
Interdisciplinary and Transdisciplinary Security Research

Submitted 20/07/21, 1st revision 01/08/21, 2nd revision 24/08/21, accepted 30/09/21

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Abstract:

Purpose: This paper aims to explain and present research conditions in the interdisciplinary and transdisciplinary approach of researching security sciences.

Design/Methodology/Approach: The desire for a holistic explanation of research problems urges the researchers to conduct transdisciplinary research. Such an approach does not exclude carrying out monodisciplinary research. Still, the interdependence of research subjects and overlapping of cognitive areas of many disciplines make it necessary to perceive and conduct research to explain research problems from a holistic perspective. In the research process, the qualitative research strategy was used, including researching the content of the literature on the subject, dialectics, and constant comparison.

Findings: Originally, conducting research was monodisciplinary and constituted the unquestionable ontological, epistemological, and axiological assumptions of the scientific disciplines emerging at that time. Still, it is more and more justified to research a holistic approach because it broadens the knowledge and results.

Practical Implications: Due to the widening cognitive scope of scientific disciplines and situating the research subject on the borderline of many of them and entering the research subject into interactions with other research subjects, the necessity of researching the borderline of two or more disciplines is more and more frequently observed. It gives the research an interdisciplinary character.

Originality/value: In the security sciences, where security systems are researched, one cannot conclude their entirety based on a single subsystem or element. Hence, it is well-founded to perform research from an interdisciplinary and transdisciplinary perspective to holistically consider and explain complex security problems.

Keywords: Research methodology, security, interdisciplinarity, transdisciplinary.

JEL classification: H56, NO1, K38.

Paper Type: Research study.

Acknowledgement: The article was co-financed by the NCBR project DOB-BIO9/26/04/2018 Controlling an autonomous drone using goggles.

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1. Introduction

Examining security is a complex process (Ziarko, 2015). That remains in close connection with science, which "(...) is a historically accumulated and permanently developing set of statements, relating to reality, aiming at intellectual and practical power over phenomena based on explanatory principles, and resulting from acquired knowledge, accepted by specialists" (Bogdanienko, 2018). Such a perception of the science concept points to its connections with Kuhn's interpretation of "normal science" (2012), but it also does not negate undermining and overturning its past achievements in the view of "revolutionary science" as changes in the perception of social reality (Kuhn, 2012). Security requires action at both the national and the international levels and can only be sought in the complex balance between the two. Excessive attention to national security leads to the self-reinforcing dynamic of the power struggle. In contrast, undue attention to international security leads to the unrealistic idealism associated with the peaceful view. A valid security policy requires states to attend both to their stability, vulnerability, and the pattern of relations in the system, with particular emphasis on their impact upon it (Buzan, 2021).

After the negative experiences of the twentieth century and the beginning of the twenty-first century, there has been a growing scientists' interest in security issues as a research subject in the cognitive field of various scientific disciplines. However, each of them perceives security issues in terms of its general subject of research. On the one hand, it enables perceiving security through the prism of other disciplines and increases knowledge in this area. On the other hand, it may cause a "blurring" of the ontological, epistemological, and axiological foundations of the security sciences. The ongoing discourse on the identity of security sciences (Sulowski, 2015; Czupryński *et al.*, 2015; Czupryński *et al.*, 2017; Kośmider and Kitler, 2017; Piwowarski and Gierszewski, 2018; Gierszewski and Pieczywok, 2020; Wiśniewski, 2020) emphasizes the ever-widening scope of the object of cognition, which causes that cognitive area of security comprises all spheres of social life, which finds its colloquial justification.

However, from the mental point of view, it makes one enter other knowledge areas non-professional. It should be unequivocally stressed that researching in an interdisciplinary, transdisciplinary, and multidisciplinary perspective bearing in mind the interaction of the research subject with its environment and other objects and drawing knowledge from different scientific disciplines differs from defining the research subject with such features (Czupryński *et al.*, 2015; Czupryński *et al.*, 2017). If such features describe the subject of research, then a premise for the emergence of a new discipline arises. Simultaneously, the methodological approach does not violate the scientific status of any co-operating field but is determined cognitively by the holistic cognition of the studied object. Even though the thesis that security sciences as a scientific discipline cannot take the totality of world perception as its subject of awareness (Kośmider and Kitler, 2017) is valid, researchers should situate and study the research subject concerning their closer and further environment in a systemic perspective, since security systems are social and open systems (Bertalanffy, 2015; Hys

and Hawrysz, 2014; Parsons, 2008; Luhmann, 1984). That means that the object of security cognition is not everything, but a specified thing cognized in the conditions of the security subject and object's social, political, economic, bio-logical, and civilizational environment.

Security research problems are usually perceived separately through the prism of securitization (in the following areas, political, economic, social, military, and ecological) and human security (in the following areas, food security, health security, personal security). However, from the cognitive point of view, it is crucial to perceive all the places and conduct research from the systemic point of view using strategies and research methods, techniques, and tools in the interdisciplinary, transdisciplinary, or multidisciplinary approach in the research process.

The concepts used interdisciplinarity and transdisciplinarity should not be treated as a synonym. Still, as a research approach to define and study a research subject that may be called the same, each discipline examines this subject different cognitive approach (Table 1).

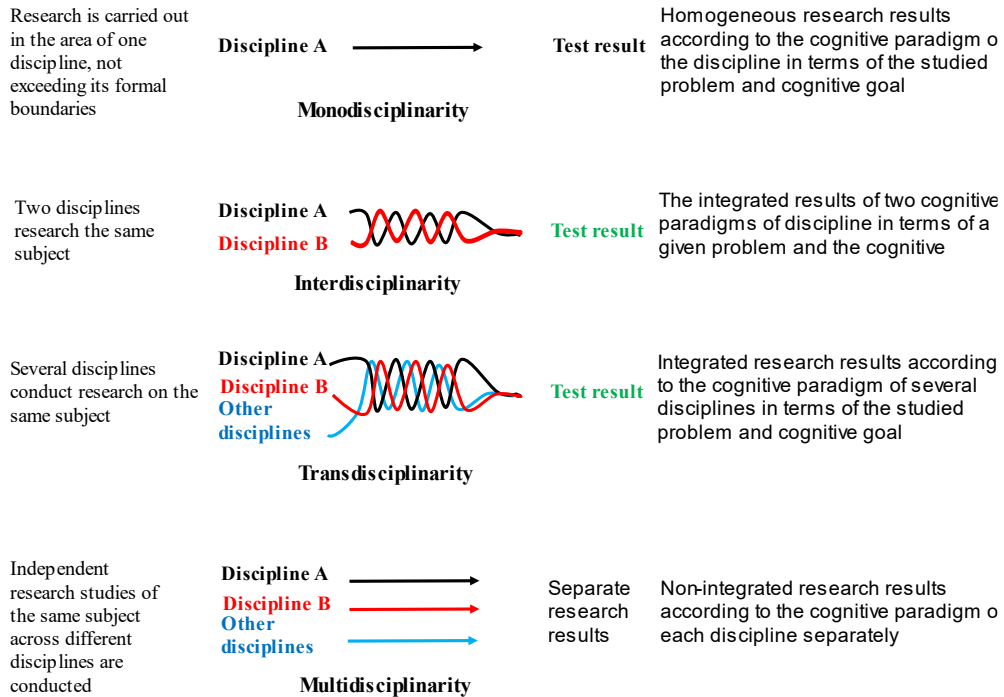
Table 1. *Concepts used in social sciences*

