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# Methodology of security sciences and theory of international relations in explaining interstates social phenomena

# Preface

n the current of world science, there has been a fierce debate for years on international relations as predisposing to the status of an independent, i.e. self-sufficient, scientific discipline. In Anglo-Saxon science, this problem was not solved so much as the status quo, established for decades, i.e. granting international relations the character of a sub-discipline within the discipline of political science. Because political sciences group many other subdisciplines, including defense sciences ( defense studies ), strategic sciences ( strategic studies <sup>1</sup>), also English-speaking representatives of international relations temporarily accept this state of affairs. A completely different approach is presented in Polish science, namely, scientific disciplines not only have a character strictly defined by law (as well as various privileges resulting from this in relation to areas of knowledge not recognized as independent disciplines), but also a specific status based mainly on their own, methodology characteristic for the subject of research. The discussion on this subject has been going on in Polish science

<sup>&</sup>lt;sup>1</sup>The subject of learning about strategic studies are social phenomena narrowed down to international relations in the area of international security, with a special emphasis placed on the study of broadly understood military aspects of regional or global security within this subject - R. Kuźniar, *Polityka and strength. Strategic studies - an outline of the issues*. Warsaw 2007.

for over a hundred years, it began in the period of the First Polish Republic, survived the difficult times of World War II and revived with full flame in the period of People's Poland. With the same result, i.e. with the failure to recognize the arguments of representatives of international relations as sufficient by representatives of other disciplines, mainly political science. The bone of contention was mainly methodology, which, according to political scientists, was lacking, and according to representatives of international relations, on the contrary, the existence of methods original to this "subdiscipline" in the form of the theory of international relations (realism, liberalism, constructivism since the 1990s, and of course all varieties of these three main theoretical trends). The centuries-old dispute was resolved by a single legal act on October 27, 2022, the Minister of Education and Science, Mr Przemysław Czarnek, acceding to the request of the authorities of the Polish Society of International Relations of August 20, 2021 and issuing a decision to create the scientific discipline of international relations<sup>2</sup>. It seems, therefore, that on the basis of Polish science, the dispute has come to an administrative end. In reality, however, on the sidelines of conferences, congresses and seminars (mainly political science), discussion, not to say criticism of the content of decisions, is still being practiced. This means that, of course, the dispute has been resolved administratively, but it is still the subject of mainly methodological considerations<sup>3</sup>.

Political science developed its own methodology based on the widely understood methodology of social sciences, drawing heavily on the achievements of, among others, disciplines such as sociology and pedagogy <sup>4</sup>. At this point, it is worth pausing to realize that since the subject of knowledge in the broadly understood social sciences are all social phenomena <sup>5</sup>, the individual disciplines functioning within social sciences have made fragments of this extremely broad subject of research as the subject of cognition. Sociology could, on the basis of its name, be defined as the proper discipline to conduct research on any social phenomena, thus blurring the difference between its subject and the subject of research belonging to the entire field. However, sociologists, as people who perfectly understand the

<sup>&</sup>lt;sup>2</sup>Regulation of the Minister of Education and Science of October 11, 2022 on scientific fields and disciplines and artistic disciplines, Journal of the Republic of Poland of 11/10/2022 item 2202.

<sup>&</sup>lt;sup>3</sup> L. Pastusiak, *International Relations as a Science Discipline*, Przegląd Dziennikarski, https://przegladdziennikarski.pl/stosunki-miegraniczowe-jako-dyscyplina-nauki/, 04.07.2019.

<sup>&</sup>lt;sup>4</sup>A. Chodubski , *Introduction to political science research* , Wyd. University of Gdańsk, Gdańsk 1995, pp. 23-30; 72-97.

