

DOI Link: <https://doi.org/10.59879/xjlCe>
Vol.91, Issue.1, Part.6, June 2025, PP. 2-20

Impact of Perceptual Factors on Forecasting Errors in Analytical Centres Monitoring Terrorist Threats

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Received April 2025 Accepted May 2025 Published June 2025

Abstract

Modern analytical systems aimed at identifying terrorist threats often make mistakes resulting from fundamental perceptual and decision-making mechanisms that are formed from the early stages of human development. This article focuses on the analysis of these errors, pointing out that both in the structures responsible for security and among those involved in terrorist activities, decision-making processes are determined by the same psychological and cognitive mechanisms. Paradoxically, regardless of the side of the conflict in the war on terror, erroneous situational judgments, cognitive heuristics, and limitations resulting from perceptual biases lead to inadequate responses and incorrect forecasts. The authors ask the question: what are the reasons for perceptual errors in the development of forecasts by analytical centers aimed at identifying terrorist threats? The article also presents the causes of these phenomena and their consequences for antiterrorist policy, indicating the need to introduce new methods of data analysis and strategies to reduce cognitive biases in threat identification.

Keywords: hazard analysis, cognitive biases, analytical systems, risk perception, hazard identification.

Introduction

This study should be initiated with terminological arrangements, so that the meaning of the terms used can be understood uniformly, regardless of many definitions functioning in the broadly understood information space. The origin of the term "terrorism" goes back to the French term "terrorisme", which in turn comes from the Latin "terror"¹, meaning "fear" or "terror". In other words, until the French Revolution of 1789-1799, terror was synonymous with intimidation, except that it included the emphasis that this intimidation was closer to sowing terror.² Therefore, we could speak of a higher level in the gradation of intimidation. During the above-mentioned revolution, which swept through France in a bloody steamroller, the so-called "Reign of Terror" in the years 1793-1794 is remembered as its most brutal period. It was then that the Jacobin revolutionary authorities took all measures and measures to intimidate the people of France, especially Paris and the big cities. This was to eliminate any resistance and even the idea of opposing the rulers not only among the population, but also within the revolutionary movement itself.³ Since then, "terrorism" has taken on a new meaning, placing at the top of the gradation of intimidation, associated with sowing terror not only towards individuals, but also towards much larger social groups, including entire societies. In other words, "terror" came to be equated with mass intimidation. Brunon Hołyst joined this trend by defining "terrorism" as: "the use of force or the threat of its use by individuals or groups in order to influence the authorities, public opinion, groups of people or individuals".⁴ Alex P. Schmid has taken a much broader interpretation of terrorism when he describes terrorism as "a method of repeated acts of violence or threats of violence by (semi-)secret individuals, groups, or states, for idiosyncratic, criminal, or political reasons, where the direct victims of violence are not the primary targets".⁵ The author points out here that the victims of the exemplary attack were not real goals, but only a means to the right end, which could be the reason for the functioning of a given organization and, depending on its nature, it could be, for example, increasing one's own profits, disseminating a specific ideology, making political changes, etc. It is worth noting that this definition comes from 2011, i.e. from the period of intensive fight against the so-called international terrorism by a coalition of countries formed under the leadership of the United States. As a result, the "culture of terrorism" was constantly recreated in the media space, with particular emphasis placed on pointing out its connotations with Arab and Middle Eastern culture, which resulted directly from the development of the international situation at that time (the attack on the World Trade Centre, the war in Afghanistan

¹ Bienvenu, R. *The Ninth Of Thermidor, The Fall Of Robespierre*. Oxford: Oxford University Press, 1968.

² Kujawski, M. *Wojska Warszawy w Wojnach Rewolucji i Cesarstwa 1789-1815*. Warsaw: Adjutor, 2007.

³ Karkocha, M. *The Image of France in the Age of Revolution in the Warsaw Press 1789–1794*. Łódź: University of Łódź Press, 2011.

⁴ Hołyst, B. *Terrorism*. Warsaw: LexisNexis, 2009.

⁵ Schmid, A. P. *The Routledge Handbook of Terrorism Research*. New York: Routledge, 2011.

and then the war in Iraq, the African Spring that preceded the Arab Spring). It is also possible that for this reason, in his definition, Sebastian Wojciechowski defined terrorism as "a form of struggle used to achieve specific goals, with the intention of forcing changes proclaimed by terrorists, where actions are taken against civilians, are characterized by violence and aggression, cause destabilization, confusion and anxiety in society".⁶ For a change, it is worth quoting legislative attempts to capture this phenomenon and, for example, in Directive (EU) 2017/541 of the European Parliament and of the Council: it is indicated that terrorism is: "acts committed with the intention of seriously intimidating a population, forcing a government or international organization to take or refrain from taking certain actions, or seriously destabilizing or destroying the basic political, constitutional, economic or social structures of a country".⁷

When reviewing the definitions of terrorism, which can be filled many more pages, it is possible to identify common elements, which means that they may differ in details, but remain consistent in understanding the essence of this particular phenomenon. In the vast majority, the combined occurrence of the following components can be distinguished:

- the entity using terror;
- terror as a form of intimidation of a selected, other entity, e.g. a social group (political decision-makers), the entire society;
- victims of terror who are only a means to an end, but not an end in itself.

