, the kinds of threats we encounter today are more complex to identify, evaluate, and anticipate than before.

Against this backdrop, intelligence practitioners recognise that the task of accurately anticipating events is highly demanding.² Analysts cannot fully predict the future but can increase the accuracy of their predictions by developing robust research procedures to evaluate intelligence. One such technique which aims to improve the research procedures for evaluating intelligence and reduce the potential for conceptual collectivism or groupthink is the Devil's Advocacy technique.³ According to Coulthart, this technique is the most effective and has the strongest evidence base for improving the analysis process amongst the 12 Structured Analytic Techniques (SATs) he evaluated.⁴ Its main purpose is to question the dominant view held by analysts and decision makers to enable them to critically evaluate the robustness and validity of their assessments.⁵

This paper aims to gain a better understanding of how the Devil's Advocacy technique assists analysts in conducting intelligence analysis, and how much weight is given to the devil's advocate's position when making decisions. This investigation will include an examination of the technique's strengths, weaknesses, applicability, and overall effectiveness when applied to the intelligence domain. The technique's effectiveness is evaluated by assessing whether it is applicable to a wide range of intelligence problems, whether its application leads to plausible alternatives, and whether it is worthwhile in terms of time and cost.

This paper is divided into two main sections. The first section includes a comprehensive literature review on the use of the Devil's Advocacy technique in the intelligence realm, covering two primary case studies in Israel and the Netherlands. The second section draws on recent empirical research with experienced New Zealand practitioners to examine the following question: *How is the Devil's Advocacy technique applied in the New Zealand intelligence analysis context?* Rather than evaluating intelligence cases to which the Devil's Advocacy technique had been applied where much of the literature focuses, this section investigates how analysts understand and practically apply this technique in their work environments.

This paper establishes that the Devil's Advocacy technique is an attractive complementary technique, as its application is effective in certain circumstances. This is attributed to the technique's potential to add significant value at a relatively low cost. Furthermore, this paper argues that New Zealand practitioners employ the Devil's Advocacy technique in an ad hoc manner, without necessarily having a comprehensive understanding of the workings of the technique. This paper contends that this may be ascribed to the technique's subjective dimension. Although the focus of this paper is the Devil's Advocacy technique, it is conceivable that other SATs are also employed in a similar manner across the New Zealand intelligence community. This could suggest that New Zealand analysts may not be receiving sufficient or consistent training in the application of SATs.

Structured analytic techniques (SATs): The Devil's Advocacy technique

SATs are "mechanisms by which internal thought processes are externalised in a systematic and transparent manner so that they can be shared, built on, and easily critiqued by others".⁶ The CIA's Tradecraft Primer describes 12 SATs, each designed to stimulate lateral thinking.⁷ SATs are intended to be an improvement over mere intuition, yet easier to apply than other rigorous but laborious methods such as Bayesian networks.⁸ They are employed to help analysts manage large volumes of data and bring additional rigour and transparency to their processes, with the ultimate goal of producing robust judgments. Fishbein and Treverton state that the main reason for integrating SATs into the intelligence analysis process is "to help analysts and policy-makers stretch their thinking through structured techniques that challenge underlying assumptions and broaden the range of possible outcomes considered".⁹ They also argue that SATs help analysts mitigate the detrimental effects that their cognitive biases have on their analysis work.¹⁰

The term "devil's advocate" (*Advocatus Diaboli*) originates from the Catholic Church.¹¹ In this context, the devil's advocate was tasked with the role of opposing the canonisation process by representing a contrary perspective, countering "God's advocate" (*Advocatus Dei*). Its role involved critically evaluating the virtues of candidates for sainthood using the same evidence presented by God's advocate, whose role was to support the candidates, to uncover any potential misrepresentations. This mechanism was designed to centralise and control the process of canonisation, to ensure that there was no threat to the church's authority. When Pope John Paul II decided to abolish the role in 1983, after it had been practised for nearly 400 years, its absence had notable ramifications. From 1983 until his death in 2005, the change led to an enormous increase in beatifications (1,338) and canonisations (482), surpassing the combined total of his 263 predecessors over nearly two millennia.¹² This rapid increase suggests that a lack of rigour may have permeated the canonisation process, potentially undermining the sanctity and credibility of these declarations.

In contemporary usage, the term “devil’s advocate” refers to someone who intentionally takes a contrary position in a discussion, whether genuine or not, to challenge the dominant view and encourage critical thinking. The focus is on presenting a dissenting perspective. English philosopher and economist, John Stuart Mill, espoused the importance of dissent in the mid-19th century. He argued that unquestioned beliefs lead to complacency and what he called the “tyranny of the majority”.¹³ Mill believed that exposing people to diverse opinions prevents passive acceptance and promotes critical examination. The Devil’s Advocacy technique has also been implemented over the years in the intelligence realm, in an attempt to enhance the final intelligence product and foster more robust judgements.