<sup>&</sup>lt;sup>5</sup> Ch , Frankfort- Nachmias , D. Nachmias , *Research Methods in the Social Sciences* , ed. Zysk and SK-a, Poznań 2001, pp. 23-28.

vast scope and complexity of the social nature of human nature, agreed that within the framework of broadly understood social phenomena, research in a much more detailed and at the same time narrower substantive scope should be conducted by representatives of other disciplines, e.g. political science, pedagogy, psychology, but either law or economics <sup>6</sup>. In the case of the latter discipline, social phenomena with an economic background are also studied (determined by human action or lack of action in the same subject of activity), albeit with the use of methods, techniques and tools taken from the exact sciences <sup>7</sup>. Nevertheless, the subject of research remains fully consistent with the field of social sciences, leaving no doubt as to the location of this discipline within the aforementioned field. The remaining disciplines (except law, because, to put it mildly speaking, the methodology of legal sciences is extremely poor compared to other disciplines of social sciences, which results from the nature of these sciences and the sources of cognition used in them) drew heavily, as already mentioned, on the methodological achievements of sociological sciences, and each subsequent one, such as security sciences, also from pedagogical sciences, and to a certain extent concerning international security, also from political sciences, gradually adjusting the borrowed methods, techniques and tools to one's own needs, modifying and thus giving it its own, original character. As a result, developing new variations of existing methods, which over time could be called techniques. In conclusion, security science, as a very young discipline, has developed the basis of its own methodological distinctiveness, which in turn contributed to the ongoing evolution of the research methodology. One of such examples may be the author's method of cultural forecasting, which has acquired an original character. While developing this method, the author used anthropological and, to a lesser extent, sociological methodology. This made it possible to create the basis for the model of obtaining empirical data, while the method of processing these data for the use of the forecasting process is already fully original and thus belongs only to the discipline of security sciences<sup>8</sup>. A similar path of borrowing and modifying, and thus imparting original features, and ultimately developing their own, previously unheard of methods and techniques, has been followed by all other disciplines of the social sciences since their birth. The situation is slightly different in the case of international relations, whose methodology, as mentioned, is actually based on theories of international relations explaining

<sup>&</sup>lt;sup>6</sup>E. Babbie , Social Research in Practice, Ed. Scientific PWN, Warsaw 2005, pp. 85-102.

<sup>&</sup>lt;sup>7</sup>M. Rószkiewicz , J. Perek-Białas, D. Węziak-Białowolska , A. Zięba-Pietrzak, *Designing socio-economic research*, *Recommendations and research practice* , Wyd. Scientific PWN, Warsaw 2013, pp. 31-79.

<sup>&</sup>lt;sup>8</sup>M. Górnikiewicz , *Forecasting cultural threats to national and international security* , ed. Military University of Technology, Warsaw 2018, pp. 305-328.

the behavior of the actors of these relations towards each other. These theories are being developed, evolving, their variations are constantly being created, and representatives of this sub-discipline so far claim that it is their own methodological achievements <sup>9</sup>.

In reference, therefore, it is worth taking a closer look at how research methods and techniques are defined in the social sciences, and thus: **could the theories used in international relations as part of the methodological workshop really be considered research methods and techniques**? This would make it possible to gain solid arguments to convince the opponents to the position represented by the representatives of international relations. The next point of scientific inquiry will be an attempt to answer the question: **could the methodology of security sciences be applied in international relations, and therefore could it be the basis for developing one's own, original methodological workshop ?** 