In simple terms, it can therefore be assumed that terror is a form of psychological influence in which we take selected or random people hostage, whom we will most likely sacrifice in order to exert even greater pressure on the real object of such influence. For example, if a criminal group beats up the owners of small shops, it is not to hurt these people, but to make them pay money – both the beaten and those who also run various businesses, but do not pay yet or have doubts about it. In the case of the attack on the World Trade Centre on September 11, 2002, the terrorists did not want to murder the passengers of the planes or destroy buildings, but to terrorize American citizens by showing them how easily they can be murdered in the very heart of their impregnable empire. Ultimately, this was to force the United States government to stop interfering in Arab countries and the Middle East. Washington's decision turned out to be just the opposite, which showed how wrong the terrorists were in assessing the perceptual and decision-making process of the President of the United States and his closest entourage. This study is devoted to the reasons for these differences, although focusing the cognitive effort on the mistakes made on the part of analytical centers to identify potential terrorist threats. Paradoxically, behind the erroneous assessment, regardless of the side of the barricade in the war on terror, there are exactly the same

⁶ Wojciechowski, S. *Terrorism at the Beginning of the 21st Century: Concept, Manifestations, Causes*. Poznań: Wydawnictwo Naukowe WNPiD UAM, 2011.

⁷ "Directive (EU) 2017/541 of the European Parliament and of the Council of 15 March 2017 on Combating Terrorism." *Official Journal of the European Union*, L 88/6.

perceptual and decision-making mechanisms that have been formed since the moment of birth.

1. Origins and evolution of the phenomenon of terrorism

Forecasting threats resulting from the conditions of modern terrorism requires understanding the genesis and essence of this particular social phenomenon. Terrorism could not exist without people organized into a social structure determined by its specific culture, which has been shaped over many centuries. In the past, this phenomenon was defined using other terms such as subversive activity, criminal activity (in the sense of breaking the applicable laws, but not only for profit, but also for political, social or ideological purposes, including religious ones), and even at a certain point in history "religious wars", "rebellion of lower social classes", or later "class struggle", where means were used, which we understand today as "terrorist" in order to draw the attention of the then ruling classes and the widest possible mass of society, e.g. to the existing social divisions, which resulted in unfair systemic treatment of individual social groups. The key was not to evoke a mass sense of fear or panic among specific social groups (ethnic, national, religious, originating from given social classes), but, as mentioned, to draw attention in this particularly brutal way to social problems that had so far been downplayed as unimportant, but in some way threatening the existing order of things. The people behind the broadly understood acts of terror at that time usually saw no other way to achieve their goals. Of course, such a goal could also be an attempt to impose one's vision of reality (also not necessarily fair for everyone) on other people by intimidating and forcing them to accept the right of the group using terror.⁸ Therefore, such means of influencing the general social consciousness (or of selected groups) were used both by those who felt unfairly treated by the prevailing social system (political, religious or, more broadly, cultural), but also by those at the top of this hierarchy, wanting to maintain their privileged position in a given society. This is where the essence of terror is based, i.e. to lead to a situation in which the victims, fearing for their own life, health or property, will submit to the will of those who use this terror. It is worth mentioning that in the past millennia, it was the less numerous, but privileged social groups that imposed their rule on wider social masses by using terror. Therefore, in accordance with the principle that every action provokes reactions, it was possible to predict that at a certain appropriately opportune moment in history, the aforementioned counterreaction would take place, and that the wider masses of society would use terror against their former oppressors on the wave of the revolutionary uprising. This is exactly what happened, albeit on a limited scale, in North America, in France, a few decades later in Italy, and over a hundred years later in Russia, Spain and Germany.⁹

⁸ Bloch, M. *Feudal Society*. Warsaw: Alethia, 2023.

⁹ Robertson, P. *Revolutions of 1848: A Social History*. 311–401. London, 1952; Graham, H., and P. Preston. *The Spanish Popular Front and the Civil War*. In *The Popular*

2. Identifying threats from terrorist organizations: criminal, ideological, political and religious groups

2.1. Identifying terrorist threats from organised crime groups

Contemporary terrorist groups are the result of this very complex civilizational and social evolution, the purpose of which may be ideological, political, or even only profit-making reasons. In the latter case, we can talk about organized criminal groups driven by the desire to profit at the expense of another person. These groups are much easier to understand, and therefore easier to identify and overpower, because their members are united only by the desire to make easy money, and therefore each of their members is by nature an egoist striving to satisfy his own needs in the first place. It is much easier to find among such people susceptible to cooperation with law enforcement agencies, because guided by their own benefits and receiving a favorable offer that also protects them from the revenge of other criminals, they will be willing to help break up the entire organization. The situation becomes more complicated if a given criminal group, apart from the pursuit of profit, has developed a specific ideology, which may induce its members to perform an act of self-sacrifice not so much for the benefit of other members of this organization, but in the name of a given ideology.¹⁰ The task faced by law enforcement agencies may then turn out to be much more difficult if a given ideology has been cultivated for many generations, creating a specific culture of a given organization, in which many members are closer and more distant relatives. In such a case, betrayal means not only exposing oneself to potential revenge, although in the case of security provided by specialized law enforcement agencies, it is not very realistic, but also exclusion from a group that is unequivocally associated with the closest family. To put it more precisely, it is easier to betray a friend who has been known for several years than parents, siblings or cousins with whom you have spent your entire life. An example is the Calabrian 'Ndràngheta (pronounced. [n'drangeta]). This organization was probably founded at the end of the 19th century and for decades did not enjoy the fame of the most powerful among Italian criminal organizations, giving way to the famous Cosa Nostra from Sicily, the Neapolitan Camorra¹¹, or the Apulian Sacra Corona Unita. The situation changed dramatically in the 90s of the twentieth century. The reason was the widespread use of the institution of a crown witness by the Italian judiciary, which led to a significant weakening of all the above-mentioned large criminal

