REVIEW ARTICLE

Language and methods of innovative agonology as a guide in interdisciplinary research on interpersonal relationships and people with the environment – from micro to macro scale

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Abstract

The social mission of science may be succinctly defined as a well-justified knowledge whose main applications are supposed to enhance the protection of all common goods. The goal of this paper is the question why the methodology, language and methods of deeply esoteric innovative agonology are supposed to be an optimum guide in interdisciplinary research from micro- to macro scale. The method of this paper is based on the collection of three short academic essays. Unfortunately, the languages of praxeology and agonology are used by few people, although they describe in a simple way the three categories of man's capacities: collaboration (positive cooperation), necessary defence, as a part of struggle (negative cooperation); concluding compromises. Innovative agonology is a short name for prophylactic and therapeutic agonology, i.e. evidence-based science about struggle. It is well known that the possibilities of even the latest technology in countering many pathologies and real threats to health or life are limited. Paradoxically, some of these threats are generated by technology (an example of negative effects of a commonly available smartphone). The alternative is education, supported with modern technology but one which only fosters verbal communication, satisfaction with learning proper motor responses in dangerous situations, or sports which teach respect for rules and own or the opponent's body.

Key words: compromises • positive cooperation • praxeology • negative cooperation • violence

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INTRODUCTION

The social mission of science may be succinctly defined as a well-justified knowledge whose main applications are supposed to enhance the protection of all common goods. This definition is based on a tacit assumption that there is in fact a scientific knowledge (and there are scientists who want to build on it), which as a rule fills up the continuum from "the restriction of certain goods to certain people or groups" to "the destruction of life (from the micro to macro scale)".

The list of common goods is long and, in principle, there is hardly a reason to rank them here. Therefore, for the purposes of this paper, I will use an alphabetically-ordered list of them (which is not meant to be exhaustive): culture, dignity, ecology and economy (as spheres of practicality), equality, freedom, health, justice, morality, life (in itself), peace, science. I say "in principle" as with certain statements made to global communities or entities with the biggest power to affect (change) decisions at the macro level, it is necessary to stress that, for example, "peace is an elementary common good, as is science". The recipients (or most of them) of such statements should be aware of two things. First of all, if the nuclear and biological arsenals are ever used, the life on Earth will be destroyed (some models predict the total destruction of our planet). Secondly, for each listed common good, we can easily make a list of detailed sciences which deliver two categories of justifications – about dangers and about recommended optimistic solutions. Paradoxically, the shortest list of detailed sciences is dedicated to the science itself. The 21 c. does not see many papers in the methodology of sciences. What is more, journals indexed by most prestigious academic databases reduced the exploration of science-related issues to scientometrics.

Small wonder then that modern science is considered by some scientists to be a method, and by some most radical thinkers and visionaries – to be nothing but a method. If this is true, then the dominant influence on science will be held by those in power. As the history of mankind proves, science never developed in a balanced manner. Rulers and governments focused mainly on military leverage or the balance of power. If there is one thing which does not change, each scientific discovery (either theoretical or empirical) is first verified as to its military application [1], followed by funding further research which accelerate such application. The above statements imply that we need to review our opinions about the leading role of science in the development of man *en bloc*.

If common goods may be looked after by people, groups and societies which maintain sustainable development, then in each public debate and scientific paper about just one such good, the term "development" should have only a positive meaning. A methodological consequence of such a radical assumption is the need to apply the "Occam's razor" (a logical method which simplifies reasoning) in order to distinguish "development" from other meanings of this word in every-day language (there are 197 of them in Polish). To put the same idea a bit differently: to eliminate all the synonyms of the word "development" if it is supposed to mean any kind of positive change, i.e. a change accepted as to the care of common goods when basic norms of humane ethics are respected.

It goes without saying that development is always a form of a progress, improvement, etc., but not vice versa. Not any progress constitutes a development. Scientific discovery led to progress in many areas (mainly technology, health care, food) but it did not help the humanity grow *en bloc*. While the comfort of life (not to be confused with the quality of life) was raised for many, this happened at the cost of uncontrollable deforestation and use of minerals, which demonstrates not development, but its opposite – degradation.