The strengths of the Devil’s Advocacy technique

At present, the intelligence analysis process often incorporates big data tools and techniques. This brings about the challenge of correctly interpreting variations and uncertainty in data. It is the role of algorithms to reveal some of the associations and patterns that exist. However, while these algorithms can help uncover certain insights, they also have the potential to make false associations or even confuse correlation and causation.¹⁴ The Devil’s Advocacy technique can be applied in this context to test the veracity of the assumptions considered, with the goal of ensuring that no judgement would be accepted immediately without being challenged. Nemeth discovered that even when the opposing view proposed by the devil’s advocate is highly unlikely, it still adds value to the decision-making process. She found that this pluralism of opinions and ideas ultimately aids the final outcome by reinforcing the validity and robustness of an argument.¹⁵

When comparing the Devil’s Advocacy technique to methods which attempt to reach a consensus, the Devil’s Advocacy technique was found to be the most effective technique in 75% of the studies reviewed.¹⁶ Its strength was attributed to how it opens up assumptions to being challenged and increases the overall accuracy of intelligence judgements. The studies reviewed by Coulthart included research spanning both the intelligence and non-intelligence realms, as there are significant commonalities between the analysis of intelligence and the analysis of other kinds of information.¹⁷ Coulthart collected studies using Google Scholar because of its large index of both peer-reviewed and non-peer reviewed research articles. In total, 259 articles relating to the use of identified SATs were considered.¹⁸ Of these, the 45 studies which explicitly evaluated the effectiveness of SATs were finally chosen. A technique was considered effective if it increased accuracy or robustness or had another positive impact, such as improving the interaction between analysts, without negatively impacting any other outcome. The Maryland Scientific Methods Scale (MSMS)² was then employed to evaluate the credibility of each

² The Maryland Scientific Methods Scale uses a scale of 1 to 5 to assess the veracity of evaluations. Studies using simple cross comparisons are assessed as level 1, with randomised trials using test and control groups are considered as level 5.

of the 45 studies.¹⁹ To help understand each technique's practical utility, evidence was added to justify the effectiveness of each technique. For each of the techniques evaluated, the credibility of its evidence was assigned a rating based on the average of the MSMS scores of the corresponding studies. It followed that at least six of the SAT techniques were highly effective in the intelligence analysis context, with the Devil's Advocacy technique rated as both the most effective and having the most credible evidence.²⁰

The weaknesses of the Devil's Advocacy technique

While the Devil's Advocacy technique can increase the likelihood of reaching a more accurate judgement in some cases, it was found to be less effective in others. For example, one study revealed that the Devil's Advocacy technique increased the likelihood of reaching a correct judgement in disjunctive tasks but was not as effective when it came to additive tasks.²¹ Disjunctive tasks involve group members choosing one option from a list of options offered by the members of the group. The authors observed that for this type of task the Devil's Advocacy technique was very effective, as it required the analysts to independently evaluate all options and all the information available to them. Additive tasks require individual expertise to be aligned within a group, since the overall result is a combination of individual contributions. For this type of task, the authors observed that the Devil's Advocacy technique was less effective, as the use of the technique led to conflicts between group members, hindering communication and hampering collaboration within the group.

Further disadvantages of the Devil's Advocacy technique have been identified in recent studies. Firstly, the Devil's Advocacy technique can be very time consuming, as it can take just as long to apply as it took to arrive at the judgement being challenged.²² Secondly, the technique has the potential to incite antagonism against the individual who questions the leading opinion in a group.²³ This situation could in turn lead group members to automatically reject any of the alternative views presented by the devil's advocate. In this way, the Devil's Advocacy technique could actually harm the intelligence assessment process and lead to flawed judgements.²⁴ The review process of the Devil's Advocacy mechanism has also been criticised. It can lead to situations whereby analysts rely too much on reviews to detect their erroneous assumptions and take uncalculated risks in their assessments of threats as a result.²⁵ Furthermore, Nemeth has raised concerns about the authenticity of those taking the devil's advocate role. Her research showed that when an opposing view appears to be authentic, it has the potential to impact decision-making, even when it is highly unlikely and supported only by a minority group.²⁶

Case Study 1: The Israeli use of Devil's Advocacy

Numerous intelligence agencies around the globe now employ the Devil's Advocacy technique in their work. In the case of Israel, the technique was introduced in the aftermath of the calamitous intelligence failure associated with the 1973 Yom Kippur War.²⁷ Following the war, the Israeli intelligence service reached the conclusion that the root cause of this intelligence failure was the result of the Israeli Military Intelligence (AMAN) dominating the entire intelligence evaluation process. This realisation led to substantial reforms within AMAN in an effort to create an open culture in which divergent opinions would be welcomed.²⁸

While it is difficult to identify exactly how many intelligence assessments were correctly assessed using the Devil's Advocacy technique, a few instances have become public knowledge. One example concerned Hamas' participation in the Palestinian Legislative Council elections which took place in 2006.²⁹ At the time, the prevailing view among American and Israeli analysts was that involving Hamas in the political sphere may moderate some of its radical positions. Prior to the elections, AMAN expected Hamas to gain substantial political support, but not enough to actually win. However, the Revision Department (RD) – AMAN's name for the Devil's Advocacy unit - insisted that the increasing popularity of Hamas, as well as the perception of corruption in the Fatah ranks, could result in a victory for Hamas.³⁰ In the end, Hamas did indeed win, and the Palestinian political landscape changed significantly.³¹

Later that same year, prior to the outbreak of the Lebanon war against Hezbollah, the RD again provided an assessment which was contrary to the dominant view of the Israeli intelligence community. It argued that Hezbollah possessed Iranian anti-ship missiles.³² Once again, the contrasting opinion was not given sufficient consideration, but was later proved to be correct. In dismissing the RD's assessment, a decision was made to disable the anti-missile system on an Israeli naval vessel INS *Hanit*. The resulting strike against this vessel caused severe damage and led to the death of four Israeli naval personnel.³³ While these two examples illustrate the usefulness of the Devil's Advocacy technique in the intelligence assessment process, they also highlight the importance of close collaboration amongst decision makers and across intelligence divisions. It follows that the Devil's Advocacy mechanism is as powerful as the recognition and support it receives by the decision makers in charge. If it is regarded as an important control mechanism, rather than an intellectual exercise, it may help identify gaps in intelligence assessments and help produce more accurate assessments.