Front in Europe, 106–130. London, 1987; Randers-Pehrson, D. Germans and the Revolution of 1848–1849. New German-American Studies/Neue Deutsch-Amerikanische Studien. New York, 1999; Lang, P., and M. W. Sandler. Atlantic Ocean – The Illustrated History of the Ocean that Changed the World. New York–London: Sterling, 2008.

¹⁰ Gołębiowski, J. The Mind of a Criminal. The Secrets of Criminal Psychological Profiling. Kraków: MANDO, 2021.

¹¹ Dickie, J. The Italian Mafia, Cosa Nostra, Camorra and the 'Ndrangheta from 1946 to the Present Day. Warsaw: Black Sheep, 2024.

organizations of the Apennine Peninsula.¹² Today, 'Ndràngheta is considered one of the strongest or strongest organized crime groups in Italy, as well as at least in the European Union. The secret lies in the organization of this group consisting of several hundred clans/families, to which new members are admitted based on blood ties, which translates into much stronger ties than in the case of other Italian criminal groups. Moreover, future members are trained from childhood to play their role as 'ndranghetisti, or full members, which is also related to another widely practiced custom that fathers mentor their sons on their way to a career in the ranks of the 'Ndràngheta clans. This is evidenced by data indicating that since 2002, only 157 former clan members have testified against their organization.¹³ The testimonies were only ordinary members, not occupying a higher position in the structures of individual clans, so their knowledge was also not so destructive to the entire organization. It is worth adding that regardless of the group, also popularly known as mafias, all of them use means of terror as an everyday tool for functioning and ensuring their obedience within the communities in which they function. What's more, most clans control individual towns and villages, where their members have known their inhabitants for generations, which in turn also significantly hinders the work of law enforcement, because for many inhabitants of these towns they are not strangers, but are considered their own. Residents of towns controlled by 'Ndràngheta who testify against criminals from a given clan not only expose themselves to bloody revenge on themselves and their loved ones, but even to the ostracism of the local community. The aforementioned organization is probably the most difficult to liquidate precisely because of its specificity resulting from a much more than a hundred years old culture, multi-generational blood ties and dependencies, as well as a special ideology strengthened by the Catholic religion practiced and particularly understood in Calabria. On the one hand, law enforcement agencies, knowing the *modus operandi* of the criminals of 'Ndràngheta, can predict the acts of terror they plan in specific situations, and thus also prevent them to some extent, but in the conditions of a democratic state under the rule of law, such as modern Italy, they have very limited possibilities to eliminate the very cause of these acts of terror, which are the aforementioned clans, or rather the specific culture of 'Ndràngheta behind them.

Contemporary organized crime operates like international corporations, where the planes of criminal activity are mixed with legal activity serving, on the one hand, to introduce into legal circulation funds obtained constantly from criminal activity, and on the other hand, to invest the generated funds in legal and also profitable activities, e.g. real estate trading, construction, amusement parks, catering and entertainment facilities, licenses for gambling activities, etc. Among the strongest organizations are, apart from those mentioned above: the so-called

¹² Zarzycka, D. "Analysis of the Institution of the Crown Witness in Poland." *Kortowski Legal Review*, University of Warmia and Mazury in Olsztyn 3 (2021).

¹³ Rubiera, C. L. "Meet the 'Ndrangheta – and Why It's Time to Bust Some Myths About the Calabrian Mafia." *The Conversation*. Last modified December 5, 2024. Accessed December 12, 2024. <https://theconversation.com/meet-the-ndrangheta-and-why-its-time-to-bust-some-myths-about-the-calabrian-mafia-54075>.

American syndicate, i.e. a conglomerate of criminal organizations with Italian, Jewish and Irish roots; Japanese Yakuza, Russian Bratva, Chinese/Taiwanese triads and tongas, Mexican cartels and Colombian cartels.¹⁴ In addition, there are also organizations operating transnationally, but with a local or regional range, but their potential on a global scale is much smaller than in the case of the above-mentioned gangs, such as motorcycle gangs (Hells Angels, Outlaws, Bandidos, Mongols), Corsican, Balkan, Vietnamese, Venezuelan mafia, etc.¹⁵

Scheme – levels of difficulty in the liquidation of organised crime groups: motives connecting and motivating the members of the organisation to joint action:

