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The Empirical Dimension of the Identity of Security Sciences

Abstract

The effectiveness of any scientific research depends on the correct preparation of the research project. This cannot be done without the practical capability of applying scientific methodology. In the research process, the way of defining certain facts or the operationalization of concepts is of great importance. A key issue is the accuracy and reliability of research, as well as the construction of a theory based on an axiomatically structured layout of empirically verified theorems.

The article is an important voice in a broader discussion of identity building in security science. The author is convinced that the empirical dimension of the identity of security sciences will find its application in the research procedure, as well as in the implementation of qualification work in this area.

Keywords: security, research, security science, security theory, identity

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Empiryczny wymiar tożsamości nauk o bezpieczeństwie

Abstrakt

Efektywność wszelkich badań naukowych uwarunkowana jest prawidłowym przygotowaniem projektu badawczego. Nie da się tego zrobić bez praktycznych umiejętności stosowania naukowej metodologii. W procesie badawczym duże znaczenie ma sposób definiowania określonych faktów czy też operacyjnalizacja pojęć. Istotną sprawą jest kwestia trafności i rzetelności badań, jak również budowy teorii opartej na aksjomatycznie ustrukturyowanym układzie twierdzeń weryfikowanych empirycznie.

Artykuł jest ważnym głosem w szerszej dyskusji dotyczącej budowania tożsamości nauk o bezpieczeństwie. Autor jest przekonany, że empiryczny wymiar tożsamości nauk o bezpieczeństwie znajdzie swe zastosowanie w procedurze prowadzonych badań, a także w realizacji prac kwalifikacyjnych z tego obszaru.

Słowa kluczowe: bezpieczeństwo, badania naukowe, nauki o bezpieczeństwie, teoria bezpieczeństwa, tożsamość

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Емпіричний вимір наук про безпеку

Анотація

Ефективність усіх наукових досліджень залежить від правильної підготовки до слідницького проекту. Це неможливо зробити без практичних навичок застосування наукової методології. Спосіб визначення певних фактів або операціоналізація понять має велике значення в процесі дослідження. Важливим питанням є питання точності та надійності досліджень, а також побудова теорії, заснованої на аксіоматично заснованій системі емпірично перевірених тверджень.

Стаття є важливим голосом у ширшій дискусії щодо побудови ідентичності науці про безпеку. Автор переконаний, що емпіричний вимір ідентичності наук про безпеку знайде застосування в процедурі дослідження, а також у здійсненні кваліфікаційної роботи в цій галузі.

Ключові слова: безпека, дослідження, наука про безпеку, теорія безпеки, ідентичність

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Introduction

Security is a very broad concept, which is fundamentally analysed from many aspects. Studies on security provide a very important contribution to the development of many sciences, and in particular social sciences. Yet they require the definition of their own

identity and methodological unambiguousness. Security sciences continue to shape their own study methodology, and their object is embedded in diverse scientific disciplines and specialisations. Due to the magnitude of factors that determine security and the multifaceted nature of this phenomenon the subject of research is studied with the use of diverse methods, which quite frequently originate from other scientific disciplines.

Similarly as security, also identity is a highly diversified concept. Questions as to identity have been accompanying humans for a long time now [1, p. 5]. And just as beforehand the definition of oneself, one's own place was a reflection of the social reality of that time, thanks to which it was not problematic and did not turn up too often. On the one hand identity is perceived as a state, particularly when it is considered to be "something" that can be in possession of an individual or of a group and that assures cohesion, but also differentiation from others. Yet quite more frequently identity is analysed as a process – with emphasis on the way in which it is created and allowing for its variable nature. As an effect the definitions of identity contain on the one hand a description of structural elements, i.e. the character and its contents, values and their dimension and relations, as well as a description of the dominating processes in which the individual takes part. It should be borne in mind that identity in security sciences may comprise numerous elements, locations and symbols, along with the inherent semantics, theory, language, subject of research etc. Besides each scientific field and discipline claims the right to a specific expression of dissimilar nature, either in the research area and the associated problems or in the object of research, research methods etc. It also has at its disposal given methodological achievements along with a base of facts and theories that together form a certain base of knowledge resources, fully or partly acceptable by particular researchers handling these issues.

Consequently the empirical dimension of the identity of security sciences should on the one hand be connected with exploration, description, clarification of complex problems of the given field of research, and on the other hand it should form its own individual way of methodological conduct in relation to other scientific disciplines.

It should be borne in mind that the effectiveness of all kinds of scientific research requires appropriate preparation of the research project. This cannot be done without practical abilities in the application of the methodology. Clearly the pertinent response to the question: what should be studied in the scope of security and in what way – is considered to be the most difficult part in the work of a researcher, most likely due to the fact that it constitutes the biggest difficulty for all persons specialised in this field of studies. When defining the empirical dimension of the identity of security sciences,

concurrently attention should be paid to such important elements in the methodology of research procedure, as: subject and object of research, cognitive and utilitarian objectives, research problems and hypotheses or research methods.

To be able to perceive and correctly appraise difficulties that occur in the empirical issues of the identity of security sciences, in the first place attention should be drawn to the ambiguous nature of the term of security as such. The concept that may be found in available sources contains no unequivocal solutions that would allow precise definition of elements that qualify the concept of security to the subject of research related to security science [2, pp. 13–30].

First of all one should relate to the name of security in the semantic aspect, which in literature sources is treated in a polysemantic way, which means it has a lot of different meanings. Such an ambiguity arises from the fact that it is being defined via various routes and offroads, which appear to lead to expressing or communicating its essence or its numerous manifestations [3, p. 52]. Those routes and offroads are related on the one hand with real and etymological perceiving of security, and on the other hand with its conventional and in such a case often polysemantic defining, but also natural and essential determination – which appears to be a route leading to its essence. This relation points to two types of analysed names, which have been already generally distinguished by Plato and Aristotle, and namely: conventional and natural. The first one, in relation to the name of security, appears to be offroads of rather conventional inaccuracy, while the latter one is a route of considerably natural accuracy. Hence conclusions indicating on the one hand inaccurate and conventional definitions of security fixed on those offroads, which in most cases point to the lack of hazards – and on the other hand correct and natural ones pointing to care, control and attention. The latter have etymological and semantic fixation in the archaic name found in the Polish language, namely: *przezpieczenie* and *przezpieczny* [4, p. 437]. Also embedding the meaning of the name security in the Latin *securitas* (*se* – himself, *cura* – care) means every self-determination, supervision and control, and care. Hence, the recommendation for such a natural and accurate definition of the name of safety, which proclaims that it is such a state of affairs, whose specificity is its concern, control and care as well as caring for existence, life and their prolongation. Contrary to this natural definition, conventional security definitions identify this complex name with the lack of risk, although it may, with certainty, such as certainty or reliability or stability, not always be true [5, p. 11].

