## Language of Innovative Agonology: A Guide in Combining Micro and Macro Scales of Preventive, Therapeutic and Defensive Actions

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## ABSTRACT

The language of innovative agonology (IA) concerns three layers. One is the terminology, whose basic frame of reference is Tadeusz Kotarbiński's general theory of struggle (agonology). The remaining ones are: the ambiguity of the same terms used in different sciences (some of which have been appropriated by the public media language); and the need to adapt key words (and even to create neologisms in English for the universal language of IA) which describes scientific discoveries of phenomena included the field of IA research, but originally published in languages other than English. An example of the dilemmas with the ambiguity of using the same terms in different areas of communication is the semantic category 'development', elementary to IA (a term used only in a positive sense). The commonly accepted phrase 'development of a disease' is patently absurd. Even if the user explains that they meant 'development in a negative sense', all the more it shows that they are ignorant as to the semantics. One of the concepts originating from the Lviv-Warsaw school of the methodology of sciences is the term 'wiedzotwórczy', which has no equivalent in English. In many methodological arguments edited in Polish, it is a convenient combination of the words 'knowledge' and 'creative'. Future IA professionals will undoubtedly face similar semantic dilemmas. Identifying, interpreting and formulating algorithms for phenomena that need to be effectively addressed (from micro to macro scales) in the areas of prevention, therapy and, defense, requires unambiguous language that is understandable to experts in even distant fields.

Keywords: Health prevention, Survival, Therapy

## INTRODUCTION

There is no need to justify the theorem: science is one, and we know its many disciplines and specialties; only a number of those detailed sciences yet to be created is unknown. Innovative agonology (IA) is such a detailed science, created with the participation of an increasing number of experts. In this paper we base on the definition of science by Tadeusz Kotarbiński (1886-1981), a prominent representative of

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the Lviv-Warsaw school of logic and methodology of sciences (the founder of modern praxeology): "science is everything that is worth to be the subject of intellectual teaching at universities, and only at universities, as a separate specialty" (Kotarbiński, 1958). This definition was announced by Kotarbiński at the University of Łódź (Poland, October 19, 1957) during the presentation of an honorary doctorate degree to him.

Although innovative agonology is not taught at any university, the latest published detailed theory of struggle - a theory of combat sports - (Kalina, 2000) was one of the subjects at the Josef Pilsudski University of Physical Education in Warsaw; soon it will be taught at other universities in Poland. Following this initiative, students at these universities acquired practical skills in the subject "Combat sports propaedeutics - basics of judo" (Kalina et al. 2003).

Using Ockham's razor as a methodological frame of reference for innovative agonology created as a new science, we adopt the language of the representatives of the Lviv-Warsaw school while being aware of the difference of opinion between representatives of this school. For those interested in this new science, it should not matter much that, for example, Wojciech Gasparski (1936-2022) claimed that "methodology is the science of sciences," and "saying that methodology is a branch of logic in its broadest sense does not say much, since 'logic' may be understood in various ways" (Gasparski, 1987). Tadeusz Kotarbiński understands methodology in relation to logic in three ways, and argues that each one is valid (Kotarbiński, 1986). Adam Nowaczyk and Zenobiusz Żołnowski, in their "Logic and Methodology of Scientific Research for Physicians", following Kotarbiński's reasoning, argue that: "Methodology of scientific research is a branch of logic in the broadest sense... it is a theory of efficient achievement of cognitive goals... a particular case of general methodology, thus praxeology" (Nowaczyk, Zołnowski, 1974). Kazimierz Ajdukiewicz (1890-1963), inspired by T. Kotarbiński's works on praxeology, promoted the view that the methodology of sciences is not only a part of logic, but also of praxeology (Ajdukiewicz, 1985). Unfortunately, praxeology (Kotarbiński, 1982; first edition 1955,) is not a well-known science, and the reason for this is the tragic fate of Poland after the aggression of Germany and the Soviet Union in 1939 - September 1 and 17, respectively. The symbolic date of September 17, 1993, when Russian troops (heirs of the USSR) left Poland, can be considered the opening of the Iron Curtain to outstanding, little-known achievements, including the Lviv-Warsaw school of logic and methodology of sciences.

The same term means different things in everyday language, but also sometimes in science, or used by various authors. According to Maria (1896-1974) and Stanislaw (1897-1963) Ossowski, the methodology of science is merely a branch of the philosophy of science (Ossowskis, M and S, 1935).