## Defining methods of techniques in social sciences

When discussing the interpretation of the terms "scientific/research method" and "scientific research technique" in the social sciences, it is impossible to omit the outstanding sociologist and methodologist of this field, Stefan Nowak. In the first chapter of an outstanding work dedicated to the methodology of social sciences, S. Nowak already points out the differences between the scientific method and the research method in the introduction, while noting that at the beginning an attempt should be made to define the method as such . Then he quotes the possibly simplest interpretation of this term, according to which "a method is as much as a specific, repeatable and learnable way - a pattern or pattern - of conduct, consciously aimed at achieving a certain goal through the selection of means appropriate for this purpose". As a result, "the scientific method is as much (...) as a certain specific way of proceeding consciously to achieve a certain goal or a certain category of cognitive goals in science"<sup>10</sup>. Striving to specify the word "scientific", S. Nowak points out that since "Individual sciences can be viewed as certain systems of human (individual and collective) activity aimed at achieving certain goals, or as products of this activity." scientific activity will be "(...) deepening knowledge about the field of phenomena, objects and processes that are in the field of interest of a given science (...)". To sum up, it can be assumed, following the line of thinking of S. Nowak, that the scientific method is a specific way of proceeding to deepen knowledge about

<sup>&</sup>lt;sup>9</sup>J. Czaputowicz , *Theories of International Relations* , Wyd. Scientific PWN, Warsaw 2022.

<sup>&</sup>lt;sup>10</sup>S. Nowak, *Methodology of social research*, PWN, Warsaw 1985, p. 19.

the subject of knowledge of a given science. The research method, on the other hand, "is primarily typical and repeatable methods of collecting, elaborating, analyzing and interpreting empirical data, used to obtain maximally (...) justified answers to the questions posed in them" <sup>11</sup>. In the further part of the text, S. Nowak points to the criterion distinguishing these seemingly similar definitions. Namely, scientific methods are to be used to expand scientific knowledge, i.e. those that can expand the existing scientific knowledge in a given discipline (hypotheses confirmed in the course of research), while research methods will then perform the function of confirming the existing assemblies. It is therefore obvious that the same method, using the criterion proposed by S. Nowak, can be of a scientific or research nature, depending on the problem questions asked. This difference can be seen a little more precisely in technical sciences than in social sciences, due to the frequent use of specific methods only to verify the validity of previously adopted assumptions, which in the course of many studies have become part of the theory of a given discipline in technical sciences. In the social sciences, however, this distinction is less visible due to the use of all available methods to extend existing knowledge as often as to confirm the validity of already developed knowledge.

The term "scientific method" was also clarified by another eminent methodologist of social sciences, Jarosław Zieliński, who pointed out that the scientific method can be understood as "the totality of research methods of reaching the truth and conceptual presentation of the known truth", and also more simply as "a way of obtaining scientific material" <sup>12</sup>. At the same time, due to the fact that the method must be scientific in order to obtain the aforementioned "scientific material", it means that universal conditions affecting the objectivity of a given method should be met <sup>13</sup>:

- 1. identifying and justifying the problem and noticing related issues;
- 2. criticism of the problem in the light of the achievements of science so far (analysis of the literature on the subject);
- 3. enumeration of necessary assumptions or theorems, sometimes also hypotheses;
- 4. establishing working methods, including the critique of existing methods and the selection or construction of new methods;
- 5. carrying out research: performing activities resulting from the posed problem and the selected working method;

<sup>&</sup>lt;sup>11</sup>lbidem., p. 22.

<sup>&</sup>lt;sup>12</sup>J. Zieinski , *Methodology of scientific work* , ed. ASPRA-JR, Warsaw 2012, p. 18.

<sup>&</sup>lt;sup>13</sup>J. Pieter , *General Methodology of Scientific Work* , ed. Ossolineum, Wrocław 1967, p. 42.

- 6. development of materials collected during research and their synthesis;
- 7. written development of research results up to the state of the work ready for printing;
- 8. critical evaluation of the course of one's own research and written elaboration of results.