The natural and epistemological meaning of the concept of security may be defined in different ways and those possibilities are used in the relevant literature sources.

The multitude of those definitions and terms gives rise to the question which one of them is the most real, and which is the most untrue.

In colloquial writing and reading safety is understood in many different ways, i.e. much more conventionally than naturally and much more denotative than connotative by nature [6, p.35]. This is due to the fact that the natural comprehension of safety rules out or reduces its qualitative describing by pointing to numerous manifestations, and consequently also its polysemantic nature, while conventional comprehension is conducive to broadening of the semantic scope of the notion of security by its broadening, furthering and thickening as well as pointing to diverse manifestations (an increasing number) [7, pp. 18–19]. On the other hand, polisemanticity fixed in a conventional-denotative meaning of the name is expressed in its use in diverse contexts, with different definitions and presentations and comprehended differently as well, once in a broader sense and at another time in a narrower one [8, pp. 5–6]; once in the subjective dimension and at another time in the objective dimension [9, pp. 151–152], and even procedural one [10, p. 8]; once with reference to the personal sphere, in other cases to the public sphere [11], or personal and structural one, or perhaps direct and indirect one; one in the context of an important technical category, including of IT nature, and otherwise of useful value and important social need, or the emotional state – feelings or emotions, etc. This diversity interferes with communication relations, in which when the notion of security is used, its broad comprehension may be praised, while the recipient comprehends this concept in a narrow way, etc. Such disturbances occur in modern literature, for which the general conviction is that the meaning and definition of notions is statutory.

In an initial conclusion it may be assumed that in the most general meaning security – in social and humanist sciences – comprises satisfaction of such needs, as: existing, persistence, wholeness, identity, independence, serenity, possession and certainty of development and infallibility.

Joseph S. Nye [12] distinguishes two possible meanings of the concept of security, and namely a negative and a positive one. In the first approach – the negative one – security is considered (conventionally) as lack of threats, i.e. absence of adverse phenomena. This approach focuses on analysing the operation of an entity, the objective of which is protection and defence from hazards [13, p. 71] for important internal values, i.e. from adverse phenomena. The second approach is broader and considered a positive one. It embeds the analysed concept on the object that is without care, meaning free, independent and creative and active or uncontrolled. In other words, the first

approach defines security as an opposite of hazard, while the second one analyses the creative activity of a subject that is free, unconstrained and uncontrolled, and in addition not comprised by care [14, p. 9].

On the other hand, Józef Kukułka has distinguished three dimensions of security: subjective, objective and procedural [15, p. 30].

In the interpretation of Ryszard Zięba, in the subjective dimension security denotes the security of existence and persistence of the given subject, the objective dimension means certainty of the state of possession of the subject and its development freedoms, and the procedural one – variability in time of subjective and objective aspects of security [15, p. 30].

On the other hand, in language dictionaries the notion of “security” is to a bigger extent defined in a conventional way (among others state of lack of hazard, mental or legal state, serenity, certainty, trust, reliance, subjective feeling or sensation of being safe, subjective, not threatened, free and not supervised and not controlled) [16, p. 147; p. 50; p. 84; pp. 144–155].

The above presumptions may be synthetically considered as three types of definitions of safety – either lack of threats or the state of certainty, tranquillity, and freedom of any concerns or as freedom from care, from control and from oversight.

To conclude a presumption may be made that the notion, word and concept or expression of security do not belong to strict and accurate ones, and the scope of meaning assigned to security keeps growing, as observed rightly among others by Jerzy Stańczyk who discusses seven basic ways of defining security in literature dedicated to it, and namely: anatomical, horizontal, contextual, vertical, paradigm, typological and alternative [17, p. 15; pp. 85–95].

In the real understanding and frequently also in the meaning used in dictionaries, the name security diverges from the word-formative and etymological meaning. Etymologically the adjective *bezpieczny* (secure) originates from the prepositional phrase *bez pieczy* (*deprived of care*) and tended to mean simply “without caring, without anxiety, free of concerns”. This dissonance and error in etymological and translational argumentation (from Latin) clearly places the meaning of the notion of security on offroads. Such offroads are rather common in literature and in security research. This error can be avoided by assuming the correct argumentation pathway taking into account the evolution of the prefix “bez”, which initially in archaic Polish was “przez” [5, p. 25–26].

To conclude the above semantic analysis of the name of security, it should be emphasised that in its etymology and understanding there are at least two trends in existence, one more conventional and the other more natural [18, p.14]. From the

viewpoint of teachings, for example of Plato, the first one appears to have an incorrect nature, while the second one is more pertinent, and in addition the essence connected with the natural meaning and the quality of things with conventional meaning (...) "are two completely different things" [19, pp. 53–54]. This is due to the fact that the natural meaning of the notion of security is connected with each type of care and the initial notion of *przezpieczęstwo* (*archaic Polish word for security*), setting out the correct pathway in its comprehension, while the conventional one is even directly associated with denial of the meaning that was etymological beforehand, and namely the lack of care. While security in the sense of each type of care and control indicates the essence of the concept, as lack and absence of care suggests at least some misguided manifestation of such essence [5, p. 34].

It should be pointed out that the term of security is traditionally applied to define services and institutions of importance for the existence (persistence, development and advancement) of states, and namely security services or national security councils or security agencies etc. Those services and institutions in the first place handle structural security, the core of which seems to be based on control and caring for the citizens or members of the social community. Such control and care should be conducive to lasting, persistence and development as well as improvement of the state or society or the nation.