The aim of this paper is to justify, on two examples, the importance of precise language from the perspective of effectively respecting the supreme value criteria of global civilization, without ignoring the micro scale.

## THE CRITERIA FOR THE VALUE OF GLOBAL CIVILIZATION IMPLY THE SUBJECT OF INNOVATIVE AGONOLOGY RESEARCH

The supreme value criteria of global civilization are only a hypothesis: survival of humans and nature in a non-degenerate form and responsibility for coming generations. This hypothesis is based on premises derived from Jarosław Rudniański's definition of supreme value criteria (Rudniański, 1989). Justifying why it is only a hypothesis, contrary to appearances, is not difficult. A question would first have to be answered publicly: what else needs to happen, beyond the COVID-19 pandemic and Russia's aggression against Ukraine, for those entities with supreme influence on the fate of the world to engage in a public debate on this hypothesis in a way that is freed from all division and prejudice? Probably also the subsequent questions will not please many people, including scientific circles. So, first of all, who will popularize the hypothesis, articulated above, in the global space? Secondly, will a competing hypothesis emerge, and if so, who will be its author and what will be its content?

One possible competing hypothesis (unfortunately, an extremely pessimistic one) is posed by Pawel Adam Piepiora, along with the first author of this paper, in the presentation "Hypothesis on the supreme value criteria of the global civilization," included in the 37th session of AHFE 2023.

However, the basic implication of the optimistic hypothesis is the theorem that the objects of concern and effort of every responsible entity (individual and group), from micro to macro scales, are **development and survival**. A misleading and untrue theorem, however, would be that the subject of IA research is development and survival.

The object of innovative agonology research is the phenomenon of struggle in a broad sense, dedicated precisely (to put it somewhat more figuratively) to the defence of development and survival of humans and nature in a nondegenerate form against destructive factors. The simplest examples are the phenomena of the necessary "fight against disease" and "self-defence against physical aggression." These examples highlight that defence in the broad sense (that is, one of the varieties of *struggle*) fills the areas of prevention (education) and therapy (if the subject accumulates the trauma of previous experiences of violence or aggression, or past illnesses). Moreover, the range of application of IA products is possible in a great many, even distant, scientific disciplines and can be implemented into areas of practice (medicine, education, defence, etc.).

Precisely because of the possible applications of IA, especially at the interface with other scientific disciplines and upon solving the most pressing problems of development and survival, precise language is one of the basic conditions for successfully practicing the just-born complementary research methodology.

Innovative agonology (IA) is an applied science dedicated to promotion, prevention and therapy related to all dimensions of health and regarding the optimization of activities that increase the ability to survive (from micro to macro scales).

## BETWEEN THE LANGUAGES OF THE SCIENCES AND THE EVERYDAY LANGUAGE

One of the basic standards of scientific correctness, in addition to a defined object of research, is to make the language of the discipline as precise as possible. Even in sciences dominated by formal language (logic, mathematics, chemistry, computer science, etc.), it is necessary to use words of the common language, among other things, in defining key terms. What is more, difficulties in communicating accurately between language users of different sciences, precisely within each of these sciences, arise when at least one key word of a given science has extensive use in colloquial language. This is precisely the case with the words 'development' and 'survival'; in the field of innovative agonology – the former word to an even greater extent. It would be rather meaningless to use both of these keywords with the abbreviation GC (which would stand for global civilization): GC DEVELOPMENT and GC SURVIVAL would sound remarkably bizarre.

The word 'development' and its synonyms have been used in colloquial communication between people for thousands of years. The word 'survival' (abstracting from the analysis of individual sources), although identified with 21 synonyms, antonyms, and words related to survival, such as: continuity, durability, endurance, and continuance, is clearly associated with either a broad (example Chomsky, 2007) or narrow meaning. In the second case: with an extreme form of physical activity in various environments of human activity, with an element of military training, with one of the activities of scouts, etc. Therefore, regardless of the context of survival (broad or narrow), and because of its proximity to the subject of IA research (the phenomenon of struggle in a broad sense), the term 'self-defence' is more suitable for acceptance as a keyword of IA.

## TWO KEY WORDS OF INNOVATIVE AGONOLOGY

#### Development

One Polish-language source lists more than 190 synonyms for 'development' and 39 word groups using these synonyms while the English Thesaurus lists 80 synonyms for the word.