Another example of the application of the Devil's Advocacy technique in the Israeli intelligence context is illustrated by the decision made by Ehud Barak, the Israeli prime minister, to withdraw Israeli troops from Lebanon in 2000.³⁴ At the time, the dominant view held by Israeli officials was that such a withdrawal would encourage terrorism

against northern Israeli communities, rather than prevent it. They argued that the Israel Defense Forces (IDF) would be left powerless to defend these vulnerable communities.³⁵ AMAN agreed with the official assessment, as it believed that Hezbollah would seize the opportunity to commit frequent terrorist attacks in this northern territory. However, the RD anticipated that such a withdrawal would actually restrict Hezbollah's actions. Although AMAN employed the Devil's Advocacy technique in this instance and reached a similar conclusion to that of the RD, it eventually lent its support to the dominant position.³⁶ Despite the opposition to the withdrawal plan, Prime Minister Ehud Barak decided to proceed with it.

Following the withdrawal of troops, aside from a few minor incidents, the Israeli-Lebanese border remained relatively quiet for several years.³⁷ However, this period of peace was short-lived. The outbreak of the Second Lebanon War in 2006 marked the continuation of the conflict between Hezbollah and Israel.³⁸ Presently, as of June 2024, over 120,000 Israelis living in the northern and southern regions have been internally displaced due to the ongoing conflicts with Hezbollah and Hamas, respectively.³⁹ In this case, the Devil's Advocacy technique successfully provided an accurate short-term analysis but failed to anticipate the longer-term trajectory.

Case Study 2: the Netherlands use of Devil's Advocacy

The Netherlands has also examined the merits and practicalities of incorporating the Devil's Advocacy technique into its intelligence apparatus. As with Israel, a major intelligence failure prompted the Dutch Defence Intelligence and Security Service (DISS) to reassess their ability to evaluate intelligence.⁴⁰ This failure concerned the Dutch assessment of intelligence relating to Saddam Hussein and the belief that Iraq possessed weapons of mass destruction prior to the 2003 US-led invasion. Following this event, the DISS carefully examined the usefulness of its quality control mechanisms and evaluated the benefits of incorporating the Devil's Advocacy technique into its analytical arsenal.

In 2005 the DISS released a substantial report on the Devil's Advocacy technique. It included an assessment of related literature, interviews of DISS staff, and an evaluation of the Israeli and British perspectives on quality control mechanisms.⁴¹ The report concluded that the incorporation of the Devil's Advocacy technique into the DISS intelligence environment would be ineffective for two main reasons. Firstly, the devil's advocates were often seen as outsiders and were not well received within the organisation they operated in. Since they sometimes lacked certain skills or qualifications, their insights were on occasion dismissed or underappreciated. Secondly, the report established that there were many problems to solve, and the devil's advocates would be incapable of making a substantial impact.

Nevertheless, the report did highlight the need for better quality assurance procedures to be incorporated into the DISS' intelligence analysis process.⁴² In particular, it emphasised the need for better work methods and for paying more attention to the quality of its products. This included additional training for analysts, consistent application of analytical techniques, and the rigorous use of peer review. The introduction of independent product reviewers within every analytical group, and the creation of a new role to lead intelligence analysis, as described in the report, are somewhat similar to what the Devil's Advocacy approach entails. However, implementing the recommendations of this report was not feasible at the time, due to the high associated costs.

In 2006, there was an even greater demand within the DISS for better quality control mechanisms in the intelligence collection and analysis phases. This time the organisation was given the budget to employ additional staff members who could focus on quality assurance.⁴³ This enabled the DISS to fully adopt the Devil's Advocacy technique and set up a dedicated team consisting of a team leader, the devil's advocate, and four skilled intelligence officers, an arrangement intended to address some of the concerns identified in the 2005 report. This Devil's Advocacy team consisted of intelligence analysts with appropriate skills, experience, and qualifications.

In the Dutch model, the Devil's Advocacy team was made responsible for quality assurance in a wider sense, encompassing the full intelligence cycle, from defining the intelligence requirements to producing the final intelligence product. In this case, the team was tasked with the broad question "are the intelligence duties being executed correctly and effectively?"⁴⁴ Between 2008 and 2018, the DISS attempted to answer this question by focusing its efforts firstly on how it operated and secondly on how the Devil's Advocacy team engaged with the organisation.⁴⁵

Between 2008 and 2011, the Devil's Advocacy team focused on the analytical tasks which were carried by the DISS. This referred to the quality of intelligence products, collection methods, relevant research, and the measures designed to reduce groupthink during intelligence analysis. To gain a better understanding of these aspects, a range of interventions were introduced, including surveys, standardised reviews of intelligence products, and training courses for analysts. Moreover, the Devil's Advocacy department helped initiate an intelligence Master's programme which was incorporated into the curriculum of the country's defence academy. This programme had two main objectives. Firstly, it sought to enhance the analytical skills of those working for the DISS. Secondly, it aimed to establish a method to improve the intelligence collection phase based on the Devil's Advocacy team's evaluation and judgement. In addition, the DISS hosted conferences with independent experts on various international matters to inspire analysts to think "outside the box".