To sum up this approach to the notion of security which is interesting from the viewpoint of semantic, etymological or conventional and natural approach, it may be and must be perceived as a process of intensification or stabilisation of negentropy, order and its enhancing. The assumption of this particular approach is passing from entropy (chaos) to negentropy (order) and rationalisation of existence, while hazards should be related with the opposite process, intensification of entropy, chaos and loss of control [20]. Consequently from the philosophical viewpoint it is justifiable to perceive security as the state of affairs or form of existence that are controlled and comprised by care by all kinds of entities (ranging from a human being, a state up to international communities). One may agree with Aristotle that such control and care (*przezpieczęstwo*) are implemented by striving at achieving useful peace and the required war and work. This arises from the presumably justified view that by fighting (struggling) people control their life, care for survival and for its enhancing and rationalisation [20].

The objective of the paper is an attempt at outlining the empirical dimension of the identity of security sciences in the context of methodological structure along with the most important concepts and areas of research.

The research problem formulated by the author is: *which principal areas and notions exhaust the empirical identity of security science?*

1. Contextual nature of concepts in security science

When defining the empirical dimension of the identity of security sciences, attention should be drawn not only to those designations that are directly connected with research, but also to concepts that form the dimension of those sciences. It is the theory of security and the scientific language adopted by that theory that are reflected in the research reality. It should be emphasised that a set of theoretical theorems always has empirical references. And even more than that – it is characterised by empirical confirmation. This implies that each theorem is verifiable. On the other hand, the scientific language strengthens the suggestive perceiving of conducted research, but in the first place facilitates comprehension of obtained data, comparing them, drawing conclusions etc. Each science creates its own language, which appears to be difficult, artificial or formal for outsiders. That is why the language used by science, regardless of accuracy and the greatest possible clarity, must also be highly informative. This property is achieved by minimising meanings by way of strict determination (definition) of concepts, using standardised characters (symbols), reducing lack of certainty in the receipt of information (message) and avoiding excess (redundancy) of information, etc., for example caused by paraphrases, repetitions. This type of informational nature of language is achieved in science also by standardising ways of passing on data, among others by applying tables, diagrams, charts and by selecting defined data classes.

The present practice of creating scientific texts in the field of security sciences is a response to a more tolerant approach to science and its relation object-subject in the cognition process, embraces the constructivist approach to reality, i.e. an approach that takes into consideration limitations in man's access to the so-called objective truth concerning reality.

Strictly speaking, the real dimension of identity is made visible in contents of the problem of theory, which in the most general terms applies to the way in which we interpret facts. For a scientific mind all knowledge provides responses to questions. Until there is no question, there may be no scientific knowledge [20, p. 58]. The concept of theory is comprehended in different ways:

1. commonly theory is opposed to practice and in many cases this latter notion has an adverse (pejorative) connotation;
2. in life and in science the concept of theory is opposed to empiricism, i.e. experimental research;
3. theory is a statement based exclusively on mental and cognitive operations, while empiricism are data obtained as a result of experience, observations or experiment;

4. theory is frequently juxtaposed to concrete facts, unit case or specific phenomenon;
5. in some cases theory is understood as contrary to common knowledge, one that is common sense; in this meaning theory also has a negative connotation;
6. at times theory is considered as contrast to proven knowledge; in this case theory is understood as a certain conjecture, likelihood, unverified presumption [21].

In the opinion of Piotr Sztompka theoretical assumptions must be characterised by certain features (properties), such as:

1. determination of relations between phenomena or variables; those are statements concerning mutual dependencies between the analysed objects or phenomena;
2. possibility of replacing a theoretical theorem into a conditional one capable of defining what would happen if specific conditions prevailed;
3. likelihood, i.e. theoretical theorems should be in the form of general sentences, concerning the infinite number of possible cases without the use of any proper names or terms that may not be defined without the application of proper names;
4. high level of generality that comprises a broad meaning scope of the analysed objects or phenomena;
5. comprising theoretical terms, i.e. in the first place generalising notions [22, p. 32].

In science as such the concept of theory comprises rather frequently defined set of theoretical theorems that needs some kind of structuring; such systemisation needs to comprise mutually interrelated theorems. In other words, theory is a set (collection) or a system of scientific theorems relevant for the given scientific discipline. The effective solving of contemporary problems appears to be impossible without being open to complex interpretation of processes that pertain to global issues [22].

Some scientists such as Roman Wójcicki are convinced that basic elements of each empirical theory comprise: language of the theory, set of theorems (sentences) adopted and considered as rights for the given theory; all evidence used for the given theory to justify particular theorems; measuring and diagnostic procedures relevant for the given theory; range of the theory, i.e. the set of all empirical data that are described by the given theory [23, p. 20]. In the opinion of Thomas Kuhn a scientific theory should have certain specific traits (features): accuracy, i.e. its statements should be consistent with known results of experience with respect to quantity and quality; a cohesion not merely of an internal nature, but also with other ones that have already been adopted by science; broad scope comprising a lot of cases or phenomena, and not single cases or phenomena; simplicity, i.e. it should bring order to the studied phenomena, without which they would not be comprehensible; fruitfulness, i.e. it should bring about new discoveries [24, p. 442].

It should be borne in mind that the theory of security and the scientific language of this theory are concepts that inherently form another term, and namely the theoretical and methodological structure. An important condition for the practical success of science is the ability of “extracting” theorems from their context, their dislocation. Thanks to such abilities the research material is subject to diverse manipulations, without which no practical success would be feasible. The success of science and of research technology is based on building the environment of security, in which both artefacts and discoveries may function jointly.

The empirical dimension of the identity of security sciences in the conceptual aspect requires additional attention to other offroads, i.e. important factors of scientific cognition pertaining to the field of security sciences. Many of them may be found in the field of methodological basis of studies of security-related issues. One of the more important ones is the core of science and scientific research.

Science, similarly as scientific research, comprises many possible meanings. As a knowledge system, science assures objective familiarisation of reality. On the other hand, scientific research comprises a set of cognitive measures, activities and measures of people handling science, which allow the detection of truths concerning the objective reality based on scientific methods, as well as their substantiation and anticipation in the form of concepts, theorems and scientific theories [25, p. 14].

Science is a type of activity associated with man that implies knowledge or a set of views. However, it may also mean a compilation of different scientific disciplines, such as for example mathematics, chemistry, physics, geography, history etc., each one of which handles a specific object of research. Literature sources present knowledge through a lot of different aspects. They include among others methodological, axiological, ideological, political, legal, economic, historical, geographical, statistical, systemic, dynamic, structural and system aspects [26, p. 19].