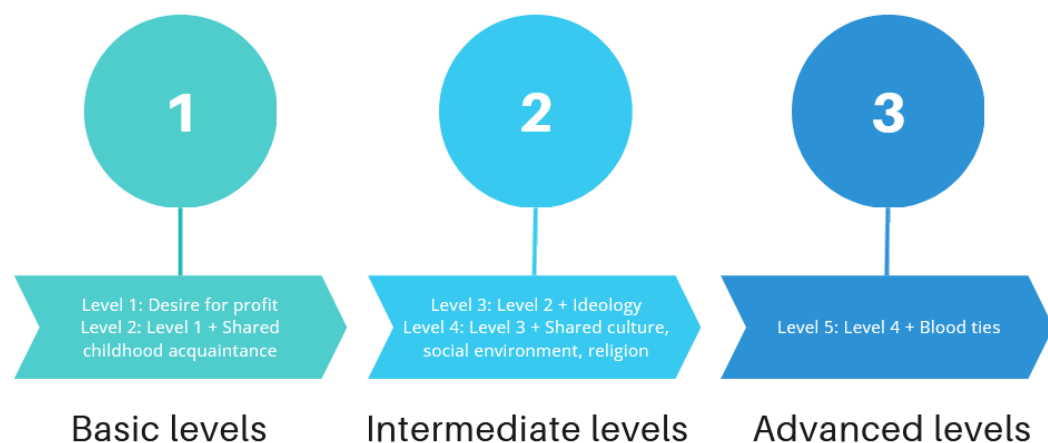


Figure 1. *own elaboration*

2.2. Identifying terrorist threats from ideological organizations

With regard to ideological organizations referring to the use of terror in the pursuit of their goals, attention should be paid to the completely different specificity of these organizations from the previously described organized criminal groups. The fundamental difference lies in the change in the priorities and purpose of the existence of a given organization. In the case of the above-mentioned criminal groups, this reason was the desire to generate profit and, depending on the complexity of a given organization, to lead a life that gives satisfaction to its members due to the very fact of functioning as a full-fledged member of a given group, i.e. the fulfilled need for self-fulfillment in the community in which the group functions. Therefore, even in the case of self-sacrifice in the form of

¹⁴ Gambetta, D. *The Sicilian Mafia: The Business of Private Protection*. Harvard: Harvard University Press, 1996.

¹⁵ Górniewicz, M. "Threats to Poland's Internal Security in the Context of Criminal Activity in Selected Motorcycle Clubs." In *Security, Świat-Region-Polska*, no. 1 (2011). Białystok: University of Public Administration in Białystok, 2011.

participation in events that could endanger the life and health of the criminal, as well as the refusal to consent to any form of cooperation with law enforcement authorities and serving the sentence in its entirety, it did not result only from the belief in the ideology practiced in a given group, closely connected with the cultural conditions of that group, but from the egoistic sense of self-worth resulting from belonging to this group.¹⁶ In other words, for such people, it was a better choice to accept a long-term or even lifelong sentence without restrictions than to deny themselves, the whole catalogue of their own values, blood ties and friendships, than to cooperate with law enforcement authorities in exchange for a commutation or elimination of the sentence.¹⁷ In the case of ideological organizations, the motivations of individual members are completely different, and to be more precise, the "cause" is more important than the life, health or property of individual members. It is not said that the members feel valued and important because of the fact of the life of the conspirators they lead (even in their own eyes), even if such a feeling affects the mental and emotional state of some people, this will not be the priority for them guiding their activity, including committing acts of terror. The "idea" itself is crucial, which in the eyes of its members should spread, because thanks to this a morally/religiously justified higher goal will be realized.¹⁸ For example, environmental organizations commit acts of breaking the law, which has a negative impact on bystanders (e.g. blocking traffic on the main streets of a large city for several hours during traffic hours or blocking the construction of a power plant or road necessary for the local community by chaining themselves to trees), because they believe that the temporary discomfort of these people, as well as the convictions they face for an act of, for example, vandalism, It is worth the fight for what they believe to be the salvation of the ecosystem, so that future generations can continue to live well or even better.¹⁹ Therefore, the so-called eco-terrorists are driven by motives that can be morally recognized as right, despite the fact that the majority of the society will not agree with the methods of action they have chosen (harmful to many people and ultimately ineffective). However, this does not matter for the very fact of the existence of people (mainly young people) who are ready to act on the border or break the existing law not for their own benefit, but for the benefit of the human species in some time horizon. Of course, the means of influence used by these organizations can hardly be considered truly terrorist and can indeed be reduced to the rank of "acts of vandalism", but behind the actions of people ready to sacrifice their own lives and the lives of innocent victims in terrorist attacks, as well as to sacrifice themselves and themselves and the comfort of other people's functioning, there is a similar, but fortunately not identical mental

¹⁶ Cur, U. *Psychological Profiling of Unknown Perpetrators of Crimes. Paradigm and Case Study*. Warsaw: Wydawnictwo Naukowe Scholar, 2021.

¹⁷ Gałdowa, A., ed. *Human Identity*. Kraków: Jagiellonian University Press, 2000.

¹⁸ Zimbardo, P., R. Johnson, and V. McCann. *Psychology of Personality. Psychology. Key Concepts. Volume 4*. Warsaw: Wydawnictwo Naukowe PWN, 2017.