The ongoing degradation of the mankind and its environment remains an open issue [2]. It is not going to be solved by any existing science, nor by any science which can appear in the future, nor there will not be any religion of evolution (accepted by the global community), as described by Pierre Teilhard de Chardin [3]. Each of these options remain utopian. What *can* happen is a radical change of the science paradigm – from the domination of the analytic formula to synthesis. To stand by the former will of course foster the creation of new ever-narrower disciplines and specialties, but will not bring about two crucial modifications. First, sustainable funding for scientific research. Second, restrictions of anomalies related to the assessment and promotion of scientific achievements, together with the pathologies which affect the science itself.

The vision of the "synthesis" paradigm implies the necessity for interdisciplinary approach when solving numerous practical issues (which

Counterproductive – from praxeological perspective certain action can be: productive – non-productive – counterproductive – neutral. The action is **counterproductive** when a doer achieved goal opposite than intended [4, p. 220].

Czestochowa declaration 2015: HMA against MMA – "continuous improvement of health through martial arts as one of the most attractive form of physical activity for a human, accessible during entire life should constantly exist in public space, especially in electronic media, to balance permanent degradation of mental and social health by enhancing the promotion of mixed martial arts – contemporary, bloody gladiatorship, significant tool of education to aggression in a macro scale".

Gdansk 2nd HMA World Congress Resolution – **Article 1** The white flag with five interlocking "Olympic rings" is the most recognizable symbol in the global public space. Neither did the resurrected idea of Olympia, "***Citius, Altius, Fortius***" save humanity from the horrors of two world wars, nor did the declared mission of the International Olympic Committee (IOC): "1. (...) the promotion of ethics and (...) ensuring that, in sport, the spirit of fair play prevails and violence is banned" (Olympic Charter, p. 18) stop the pathology of permanently educating contemporary man in aggression.
Article 2 Likewise, symbols (a sword pointed downwards surrounded by five rings) and motto ("Friendship through Sport") of Conseil International du Sport Militaire (CISM) did not stop soldiers from killing each other and murdering people after 1948 (the year of establishing CISM, the second largest multi-sport discipline organization after the IOC, and also the year of the Universal Declaration of Human Rights).
Article 3 Although there are five identical combat sports in the Olympic Games and the Military World Games, their potential is still not used to meet the second of the Fundamental Principles of Olympism: "(...) to place sport at the service of the harmonious development of humankind, with a view to promoting a peaceful society concerned with

are the domain of applied sciences) and theoretical ones (”pure” science inspired by curiosity). The necessity to restore the social mission of science. The mission as defined in the first sentence of this paper or in any similar way. We do not take here into account any definitions which ignore the issue of morality or treat ethical norms in an instrumental manner when it comes to the social mission of science.

The goal of this paper is the question why the methodology, language and methods of deeply esoteric innovative agonology are supposed to be an optimum **guide in interdisciplinary research from micro- to macro scale.**

METHOD

This paper can be put on the borderline of categories “Research Article” and “Reviews” (according to the editorial criteria *Science* journal). The method is based on the collection of three parts (short academic essays) whose content taken together (a kind of propositional calculus) does not deliver a ready answer to the question asked. The author prefers to leave this privilege to each and every reader.

PART 1

Not only the semantic issues related to the term “development”

The evidence of caring about common goods can be considered reliable criteria of a man’s development at least in the intellectual and moral (spiritual) sense. To achieve those goals on the micro scale is already an evidence of a sustainable development of a person, i.e. not only in the intellectual and moral sense, but a physical one, too. In order to thwart an attacker (without inflicting unnecessary damage) who assault a person or property, we need to first master self-defence art. However, such psychomotor and moral competence is far from common.

The high level of generality of the statement “a sustainable development of a person concerns the intellectual, moral and physical area” means that a given person achieved full possibility of action, including a dispositional and situational one (these are specific terms of the praxeology language [4, 5]) in order to protect a wide range of common goods. The above example is a demonstration of active care about dignity (including the attacker’s), freedom, justice, morality, health and life (the attacker is thwarted but not killed in necessary self-defence). A person who deserves to be called a man of sustainable development is able to effectively use power, intellectual or manipulative proficiency, knowledge (ability) and can demonstrate sufficient willingness to carry out a given action when the circumstances call of it (to actually use self-defence skills is only but one option).