Science is subject to diverse criteria of divisions and classifications. From the methodological viewpoint empirical and theoretical sciences may be distinguished. Empirical sciences study a given fragment of reality, while theoretical sciences study the “abstract world” defined by those sciences. Empirical sciences are the so-called real sciences, while theoretical sciences are formal sciences. Empirical sciences are dominated by the inductive methodology, while theoretical ones – by the deductive one. For this reason empirical sciences are inductive sciences, while theoretical sciences constitute deductive sciences.

Scientific research may be conducted in the broad and narrow aspect. In the broad approach studies constitute a stage-based process of activities that studies from making a decision on solving the given research problem up to its scientific processing. This is the process of scientific work, which also comprises activities oriented at seeking and substantiating the axiom in the scope of research problem being solved. In this approach research has the form of preparatory procedures, and then executory ones. The first of those activities consist in compilation of scientific material, adopting appropriate methods or development of new methods for needs of research. On the other hand, executory activities comprise the processing of scientific materials with the use of selected research methods including their presentation.

Worthy of attention in an analysis of the concept of research is the supposition of Ryszard Wróblewski who argues that each research comprises activity that consists of forming problems and their solving with the use of a scientific method, and concurrently the research procedure in security sciences in the general concept, comprises the following levels of formulation of operating objectives (induction): adoption of anticipations (deduction); observation-based or experimental verification of theory by comparison of expectations with the reality [27, pp. 140–141].

The above approach draws attention to a few important elements that occur in a scientific discipline, which are clearly constituted by security sciences, especially in the dimension of empirical identity. Worthy of distinguishing in this respect are research problems, research methods, induction and deduction.

The concept of scientific discipline is a further vital designation in the field of security sciences. Quite frequently it denotes a specifically defined sphere of knowledge, which is lectured in universities and practiced within the activity of faculties at various universities or research and scientific institutes. Leszek Krzyżanowski was of the opinion that the scientific discipline is a “part of science of social importance, established and distinguished from the viewpoint of the object and objective of research or education in the institutional meaning, considered as a basic unit of its classification” [28, p. 44].

The concept of scientific discipline also pertains to a specific segment of certain knowledge comprised by the given field and area. And hence the discipline of security sciences is a part of the field and area of social sciences. It constitutes a theoretically and practically organised research activity with historical considerations, which is adopted to obtain methodically verified information as effects of studies that have social and practical importance [29, p. 96].

Criteria that set out the defined discipline comprise among others: language of cognition, method of cognition, researchers with specific skills, institutions that conduct given research and the history of the creation and evolution of the discipline. In the opinion of Stanisław Sulowski the adopted criteria are not unequivocal, but they do function, because to some extent they enable the determination of limits of the given discipline. Given the determination of the name in plural – security sciences – a thesis is posed that they are of an interdisciplinary nature [30, pp. 33–35].

The discourse on criteria that define the discipline of security sciences also comes down to the determination of its ontological and epistemological identity. If we assume that the object of cognition of security sciences is considered as a social reality, then on the one hand it may be identified in the constructs of social life of man and relations between participants of social life, and on the other hand we are aware of the fact that the object of research as objective reality does not exist, because it is a product of civilizational and cultural relations and subjective observations. We create a social reality not in a natural way, but much more one that arises from preferences of interests, convictions and preferences in the creation of social relations. Objective reality does not exist, and consequently the objective of research has a subjective nature depending on the object being perceived [31, pp. 13–14].

A further important designate in the empirical dimension of identity of security sciences is the concept of the object and subject of research.

It is considered that the subject of research is the social reality of the given field or discipline, while the object of research comprises features of objects, properties and dependencies that exist between them.

The objective of research in security sciences does not exist in nature, but from the viewpoint of social sciences we perceive its theoretical reflection in concepts, systems, relations, institutions and social behaviour. Hence despite the absence of physical features it does exist, because it is perceived by mind and by senses [32, pp. 35–37]. This implies that security sciences are a reflection of values, aspirations and social needs, because their objective is to provide knowledge to be able to clarify, comprehend, assess and anticipate processes connected with security of given subjects [32, p. 29]. They affect its level, and in such a way contribute to improving the quality of life in an unstable security environment [33, p. 47].

Studies of security-related issues require adopting a systemic perceiving of the subject and object of research, because the object of security is functioning in the world of systems [34, pp. 9–12]. In the universal understanding, the object of research

is determined by subjects of processes we are studying. From the formal viewpoint the above mentioned discipline has subjects and objects of studies, because security has been and still remains the superior value of people [35, p. 19].

In a certain simplification one may also assume that an empirical designate of the identity of security sciences is constituted by objectives of scientific cognition. Their core comprises describing, clarifying and anticipation of facts, processes and phenomena connected directly with security. This is a system of justified theorems and hypotheses reflecting the objective image of the area of social reality related with security achieved thanks to scientific cognition and recommendations for its transformation to an acceptable level.

Each science, including also security sciences, should have its own methodology. It is even more indispensable to newly created sciences, which are still in the phase of achievements. This arises from the fact that it served for the creation of the language specific to the given science (concepts, definitions, hypotheses, theorems), building scientific theories and determination of the scope (i.e. the object) of studies, as well as seeking more effective methods of their execution. Those studies should not only be used in the process of building of the above mentioned theories, but should also contribute to solving actual problems that are characteristic for the given science. The above theories should remain strictly correlated with general trends in science, particularly in the field of general methodology, so that they consequently can be used in the development of the given science, and particularly those that seek their identity, and these certainly include security sciences. As a result an issue of primary importance for the methodology of those sciences should be to find the substantiation for their scientific nature [36, p. 567].

Deliberations concerning the identity of sciences and their related aspects give rise to several issues and problems that are comprised by them, and which concern among others heritage, tradition, ethnical and cultural diversity etc. They all constitute vital points in reflections and require attention not only on the scientific or research level, but also on one that applies to everyday life. Identity has contemporarily become one of the most frequently and commonly cited values, and its advocates comprise both proponents of individualisation, and proponents of bigger subordination of members to communities.