'Development' is a subject of consideration mainly in the field of philosophy. It is also a phenomenon that remains within the limited scope of study of parts of the humanities and social sciences: education, ethics, pedagogy, psychology (psychology of development), sociology, theology, etc., and theory (axiology), but also biology. For an agonologist, the closest is the position presented mainly by philosophers. Although different philosophers use different words to define the term 'development,' the sense is similar, and in many cases even identical. However, such an assumption would be an oversimplification.

Philosophers of science make a distinction between the terms 'development' and 'advance,' although in common usage these words are perhaps the clearest synonyms. Development – understood as a collective view of various philosophical orientations – "is a sequence of directed transformations, proceeding from less complex to more complex structures, in particular to qualitatively higher structures, i.e., those whose internal processes and connections with the environment proceed according to laws that at lower structural levels did not operate. The basic indicator of the development of a system is the growth of its diversity" (Cackowski, 1987, p. 613). In the languages of cybernetics and information theory, the measure of a system's development is an increase in its information capacity. In biology, the term development is associated with adaptation to a changing environment, a richer, more diverse one. However, the passage of time falsifies this philosophical approach. Alarming reports from ecologists, are forcing a redefinition not of the concept of "adaptation to the environment," but of adaptation to the circumstances. In many circumstances, this adaptation is a necessary defence (so one variation of struggle) against progressive environmental degradation.

Similarly, the concretization of the term 'advance' took place in the areas of exploration of various phenomena, especially biological and social.

It is different with the terms 'internal development,' 'moral development,' 'spiritual development,' and 'moral degradation,' 'moral decline,' etc. Without development whether internal, moral or spiritual (and indeed they are almost the same thing), decent survival will become an unattainable goal. It will remain realistic as long as this kind of development affects three generations simultaneously. Disturbing this order (especially by excluding the oldest generation from social life in any way) will inevitably lead to the degradation of social health, and this and this regression will not bypass the macro scale.

For the purpose of this work, let the recommendation for the definition of 'spiritual development' be the fact that it was published in Poland at the height of Solidarity's struggle against communist dictatorship. It means "first and foremost, the moral improvement of man: that to an ever-increasing extent — and with ever-increasing efficiency — he acts morally well..., that is, in accordance with the supreme criteria of values recognized by the majority of honest people, which are also contained in the moral programs of all great philosophical and religious systems and in independent ethics... We will say that someone has reached a high spiritual level when we reasonably assume that he will realize the supreme moral values in every situation — both through his life and through his death" (Murawski, 1987). Despite the passage of nearly 40 years, the importance of such a resounding spiritual development has not only not lost its relevance, but to ignore this phenomenon would be counterproductive – instead of the global goal (survival), humanity would achieve its negation (self-destruction).

In the case of these largely equivalent concepts of 'development' (spiritual, internal, moral), neither redefinition nor analysis of the differences is needed. The opposite of these terms is 'moral degradation' and any other name that would mean the same thing. Thus, these two words and any equivalent term are sufficient, without justification, to fulfil the function of accurately conveying meaning both in science and in everyday language.

It will be a discredit for science and, more broadly, 'people of the word,' to duplicate the example scheme of outright absurdity: "the positive effect of the struggle against the **development** of civilization diseases is the **development** of health care institutions." In the language of innovative agonology, the word **development** is consistently used only in a positive sense, in relation to any of the phenomena, and it does not matter whether it is on the micro or macro scale, or intermediate levels (Kalina, 2020).

#### Self-Defence

In the everyday language the most common perception of the term 'selfdefence' concerns the variety of hand-to-hand combat that has to do with effectively countering physical aggression by an individual or group. In the field of innovative agonology, it is only one aspect of self-defence, associated with the micro scale, and has to do with promotion, prevention and therapy related to all dimensions of health and regarding the optimization of activities that increase the ability to survive. Perspective on prevention and therapy from ancient to modern times is presented by Artur Kruszewski in the opening paper of a series of articles dedicated to "Martial Arts and Combat Sports in Health Prevention and Modern Therapy" (Kruszewski, 2023).

In a sense, at the opposite pole of the broadest possible understanding of self-defence, one can place logical self-defense as envisioned by Johnson and Blair (2006), and this concept already covers every scale of action – from micro to macro. In their logical self-defense, the weapon is the intellect. Johnson and Blair, however, do not explicitly say that the methods and means described are applicable to defence against the camouflage of power and the camouflage of violence. The phenomena they deal with are described in languages that do not belong to any of the detailed theories of struggle. Moreover, they use English, while Rudniański — the creator of the methodology of defence against camouflage of violence and camouflage of power (Rudniański, 1989) — wrote in Polish.