¹⁹ Cheda, J. "Ecoterrorism as a Contemporary Threat to Ecological Security in Poland and in the World." *Karpacki Przegląd Naukowy* 3, no. 11 (2014): Krosno: RUTHENUS Publishing House, 2014.

programming aimed at achieving a more important goal, than their own and other people's welfare.²⁰ However, this does not change the fact that it is not a coincidence that the Russian services, which have been extremely active in the last dozen or so years, are trying to reach and recruit people from environmental organizations that allow the use of acts of vandalism, because these people, due to their mental structure, are potentially good candidates for subjecting them to information influence, so as to select future terrorists from among these groups, including suicide terrorists.²¹ On the one hand, such organizations are mainly young people with no obligations or families, and on the other hand, people born in Western societies, which are the main targets of Russian information operations. Acquiring such people allows them to be used in a very wide range of tasks, including terrorist ones, and arranging the situation in such a way that they could not know for whom they were really performing these tasks until the last moment.²²

At this point, we come to a disturbing conclusion that organizations grouping young people with a mental structure indicating susceptibility to the possibility of directing them to commit an act of terror have always been of interest to various special services, of course not only Russian. In the light of the briefly quoted psychological profile of the members of such ideological organizations, this seems fully understandable. However, this fact has certain consequences, including the fact that future candidates for terrorists run by special services can be given access to professional knowledge, acquire certain skills, as well as have access to logistical facilities that allow them to travel freely around the world and not to worry about their livelihood, not to mention the means necessary to carry out terrorist attacks.²³ Of course, the special services, within their tasks and such needs, can also cooperate with criminal organizations as part of an immediate need, as was the case during the secret agreement concluded between La Cosa Nostra, Cosa Nostra and the CIA to prepare for the landing of the Allies in Sicily during World War II. On the other hand, by definition, representatives of the services cannot trust criminals due to the motivations presented above, resulting from their specific mental structure, regardless of the level of organization of a given group. It seems doubtful to persuade a criminal to commit an act of self-sacrifice in a suicide attack, or to agree to a long-term or lifelong sentence in the name of any benefits, even financial ones. Unlike criminals who are by nature guided by more or less camouflaged egoism, members of ideological groups would be ready to make such a sacrifice if it was consistent with their idea, or in fact it seemed necessary to them to bring this idea closer to realization. The above argument also explains why so many terrorist groups, which theoretically should have some problem with the daily

²⁰ Hofstede, G., and G. J. Hofstede. *Cultures and Organizations*. Poznań: Polish Economic Publishing House, 2007.

²¹ Aro, J. *Putin's Trolls. True Stories from the Fronts of the Russian Information War*. Kraków: SQN, 2020.

²² Suvorov, W. *Spy, or the Basics of the Spy Profession*. Poznań: Rebis Publishing House, 2023.

²³ Weiner, T. *The Heritage of Ashes. History of the CIA*. Poznań: Rebis Publishing House, 2012.

functioning of their members, are doing so well, continue to develop and remain active despite numerous actions of forces against them. Of course, this also hides the difficulty of forecasting the decision-making process of such organizations, because on the one hand, they work for the implementation of a specific idea, but on the other hand, they can also be bogged down by external forces, which tasks may not be directly related to the implementation of this idea. In such a case, the only solution is to observe the group on an ongoing basis and try to decipher their *modus operandi*, so that on the basis of existing models and decision-making schemes, an attempt can be made to identify the motives, goals and means of carrying out future terrorist attacks. The second option is to send trained individuals to infiltrate the ranks of such organizations and to try to establish cooperation with their real members. As indicated above, in the case of criminal groups, depending on the level of their organization, this task may not necessarily be easy, but in the case of ideological groups it is very difficult.²⁴ In fact, the only argument (apart from possibly other identified weaknesses) that can be used during recruitment is an attempt to convince a member of such an organization that by acting against the group, he will actually work for the implementation of a given idea. The Russian services have a lot of experience in this area of activity, dating back to the tsarist and Okhrana periods.²⁵

2.3. Identifying terrorist threats from political organisations

Political organizations are a special type of organization whose purpose is to make changes in the political system or, most often, to make changes in the authorities. Members of such organizations may be guided by a specific ideology with a strong political tinge, but their attachment will not be as strong as in the case of classic ideological organizations, and even more so most members will not be willing to make far-reaching self-sacrifices (in extreme cases in the form of suicide) for the sake of achieving the goal of the organization. Such organizations bring together people with similar views, but with varying degrees of commitment to the planned changes. On the one hand, the idea of political change behind their members is strong enough to determine their actions, including the carrying out of acts of terror, but at the same time not so strong that if it was possible to avoid punishment, most of its members would decide to sacrifice themselves in order not to harm their organization. As a result, these organisations are easier to infiltrate, their members are more willing to cooperate with law enforcement agencies, and the assumptions of the political programme introduce restrictions as to the forms and purposes of possible terrorist attacks. Another difference is the relatively unstable nature of the ties between the members of such organizations, which is usually subject to quick verification after the main political goal for which they were established, e.g. after taking power in a given country, has been achieved.

²⁴ Suvorov, W. *Spy, or the Basics of the Spy Profession*. Poznań: Rebis Publishing House, 2023.

²⁵ Kaczyńska, E., and D. Drewniak. *Ochrona Tsarska Police Polityczna*. Warsaw: Warszawska Oficyna Wydawnicza "Gryf", Wydawnictwo Bellona, 1993.

Then there are often internal, more dynamic and permanent divisions into individual factions, which begin to compete with each other for the scope of the power gained.