Identity (or rather certain autonomy and independence) in the empirical sphere of security sciences comprises many other notions, which are characterised by certain individuality and constitute an important point of relation to the empirical area. The history of the development of science as such indicates that new scientific disciplines were in general formed on the border lines of other disciplines. Issues of security have

been to date the object of cognition of many disciplines, such as for example political science, sociology, philosophy or military sciences. Owing to their relatively recent distinguishing security sciences may be characterised by the least evident scientific identity from among scientific sciences [37, pp. 93–94].

2. Thoughts over the complexity of studies in sciences on security

Similarly as other social and humanistic sciences, security sciences are also an effect of research and without such research their further development would be impossible. Similarly as any science, they should be exercised according to methodological recommendations and directives, and those in turn depend to a large extent on the type of science. According to findings of the general methodology, security sciences belong to the group of empirical sciences. Those sciences handle fragments of the real world, study not only institutions, phenomena (e.g. armed conflicts), objects and events that are observable (such as behaviour of people) comprised by it, but also facts inaccessible in direct observations (such as motives of conduct). They handle not only individual facts, but also general ones, i.e. regularities [38, p. 362].

Deliberations over the complexity of research in security sciences may well be started from the methodology. As regards the formation of a framework of a new discipline or fixing of its identity it seems that it is the most important field of empirical identity of security sciences. It is a certain kind of scientific reflection concerning the cognitive basis of the discipline. It comprises fundamental framework of epistemology as the core and value of scientific cognition. In its scientific activity the methodology comprises not only ways of preparing and conducting scientific research pertaining to problems related to security, but also the processing of their results, establishing scientific procedures that allow the presentation of already used and postulated principles of the given research procedure. The objective of the research methodology is developing increasingly better ways of measurement/study of phenomena and enhancing the present ones. The better the research method, the more reliable results may be expected. The key for reliable measurement of an interesting phenomenon is the selection of the appropriate research method (measurement technique). Apart from research methods and techniques there is a lot of other elements considered to be of a considerable cognitive importance in the methodology of security sciences. They include among others the object and objectives of studies, research problems and hypotheses, variables and research indices, activities connected with the organisation and course of research (among others appropriate

selection of the research trial), as well as activities pertaining to the processing and deployment of results of research.

From the viewpoint of science methodology it is important that social sciences, including also security sciences, have a lot of common features with all the remaining sciences. For this reason when defining the identity of research in security sciences, certain comparability may be observed, and at times an identical nature of the elements and phases (activities) of research procedures. The differences may appear in the dimension of executed explorations, object, goals, as well as formulated research problems of obtained research results.

It should be pointed out that several issues related to security are situated in all fields of life of the security object, hence it is justifiable to take into account the broad aspect of adopted research methods, techniques and tools for needs of familiarisation, assessment, forecasting and planning of security.

An activity of key importance in research of security is defining and analysis of the so-called security dimension. Elements of this dimension are as follows:

1. Possible and likely hazards;
2. Likelihood of occurrence of those hazards;
3. Anticipated adverse consequences of the hazards (in the global and local scale);
4. Possibilities of preventing hazards or elimination of their consequences;
5. Strategies of hazard prevention (their consequences consisting of crises and conflicts) [39, p. 320].

Elements of this dimension comprise among others hazards for the security system, which are generated by system environment (functioning environment) of the subject, familiarisation with this environment and its analysis is of basic importance for needs of determination (evaluation) of the state of security of the subject both in the static and dynamic approach.

The security environment forms a diversified and complex over-system of mutual relations (political, economic, social, technical/technological ones etc.) taking place between individual state and non-state actors. Those subjects are operating according to their own interests and exert a significant impact on the intensification or reduction of opportunities and hazards on global, regional and local levels. Multilateral relations taking place between the above mentioned actors have a significant impact on the closer and farther environment [39, p. 320].

First of all a basic presumption may be made that the environment of security is characterised by a certain level of order that is measurable. Order comprehended as

a harmonious set of given elements [40, pp. 117–132] prevails over chaos and is a condition for the preservation of the global system. This gives rise to the systemic nature of the security environment, which implies the occurrence of numerous functional relations between its elements.

Given the multidimensional nature of research on security, a key element of the methodology of those sciences is the accurate determination of the subject and scope of research. This is of importance as regards attempts at defining the empirical identity of the scientific discipline. Numerous researchers pay a lot of attention to the systemic and organisational aspect of security. For example, Andrzej Glen is of the opinion that research exploration should be oriented at contemporary security systems in the military and non-military dimension and their functioning on various organisational levels [41, p. 83]. A more in-depth conclusion was made by Piotr Sienkiewicz who suggests that security science may be considered a theory and engineering of system security. The author distinguishes two basic research streams: creation of theoretical framework for security of systems (technical and social ones) and planning security systems, including security management systems and risk management (with particular emphasis on crisis situations) [42]. This research proposal was further developed by theorems of Janusz Świniański and Włodzimierz Chojnacki who analyse the issues of security from the viewpoint of science related civilisation and cybernetic and technical knowledge on security and military sciences; the authors associate security with cyber construction of such systems, characterised by infallibility [43]. The presented views have a great cognitive value. They highlight the importance of the system-based consideration of security from different viewpoints.

It seems justifiable to encompass also its subjects by the object of research on “social communities and resources of security”. A subject of security is an individual, social group, nation, nations and all people. Subjects of security are defined in sociological categories, hence the object of research consists of their features in the aspect of their structure, properties, relations, hazards, skills of counteracting hazards and capabilities of creating development and perseverance. Entities understood as social institutions comprise legal organisations and organisations without a legal status, and in addition all civilizational and cultural works of man, as well as anthropological and organisational ones. In those objects we may find the object of research, which consists in perceiving of security by the criterion of object, time, space and source of hazard. The object of research comprises features of objects and their interactions. Objects defined as social processes and phenomena are understood to include diverse ethical and legal standards

that regulate security, as well as presumptions for the functioning of all institutions. It is in such objects that we situate the perceiving of security according to criteria of the process, source of hazards and time [44, p. 168].

When observing practice – the national security system – the researcher notices its loopholes, deficiencies and effectiveness shortages. This leads to his formulating relevant questions, as to why they happen and what are they caused by? This gives rise to a problem situation that requires certain additional particularisation consisting of formulated research problems. Responses to them are sought in the existing operating theories of national security. As an effect research hypotheses or tasks become formulated (research programme) [45, p. 74].