Returning to S. Nowak, it is worth considering what this scientifically confirmed knowledge is, and therefore recognized as a real resource of information about the reality studied within a given science (or rather a selected part of it). Quoting after S. Nowak: "This knowledge is a certain set of beliefs and judgments recognized by the representatives of a given scientific discipline about how things are, how things are and why they are like this, and the statements expressing these judgments or entire systems of such statements constituting or descriptions of particular fragments of reality, or theories explaining phenomena in a given field" <sup>14</sup>. As noted by S. Nowak, these statements must be "maximally consistent with reality", recognizing that it will not always be possible at a given level of scientific (civilization) development to unambiguously confirm the truth of a statement. On the other hand, one should absolutely strive for this ideal state. However, in order to achieve this, it is necessary to maintain as far as possible objectivity towards the subject/object of cognition. To put it simply, it can be assumed that in order to achieve this goal, the research process should be carried out in such a way that it is possible to repeat it, and as part of the process repeated many times, convergent or very similar results will be obtained (depending on the sciences and their nature: formal or empirical)<sup>15</sup>. It is generally accepted that in the social sciences it is almost impossible to obtain identical results, e.g. by carrying out a diagnostic survey or expert interview on the subject of the study, but changing the subjects of the study, as well as when using the experimental or observation method <sup>16</sup>. the same sources in the same subject of cognition should lead to the same conclusions, although the knowledge of the person conducting the research may affect the perception and interpretation of the results obtained, and these, in turn, may influence the formulation of conclusions. more precisely in the answers given to the same problem questions. This significant difference between the aforementioned formal and empirical sciences consists in the essence of the subject of cognition, which in the case of social (empirical) sciences are social phenomena generated by people, and people by their very nature tend to be too unpredictable (using the language of science, it can be assumed that the process The human decision-making process is affected by too many variables, which makes it impossible to know

<sup>&</sup>lt;sup>14</sup> S. Nowak *, op. cit.* , p. 19.

<sup>&</sup>lt;sup>15</sup>Ibid., p. 20.

<sup>&</sup>lt;sup>16</sup>E. Babbie , *op. cit.* , pp. 85-102.

all of them through scientific inquiry at the current level of scientific development - author's note). Therefore, by conducting research on different groups of people meeting the same criteria, such as age, education, life experience, language, culture, religion, etc., and asking the same questions, you can get similar but different answers. In conclusion, the distinguishing feature of research results in social sciences, e.g. from mathematical sciences, is their uniqueness, which, as already mentioned, is conditioned by the excessive unpredictability of the human decision-making process <sup>17</sup>.

#### Conclusions

Therefore, going to the merits, it is worth taking the trouble to answer whether theories functioning within national relations and explaining social phenomena occurring in the area of international relations from a specific perspective can really be considered as scientific/research methods?

In the light of the quoted definitions, these theories can indeed be considered methods for two reasons, conditioned by the above-mentioned specificity of the uniqueness of the results of research conducted in the broadly understood social sciences. Firstly, a theory can be used as a research method, given that many researchers can apply the same theory and obtain similar or the same results in relation to a particular international phenomenon. This means that this method ensures the objectivity that is so important in the scientific approach. On the other hand, it remains an open question whether it also allows to obtain a result as close to the truth as mentioned by S. Nowak. Striving to answer this question, one can reason a contratio to ask whether there is a method in the social sciences that guarantees obtaining true results. Unfortunately, no method can guarantee this, but it can significantly bring you closer to obtaining objectively truthful answers to the posed problem questions. Continuing, then how do you know that a given method actually allows you to get answers as close to the truth as possible or fully true while maintaining due methodological diligence? Well, from the pragmatics of using this method in the past. If in many cases (not necessarily in all cases, at least on the basis of social sciences as empirical sciences) the obtained result turned out to be

<sup>&</sup>lt;sup>17</sup>The human decision-making process can be predicted, however, despite the most advanced and innovative methods and techniques offered by modern science, it has not been possible to achieve 100% accuracy of forecasts so far - the aforementioned proprietary method of cultural forecasting allows you to predict the content of decisions in international relations at a statically averaged level of 80-90 % - M. Górnikiewicz , *Forecasting cultural threats to national and international security* , ed. Military University of Technology, Warsaw 2018, pp. 326-331.

true, then we can assume that such a method is not perfect, it is characterized by a certain margin of error, but a sufficiently high percentage of true answers obtained , allows us to assume that such a method can be used. It is worth referring once again to the very definition of the "scientific method", i.e. a specific method of "proceedings consciously aimed at achieving a certain goal or a certain category of cognitive goals in science". The use of a theory characterized by the observance of specific rules of its use in the pursuit of explaining the course of the international phenomenon under study, taking into account a sufficiently high level of verifiability of the obtained results, allows us to assume that such a structured and standardized theory can be regarded as a kind of research method <sup>18</sup>.