Between 2012 and 2018, the Devil's Advocacy team focused on the responsibilities of the devil's advocate. The main goals were to gain a better understanding of whether the devil's advocate was given appropriate responsibilities and whether these were performed effectively. In an attempt to answer these questions, the Devil's Advocacy team defined a qualitative framework also known as the "Weighing and Prioritising" (W&P) system. This system supports the process of assigning limited resources to relevant intelligence problems and research tasks. One major feature of the W&P system was the incorporation of the DISS users' insights, which assessed whether the DISS' services and products met the co-created set of requirements. The Devil's Advocacy team also assessed the terminology and time indicators employed in the intelligence products. The main aim was to evaluate the accuracy of past predictions, in order to gain an understanding of the quality and efficacy of analytical outcomes.

Overall, the DISS embraced the Devil's Advocacy team, though junior analysts were found to be more willing to accept criticism from the devil's advocate on how to enhance their work compared to senior analysts.⁴⁶ The overall quality of the analytical products also improved markedly. However, it is difficult to conclusively establish whether the improvement was the result of the work done by the Devil's Advocacy team alone or the result of the work carried out by the production departments, which also received training courses and performed self-reviews. Moreover, although the devil's advocates' evaluations and intelligence product reviews were useful at times, they were also time consuming and less useful at other times.

The Israeli and Dutch examples show that under the right circumstances the Devil's Advocacy technique can be beneficial, as it can improve the overall robustness of the intelligence analysis process. In the Dutch model, the Devil's Advocacy technique was used to improve transparency, internal accountability, and quality assurance throughout the intelligence cycle. In both the Israeli and Dutch models, the Devil's Advocacy technique offered the decision makers critical insights or alternatives, assisted them to think laterally, and reduced the potential for errors in judgements due to cognitive biases. Nevertheless, while the Devil's Advocacy technique may lead to an accurate short-term analysis, it may overlook long-term eventualities, as demonstrated by the Israeli case. Furthermore, the Israeli and Dutch examples also demonstrated that finding suitable individuals to fulfill the devil's advocate role can be challenging. The ideal candidate should be an experienced professional with strong leadership skills, but in practice this is often not the case.

While some of the applications of the Devil's Advocacy technique have become public knowledge, it is impossible to assess the effectiveness of this technique merely based on the times it has been shown to produce a more accurate intelligence assessment. Some argue that the devil's advocate is wrong more often than it is right. Unfortunately, there

are only a handful of studies published in this area, which makes it difficult to prove or disprove this claim. However, while the Devil's Advocacy technique may not lead to the correct assessment often enough, it is inexpensive and helpful in some cases, making it an attractive complement to other techniques. As noted by a former head of the Israeli intelligence Revision Department:

Given the principled importance of the devil's advocate mechanism, its existence is justified even if none of its assessments prove to be correct over a lengthy period. It is sufficient for the devil's advocate to be right in just one instance in order to justify its existence.⁴⁷

Devil's Advocacy in the New Zealand intelligence analysis context

As part of this study, a total of ten New Zealand intelligence practitioners were approached through informal networks. All ten were experienced professionals who work for, or previously worked for, New Zealand intelligence organisations or intelligence departments within other organisations. Their work experience spanned the military, security intelligence, and law enforcement domains, and several participants had worked in more than one intelligence setting. Of the ten, two were immediately excluded, having confused the Devil's Advocacy technique with Red Team analysis. Of the remaining eight, six responded to an initial questionnaire and answered follow-up questions where necessary, yielding a small but in-depth qualitative dataset.

Previous studies of SATs also had small sample sizes, but meaningful conclusions could still be drawn. For example, Coulthart reviewed a study that was undertaken by the US State Department's Bureau of Intelligence and Research (INR), which surveyed 80 analysts.⁴⁸ Of those analysts, only 17 had made some use of SATs, with the remaining 63 having rarely made use of SATs or not used them at all. Furthermore, only nine of the 17 candidates were eventually interviewed. The final group of experienced individuals who also gave an interview as part of the INR study is therefore not significantly larger than the group who participated in this research. Moreover, as this research only targeted those individuals who have made use of one particular SAT, rather than any of the SATs, it is also reasonable to expect a comparatively lower number of participants.

The pre-set questionnaire for this research consisted of ten questions. While eight of these questions were open-ended, two questions required the respondents to give an answer on a 1 to 9-point scale, where 1 represented "never" and 9 represented "always". The only requirement for those taking part in this research was that they had made use of the Devil's Advocacy technique in an intelligence context. This questionnaire was designed to help shed light on the kinds of problems which New Zealand intelligence analysts applied the Devil's Advocacy technique to, and to provide an indication of how effective it was in solving the problems to which it was applied. The results were analysed for themes that emerged from participants' experiences.

While all participants had made use of the Devil's Advocacy technique in an intelligence context, each of them had applied it within a different intelligence setting in New Zealand. Their responses to the questionnaire suggest that intelligence practitioners working in distinct environments define, perceive, and even apply the Devil's Advocacy technique differently. It therefore appears that there is no unified understanding of the technique amongst New Zealand practitioners.

The participants' responses showed significant variation concerning the criteria used for deciding who would take on the role of the devil's advocate. In some environments this role could be informal and assumed by anyone who volunteered for it. One participant described this role as "an informal role taken by those who naturally incline to take it or want to take it within the team". However, in other environments this role is more formally defined and can only be assumed by specific individuals, typically senior analysts or managers. As another participant explained, "often the devil's advocate comes from one of the more senior members of the team" because this individual would need to "have the knowledge and experience of previous trends and the confidence to question the entire group". The criteria for choosing the devil's advocate are therefore inconsistent across various organisations, which may help explain why the devil's advocate is perceived in different ways by their staff.