In the process of solving of any problem it is important to discover the principle or rule that regulates the given phenomenon and familiarity of the algorithm for solving tasks of a similar type. One should bear in mind that unwavering following of set rules may turn out to pose a serious obstacle, especially in solving of new problems. One lapses into routine that may turn out to be more of a hindrance than assistance in successful solving of the given problem. Another hindrance may be the so-called functional fixation, in the situation of which one may find it difficult to apply a known item in a new way or application than to now. This indicates that we are unable to make creative use of the knowledge or utilise particular items in a different way than we have been doing to date. Hence when we speak of hypotheses we take into consideration not the scheme of the solution, but the approach as such that depends on the methodological perceiving of the problem [46, p. 173].

As to hypotheses it should be assumed that they are theorems as to which the likelihood exists that they provide relevant answers to a problem formulated beforehand. There is a frequent opinion that there is no scientific research without a hypothesis. This is due to the fact that research consists in the detection and formulation of a problem, proposal of its hypothetical solution and verification of the hypothesis.

It may be supposed that apart from research problems and methods (techniques) a research hypothesis constitutes a rather important element of the methodology on which security sciences are based, and is concurrently contained within the empirical identity. It is a presumption as to which a likelihood exists that a reliable solution of the given problem would take place. For this reason it is recommended that hypotheses be formulated in the affirmative. This indicates that a hypothesis should not be formulated as a negation, evaluation, question or postulate. Undoubtedly its requirement is to determine co-dependencies between an independent and dependent variable.

Hence in the methodology of security sciences there is a need or even a necessity of making use of achievements comprised by methodologies of other social sciences. This applies in particular to general rules for scientific conduct, and also to the application of research methods.

Until now security sciences have not worked out their own methods and analytical tools. Given their broad object it may be presumed that they would make use of methodologies worked out in other ("social") scientific disciplines and that they would adapt them in a creative way to their own specific needs. This is in agreement with the statement made by L. Krzyżanowski who suggests that currently scientific methods and languages easily permeate disciplinary limits [47, p. 180].

The methodology of research in security sciences comprises two basic types of approaches to methods used in a single research process: single and multiple. The single approach takes place when the entire research is conducted based on the specific qualitative or quantitative method. On the other hand, the multiple approach is applicable when various stages of the research process are implemented based on diverse methods, e.g. when in different stages use is being made of such kinds of the quantitative method, as descriptive statistics and regression analysis. The multiple approach may in such a sense be considered to be uniform (all the applied methods are either quantitative or qualitative) or not uniform. An example of a uniform multiple approach may be constituted by research in the case of which for needs of the same research goal use was made of a single phase participatory observation and extensive interviews, and in the second one ethnographic study and a case study. Despite the use of different methods, this approach preserves uniformity of the qualitative research [48, pp. 21–54].

Debates have been going on for years whether there is a single research method common for all empirical studies. It may be assumed that there is no universal method for all research, but given ontological assumptions two methodological orientations are applied that are related with undertaken research – quantitative and qualitative empirical orientation, which have their specific traits. Those approaches require different skills, as well as research algorithms. Hence both orientations are methodologically and substantively justified [49, p. 19].

It should be borne in mind that in quantitative methods numerical parameters are determined (e.g. statistical methods), and on the other hand methods in which numerical parameters are not determined, and instead the analysed phenomenon or study object is outlined in a descriptive way constitute qualitative methods (such as

surveying, experiment, interview, heuristic methods, case study etc.). They are based on the assumption that studies of security-related problems may be better executed with the use of in-depth analysis of a smaller number of cases than simpler analyses of a larger number. Quite frequently they are a preliminary stage for qualitative studies.

The major part of explorative studies in social sciences is based on the quantitative method, while qualitative research is applied a little more seldom, and what is more earlier on they have not been appropriately appreciated. Furthermore, it was considered that quantitative methods form an accurate and exhaustive image of unknown phenomena and processes, as well as anticipation of prospective behaviour of individuals or social groups. Yet on the other hand, given its specific nature, qualitative methods go along with the idiographic approach in the methodology of security sciences, the objective of which is presentation and clarification of individual facts and events to in-depth and exhaustive description of a specific event or process pertaining to the security level in a causal sequence. This thesis may be confirmed by the statement suggesting that also in the methodology of security sciences this situation does appear, and the role of the researcher is always the selection of appropriate methods and techniques under the strategy which are to allow the implementation of analyses in the best possible way.

To sum up a brief outline of elements that form the research methodology in security sciences, a few important stages may be discerned that pertain to the preparation and execution of research. They concern among others the planning and conduction of empirical research, interpretation and generalisation of the obtained results. Consequently it may be assumed that intentional and conscious research activity comprises three stages: initial form of research consisting of identification of the object of research; processing the effects of identification and confrontation of results of research with practice.

One of the last activities in the research procedure is ordering the compiled material and its processing. From the methodological viewpoint this is a process of preparing materials for writing of the given work, and from the logical viewpoint – a process of seeking conceptual relations, formally according to models of reductional (deductional), inductional reasoning or according to all of them. When processing materials, the researcher concurrently carries out its analysis and synthesis, reasons and concludes. He is faced by the necessity of establishing, i.e. stating scientific facts. This is one of the most important tasks of each research work, not only one implemented in security sciences.

Summary

To recapitulate, it should be pointed out that the empirical dimension pertaining to the identity of security sciences is connected with many notions, areas, as well as with given research. Research in security sciences comprises basically an extremely complex and subtle set of activities. Research processes are characterised by certain uniqueness, yet they are subordinated to general rules applicable for the execution of research, which are determinant for their effectiveness.

An attempt at depicting the empirical dimension of identity in security sciences in the context of the methodological structure proves that in this dimension exist numerous concepts, theorems and rules of conduct, as well as fields of activity that affect ultimate products of research activities. The adopted conceptual grid meets the requirement of logical correctness and pragmatic utility. During the analysis also noticed was the ambiguity of the notion of security as such. The approaches that appear in available sources do not contain unequivocal solutions that would allow precise determination of its meaning. Research literature offers various approaches to issues of security, which gives rise to ongoing disputes and discourses concerning its scientific nature, the object and essence of security, and consequently also the selection and effectiveness of research methods.