Multidisciplinarity	Disciplines are working on a research field in parallel, without the synthesis of research approaches.
Interdisciplinarity	Disciplines are working in a research field, and their cognitive structures are synthesized.
Transdisciplinarity	Knowledge arises between and above disciplines based on a new methodology.
Neodisciplinarity	Knowledge arises between and above disciplines based on a new methodology.
Adisciplinarity	Striving to overcome specialization by recognizing that disciplinary boundaries limit the development of knowledge.
Intradisciplinarity	Creating a new combination of concepts to explain the problems in a new way
Analytical eclecticism	Disciplines work in a given research field in parallel, without synthesizing research approaches.

Source: Czaputowicz, 2015.

To distinguish the research approach, the cited concepts can be illustrated (Figure 1), where the basis for their perception in the study of a given problem is the cognitive paradigm of one, two or more scientific disciplines. The article aims to present assumptions and challenges connected with undertaking and carrying out interdisciplinary and transdisciplinary research in security sciences on the ground of Polish science. The fact is that science does not have national ontological and epistemological characteristics, but the development of each scientific discipline has its specific civilisation and cultural sources of the emergence of cognitive areas independently of similar approaches in other parts of the world.

Figure 1. Distinguishing the research process and results in terms of monodisciplinary, interdisciplinary, transdisciplinary and multidisciplinary in the interpretation of the joint research subject in social science



Source: Own study of the authors' team.

2. Research Methodology

Doing science is an anarchistic endeavour because it assumes scepticism about its achievements to date. According to Feyerabend (2010), anarchism helps one progress in whatever area one wishes. Since challenging established theories makes us find additional arguments for and against the challenged theory or create the basis for new knowledge (Feyerabend, 2010). In scientific research, the restriction of not addressing problems that have been previously justified does not apply, everything is contestable and comes down to argumentation according to assumptions of confirmation or falsification (Popper, 2002). In such a perception of reality, one can apply dialectical thinking, which becomes the first step to identifying a scientific problem and the possibility of its investigation. Describing a problem with the adjective scientific suggests that the product of this activity should be knowledgeable about the subject under investigation produced in the procedures of scientific perception of reality. Above all, a scientific problem is an identified level of ignorance in existing knowledge or its consistency with reality. The results of research and theories produced are subject to processes of confirmation and falsification, which constitutes the essence of science.

The scientific world often suggests that security problems should be studied from an interdisciplinary perspective; however, it seems that cognitive processes resulting from the research subject's interdependence with others should be reviewed even more from a transdisciplinary or multidisciplinary perspective. Hence, a research problem has been posted, the essence of confirming or denying such a research approach. What justifies conducting security research from an interdisciplinary and transdisciplinary perspective? The cognitive considerations assume that interdisciplinarity and transdisciplinarity of security research results from the necessity of holistic cognition of the research subject situated on the borderline with other scientific disciplines, which interacts with research subjects from the disciplines. It is necessary to perceive it from the cognitive perspective of disciplines with which it interacts to explain the identified relationships, dependencies, and processes. The necessity of interdisciplinary and transdisciplinary research stems from the origins of security sciences.

The research subject is located on the borderline of political, military, social, economic, ecological, food, health, and personal security. At the same time, these are the detailed areas of cognitive interest of many other scientific disciplines. In the process of cognition of security sciences, it is not about exploring the cognitive area of different scientific disciplines but studying one's object of research and considered scientific problems also from the perspective of disciplines with which the research subject interacts, as well as from the necessity of holistic solution of the research problem and verification of hypotheses.

More and more often, the world of science suggests that security problems should be studied from an interdisciplinary perspective. However, it seems that cognitive processes resulting from the interdependence of the object of research with others should be reviewed even more from a transdisciplinary perspective. Hence, a research problem has been posted, the essence of which is to confirm or deny such a research approach. What justifies conducting security research from an interdisciplinary and transdisciplinary or perspective? The cognitive considerations assume the hypothesis that interdisciplinarity and transdisciplinarity of security research results from the necessity of holistic cognition of the object of research, which is situated on the borderline with other scientific disciplines, interact with objects of research from different disciplines, and explain the identified relationships, dependencies and processes it is necessary to perceive the object of study from the cognitive perspective of disciplines with which it interacts.

The necessity of interdisciplinary and transdisciplinary research results from the origins of security sciences, whose research subject is located on the borderline of political, military, social, economic, ecological, food, health, and personal security, and at the same time, these are the detailed areas of cognitive interest of many other scientific disciplines. In the process of cognition of security sciences, it is not about exploring the cognitive area of different scientific disciplines but examining one's object of research and considered scientific problems also from the perspective of disciplines with

which the object of study interacts, as well as from the necessity of holistic solution of the research problem and verification of hypotheses.

It should be borne in mind that such dependence and the possibility and necessity of exploring common cognitive areas pose similar challenges to other scientific disciplines interacting with security sciences. Holistic research involves learning about the same research subject from the perspective and cognitive methodology of the disciplines it interacts with. It can result in the beginning to explore the essence of security science from a mental standpoint of another discipline. Not only does such an approach bring about an increment of innovative knowledge in each discipline but also it may cause "blurring" its ontological foundations in favor of the discipline with which it interacts or the disappearance of both cooperating disciplines and the formation of ontological, epistemological, and axiological foundations of a new discipline.

From the scientific point of view, it is justified to perceive the research process reflexively, to be cognition, truth, knowledge, and realism, not separately but as a whole (Woleński, 2007). It must be added that the latter refers to all elements of epistemology. If science is based on diversity, then such diversity should enrich security sciences, but different cognitive methodologies should be considered to cognition and the problem. Given the essence of the research subject in the security sciences, borrowing research methodology from social sciences or other fields of science is not abuse. However, it requires adjusting the adopted cognitive assumptions of methods, techniques, and research tools appropriately to the general and specific research problems, the research subject, and the mental goal.

The adopted research process aims to determine the reasons and conditions of undertaking interdisciplinary and transdisciplinary research in the security sciences on Polish science. On the other hand, the research subject is the ontological, epistemological, and axiological foundations of security sciences in holistic research conditions.