When the participants were asked about the frequency with which their team changed their assessment based on the recommendations of the devil's advocate, they provided a range of responses. Two participants suggested that while the devil's advocate's view was always considered, it rarely had an impact on the final decision-making with respect to the intelligence product. Two other participants claimed that the devil's advocate's view occasionally impacts decision-making on the final product, and the two remaining participants suggested that the devil's advocate's view very often impacts the final decision-making. The participants' responses therefore suggest that the weight given to the devil's advocate's assessment in the final decision-making may also vary significantly across New Zealand government organisations.

However, the participants' responses also revealed that when the devil's advocate strongly believes that the dominant view is highly unlikely, its view is given substantial weight and consideration during the final intelligence product decision. The participants noted that the devil's advocate's view is usually considered alongside the dominant view, for the intelligence decision maker to decide on the final product after considering all options. According to most participants, the one who makes the final decision about the product is usually a senior analyst or the team leader. The final decision is typically based on the assessment which has the most coherent and logical argument and is backed up by sufficient evidence. However, some participants highlighted that the final decision also draws on the judgement, skills, knowledge, and experience of the intelligence practitioner in charge of making this decision. In addition, one participant emphasised the need for the devil's advocate to be trusted and respected for their view

to be given genuine consideration. Another participant suggested that when the devil's advocate strongly believes that the dominant view is highly unlikely, additional brainstorming, research, or collaboration with counterparts might also be required before the final decision is made.

Although the devil's advocate's view does not always have an impact on the final intelligence product decision, all research participants perceived the Devil's Advocacy technique to be an important control mechanism within their organisation. A few participants suggested that the Devil's Advocacy technique is helpful in reducing the risk of groupthink and in promoting an inclusive work environment in which diverse opinions are welcomed. Others suggested that the Devil's Advocacy technique helps produce more balanced and objective reports through challenging one's thinking and identifying alternatives to the dominant view. Most participants described the Devil's Advocacy technique as a mechanism which supports and strengthens the entire intelligence analysis process. They identified that the technique is helpful for verifying the robustness of an argument, questioning the assumptions made, and challenging the evidence presented. One participant pointed out that at times this technique can also be perceived in a negative light, as it can slow down the natural flow of a brainstorming session. Nevertheless, this participant concluded that the Devil's Advocacy technique is still valuable and is mostly embraced by analysts, as it is effective in defining and refining the final intelligence product. Furthermore, when the participants were asked how often the application of the Devil's Advocacy technique resulted in a new plausible option for them to consider, most of them responded that this was the case at least half of the time. The average score on the 9-point scale was 5.5.³ This suggests that the application of the Devil's Advocacy technique could lead to a new possibility to consider in the final decision-making on the final intelligence product in just over half of the cases in which it was employed.

The participants identified further benefits of integrating the Devil's Advocacy technique into the intelligence analysis phase. Firstly, the Devil's Advocacy technique promotes the pluralism of perspectives and explanations and helps reduce the risk of over-confidence. Secondly, according to some participants, the technique makes the intelligence analysis phase more enjoyable, by promoting a creative work environment through roleplay, which also helps keep the analysts more engaged. Moreover, one participant suggested that this roleplay scenario also assists analysts to think more deeply about the problem at hand. It helps them identify some of the weaknesses in the evidence presented and encourages them to seek out further evidence. The Devil's Advocacy technique can therefore help produce higher quality assessments and assist in more accurately

³ Participants were asked to use a nine-point scale, with 1 representing "never" and 9 representing "always". The average score across all responses was 5.5%, meaning that in just over half of the cases the DA technique was applied, a new possibility was uncovered.

predicting future events, thereby reducing the risk of intelligence failures. Finally, one participant pointed out that this technique can also serve as a safeguard mechanism to ensure that the final recommendations are realistic and achievable.

The research participants also identified some of the main weaknesses of the Devil's Advocacy technique. Firstly, some of the participants argued that the formality of the devil's advocate role can sometimes intimidate group members, and the devil's advocate can be perceived as overly critical. Secondly, a few participants believed that the devil's advocate should possess strong social and leadership skills and noted that occasionally those who undertake the role lacked these skills and were therefore unsuitable for it. Moreover, if the devil's advocate is underappreciated or not sufficiently trusted, their view can be disregarded by analysts, and this situation could in turn harm the intelligence assessment process and lead to erroneous assumptions. As one participant described, "at times the devil's advocate's views will be ignored, however if the devil's advocate is the right person who is trusted and respected this is less likely to happen". Thirdly, one participant suggested that the devil's advocate typically takes the polar opposite view to the dominant view, turning the final decision into a binary decision, when in reality the likely scenario could be one of a range of nuanced alternatives. Finally, several participants agreed that applying the Devil's Advocacy technique can be time consuming, which would be problematic for time-critical assessments.

When asked about the types of problems for which the Devil's Advocacy technique is most effective, most participants suggested that the Devil's Advocacy technique is generally effective when dealing with ambiguous problems. In this case, the final outcome could be one of many possibilities. The Devil's Advocacy technique would then help to challenge the dominant view and surface various alternative scenarios to assist decision makers to arrive at an informed decision. One participant provided specific examples in their answer, indicating that the Devil's Advocacy technique is particularly effective for assisting in the following processes: course of action analysis⁴⁹, joint military appreciation process⁵⁰, scenario generation⁵¹, cone of plausibility⁵², and analysis of competing hypotheses.⁵³ According to that participant, applying the Devil's Advocacy technique in these cases could be particularly effective in helping the analyst keep an open mind and recognise their own biases.