When defining the meaning of the empirical dimension of the identity of security sciences, attention should be drawn in particular to two basic areas, and namely the security dimension along with its diverse extents and the methodology of security sciences with a few interrelated functional elements and procedures (phases). It appears that in its essence, principles and procedures the research methodology is applied in a similar way. Noticeable differences pertain in the first place to the core of the research object and goal, research problems and hypotheses and the adopted methods. One may find that the most important feature of the research process is its cyclical nature, and that it has no linear nature, but rather a circular one. In most cases it starts with definition of the problem and setting up of a hypothesis, and ends with verification of the hypothesis and clarification of the problem being solved.

In this context of our deliberations it should be emphasised that the object of research in security sciences is of an interdisciplinary and transdisciplinary nature. Consequently describing, clarifying, assessing and anticipation of events (facts), processes and phenomena in the sphere of security requires making use of knowledge from diverse scientific fields and disciplines in a system-based way.

The empirical dimension of the identity of security sciences also comprises clearly formulated directives that regulate the course of research conduct. In most cases these include recommendations establishing methods of conduct in the given type of research and in its specific stage as well as guidelines recommending activities to be executed to make them contribute to implementation of the research objective. In general terms those activities are connected with posing questions and formulation of scientific problems and with seeking responses to those questions. This is possible thanks to the application of diverse scientific methods (techniques), which considerably contribute to data interpretations by verifying earlier available knowledge and with gaining new scientific experience, as well as new knowledge.

References:

- [1] Wiśniewski B., Kowalski R., Kozioł J., Szyłkowska M., *Bezpieczeństwo procesów decyzyjnych*, Wyd. TUM, Wrocław 2018.
- [2] Gierszewski J., *Bezpieczeństwo. O istocie pojęć i paradygmatach w naukach o bezpieczeństwie*, [in:] *Kultura bezpieczeństwa w teorii i praktyce*, J. Gierszewski, M. Kubiak (ed.), Wyd. Adam Marszałek, Toruń 2019.
- [3] Lubiewski P., *Bezpieczeństwo państwa – reminiscencje*, "Zeszyty Naukowe Państwowej Wyższej Szkoły Zawodowej im. Witelona w Legnicy" 2020, No. 34(1).
- [4] Krasnowolski A., Niedzwiedzki, *Słownik staropolski*, Wyd. M. Arcta, Warsaw 1920.
- [5] Świński J., Kawalerski P., *Drogi i bezdroża securitologii*, Wyd. WAT, Warsaw 2019.
- [6] Wiśniewski B., *System bezpieczeństwa państwa. Konteksty teoretyczne i praktyczne*, Wyd. WSPol, Szczytno 2013.
- [7] Świński J., *Barwy w pogłębianiu i poszerzaniu badań nad bezpieczeństwem*, [in:] *Barwy i cienie bezpieczeństwa*, W. Gocalski (ed.), Wyd. WAT, Warsaw 2013.
- [8] Lisiecki M., *Diagnoza i prognoza rozwiązań systemowych w zakresie organizacji i zarządzania bezpieczeństwem obywateli*, [in:] *Zarządzanie bezpieczeństwem – wyzwania XXI wieku*, M. Lisiecki (ed.), Wyd. WSZiP w Warszawie, Warsaw 2008.
- [9] Gołembksi F., *O wieloznacznosci pojęcia bezpieczeństwo*, "Nowoczesne Systemy Zarządzania. Zeszyt WCY IOiZ" 2008, No. 3.
- [10] Zięba R., *O tożsamości nauk o bezpieczeństwie*, "Zeszyty Naukowe AON" 2012, No. 1.
- [11] Skorupka S., *Słownik frazeologiczny języka polskiego*, Wyd. Wiedza Powszechna, Warsaw 1985.

- [12] Nye J.S., Keohane R., *Power and Interdependence: World Politics in Transition*, Brown and Company, Little 1977.
- [13] Lubiewski P., Dróżdż A., *Zagrożenie – rozważania na gruncie teorii*, "Zeszyty Naukowe Państwowej Wyższej Szkoły Zawodowej im. Witelona w Legnicy" 2020, No. 34(1).
- [14] Kaczmarczyk B., Socha R., Szwajca A., *Zarządzanie kryzysowe w systemie bezpieczeństwa publicznego*, Wyd. SA PSP, Kraków 2014.
- [15] Zięba R., *Instytucjonalizacja bezpieczeństwa europejskiego: koncepcje-struktury -funkcjonowanie*, Wyd. Scholar, Warsaw 1999.
- [16] Brzeziński M., *Problem tożsamości bezpieczeństwa w świetle etymologii języka polskiego*, [in:] *Metodyczne i dydaktyczne aspekty bezpieczeństwa narodowego*, W. Kitler, T. Kuśmider (ed.), Wyd. Difin, Warsaw 2015.
- [17] Stańczyk J., *Poszukiwanie reguł definiowania bezpieczeństwa*, [in:] „*Studia Bezpieczeństwa Narodowego. National Security Studies*” 2016, No. 10.
- [18] Stańczyk J., *Formułowanie kategorii pojęciowej bezpieczeństwa*, Wyd. FNCE sp. z o.o., Poznań 2017.
- [19] Wiśniewski B., *Organizacja przygotowań obronnych administracji publicznej*, Wyd. AON, Warsaw 2009.
- [20] Morgenthau H. J., *Polityka między narodami. Walka o potęgę i pokój*. Abbreviated edition, Wyd. Dyfin, Warsaw 2010.
- [21] Świniarski J., Chojnacki W., *Filozofia bezpieczeństwa. Podręcznik akademicki*, Wyd. AON, Warsaw 2004.
- [22] Cackowski Z., *Problemy i pseudoproblemy*, Wyd. Książka i Wiedza, Warsaw 1964.
- [23] Sztompka P., *Teorie i wyjaśnianie*, "Studia Socjologiczne" 1972, No. 1.
- [24] Wójcicki R., *Metodologia nauk empirycznych*, Wyd. Ossolineum, Wrocław 1974.
- [25] Kuhn T., *Dwa bieguny*, Wyd. PIW, Warsaw 1985.
- [26] Wiśniewski E., *Metodyka wojskowych badań naukowych*, Wyd. ASG WP, Warsaw 1983.
- [27] Pokruszyński W., *Teoretyczne aspekty bezpieczeństwa*, Wyd. WSGE, Józefów 2010.
- [28] Wróblewski R., *Wprowadzenie do nauk o bezpieczeństwie*, Wyd. Uniwersytet Przyrodniczo-Humanistyczny [Siedlce University of Natural Sciences and Humanities], Siedlce 2017.
- [29] Krzyżanowski L., *O podstawach kierowania organizacjami*, Wyd. PWN, Warsaw 1994.
- [30] Gierszewski J., *Problemy tożsamości nauk o bezpieczeństwie jako dyscypliny społecznej* [in:] *Granice tożsamości nauk o bezpieczeństwie Perspektywa materialna i formalna*, T. Kośmider, W. Kitler (ed.), Wyd. Difin, Warsaw 2018.