In the adopted research process, the strategy of qualitative research was applied. It assumed that we do not discover facts but only resolve, interpret, and describe them in qualitative terms because employing other strategies under such a cognitive assumption is hardly justified. The premise of qualitative research strategy assumes that qualitative research is defined primarily by a series of tensions, contradictions, and fluctuations (Denzin and Lincoln, 2005), focusing on explaining the causes and conditions of interdisciplinary and transdisciplinary research in security science. As empiricists suggest, the essence of the qualitative research strategy is not in opposition to other cognitive processes (e.g., quantitative, empirical, and multivariate ones).

However, it constitutes a methodology of cognition, classification, and description of research results in terms of the cognitive subject, the considered problem, and the inseparability of awareness from valuation, which is necessary for security sciences due

to the object and subject of attention. Hence, dialectical, and critical thinking about the problem and the research subject was applied with the assumption that one should:

- strive for critical perception of describing facts, processes, and phenomena contained in the subject literature;
- use comparisons of similar problems, facts, phenomena, pre-subjects and their conclusions in the research process;
- use comparisons of similar problems, facts, phenomena, subjects and conclusions drawn from them;
- perform a comprehensive and in-depth analysis of the data contained in the subject literature;
- analyse and compare cases of deviation from commonly perceived cognitive assumptions (Silverman, 2001; Silverman, 2005; Denzin and Lincoln, 2005; Flick, 2007; Stasik and Gendźwił, 2012).

The qualitative research strategy used was the method of examining the content of selected subject literature (Babbie, 2015) involving the coherent application of reasoning operations (analysis, synthesis, comparison, abstraction, generalization, deductive reasoning) and strategies of reductive, taxonomic, heuristic, and constructive thinking (Peräkylä, 200; Czupryński, 2020b). It should be emphasized that the included research results do not follow the realization of a scientific project but own independent research and the discourse about monodisciplinary, interdisciplinarity, transdisciplinarity, and multidisciplinary of research in security sciences conducted by the author's team.

It is worth emphasizing that the author team, through the discourse, excluded cognitive subjectivism or attachment to a methodology resulting from the specificity of the individual research conducted. Nonetheless, a certain margin of subjectivism, which is its essence expressed in perceiving and interpreting facts, is sure to be included in the qualitative strategy. In the security sciences, one does not produce points but analyzes them from different cognitive perspectives. Since the sciences above apply other cognitive processes, somewhat mental eclecticism arises, which also stems from interdisciplinary and transdisciplinary cognition of the studied subject and resolution of the problem under consideration.

3. Literature Review

The cognitive perspective of the Polish security sciences has similar trends in the development and study of security as in the world. However, it is classified formally as a scientific discipline, arbitrarily established in 2011 and modified by legal acts until 2018. The development of security sciences has several cognitive currents. Regardless of whether such assumptions were or were not directly articulated, the security sources were related to the organization of the social life of individuals, social groups, and nations in various organizational and systemic forms. Historically, the current is called state-centrism, which has evolved to securitization since the 1980s (Buzan and Little,

2000). Securitization theory is a relatively few recent genuine advances in security theory (Waeber, 1995). Central to its successful incorporation in Security Studies is its innovative attempt to answer the most crucial question of the discipline: What is security? This question seems to divide the field not only because security could be called an 'essentially contested concept' (Gallie, 1956) but as well also because it is the starting point of many other related debates concerning who the legitimate authors of security policy are, which beneficiaries should have priority, or what are the adequate strategies of implementation.

What marks out securitization theory is answering the 'who, what, where, and how' of the security research subject. It also allows potential new interpretations of what security means. Should this promise be delivered, it would indeed significantly contribute to Security Studies and IR in general (Ciută, 2009). As Baldwin has pointed out, there are very few new security concepts (Baldwin, 1994). The general assumptions of the Copenhagen, Paris, and Welsh schools, with slight equivocations, fit into that current of cognition and concern the conditions of state security as a political entity.

Therefore, in Poland (like worldwide), it includes the cognitive scope of martial arts, ex-military sciences, ex-defence sciences, political and administrative sciences, management and quality sciences, legal sciences, economics and finance, philosophy, cultural and religious sciences, social sciences, social communication, and media sciences, and polemology since those non-cognitive areas cover aspects of state security within their specificity. The foundations of the cognitive trend indicate the necessity of perceiving state security in connection with many knowledge sectors. Thereby, it is not reasonable to consider it from the mental perspective of one knowledge sector or those knowledge sectors with which the research subject interacts.

Another cognitive trend in the security sciences has its sources in the socio-psychological-humanistic direction of perceiving reality related to the UN's position on security problems as human security. Perceiving a human being as an essential subject of protection directs the scope of cognition towards human and civil rights to decent and safe conditions for a human being's existence and development. In the socio-psychological-humanistic stream of the security sciences, the subject of cognition is located on the borderline with sectoral knowledge, philosophy, political sciences, cultural and religious sciences, health sciences, food and nutrition technology, economics and finance, socio-economic geography and spatial management, social communication and media, politics and administration, management and quality sciences, legal sciences, sociological science, pedagogy, psychology, environmental protection, and irenology.

Thus, the direction of security sciences, which primarily assumes the protection of human rights and dignity and decent conditions for existence and development, has cognitive contexts that situate the object of cognition on the borderline of various sectors of social-psychological-humanistic knowledge (Table 2).

Table 2. *Scientific disciplines and knowledge sectors in which interdisciplinary, transdisciplinary and multidisciplinary security research is conducted*

No .	Scope of knowledge	Main research problems	Scope of cognition
1	Security sciences	What factors influence the nature and quality of security?	Areas of security in terms of securitisation and human security
2	Cultural anthropology	To what extent do cultural, ethnic and civilisational changes affect the security of individuals, social groups and nations?	The cultural dimension of human existence in its social, ethnic, historical, political and geographical contexts.
3	Philosophy	What are the axiological sources and conditions of security?	Primary problems of the discursive perception of reality.
4	Cultural and religious sciences	How do civilisational and cultural conditions affect security?	Cultural, social, political phenomena in relation to social relations of the security subject and his/her value system.
5	Health sciences	What are the social aspects of the identified level of health and medical services in relation to the state of feeling of safety?	Impact of social determinants on the quality of health security.
6	Food technology and nutrition	What is the impact of nutrition on people and societies in terms of existential and health security?	Food production and distribution in terms of social, ecological and health determinants.
7	Economics and finance	How do economic and financial factors influence the level of security?	The level of wealth of individuals and societies and their impact on the security systems of individuals, social groups, nations, states, political regions and the world.
8	Socio-economic geography and spatial economy	To what extent do geographical, social, economic and economic conditions determine security?	Impact of the geographical, social and economic environment on the security of individuals, social groups, nations and political entities
9	Social communication and media sciences	To what extent does social communication influence the stabilisation of security?	The importance of communication in social processes and civil society building.
10	Political and administrative sciences	How are states involved in guaranteeing internal and international security?	Political institutions and organisations, political culture, political subjectivity, process of political change, formation of international relations, state security management.
11	Management and quality sciences	How do security actors manage security?	Instruments and mechanisms of rational security management
12	Legal sciences	What is the impact of legal conditions on the quality of homeland security?	Individuals, groups, states, regions, the world
13	Sociological sciences	How do we explain the impact of social interactions on security?	Functioning and changes in society in terms of security.
14	Pedagogy	How do we educate society for security?	Systems of education and training for a safe society.