2.4. Identifying terrorist threats from religious organizations

Terrorist religious organizations are in fact a special and distinguishable variety of ideological organizations. It is therefore no coincidence that, as in the case of classic ideological organizations, also from among terrorist religious organizations, the special services of many countries are eager to recruit future collaborators. The key is the mental structure of its members, which encourages them to self-sacrifice for the "greater good", and if they are ready to sacrifice themselves, they are also ready to sacrifice themselves to other strangers. Religion has a certain advantage over any secular ideology, which was noticed by communist activists responsible for indoctrination – communists promised to build a paradise on earth for people, which in a certain time horizon was possible to be verified by the society. In many religions, the promise of paradise occurs after death and is therefore impossible to verify tangibly, and is therefore based on a faith strengthened by the promise of the fulfilment of all human needs, which affects the inner sense of security. To sum up, a given religion can promise almost everything, because the fulfilment of this promise will take place only after death, e.g. suicide.²⁶ At the same time, for this reason, it would be a big challenge to try to persuade strongly religious members of such groups to cooperate with law enforcement agencies. If their fervent, even fanatical faith was the only weak and at the same time strong point of their personality, then the foundations of faith should be undermined, which is almost impossible due to the very nature of religion. It is difficult to threaten someone with the loss of life who expects it in exchange for eternal life. Such an unyielding belief in one's own immortality gave conviction of one's own immortality, which allowed them to perform daring deeds in a fight to the death, e.g. the Vikings believing that dying in battle they would go straight to Valhalla.²⁷ Then a paradox occurs, in which members of religious organizations use terror against other people, but they themselves show surprisingly high resistance to the same practices.²⁸ Of course, in every organization, especially the more numerous ones, there will be people with weaker faith, and perhaps even conformists who only pretend to believe, but joined a given organization for much more mundane purposes. Such people could prove invaluable as future collaborators of the services responsible for the fight against terrorism not only in identifying current terrorist threats from a given group, but also in indicating future

²⁶ Jędraszewski, M. "The Communist Party Fighting Against Religion and the Communist State Guaranteeing Religious Freedom as the Theoretical Foundations of Marxism-Leninism in the Fight Against Religion and the Catholic Church in the Countries of Real Socialism." *Poznańskie Studia Teologiczne* 22 (2006).

²⁷ Bernhard Grom, S. J. *Psychology of Religion*. Warsaw: Wydawnictwo Naukowe PWN, 2009.

²⁸ Zimbardo, P., R. Johnson, and V. McCann. *Psychology of Personality. Psychology. Key Concepts. Volume 4*. Warsaw: Wydawnictwo Naukowe PWN, 2017.

targets based on an understanding of the principles of its functioning, or rather the assumptions of their religion, which may result in restrictions as to potential means, forms and objects of future acts of terrorism.²⁹

3. Methodology for forecasting terrorist threats by analytical centres

Commonly used measures to forecast terrorist threats focus on two types of activities carried out in parallel:³⁰

- (1) Identification of places and events (e.g. public events) that may constitute an attractive subject/object of a terrorist attack.
- (2) Identification and investigation of terrorist groups by state organs appointed for this purpose in the form of special services or separate components of state services responsible for national security, including the internal security of the state.

With the information resulting from the activities described above, modelling of potential terrorist threats resulting from the activities of previously identified terrorist groups is undertaken.³¹ Using a kind of simplification for the benefit of this study, it can be assumed that a terrorist religious organization will be interested in carrying out an attack that will give publicity to its activities, where a much stronger informational effect will be caused by an attack on specific people or institutions than by an accidental one. For example, these can be institutions related to a state that is considered hostile, e.g. military bases, embassies, but also, if it would be too difficult to carry out an attack against the aforementioned facilities, also economic institutions associated with a given country, e.g. banks, representative offices or corporate headquarters, etc. Religious institutions representing religions considered hostile by members of a given organization could be an equally good target. It can then be assumed that having a choice of such facilities, and carrying out an attack on innocent people in any place during any public event, e.g. a concert, could not bring such publicity to the organization and perhaps understanding on the part of a specific audience, e.g. ordinary and not involved in terrorist activities followers of a given religion. It may be important not only to gain publicity, but also to put pressure on decision-makers by assassinating random members of a selected society.³² However, such action may have the opposite effect in the form of public anger and pressure on the authorities to retaliate (e.g. after the attack on the World Trade Centre). In such a case, it would be optimally better to carry out an attack not on outsiders, but on specific people (lowering the prestige of a given state by assassinating an ambassador or high-ranking military personnel, which could reduce the credibility of a given state as a partner in the eyes of the societies of a given region of the world or institutions. Another method of exerting pressure on the government is to reduce the income of

²⁹ Wojtasik, K. *Paths of Radicalization and the Activities of Jihadist Terrorist Organizations*. Academic Textbook. Toruń: Adam Marszałek, 2021.

³⁰ Aleksandrowicz, T. R. *Forecasting Terrorist Threats. Methodological Aspects*. Warsaw: Difin, 2022.

³¹ Ibid

³² Horgan, J. *Psychology of Terrorism*. Warsaw: Wydawnictwo Naukowe PWN, 2017.

a given country by attacking means of transport used for international trade, e.g. container ships.³³

Institutions responsible for developing forecasts of terrorist threats take into account a number of data, starting from the profile of a given organization and its members, through the possible selection of measures for this organization, the intended effect to be caused by a given attack and the logical, even ruthless thinking of the authors of the attack. For these people, an act of terror is only an act aimed at a specific goal by causing a given event, e.g. terrorizing a selected social group, causing tension and anxiety on the part of decision-makers, euphoria on the part of followers of a given religion or ideology, drawing social attention to a given problem, e.g. global warming, immoral activity of large financial institutions such as insurers or banks. Therefore, the key to developing effective forecasts is to properly understand the mentality of people who may commit an attack in the future, thus creating a terrorist threat.