So let's move on to the second and last problem question: *Could the methodology of security* sciences be used in international relations - becoming a contribution to the development of one's own methodological workshop?

In the case of most social science disciplines, they used the hitherto developed methodological achievements within older disciplines, even outside their own field of science (see, for example, economic sciences). Nowadays, the development of an own, innovative method or technique appropriate for a given discipline seems to be so difficult, because in the methodological space there is an abundance of various methods and techniques that can be used immediately or after making some modifications according to the needs of a given research. For example, the author of this article, while developing his own forecasting method, also relied on the method developed in cultural anthropology to study cultural differences that translate into work efficiency within foreign branches of an international corporation <sup>19</sup>. The author's method is of course not a repetition of G. Hofstede's method , but the idea of how to start was derived from this method to build a completely new and previously unknown method for forecasting the human decision-making process in the space of social activity, such as is international security. Concluding, if any method or technique can be used for a methodologically reliable research

<sup>&</sup>lt;sup>18</sup>The structuring of the interview means the use of such forms of questions during the research process that impose on the respondents the need to answer in a specific form, usually in a concise manner, while standardization is a more extensive concept and concerns proceeding in accordance with a specific, previously adopted scenario of conducting a given interview, which concerns not only the questions themselves, but even their order, and sometimes also the wording of the questions during the examination -

B. Glinka, W. Czakon , *Basics of qualitative research* , Polskie Wydawnictwo Ekonomiczne, Warsaw 2021, pp. 101-106.

<sup>&</sup>lt;sup>19</sup>M. Górnikiewicz, *Forecasting cultural threats to national and international security*, ed. Military University of Technology, Warsaw 2018, pp. 36-40.

process, it is absolutely worth taking advantage of such a possibility. Due to conducting research in the field of international security within the framework of security sciences, it can be presumed that at least some of the methods and techniques used in these sciences may be used in research conducted within the framework of international relations.

#### Streszczenie:

W artykule podjęto próbę odpowiedzi na dwa pytania problemowe, które wyłoniły się z rozważań nad rolą metodologii nauk o bezpieczeństwie i stosunków międzynarodowych w wyjaśnianiu zjawisk społecznych zachodzących w szeroko rozumianych stosunkach międzypaństwowych. Pierwsze pytania brzmiało: Czy teorie stosowane w stosunkach międzynarodowych można uznać za oryginalne metody i techniki badawcze zawarte w oryginalnym i właściwym warsztacie metodologicznym? . Drugie z kolei, będące naturalnym rozwinięciem podjętego watku, a odnoszące się do metodologii nauk o bezpieczeństwie, brzmi: nauk o bezpieczeństwie Czy metodologie można zastosować W stosunkach międzynarodowych, prowadząc do rozwoju własnego warsztatu metodologicznego w tym obszarze? W celu uzyskania odpowiedzi posłużono się metodą przeglądu literatury, a następnie głównie porównań, porównując wcześniej analizowaną treść przeczytanych źródeł. Proces ten został przedstawiony w niniejszym tekście wraz ze stopniowym dochodzeniem do wniosków mających na celu rozwiązanie problemów badawczych formułowanych w formie pytań.

### Słowa kluczowe:

Metodologia, teoria nauki, metody badawcze, techniki badawcze, nauki o bezpieczeństwie, stosunki międzynarodowe

## **Keywords:**

Methodology, scientific theory, research methods, research techniques, security sciences, international relations

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