# OTHER LINGUISTIC DILEMMAS OF THE DEVELOPMENT OF SCIENCE

In any intellectual circles, there should be no doubt that due to the social mission of science, it can only be about its development. The simplest example of basic dilemmas are language barriers, and only seemingly any part of it can get away with being unimportant.

One of the concepts originating from the Lviv-Warsaw school of the methodology of sciences is the term 'wiedzotwórczy' (Nowaczyk and Zolnowski, 1974), which has no equivalent in English. In many significant methodological arguments edited in Polish, it is a convenient combination of the words 'knowledge' and 'creative'. Future IA professionals will undoubtedly face similar semantic dilemmas (it is possible that the neologism "knowledgecreating" will be widely accepted). Identifying, interpreting and formulating algorithms for phenomena that need to be effectively addressed (from micro to macro scales) in the areas of prevention, and therapy, call for undertaking a strong defence and require unambiguous language that is understandable to experts in even distant fields.

The following example, with its unique symbolism, already goes beyond just linguistics. It is in natural languages that knowledge of exceptional importance is contained from the perspective of fulfilling the social mission of science across all divides. The dilemmas of the limited possibility of sharing this knowledge with a multilingual society are still significantly influenced by the mental remnants of the Iron Curtain. A joint publication by Ukrainian and Polish authors, made available in the global science space at the beginning of the Russian invasion of Ukraine, addresses the issue of analysis of Russian-language scientific resources in the context of prevention and treatment of Alzheimer's disease (Iermakov et al., 2022).

## THE ISSUES OF NECESSARY SELF-DEFENCE AND GROUP DEFENCE OF THE FREEDOM OF SCIENCE, IN SCIENCE AND FOR THE DEVELOPMENT OF SCIENCE

However, according to the authors of this work, two important issues escape attention, not only among many intellectuals. The first, of the necessary self-defence within the community of scholars to ensure the freedom of science, which is and can be increasingly threatened and involve a variety of aspects (Kalina, 2016a). The second, of the necessary group defence against the use of science (scholars) for purposes contrary to the value criteria of global civilization. The history of scientific exploration of the second issue, more or less implicitly, began long before the start of the Cold War (e.g., Whitehead, 1925), and intensified with even greater force in that period (Katz et al., 1954, Doob, 1956, Rudniański, 1975).

Science is not passive and clearly formulates the basics of defence: "Innovative self-defence involves using verbal and/or behavioural methods and means along with available items in counteracting each attack on any good of an individual (honour, dignity, life, health, property, etc.), whereas a defender submits his/her actions to the criteria of prophylactic and therapeutic agonology, considering the most general directive of efficient leading of any struggles and also universal assumption of self-defence training as absolutely paramount." (Kalina, 2016b, p. 341).

In this work, we merely hint at both of these issues. Their solution is not possible while ignoring both the complementary research methodology and the already available knowledge of innovative agonology, which can be an important part of creating and developing this much needed methodology.

#### CONCLUSION

Still, whether both the hypothesis on the supreme value criteria of the global civilization and the keywords of innovative agonology will be replicated in the global learning space (and with what effect) will be determined primarily by the community of scholars. Here, Whitehead's visionary warning about the questionable competence of social affairs coordinators since the method of training professionals was discovered (Whitehead, 1925), shines through. This warning rings out especially sarcastically against the backdrop of the experience of a global pandemic and a full-scale war in Europe, the largest since the end of WWII.

Although thousands of scientific publications are published every day, and although the implementation of artificial intelligence is dizzying, there is no way to make an ongoing, meaningful selection of the content of these publications in terms of scientific and application value. One factor is the hermetic nature of many specific disciplines, and thus mainly their language. However, we are neither calling for the monitoring of the latest scientific knowledge through a coordinating global-level institution, nor for the unification of the language of science. We are merely pointing out to the need to implement complementary research methodology in a prudent and flexible manner. This necessary prudence is mandated by the awareness of the threat of total annihilation, which has not been present before. Perhaps unsurprisingly, the keywords of innovative agonology will focus the attention of most positive forces concerned, unfortunately, with the distant prospect of a dignified survival. The authors of this work feel that they are fulfilling the social mission of science in the best way they can currently afford.

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