- [31] Sulowski S., *O rozwoju badań i postulacie interdyscyplinarności w naukach o bezpieczeństwie*, [in:] *Tożsamość nauk o bezpieczeństwie*, S. Sulowski (ed.), Wyd. Adam Marszałek, Toruń 2015.
- [32] Czupryński A., *Kryteria dyscypliny naukowej*, [in:] *Nauki o bezpieczeństwie. Wybrane problemy badań*, A. Czupryński, B. Wiśniewski, J. Zboina (ed.), Publishing House of the Scientific and Research Centre for Fire Protection – State Research Institute, Józefów 2017.
- [33] Czupryński A., *Podstawy badań nad bezpieczeństwem*, [in:] *Ochrona przeciwpożarowa a bezpieczeństwo państwa*, J. Zboina, B. Wiśniewski (ed.), Publishing House of the Scientific and Research Centre for Fire Protection – State Research Institute, Józefów 2014.
- [34] Bigo D., *Międzynarodowa socjologia polityczna*, [in:] P.D. Williams (ed.), *Studia bezpieczeństwa*, Wyd. Uniwersytet Jagielloński [Jagiellonian University], Kraków 2012.
- [35] Wiśniewski B., *Description of Security Systems – a Few Reflections*, “Internal Security” 2019, Vol. 11, Issue 1.
- [36] Sztumski J., *Wstęp do metod i technika badań społecznych*, Wyd. “Śląsk”, Katowice 2010.
- [37] Żegnałek K., *Możliwości wykorzystania metodologii nauk społecznych w badaniach nad bezpieczeństwem*, [in:] *Metodologia badań bezpieczeństwa narodowego. Bezpieczeństwo 2010*, P. Sienkiewicz, H. Świeboda (ed.), Wyd. AON [National Defence Academy], Warsaw 2014.
- [38] Gierszewski J., *Problemy tożsamości nauk o bezpieczeństwie w perspektywie subdyscyplin i nauk pomocniczych*, [in:] *W poszukiwaniu tożsamości nauk o bezpieczeństwie*, J. Piwowarski, J. Gierszewski (ed.), Wyd. Dyfin, Warsaw 2018.
- [39] Filozofia a nauka. Zarys encykopedyczny, Z. Cackowski (ed.), Wyd. Zakład Ossolińskich, Wrocław 1987.
- [40] Błażejczyk W., *Metody ilościowe w badaniach bezpieczeństwa*, [in:] *Metodologia badań bezpieczeństwa narodowego*, P. Sienkiewicz, M. Marszałek, H. Świeboda (ed.), Wyd. AON, Warsaw 2012.
- [41] Bartosiewicz P., *Ład czy chaos? Stan stosunków międzynarodowych w I połowie XXI wieku*, [in:] M. Pietraś, K. Marzeda (ed.), *Północwestfalski ład międzynarodowy*, Wyd. UMCS [Marie Skłodowska-Curie University], Lublin 2008.
- [42] Glen A., *Podstawy poznawcze badań bezpieczeństwa narodowego*, “Zeszyty Naukowe AON” 2011, No. 2.

- [43] Sienkiewicz P., Świeboda H., *Perspektywy badań systemowych nad bezpieczeństwem*, [in:] M. Kwieciński (ed.), *Bezpieczeństwo. Wymiar współczesny i perspektywy badań* – Wyd. Krakowskie Towarzystwo Edukacyjne [Kraków Educational Association] – Oficyna Wydawnicza AFM, Kraków 2010.
- [44] Świniarski J., Chojnacki W., *Bezpieczeństwo jako przedmiot badań wybranych dyscyplin naukowych*, [in:] K. Jałoszyński, B. Wiśniewski, T. Wojtuszek (ed.), *Współczesne postrzeganie bezpieczeństwa*, Wyd. Wyższa Szkoła Administracji [University of Administration], Bielsko-Biała 2007.
- [45] Czupryński A., *Obiekt i przedmiot badań bezpieczeństwa*, [in:] *Bezpieczeństwo w teorii i badaniach naukowych*, B. Wiśniewski (ed.), Wyd. WSPol [Police Academy in Szczytno], Szczytno 2018.
- [46] Wróblewski R., *Przedmiot i metoda. Nauki o bezpieczeństwie narodowym*, [in:] *Metodologia badań bezpieczeństwa narodowego. Bezpieczeństwo 2010*, P. Sienkiewicz, M. Marszałek, H. Świeboda (ed.), Wyd. AON, Warsaw 2011.
- [47] Czupryński A., *Poznanie bezpieczeństwa*, [in:] *Bezpieczeństwo w teorii i badaniach naukowych*, B. Wiśniewski (ed.), Wyd. WSPol [Police Academy in Szczytno], Szczytno 2018.
- [48] Krzyżanowski L., *Podstawy nauk o organizacji i zarządzaniu*, 2nd edition, PWN, Warsaw 1994.
- [49] Venkatesh V., Brown S.A., Bala H., *Bridging the Qualitative-Quantitative Divide: Guidelines for Conducting Mixed Methods Research in Information Systems*, “MIS Quarterly” 2013.
- [50] Krajewski M., *O metodologii nauk i zasadach pisarstwa naukowego. Uwagi podstawowe*, Wyd. Włocławskie Wydawnictwo Diecezjalne, Warsaw 2010.

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