The participants' responses were fairly uniform when asked about the types of problems for which the Devil's Advocacy technique is ineffective. They all suggested that the Devil's Advocacy technique would be ineffective for simple problems which are well-understood, and where the final outcome on the matter is fairly obvious. In addition, the Devil's Advocacy technique was considered ineffective for time-critical problems, because there was a perception that too much time would be wasted by the devil's advocate on scenarios which would be highly unlikely to occur.

Overall, considering the strengths and weaknesses of the Devil's Advocacy technique, as well as its role in the finalisation of the intelligence product, the participants consistently agreed that the technique is worth applying. One participant suggested that the Devil's Advocacy technique could be made redundant by good analysis but concluded that it is still a useful mechanism to ensure that no probable alternatives are overlooked. Another participant pointed out that analysts sometimes tend to agree with those in the group who are more experienced, assertive, or louder than themselves. According to that participant, the Devil's Advocacy technique could help in such cases to create a safe space to challenge the dominant view, especially if it is made obligatory, and if people are formally given the responsibility and permission to apply it. Another participant concluded that applying this technique in the intelligence context is worthwhile, as it is simple to use, and it does not require up-front planning and preparation compared to other SATs. Finally, some participants suggested that the Devil's Advocacy technique is valuable because it also helps reassure decision makers that the analysis process which was carried out was as robust as it could be.

Conclusion

For the most part, this research appeared to support findings identified in the international literature. However, there were certain characteristics of the Devil's Advocacy technique which emerged from the participants' responses that had not yet been reported elsewhere. These reveal that practitioners in distinct intelligence environments across New Zealand employ the Devil's Advocacy technique in an ad hoc manner, leading to significant variations in how they define, perceive, and apply the technique. Although the focus of this paper is the Devil's Advocacy technique, it is possible that other SATs are also employed in a similar manner, indicating the possibility of a broadly inconsistent understanding and application of structured analytic techniques across New Zealand's intelligence-active agencies. This implies that distinct agencies could be drawing different (possibly inaccurate or flawed) conclusions about similar problems. A lack of SAT-literacy could hinder interoperability, which is a concern in the fiscally challenging environment that New Zealand's security, law enforcement, and regulatory agencies are currently operating in.

Both the existing literature and this research examined the conditions that influence the success or failure of the Devil's Advocacy technique. The risk of antagonism against the devil's advocate was specifically discussed in this respect, as the formality of the devil's advocate role can sometimes create an intimidating environment which may be detrimental to the analysis process.⁵⁴ Although this is a known issue which was identified and discussed in the literature, this paper contends that very little has been done at the institutional level to mitigate this risk in the New Zealand intelligence context. The data from the literature indicated that the success of this technique also depends to an extent on the recognition and support it receives from the decision makers in charge.⁵⁵ Intelli-

gence decision makers who regard this technique as a mere intellectual exercise are less likely to employ it effectively compared to those who perceive it as an important control mechanism.⁵⁶ Additionally, the intelligence decision makers' ability to collaborate effectively both within and across divisions was also linked to the effectiveness of the Devil's Advocacy technique in solving problems in the intelligence domain.⁵⁷

Both data sourced from the research participants and the literature imply that the success of the Devil's Advocacy technique depends to a certain extent on how the devil's advocate is perceived within the organisation it operates in. However, the participants' responses provided additional insights. Whether the view of the devil's advocate is taken seriously or not seems to depend to a large extent on the reputation, experience, status, and leadership abilities of those assuming the role. In environments in which the devil's advocate is trusted and appreciated, their view is likely to be given substantial weight in the final decision-making with respect to the intelligence product. On the other hand, when the devil's advocate is underappreciated or is not perceived as trustworthy, their view may simply be disregarded. This finding raises questions about the purpose and application of the devil's advocate process, which aims to provide the intelligence analysis phase with a robust alternative challenge mechanism. The fact that the devil's advocate's effect is viewed as dependent on individuals' social standing or leadership skills significantly undermines the validity of the technique. The case study examples suggest that forming Devil's Advocacy teams is the most effective way to address this issue; however, such teams seem to be absent in the New Zealand intelligence environment.

Moreover, the revelation that the individual taking on the devil's advocate role is typically a senior staff member also raises some questions. It is unclear whether a certain group of people would adhere to the devil's advocate's recommendations because they perceived their assessment to be the most coherent and logical one, or simply because their superior delivered them. Some analysts may feel uncomfortable to oppose their direct superior, in which case the full potential of the Devil's Advocacy technique would never be realised.

Overall, it could be concluded that the application of the Devil's Advocacy technique can be highly effective in the intelligence analysis context, but this is dependent on the circumstances in which it is applied. The technique was found to be applicable only to certain intelligence problems and only when there is sufficient time to apply it. However, when it is applied, it can quite often lead analysts to consider a new possibility they had not considered before. While this new possibility only occasionally impacts the final intelligence decision, it helps validate the original conclusions drawn from the available evidence and thereby improves the robustness of the entire assessment process. Both the research participants' responses and the data collected as part of the literature review suggest that the Devil's Advocacy technique has an inherently subjective character. This indicates that the strength of the technique may not be universal,

sometimes coming from the experience, persuasiveness, and social skills of those taking on the devil's advocate role, rather than from an objective strength of the technique itself. This subjective dimension of the Devil's Advocacy technique may also explain why there is no unified understanding of the technique, and why it is challenging to assess its application and effectiveness across distinct intelligence environments. Despite its shortcomings, the Devil's Advocacy technique remains an attractive complementary method for addressing certain problem types, provided that adequate mitigations are in place. Its value lies in the significant testing and challenge it brings to intelligence analysis at a relatively low cost.