4. Perceptual and decision-making errors in the development of forecasts by analytical centers

In the previous section, it was pointed out that people who develop terrorist threat forecasts first seek to understand the motivations of terrorist organizations, most often identified through the operational activities of specialized state services.³⁴ Securing all events, places and individuals who may be the target of a terrorist attack by any group today is very difficult, not to say impossible, due to limited forces and own resources. One can imagine a situation in which state and local authorities are obliged to secure every major public gathering such as concerts, protests, marches, marches, but also celebrations of national and religious holidays in all places where such gatherings take place. In the case of Polish, it would be almost impossible to secure even all churches in all cities, e.g. during Christmas. In view of the above, state services first strive to identify potentially dangerous organizations, attempt to work out their functioning, activities and motives driving the members of these groups, and only then strive to control and predict the activity of these organizations. In addition, the above-mentioned forecasting entities use this knowledge to identify people and objects that may become the subject of a terrorist threat. Unfortunately, even then, it is not always possible to avoid an effectively carried out assassination, which unfortunately the whole world learns about from the media.³⁵

It should be remembered that the vast majority of potential attacks can be prevented, and those that do occur are a fraction of those that have been successfully counteracted. In the absence of specific data in the form of unambiguous

³³ Bahadur, J. *The Pirates of Somalia: Inside Their Hidden World*. New York: Knopf Doubleday Publishing Group, 2012.

³⁴ Aleksandrowicz, T. R. *Forecasting Terrorist Threats. Methodological Aspects*. Warsaw: Difin, 2022.

³⁵ Suvorov, W. *Spy, or the Basics of the Spy Profession*. Poznań: Rebis Publishing House, 2023.

identification of the object and the time of the attack, coming from the operational activities of specialized state services, there is a forecast based on the data obtained so far. Having knowledge about the motives of a given group and its constant activity, it can be assumed, despite the lack of operational data indicating that a terrorist attack is being prepared, that such an attack can be prepared. Then it comes to selecting potential targets of such an attack in a specific time range, which can lead to the unwanted occurrence of two cognitive biases:

- stereotypical thinking about the modus operandi of a potential attack, while terrorists usually try to act creatively and surprise with an innovative approach to planned acts of terror;
- the assumption that terrorists are guided by the logic typical of people brought up in a culture common to forecasters, while they may represent a completely different cultural system, and therefore they may perceive the reality around them in a completely different way, their minds will process information coming from the environment in a different way and on their basis create solutions that are not standard for representatives of other cultures.

A perfect example of the difference in perception and thinking between representatives of two different cultural circles is the war in Ukraine, which has been going on since 2022, where it took representatives of Western and Central European countries two years to fully understand that Russian decision-makers do not act in an incomprehensible or even thoughtless way, exposing their country and society to devastating economic sanctions, which they seem to downplay. And they are guided by a completely different logic than the West, determined by a completely separate system of values. In other words, both parties perceive reality and draw conclusions by thinking logically, not determined by emotions. The difference lies in the culture and the system of values conditioned by it, different for culturally different social groups. The same is true of an attempt to forecast the potential goal, means and course of a terrorist attack planned by people brought up in a completely different culture than those responsible for making this forecast. Paradoxically, even if we have a large amount of information about a given organization, we can misinterpret this data through the prism of perceptual and decision-making patterns conditioned by a specific culture.³⁶

It is therefore worth looking at how cultural conditioning affects the formation of these perceptual and decision-making patterns in humans. The human mind can be compared to software, and the brain is a kind of biological computer.³⁷ From the first moments of life, the mind, based on learning algorithms, absorbs information about the environment, creating a knowledge base. A human being is therefore born with a kind of basic "software", the purpose of which is, on the one hand, to regulate life processes such as breathing, maintaining proper blood pressure, heart rate, etc., as well as to build the aforementioned knowledge base,

³⁶ Hofstede, G., and G. J. Hofstede. *Cultures and Organizations*. Poznań: Polish Economic Publishing House, 2007.

³⁷ Wojsiat, J. *This Is How the Brain Works*. Warsaw: W.A.B., 2023.