15	Psychology	What factors influence the state and process of feeling safe by the individual, social groups and societies?	Mechanisms and laws governing the human psyche and behaviour. The impact of perceptions of security on interpersonal interactions and interaction with the environment.
16	Irenology	How do peace processes shape security?	Determinants of individual, social groups and societies.
17	Polemology	How do armed conflicts shape security?	Aetiology of armed conflicts.
18	Others	What cognitive scope of other scientific disciplines influences the development and promotion of security?	Relationships and dependencies of other areas of knowledge with security.

Source: Authors' team compilation based on the discourse.

To what extent is the ongoing discourse about the importance of any of the currents (securitization, human security) justified? The answer seems evident that instead of conducting cognitive rivalry, both strands should be merged since they complement each other in exploring security in different research problems and the research subject. That is due to the state's function because the state as a legal entity is responsible for its citizens' security. The perceived two main streams of security sciences, in many cases, have their location in the same sectors of knowledge. Still, the differences arise due to the specific problem considered and the research subject.

Security sciences as a scientific discipline in Poland combine both streams as the cognitive scope of securitization and human security complement each other and allow for a comprehensive perception of the research subject about their closer and further environment. Even though defining the subject of research as security and its systems is very general and imprecise, it is justified as a cognitive metaphor in this case. Security as a subject of cognition has no physical characteristics, despite the possibility of describing some of its elements in a parameterized way.

Due to the necessity of interacting with the range of knowledge from various scientific fields, Security sciences apply research methodologies from different areas. Nonetheless, it is necessary to adapt methods, techniques skilfully, and research tools to the subject being researched, interacting with other research subjects from other disciplines. Therefore, we may pose a thesis that somewhat methodological eclecticism is perceived in the security sciences. However, its application must be justified by the researched problem and subject, the assumed cognitive goal, and the scope of confirmation and falsification of hypotheses. It should be stressed that there are interdisciplinary and transdisciplinary security studies carried out. Still, one cannot attribute such a hybrid shape to the research subject even if it is understood as a metaphor.

4. Results

Security, like many other social rights, is an inalienable human right. Social rights are the product of moral and political agreements that people make among themselves;

they are an expression of compromise that captures the essence of human social development. Putting and proving the thesis of the right to security seems evident in the context of security theory. Still, when confronted with reality, it turns out that the multiple dimensions of security are not unequivocal.

Therefore, from the security point of view, it follows that its cognition by a researcher from the security sciences requires reference to selected issues from the field of cultural anthropology, philosophy, cultural and religious sciences, social communication and media sciences, political and administrative sciences, legal sciences, psychology, irenology (Czupryński, 2021), and others. A researcher who wants to refer to the perspective of security from the cognitive point of view of their discipline cannot disregard its various contexts resulting from the mental scope of other disciplines because the knowledge of the research subject will be limited. There is no doubt that risk estimation and security management cannot be overlooked when studying security contexts from the management and quality sciences point of view (Wiśniewski *et al.*, 2018). Security sciences have their praxeological dimension manifest in the organized and effective operation of security systems in crises and the so-called normal conditions in which security systems should act for the security subject with equal effectiveness guaranteeing its survival, continuance, and development.

Security has an axiological and ontological and, from the point of view of cognition, a methodological character. In the axiological sense, security is a system of values and evaluations pursued by its subject, and therefore cognition and valuation cannot be separated while studying security (Czupryński *et al.*, 2015). Security is an autotelic value. Ontologically, security is seen as a metaphor, although its selected components of security systems in a material sense may have a physical dimension. Whereas methodologically, it defines how to study security.

The contemporary understanding of the essence of security is reduced to human civilizational and cultural standards, and its context varies greatly depending on these requirements. There are also differences in understanding security within the same civilization and culture areas because one perceives its level subjectively. Hence, what can be defined as the standard of 21st-century human security? Conclusions from the research literature analysis indicate that security measures result from our place in the civilized world and our culture. "It is about political pluralism (multiple states and multiple governments) as well as capitalism, freedom of conscience, and the scientific method of inquiry; it is about the rule of law and property rights as well as democracy" (Ferguson, 2012). It is about human beings, about making the world they co-create similarly safe for all people.

Human beings as a social unit are the fundamental subject of security studies on their relationship with the environment. Do security studies take over the cognitive field of psychology, sociology, and other related disciplines? They do not, but security researchers should perceive and interpret the determinants of social interactions and their impact on individuals and social groups' security. Is it possible to avoid value

judgment when considering the research subject in this manner, given that the subject and the object of research interact? No, it is not, and, therefore, cognitive reflexivity will often prevail over cognitive realism. It does not mean that reflexive is as-signed a higher cognitive value, but only that the choice of cognitive approach in terms of intuitive or cognitive realism is determined by the problem under consideration and the research subject and the mental goal.

The origin and evolution of security indicate that we are dealing with multiple understandings, leading to ambiguity. Conclusions from the literature research indicate that security as a scope of scientific cognition was understood, among others, as:

- a continuous social process with acting subjects trying to adjust mechanisms that provide them with a sense of security (Kukułka, 1982);
- the state and process of security depend on the variability of the power systems and essential relations between the security subjects and is understood as a standard of living in a specific socio-political environment (Stefanowicz, 1984);
- the paramount need of an individual and social groups, connected with the system of human needs as a social unit (Zięba, 1989);
- the achievement of individual prosperity and social development (Stańczyk, 1996);
- guarantee of inviolable survival and free development of the security subject (Czaputowicz, 2003);
- a state of certainty, peace, and a lack of threat and protection against it (Zięba, 2007).

The different perception of security requirements has a wide range and depends on cultural conditions. Hence, the security standardization appears to result from the perception and application of the same legal norms to every person regardless of their status, origin, or residence. The security level is perceived in subjective terms. Subjectivity is not justifiably seen adversely as every person has different expectations and requirements resulting from the achieved state and security process. Hence subjectivity is a feature of the evaluations of a specific subject. Therefore, can one speak of standards, and if so, can one ascribe specific values to classify them - high, medium, or low level of safety.