-
- 1 Eyal Pascovich, "The devil's advocate in intelligence: the Israeli experience," *Intelligence and National Security* 33(6) (2018): p.854., DOI:10.1080/02684527.2018.1470062.
 - 2 Richard K Betts, "Analysis, War, and Decision: Why Intelligence Failures Are Inevitable," in *Intelligence Theory*, eds. Peter Gill, Stephen Marrin, and Mark P Marrin (London: Routledge, 2008).
 - 3 Pascovich, "The devil's advocate in intelligence."
 - 4 Stephen J Coulthart, "An Evidence-Based Evaluation of 12 Core Structured Analytic Techniques," *International Journal of Intelligence and CounterIntelligence* 30(2) (2017): p.377., DOI:10.1080/08850607.2016.1230706.
 - 5 Pascovich, "The devil's advocate in intelligence."
 - 6 Randolph H. Pherson and Richards J. Heuer, *Structured Analytic Techniques for Intelligence Analysis* (Washington, DC: CQ Press, 2020), p.4.
 - 7 Center for the Study of Intelligence, *A Tradecraft Primer: Structured Analytic Techniques for Improving Intelligence Analysis*, CIA Center for the study of intelligence, (Washington, DC: Central Intelligence Agency, Center for the Study of Intelligence, 2012).
 - 8 Welton Chang, Elissabeth Berdini, David Mandel, and Philip Tetlock, "Restructuring structured analytic techniques in intelligence," *Intelligence and National Security*, 33(3) (2018): p.338., DOI:10.1080/02684527.2017.1400230.
 - 9 Warren Fishbein and Gregory Treverton, *Rethinking "Alternative Analysis" To Address Transnational Threats*, Central Intelligence Agency, The Sherman Kent Center for Intelligence Analysis (Washington, DC: Central Intelligence Agency, The Sherman Kent Center, 2004), p.1, <https://apps.dtic.mil/sti/pdfs/ADA525417.pdf>.
 - 10 Fishbein and Treverton, *Rethinking "Alternative Analysis" To Address Transnational Threats*, p.6.
 - 11 Alexander Claver and Huibert M van de Meeberg, "Devil's Advocacy within Dutch military intelligence (2008-2020): an effective instrument for quality assurance?," *Intelligence and National Security* 36(6) (2021): p.1., DOI:10.1080/02684527.2021.1946951.
 - 12 Claver and van de Meeberg, "Devil's Advocacy within Dutch military intelligence (2008-2020)," p.2.
 - 13 Struan Jacobs, "John Stuart Mill on the Tyranny of the Majority." *Australian Journal of Political Science* 28(2) (1993): pp.306-21., DOI:10.1080/00323269308402243.
 - 14 Claver and van de Meeberg, "Devil's Advocacy within Dutch military intelligence (2008-2020)," p.8.
 - 15 Charlan J Nemeth, *In Defense of Troublemakers: The Power of Dissent in Life and Business*, (New York, NY: Basic Books, 2018).
 - 16 Coulthart, "An Evidence-Based Evaluation of 12 Core Structured Analytic Techniques," p.377.

- 17 Daniel Zelik, Emily S Patterson, and David D Woods, "Understanding Rigor in Information Analysis" (paper presented at the 8th International Conference on Naturalistic Decision Making, Pacific Grove, CA, 2007).
- 18 Coulthart, "An Evidence-Based Evaluation of 12 Core Structured Analytic Techniques," p.374.
- 19 David P Farrington et al., "The Maryland Scientific Methods Scale," in *Evidence-Based Crime Prevention*, eds. David P Farrington et al. (London: Routledge, 2004).
- 20 Coulthart, "An Evidence-Based Evaluation of 12 Core Structured Analytic Techniques," p.377.
- 21 Audrey J Murrell, Alice C Stewart, and Brent T Engel, "Consensus Versus Devil's Advocacy: The Influence of Decision Process and Task Structure on Strategic Decision Making," *International Journal of Business Communication* 30(4) (1993): pp.399-414., DOI:10.1177/002194369303000402.
- 22 Morgan D Jones, *The Thinker's Toolkit: 14 Powerful Techniques for Problem Solving*, (New York, Three Rivers Press, 1998), pp.217-223.
- 23 Pascovich, "The devil's advocate in intelligence," p.856.
- 24 Betts, "Analysis, War, and Decision," p.80.
- 25 Pascovich, "The devil's advocate in intelligence," p.856.
- 26 Charlan J Nemeth, "Minority Influence Theory," in *Handbook of Theories of Social Psychology* eds. Paul A. M. van Lange, Arie W. Kruglanski, and E. Tory Higgins (Los Angeles, CA: SAGE Publications Ltd, 2012).
- 27 Pascovich, "The devil's advocate in intelligence," p.855.
- 28 Agranat Commission, "Israel: What Went Wrong on October 6?: The Partial Report of the Israeli Commission of Inquiry into the October War," *Journal of Palestine Studies* 3(4) (1974), DOI:10.2307/2535473.
- 29 Matthew Levitt, *Hamas: Politics, Charity, and Terrorism in the Service of Jihad* (New Haven, CT: Yale University Press, 2006), p.240.
- 30 Pascovich, "The devil's advocate in intelligence," p.859.
- 31 Eyal Pascovich, "Intelligence Assessment Regarding Social Developments: The Israeli Experience," *International Journal of Intelligence and CounterIntelligence* 26(1) (2013): pp.96-99., DOI:10.1080/08850607.2012.705625.
- 32 Pascovich, "The devil's advocate in intelligence," p.859.
- 33 "Hezbollah Missile Strikes Navy Warship; Four Killed," 16 July 2006, *Haaretz*. Available at <https://www.haaretz.com/2006-07-16/ty-article/hezbollah-missile-strikes-navy-warship-four-killed/0000017f-dc8f-db5a-a57f-dcefb5c80000>
- 34 Augustus R Norton, "Hizballah and the Israeli Withdrawal from Southern Lebanon," *Journal of Palestine Studies* 30(1) (2000), DOI:10.2307/2676479.
- 35 Pascovich, "The devil's advocate in intelligence," p.860.
- 36 Amos Gilboa, *The True Story of How Israel Left Lebanon (May 2000) Code Name "Dawn"* (Tel Aviv: The Israel Intelligence Heritage & Commemoration Center, 2015).
- 37 Norton, "Hizballah and the Israeli Withdrawal from Southern Lebanon."
- 38 Sarah E Kreps, "The 2006 Lebanon War: Lessons Learned," *The US Army War College Quarterly: Parameters* 37(1) (2007), DOI:10.55540/0031-1723.2343.
- 39 "Swords of Iron - Real Time Tracker," 7 October 2023, accessed 9 June 2024. Available at <https://www.inss.org.il/publication/war-data/>.
- 40 Willibrord J. M. Davids, *Rapport Commissie van Onderzoek Besluitvorming Irak* (Amsterdam: Boom, 2010).
- 41 David R Mandel, *Assessment and Communication of Uncertainty in Intelligence to Support Decision Making: Final Report of Research Task Group SAS-114*, North Atlantic Treaty Organization (Neuilly-sur-Seine Cedex, France, 2020), p.4, <https://psyarxiv.com/vxh9r/download?format=pdf>.
- 42 Mandel, *Assessment and Communication of Uncertainty in Intelligence to Support Decision Making: Final Report of Research Task Group SAS-114*, p.4.
- 43 Mandel, *Assessment and Communication of Uncertainty in Intelligence to Support Decision Making: Final Report of Research Task Group SAS-114*, p.5.
- 44 Claver and van de Meeberg, "Devil's Advocacy within Dutch military intelligence (2008-2020)."