which is to provide knowledge about how to function in the surrounding reality to ensure the fulfillment of basic physiological needs and safety. Along with the expansion of the knowledge base about the surrounding reality, new needs appear, such as belonging, recognition and self-fulfilment.³⁸ The first one is in fact the next level of ensuring security by belonging to a specific group, while the next one is social in nature, and the last one concerns the realized need for self-esteem. Therefore, it is crucial to answer the question of where this information is obtained from, which is then processed by the algorithms existing in the human mind? Well, from the social environment, i.e. observing mainly non-verbal communication at the beginning, and over time verbal communication by learning to speak in a given language.³⁹ As a result, a person growing up in a group characterized by a specific culture will interpret facts and events in a similar way as other members of this group, because in the early stages of development they subconsciously learned it, and their mind created new algorithms based on this knowledge.⁴⁰ It is interesting that the entire process of absorbing information, building a knowledge base, creating new algorithms takes place outside of consciousness, and the goal is to meet the above-mentioned needs. For an average member of the society of one of the countries of Western Europe, the sense of security will be synonymous with material well-being guaranteeing a certain standard of living, and consequently guaranteeing an appropriate standard of living also for the family that this person will start in the future. The outbreak of war would, of course, completely reevaluate this state of affairs, but depending on the society, the reaction may be completely different depending on the culture of origin. For example, after the outbreak of the war, many young Ukrainians felt a very strong emotionally conditioned need to become actively involved in defending their own country, even though before the outbreak of the war they were willing to go abroad to find a better-paid job.⁴¹ Similarly, the sense of security of the average Russian is not only related to the provision of basic material needs, which in his opinion guarantee a "decent life", but also to the sense of belonging to Russian society, going further to the Russian Empire. Only then would the average Russian feel safe and fulfilled.⁴² From the perspective of the Russians, the possibility of Ukraine joining NATO would mean an increased sense of threat, because even if in their opinion this threat does not exist now and in a dozen or so years, no one can guarantee them how the international situation will develop in several decades. Moreover, the Kremlin has always considered Ukraine to be part of its empire, at least as a sphere of influence, so Ukraine's full independence would undermine the sense of security resulting

³⁸ Maslow, A. *Motivation and Personality*. Warsaw: Wydawnictwo Naukowe PWN, 2014.

³⁹ Wojsiat, J. *This Is How the Brain Works*. Warsaw: W.A.B., 2023.

⁴⁰ Hofstede, G., and G. J. Hofstede. *Cultures and Organizations*. Poznań: Polish Economic Publishing House, 2007.

⁴¹ Siek, S. *Brainwashing*. Warsaw: Publishing House of the Academy of Catholic Theology, 1993.

⁴² Bieleń, S. *International Identity of the Russian Federation*. Warsaw: ASPRA-JR Publishing House, 2006.

from its attachment to Russian imperialism.⁴³ In other words, if Ukraine were to lose completely, even as a formally independent sphere of influence, the Russians would see their country's status as an empire become debatable, and thus their internal emotionally conditioned sense of security would be lowered. Moreover, Ukraine's accession to NATO, which Moscow considers an unfriendly alliance, even if relations are correct at a given time and there is "temporary" peace, would not only create uncertainty about Russia's status as a superpower, but would pose a threat to the future. This, of course, is only a Russian interpretation of this complex international situation, which is completely contrary to the Ukrainian and even NATO interpretation. However, it does not matter, because for Russians it is very real, and the perceptual and decision-making process described above is conditioned by their multi-generational culture. From the point of view of Western countries, Russia's full-scale aggression against Ukraine was wrong, and even illogical, given the losses that Russia has suffered since the beginning of the war: both in economic, population and military terms. From the Kremlin's perspective, however, it was the only right and absolutely logical decision. Following this line of thinking, we can cite more examples of actions that from the point of view of the culture of Western societies are considered erroneous and illogical, and at the same time absolutely barbaric and inhumane, such as:

- Hamas's mass act of terror and genocide against the people of Israel on October 7, 2024;
- mass acts of terror against the population of eastern Ukraine carried out by Russian troops since February 2022 (including the famous Bucha massacre in March 2022)
- the attack on the World Trade Centre on September 11, 2002;
- the Hutu massacre by Tutsis in Rwanda in 1994;
- the terror of the Khmer Rouge regime in Cambodia 1975-1978.

At the same time, all these decisions were not made ad hoc under the influence of a strong emotional impulse, but were planned for a very long time and meticulously (sometimes for many years), and therefore were the result of an emotionless, logical perceptual and decision-making process. This means that if this process was known exactly, it would be possible to predict many tragic events well in advance as one of the very real possibilities. This, in turn, would give time for proper preparation, and perhaps even prevention and avoidance of these events, which often generate terrorist threats.

⁴³ Plokhyy, S. *The Russian Question. How the Nation and the Empire Was Built*. Kraków: Znak Horyzont, 2017.

Conclusion

Perceptual errors in the development of forecasts by analytical centres aimed at identifying terrorist threats are therefore the result of determining their own forecasting process by cultural conditions specific to people employed in these centres. In order to reduce these errors, it would be necessary to employ people from the cultural circles appropriate for the members of the terrorist organizations under study, so that it is possible to properly work out the perceptual and decision-making model determining their actions, especially in the area of setting new targets for future terrorist attacks. However, it seems important not only to employ such people, but also scientists specializing in forecasting methodology, so that they are able to develop the model in an impartial and objective manner with the support of these people, and then, based on the observation of the activity of such an organization, introduce possible corrections in order to develop a model as close as possible to the actual picture of the studied perceptual and decision-making process.

Funding: This work was supported by the Polish Ministry of Science and Higher Education under project No. RID/SP/0042/2024/01, Increasing Competences in identifying threats related to hazardous materials, from program Regional Excellence Initiative, 2024-2027. Marcin Górniewicz: Writing – original draft, Methodology, Conceptualization, Writing – review & editing. Barbara Wiaderek: Writing – review & editing, Supervision. Klaudia Rzadkowska: Writing – review & editing, Visualization. Patrycja Bryczek-Wróbel: Project administration, Supervision.

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