The thesis that everything can be classified, reduced to a common denominator, and given a parameterized dimension can be put forward. Is this approach valid for pragmatic human functioning and, scientifically, social sciences? Perception of security as a state and a process causes that the context of the subjectivity of feeling the security level does not allow for its parametrization because each security subject feels its level differently as a mental state. There is no doubt that security has its standards in the context of pragmatics and science; it has determinants of security in the process context, such as the subject's ability to survive and independence from threats and

development (Koziej, 2006). What, therefore, is security for its issue? Is it a standard of the 21st century? Furthermore, if so, can this standard be identified and explained?

The outcomes from the security concept analysis and its pragmatics indicate that it is first and foremost its subject's need, value, and right. One might argue that the security subject's natural state is the accepted threat level, assuming that there is no state of no threats. Therefore, the security subject functions in a world of permanent threats, the level of which allows or prevents them from achieving their goals. Applying a positive approach to the description of security, one may argue that security is a need, a value, and a law of nature, not just the opposite of threats.

5. Examining Security as an Autotelic Value

If the security subject functions in a world of permanent threats, their immediate need is a condition for survival and development and the opportunity to achieve their existential goals. Identifying the level of achievement of existential goals requires reference to their categorization in terms of a hypothetically created satisfaction level with the accepted level of security to manage it rationally.

Depending on how much influence a security actor has on achieving their objectives, one may define security management as perceived levels: accepted, critical, or unsatisfactory (Table 3). The different security management levels mean they are debatable, as each security actor defines its boundaries subjectively. However, based on the assumption that one can categorize the security management levels (accepted, critical, unsatisfactory), they were explained from the relationship between the expected subjective system of the security subject's needs and the possibility of achieving it in the objective security environment.

A need is something the security subject neither can do without nor can give up. Therefore, the need for security is perceived as a necessary condition defining the generally dichotomous possibility of the security subject's existence or non-existence. Security is a state that gives a sense of certainty and guarantees preservation and the chances of improvement. It is one of the basic human needs; it is characterized by the absence of a high risk of losing something that one values, particularly health, work, respect, feelings, or material goods. Thus, security is an existential need. One can talk about a need when the security subject cannot function "normally" without a specific object: the proper relationship between a human and the environment is satisfied when the person in need has access to what they need (Zawadzki, 2009; Dacko-Pikiewicz and Walancik, 2016). Security has always been a primary human need.

According to Maslow (1970), human beings have the following needs, physiological, safety, love and belongingness, respect and recognition, and self-realization. In the problem theory, the hierarchy of needs, as defined by many theorists, but had roots in Maslow's theory. Alderfer's hierarchy of needs includes existence, interpersonal contacts, and human growth and development (Alderfer, 1969). In the situation of

pandemic restrictions in many countries, direct interpersonal contacts are disturbed. Therefore, the level of feeling of security is lowered in this category. In contrast, McClelland's theory of needs distinguishes between the need for achievement, power, and belonging (McClelland and Burnham, 1977).

Table 3. Relations of the subjective state of feeling of security to the objective conditions of its occurrence

No.	Relationships	Level of satisfaction with safety	Security management level
1	The system of the security subject's needs, and values is lower than the objective conditions for survival and development of the security subject	Revealed	Accepted
2	The system of the security subject's needs, and values is lower or equal than the objective conditions of survival and development of the security subject	Very good	
3	The system of the security subject's needs, and values is equal than the objective conditions for survival and development of the security subject	Good	
4	The system of the security subject's needs, and values is higher or equal than the objective conditions of survival and development of the security subject	Average	Critical
5	The system of the security subject's needs, and values is higher than the objective conditions of survival and development of the security subject	Poor	Unsatisfactory
6	The minimum system of the security subject's needs, and values is difficult to achieve in the objective conditions of survival and development of the security subject	Dire	

Source: Developed based on Czupryński, 2014.

The issue of belonging to a given community is not a declaration that one belongs to the same group, it is the possibility of active functioning in the group, and thus, similarly to the need for interpersonal contacts, the lack of achieving this value lowers the level of feeling of safety, which is different for each individual and is felt differently. The need for power can be perceived and achieved in Maslow's aspect of self-realization. One can put forward a thesis that the system of needs defines a specific set of values, perceived as a feature of what is suitable for the security subject in some respect. What is vital for the issue of security is the possibility to survive and develop freely.

Security is subjective and objective. Each security subject's state of security is different and always personal, depending on their value system. The subjectivity of feeling security means that the scale of freedom from threats for each security subject varies despite functioning in the same conditions. Maslow's psychological concept is not only about needs, but it serves as the basis for constructing security. Maslow's system of needs has a broader scope than psychology defines because the process view of security is founded on the assumptions of achieving basic needs and values. If the

security subject provides only physiological and safety needs, it maintains the continuity of their existence. Self-thinking beings have a broader range of needs and a diversified value system, which forms the basis of their security. In biological terms, one can argue that it is enough to preserve the species, but in psychological terms, a specific security subject must have acceptance, recognition, and development opportunities. Hence, the human's system of needs and values constitutes the basis for defining their safety as an independently thinking individual. In a process view, one can transfer the psychological approach of human needs to other security subjects as the security subject's ability to persist, survive, and develop (Czupryński, 2014; Czupryński *et al.*, 2015).

Conclusions from the dependency analysis indicate that the basis of security is the conscious system of the security subject's needs. It should be expected that along with the social development, the security subject's level of needs and value system will systematically increase about the objective conditions of their existence. Hence, to guarantee an acceptable security level, it is imperative to focus on the security subject's legitimate needs and expectations and manage their social, economic, and political aspects to aim to fulfil their needs to at least a reasonable level.

Security is an ambiguous concept. *"In a general social sense, security encompasses the following needs: existence, survival, certainty, stability, identity (sameness), independence, protection of the standard of living, and quality of life. Security, being the human beings and social groups' main need, is at the same time the basic need of states and international systems; its absence causes anxiety and a feeling of threat"* (Zięba, 1989). Security in a narrow sense means the ability to resist threats; in a broad context, it means the security subject's ability to survive and develop. Thereby, there is a fundamental difficulty in its categorization because of the variety of classification criteria. Security has accompanied humankind since the dawn of time and is an elementary, primordial need for individuals, social groups and nations, and their institutions.

6. Cognitive Multidisciplinary of Security

The sources of security sciences are situated in many cognitive areas, the range of which refers to various scientific disciplines cited in Table 2. Interdisciplinarity and transdisciplinarity of research in security sciences have their justification in the sources of security sciences (Czupryński, 2020). The complexity of security and the desire to know it scientifically makes it legitimate to research an interdisciplinary and transdisciplinary approach to gain holistic knowledge about the studied subject. The multidisciplinary approach does not limit security sciences, as conclusions from interdisciplinary research in other disciplines can be used in security sciences. Similar use of findings from security research can be used in different fields.