- 45 Mandel, *Assessment and Communication of Uncertainty in Intelligence to Support Decision Making: Final Report of Research Task Group SAS-114*, pp.6-7.
- 46 Claver and van de Meeberg, "Devil's Advocacy within Dutch military intelligence (2008-2020)," p.7.
- 47 Pascovich, "The devil's advocate in intelligence," p.862.
- 48 Stephen J Coulthart, "Why Do Analysts Use Structured Analytic Techniques? An in-Depth Study of an American Intelligence Agency." *Intelligence and National Security* 31(7) (2016): pp.933-48., DOI:10.1080/02684527.2016.1140327.
- 49 The term "Course of action" (COA) has several definitions. Broadly speaking, it refers to a sequence of actions taken in order to achieve a desired set of outcomes. In military contexts, COA is used to describe actions at varying levels of scale, from that of individual units through to actions at a strategic theatre level. See: Duane Gilmour and Zhongfei Zhang. *Determining Course of Action Alignment with Operational Objectives*. Air Force Research Laboratory, Rome, NY: Air Force Research Laboratory, 2006. <https://apps.dtic.mil/sti/pdfs/ADA463178.pdf>.
- 50 The "Joint Military Appreciation Process" (JMAP) is a linear five-step process used by commanders and planners in the Australian Defence Force for joint campaign and operation planning. It is also used by New Zealand military planners. See: Australian Defence Force Warfare Centre. *Adfp 5.0.1 Joint Military Appreciation Process*. Canberra: Defence Publishing Service, 2019.
- 51 Scenario generation techniques are used to examine multiple plausible future outcomes. By generating multiple scenarios, analysts can distill the most important underlying factors which could influence how a given situation might evolve over time. See: Randolph H. Pherson, "The Tradecraft of Warning: Overcoming Cognitive Barriers." Paper presented at the Seminar on the Tradecraft of Warning: New Approaches and New Thinking, 2009.
- 52 The cone of plausibility is used in forecasting. It was introduced by Charles Taylor in 1988. From: Charles W. Taylor. *Alternative World Scenarios for Strategic Planning*. Carlisle Barracks, PA: Army War College Strategic Studies Institute, 1988. It provides a graphical representation of the relationship between the present and a selection of plausible futures, including the possible, probable, and preferable futures. See: Roy Amara, "The Futures Field: Searching for Definitions and Boundaries." *The Futurist* 15(1) (1981): pp.25-29.
- 53 Analysis of Competing Hypotheses (ACH) is a structured analytic technique designed to help mitigate analysts' confirmation bias. It requires analysts to rigorously evaluate alternative hypotheses against the evidence available, to be able to identify the most likely hypothesis which has the lowest amount of conflicting evidence. See: Mandeep K. Dhami, Ian K. Belton, and David R. Mandel. "The 'Analysis of Competing Hypotheses' in Intelligence Analysis." *Applied Cognitive Psychology* 33(6) (2019): pp.1080-90., DOI:10.1002/acp.3550.
- 54 Pascovich, "The devil's advocate in intelligence," p.856.
- 55 Betts, "Analysis, War, and Decision," p.80.
- 56 Pascovich, "The devil's advocate in intelligence," p.861.
- 57 Pascovich, "The devil's advocate in intelligence," pp.856-62.