Thus, interdisciplinary research results provide conclusions in each discipline in terms of its research assumptions and do not enter direct cognitive cooperation. Still, the

general research results can be implemented into other fields, including security sciences.

The literature and cognitive pragmatics draw attention to the interdisciplinarity of research in security sciences (Sulowski, 2015; Balcerowicz, 2015; Aleksandrowicz, 2015; Żukowska, 2015) as seeking to obtain a much broader range of knowledge about the subject under study, but it should be emphasized that this does not exclude transdisciplinary and multidisciplinary approaches. If we study state security problems (Czupryński, 2020a), a transdisciplinary and interdisciplinary approach is justified because one should refer to the political, economic, social, military, and environmental determinants of security when considering the cognitive scope of the problems.

In turn, the study of security in terms of human security requires addressing issues from the fields of irenology, food security level, health security, personal security about respect for human rights, opportunities for individual and societal development, and the level of freedom and civil liberties. If one perceives security holistically, one must consider its conditions from the perspective of many scientific disciplines and separate specialist areas within them. The research assumptions presented in general regarding the supposed problems and researched the complex subject and the research aim indicate the cognitive scope. It should be emphasized that as far as security is concerned, it is increasingly difficult to make a precise mental boundary of a given discipline. The limits of cognition are fluid and impossible to determine unambiguously. Perhaps one should make such an assumption, like when establishing system boundaries, where the discipline through self-limitation can evaluate the internal limitations but does not specify the external ones, as is conditioned by the entropy of cognition.

Hence, it is considered reasonable that an interdisciplinary, transdisciplinary, or multidisciplinary approach should be employed if the scope of awareness requires it. Suppose the research subject is homogenous and does not interact with other similar objects, which does not require knowledge from outside the discipline. In that case, the research is usually conducted from a monodisciplinary approach. Therefore, it means that the scope of cognition and the research approach is not determined by any research directive but by the research problem, subject, and goal. The researcher intends to investigate a determinant of the research approach, monodisciplinary, interdisciplinary, transdisciplinary, or multidisciplinary.

Openness towards inference on the grounds of the achievements of scientific disciplines other than hitherto provides an opportunity to increase the ability to use both knowledge and scientific creativity in explaining undoubtedly complex security issues from different perspectives (Rosłoń and Troszczyńska, 2017; El Ghamari, 2017a; El Ghamari, 2017b; Sopóci and Szczepańska-Woszczyna, 2015). It consequently enriches scientific understanding and interpretations of the social phenomena occurring in that area. Disciplines, theories, and paradigms are interpretative frameworks that reflect a particular manner of looking at the world or the dominant specific periods or

societies. Such different perspectives can be complementary when they highlight various dimensions of the same phenomenon or appear contradictory when their fundamental assumptions are opposed (Korporowicz, 2017; Stefanski, 2017; Czaja, 2017).

It is dangerous to lock oneself in one field and discipline of science in the case of a complex problem and research subject with numerous determinants in different disciplines. In such a situation, theory can quickly become an intellectual limiter rather than an instrument for a more comprehensive understanding of security conditions. It should be emphasized that interdisciplinarity in the security sciences is expressed in research subject that is complex and has numerous determinants in many scientific disciplines, the methodology of examining a given subject, the application of various non-cognitive perspectives of cooperating disciplines, and the abilities and skills of a researcher perceiving the influence of other disciplines on the researched topic. Although interdisciplinary research enriches the knowledge about the studied subject, it may lead to its ontological, epistemological, and axiological "blurring" in the case of the forming discipline. On the other hand, if interdisciplinarity and transdisciplinarity as a cognitive paradigm in security sciences are accepted, we begin to strengthen the foundations of the discipline. Nevertheless, there is a risk that such an approach may suggest that security sciences appropriate cognitive areas from other disciplines, which is hardly justified.

The principle of openness has methodological implications. Instead of choosing between quantitative and qualitative methodologies, it should be assumed that the appropriate method depends on the given problem and subject of research. Moreover, methodological monism is unlikely to enrich the understanding of the complex and highly variable social processes in security.

7. Conclusions

Many sciences increasingly broadly contribute to the understanding of the phenomenon of security. The circumstances make security an ambiguous category, which refers to securitization issues that were initially assumed and to human security problems.

Security is understood as a state of consciousness in which a person feels free from threats; it combines the feeling of peace and comfort of life and the tranquil co-existence of a human being with other people and the natural environment (Kwiatkowska, 1999). Freedom from threats does not mean their absence, but only one's ability to organize their life despite their presence. One may argue that it is an accepted level of threats, which does not condition the security subject's functioning. Security is a complex issue in which the state of security and its organization is subject to dynamic change following its natural changes and conditions. Therefore, security does not have a fixed value of its organization level (Jakubczak and Flis, 2006). Hence, the thesis may be put forward that the organization's security level evolves along with the needs and values of the security subject and the objective conditions of its state.

Security is both a state and a process. The state of security defines the situation in which it exists, its dimension, the scale of permanence, and territorial range. On the other hand, the security process is its continuous evolution, transformation, strengthening, and dynamics, where its subjective, objective, and spatial scope is constantly growing. Whereas security means a state of consciousness that one possesses and that influences our perception of the environment. Meanwhile, it is a process of transformation under the influence of civilizational growth to develop a specific security state.

The concept of security is very diverse. That is due to the increasing number of actors participating in it, from individuals to the international community. The idea of security belongs to a category characterized by a wide range of meanings in every classification and context. Understanding the processes and phenomena that influence the formation of security requires its actors' complex knowledge. Hence, it is a process subject to constant transformations of varying dynamics and intensity, constantly changing.

Nowadays, the concept of security is constantly expanding, which causes difficulties in identifying its areas. That is because it is subject to dynamic changes as part of an ongoing human effort to achieve the desired level of security, which evolves in both scope and quality. The evolutions in question are subject to recurrent, intensive developments resulting from natural environmental impacts and conditions (Wiśniewski, 2020).

One can perceive the development of a scientific discipline as its evolutionary progression resulting from the broadening and deepening of knowledge; however, such an approach does not guarantee a "leapfrogging" but stable knowledge growth based on recognized and accepted cognitive assumptions in terms of "normal science" (Kuhn, 2012) and a clarified research subject. Even though the achieved paradigm of the scholarly world's consensus on the scope of the epistemology of security sciences brings about the strengthening of its foundations, it will see and interpret to a small extent what accelerates science through revolutionary discoveries. The paradigm of normal science and revolutionary science do not contradict each other (Kuhn, 2012) as through the development of the discipline in the aspect of normal science, and one comes to know its essence, and doubts arise from the depth of cognition, which may cause an impulse to cross hitherto impassable limits causing revolutionary paradigm shifts. If scientific development consists of overthrowing theories incompatible with reality, then the proponents of normal science and its extreme changes complement each other. That is because the accepted revolutionary changes in science require their clarification, consolidation, expansion, which the advocates of normal science typically do.

However, in the initial period of making extreme changes in paradigms, some ordinary science supporters usually take a sceptical stance until the so-called scientific authorities accept the revolutionary transition or reach such a level that the modification appears obvious. It is a conservative cognitive stance that characterizes every social

group towards processes of change in all spheres of social life. It remains an open question whether the demolition of the standard science paradigm is due to its ignorance or considering its development impossible?

The monodisciplinary, interdisciplinarity, transdisciplinarity, and multidisciplinary research in security sciences is due to the specificity of the research subject. The research subject in security sciences is situated on the borderline of many disciplines. Still, each of them should perceive them in the aspect of its cognitive specificity, ontological, epistemological, and axiological foundations.

References:

- Alderfer, C.P. 1969. An empirical test of a new theory of human needs. *Organizational Behavior and Human Performance*, 4(2).
- Aleksandrowicz, T.R. 2015. Tożsamość nauk o bezpieczeństwie (Security Science Identity). In: Sulowski, S. (Eds.). *Tożsamość nauk o bezpieczeństwie*. Toruń: Wyd. Adam Marszałek.
- Babbie, E. 2015. *Basics of Social Research*. Boston: Cengage.
- Balcerowicz, B. 2015. O tożsamości metodologicznej nauk o bezpieczeństwie (On the methodological identity of security science). In: S. Sulowski. (Eds.). *Tożsamość nauk o bezpieczeństwie*. Toruń: Wyd. Adam Marszałek.
- Baldwin, D. 1994. *The Concept of Security*. *Review of International Studies*.
- Bertalanffy, L. 2015. *General System Theory. Foundations, Development, Applications*. New York: George Braziller.
- Bogdanienko, J. 2018. *Istota i problemy poznania naukowego (The essence and problems of scientific cognition)*. Warszawa: Wydawnictwo CeDeWu.
- Buzan, B. 1984. Peace, Power, and Security: Contending Concepts in the Study of International Relations. *Journal of Peace Research*, 21(2).
- Buzan, B., Little, R. 2000. *International Systems in World History: Remaking the Study of International Relations*. Oxford: Oxford University Press.
- Ciutã, F. 2009. Security and the Problem of Context: A Hermeneutical Critique of Securitization Theory. *Review of International Studies*, 35(2).
- Czaja, J. 2017. Kultura jako czynnik bezpieczeństwa i przedmiot badań studiów w naukach o bezpieczeństwie (Culture as a security factor and the subject of studies in security sciences). In: Kośmider, T., Kitler, W. (Eds.). *Granice tożsamości nauk o bezpieczeństwie. Perspektywa materialna i formalna*. Warszawa: Wyd. Difin.
- Czaputowicz, J. 2003. Kryteria bezpieczeństwa międzynarodowego – aspekty teoretyczne (Criteria of international security - theoretical aspects). In: Dębski, S., Górska-Winter, B. (Eds.). *Kryteria bezpieczeństwa międzynarodowego państwa*. Warszawa: PISM.
- Czaputowicz, J. 2014. Studia europejskie między interdyscyplinarnością a spójnością dyscyplinarną (European studies between interdisciplinarity and disciplinary consistency). In: Czaputowicz, J. (Eds.). *Studia europejskie. Wyzwania interdyscyplinarności*. Warszawa: Wydawnictwo Wydział Dziennikarstwa i Nauk Politycznych Uniwersytetu Warszawskiego.
- Czupryński, A. 2021. Peace and armed conflicts studies. *Journal of security and sustainability*, 11.

- Czupryński, A. 2014. Bezpieczeństwo w ujęciu aksjologicznym (Security in axiological terms). In: Zboina, J. (Eds.). *Bezpieczeństwo na lądzie, morzu i w powietrzu w XXI wieku*. Józefów: Wyd. CNBOP-PIB.
- Czupryński, A. 2015. Aksjologiczne aspekty bezpieczeństwa (Axiological aspects of security). *Europejski Przegląd Prawa i Stosunków Międzynarodowych*, 4(35).
- Czupryński, A. 2020a. Internal Crisis as A Security Challenge for A Nation State. *IBIMA*, 36.
- Czupryński, A. 2020b. The Essence of Security Sciences. *Scientific papers of the Main School of Fire Service*, 73(1).
- Czupryński, A., Wiśniewski, B., Zboina, J. (Eds.). 2015. *Bezpieczeństwo. Teoria - Badania - Praktyka (Security. Theory - Research - Practice)*. Józefów: Wyd. NBOP-PIB.
- Czupryński, A., Wiśniewski, B., Zboina, J. (Eds.). 2017. *Nauki o bezpieczeństwie. Wybrane problemy (Security Sciences. Selected problems)*. Józefów: Wyd. NBOP-PIB.
- Dacko-Pikiewicz, Z., Walancik, M. 2016. The economic or social dimension of lifelong learning. *Forum Scientiae Oeconomia*, 4(2).
- Denzin, N.K., Lincoln, Y.S. (Eds.). 2005. *The Sage handbook of qualitative research*, 1. London: Sage Publications.
- El Ghamari, M. 2017a. Culture security issue. *Economic and Regional Studies*, 10(4).
- El Ghamari, M. 2017b. Interdyscyplinarność w badaniach bezpieczeństwa kulturowego (Interdisciplinarity in research on cultural security). In: Czupryński, A., Wiśniewski, B., Zboina, J. (Eds.). *Nauki o bezpieczeństwie. Wybrane problemy*. Józefów: Wydawnictwo CNBOP PIB.
- Ferguson, N. 2012. *Civilization: West and the Rest*. New York: Penguin Books.
- Feyerabend, P.K. 2010. *Against Method*. London: Verso Books.
- Flick, U. 2007. *Designing Qualitative Research*. London: SAGE. Retrieved from: <https://psycnet.apa.org/doi/10.4135/9781849208826>.
- Gallie Walter, B. 1956. Essentially Contested Concepts. *Proceedings of the Aristotelian Society*, 56(1). *Social and Political Philosophy*.
- Gierszewski, J., Pieczywok, A. 2020. *Metodologiczne podstawy badań problemów bezpieczeństwa (Methodological basis of research on security problems)*. Warszawa: Difin.
- Hys, K., Hawrysz, L. 2014. System – interdyscyplinary understanding, *Organization and Management*. *Kwartalnik „Organizacja i Kierowanie”*, Wydawany przez Komitet Nauk Organizacji i Zarządzania Polskiej Akademii Nauk (PAN) oraz Kolegium Zarządzania i Finansów Szkoły Głównej Handlowej w Warszawie, No. 1B(160).
- Jakubczak, R., Flis, J. (Eds.). 2006. *Bezpieczeństwo narodowe Polski w XXI wieku (National security of Poland in the 21st century)*. Warszawa: Bellona.
- Korporowicz, L. 2017. Społeczeństwo. Naród. Państwo. Granice redukcji socjologicznej w interdyscyplinarnym modelu nauk o bezpieczeństwie (Society. Nation. State. Limits of sociological reduction in the interdisciplinary model of security sciences). In: Kośmider, T., Kitler, W. (Eds.). *Granice tożsamości nauk o bezpieczeństwie. Perspektywa materialna i formalna*. Warszawa: Wyd. Difin, Warszawa.
- Kośmider, T., Kitler, W. (Eds.). 2017. *Granice tożsamości nauk o bezpieczeństwie. Perspektywa materialna i formalna (Identity limits of security science. Material and formal perspective)*. Warszawa: Wyd. Difin.
- Koziej, S. 2006. *Między piekłem a rajem. Szare bezpieczeństwo na progu XXI wieku (Between hell and paradise. Gray security at the threshold of the 21st century)*. Toruń: Wydawnictwo Adam Marszałek.

- Kuhn, T.S. 2012. *The Structure of Scientific Revolutions*. Chicago: The University of Chicago Press.
- Kukułka, J. 1882. *Międzynarodowe stosunki polityczne (International political relations)*. Warszawa: PWN.
- Kwiatkowska, B. 1999. *Problemy bezpieczeństwa w samorządowej kampanii wyborczej (Security issues in the local government election campaign)*. ZN SGSP, 22.
- Luhmann, N. 1984. *Soziale Systeme: Grundriss einer allgemeinen Theorie*. Frankfurt: Suhrkamp.
- Maslow, A.H. 1970. *Motivation and Personality*. New York: Harper & Row Publishers.
- McClelland, D., Burnham, D. 1977. *Power is the Great Motivator*. Harvard Business Review.
- Parsons, T. 2008. *The Social System*. New York: Free Press.
- Peräkylä, A. 2005. *Analyzing Talk and Text*. In: Denzin, N.K., Lincoln, Y.S. (Eds.). *The Sage handbook of qualitative research, 2*. London: Sage Publications.
- Piwowarski, J., Gierszewski, J. 2018. *W poszukiwaniu tożsamości nauk o bezpieczeństwie (In Search of Security Science Identity)*. Warszawa: Wyd. Difin.
- Popper, K.R. 2002. *Open Society and its Enemies, 2*. Oxford: Taylor & Francis Ltd.
- Rosłoń, P., Troszczyńska, L. 2017. *Transdyscyplinarność badań w naukach o bezpieczeństwie i obronności (Transdisciplinary research in security and defense sciences)*. In: Czupryński, A., Wiśniewski, B., Zboina, J. (Eds.). *Nauki o bezpieczeństwie. Wybrane problemy*. Józefów: Wydawnictwo CNBOP PIB.
- Silverman, D. 2001. *Interpreting Qualitative Data*. London: SAGE Publications Ltd.
- Silverman, D. 2005. *Doing Qualitative Research*. London: SAGE Publications Ltd.
- Sopóci, M., Szczepańska-Woszczyzna, K. 2015. *Security policy and economic priority of the Slovak Republic*. *Review of the Air Force Academy*, 1(28).
- Stańczyk, J. 1996. *Współczesne pojmowanie bezpieczeństwa (Contemporary understanding of security)*. Warszawa: ISP PAN.
- Stasik, A., Gendźwiłł, A. 2012. *Projektowanie badania jakościowego (Designing a qualitative study)*. In: Jemielniak, D. (Ed.). *Badania jakościowe. Podejścia i teorie*. Tom 1. Warszawa: Wydawnictwo Naukowe PWN.
- Stefanowicz, J. 1984. *Bezpieczeństwo współczesnych państw (Security of modern countries)*. Warszawa: PAX.
- Stefański, M. 2017. *Związki nauk o bezpieczeństwie z socjologią (Relationships of security science with sociology)*. In: Kośmider, T., Kitler, W. (Eds.). *Granice tożsamości nauk o bezpieczeństwie. Perspektywa materialna i formalna*. Warszawa: Wyd. Difin, Warszawa.
- Sulowski, S. 2015. *O rozwoju badań i postulacie interdyscyplinarności w naukach o bezpieczeństwie (On the development of research and the postulate of interdisciplinarity in security sciences)*. In: Sulowski, S. (Eds.). *Tożsamość nauk o bezpieczeństwie*. Toruń: Wyd. Adam Marszałek.
- Sulowski, S. (Eds.). 2015. *Tożsamość nauk o bezpieczeństwie (Security Science Identity)*. Toruń: Wyd. Adam Marszałek.
- Waeber, O. 1995. *Securitization and Desecuritization*. In: Lipschutz, D.R. (Ed.). *On Security*. New York: Columbia University Press.
- Wiśniewski, B. 2020. *Praktyczne aspekty badań bezpieczeństwa (Practical aspects of security research)*. Warszawa: Difin.
- Wiśniewski, B., Prońko, J., Lubiewski, P. (Eds.). 2018. *Instytucje publiczne i prywatne w systemie zarządzania kryzysowego (Public and private institutions in the crisis management system)*. Warszawa: Szkoła Główna Służby Pożarniczej.

-
- Woleński, J. 2007. *Epistemologia (Epistemology)*. Warszawa: Wydawnictwo Naukowe PWN.
- Zawadzki, P.W. 2009. *Bezpieczeństwo społeczne (Social security)*. In: Wojtaszczyk, K.A., Madera-Sosnowska, A. (Eds.). *Bezpieczeństwo państwa (State security)*. Warszawa: Oficyna Wydawnicza ASPRA-JR.
- Ziarko, J. 2015. *Wieloparadigmatyczność nauk o bezpieczeństwie w kontekście wybranych założeń teorii społecznych (The multi-paradigm nature of security sciences in the context of selected assumptions of social theories)*. In: Sulowski, S. (Ed.). *Tożsamość nauk o bezpieczeństwie*. Toruń: Wyd. Adam Marszałek.
- Zięba, R. 2007. *Instytucjonalizacja bezpieczeństwa europejskiego (Institutionalization of European security)*. Warszawa: Wydawnictwo Scholar.
- Zięba, R. 1989. *Pojęcie i istota bezpieczeństwa państwa w stosunkach międzynarodowych (The concept and essence of state security in international relations)*. *Sprawy Międzynarodowe*, nr 10.
- Żukowska, K. 2015. *Interdyscyplinarność a tożsamość metodologiczna nauk o bezpieczeństwie (Interdisciplinarity and methodological identity of security sciences)*. In: Sulowski, S. (Eds.). *Tożsamość nauk o bezpieczeństwie*. Toruń: Wyd. Adam Marszałek.