If the goals related to the protection of common goods are achieved by a person at the higher levels of action (even if he or she is unable to frustrate the attacker), it is a demonstration of: the ability to cooperate (positive cooperation); the ability to fight (negative cooperation) in a team (a very specific case of combining positive and negative cooperation); and the ability to achieve compromise (but never at the expense of any common goods). It is unacceptable to indiscriminately identify a man’s development *en bloc* with technological progress.

This should be considered true by at least a philosopher, ethician, logician, methodologist, praxeologist, and above all – a scientist with interdisciplinary competence or one who prefers to solve problems in a systemic way. This kind of selective attitude is surprising if the use of precise language is a widely accepted requirement in science. The author does not exaggerate, as the public space is filled with statements like: “the reason for the sudden decrease of the patient’s health is the development of disease X; “despite the development of the disease, Y does not lose their intellectual development”, “a measure of development of modern human civilization is an extraordinary technological development since the man landed on the Moon”. Such statements are unfortunately shared by people with formal scientific qualifications. Any debate which is really interdisciplinary (including a discussion of research results in a paper) does not accept such statements precisely due to the requirement of clear-cut language in science. If the same term is defined differently in various sciences, then for the debate or paper which is supposed to be interdisciplinary, it is necessary to highlight which definition is being used. For example, it is simple disinformation to have a debate or paper about two notions, muscular strength and moral strength, if the word “strength” (or its synonyms) are used many times without a proper adjective.

the preservation of human dignity” (Olympic Charter, p. 13).
Article 4 Boxing and wrestling cultivate the traditions of ancient Olympism. Judo and taekwondo have given martial arts humanistic and health attractiveness. Fencing combines this tradition with modernity in the spirit of chivalry. Aiming dynamic offensive and defensive actions directly at the opponent’s body (irrespective of the protectors used) in such a way as not to hurt is a measure of respecting those knightly rules. This rule harmonizes with the principle of respect for the opponent’s as well as one’s own corporeality and dignity over the vain victory at all costs.
Article 5 For the civilized individual and the society for whom human health and dignity are the common good, participation, in any role, in brutal shows of people massacring each other cannot be a standard of the quality of life. Neo gladiatorship camouflaged under the banner of martial arts or combat sports is a slight to the Fundamental Principles of Olympism, but also to the Universal Declaration of Human Rights. Therefore, this Resolution should inspire as many actors of Knowledge Society as possible jointly to oppose any deformations of the mission of Olympism and sport. The expansion of the pathology of unauthorized naming neo gladiators as combat sports athletes will soon turn the Fundamental Principles of Olympism into their own caricature – objective indicators are a testament to the devastation of all dimensions of health by the practice of legal bloody pageants [78].

This principle should not be ignored even when individual every-day words or idioms are supposed to be considered crucial terms of rigid argumentation. Here, such word is "development". The commonly accepted term "development of a disease" is patently absurd. Even if the user explains that they meant "development in a negative sense", all the more it proves that they are ignorant as to the semantics. It is also absurd, even if it is carefully disguised, to identify the development of human civilization mainly with technological progress. There is no doubt that the biggest technological progress concerns the ability to destroy stationary and mobile objects, including living humans, in any part of the globe, even one remote from the operator of "intelligence weapons" by thousands of kilometres. It is only a *faux* positive change if the victims of such technology put into practice are thousands of innocent civilians. The predominance of the destructive technology juxtaposed with the lack of basic sanitary installations, schools, hospitals, economic infrastructure which provides a dignified existence in overpopulated parts of the Earth is only one of the most general indications of dubious development of human civilization in a sustainable manner. Limited access of people and certain countries to not only innovative technologies, but also to services which rely on contemporary installations and devices, runs afoul of the thesis about the high level of the civilizational development of mankind. One good example is medical diagnostics, which is limited or absent for many people of the world. An obvious result of those egregious inequalities is the migration crisis in Europe.

If we accept the basic assumption of this work, mainly that the term "development" is associated only with positive changes, then we cannot ignore the fact that since the beginning, the promotion of SMARTPHONES entailed a conscious camouflage of their negative effects. Some were easy to predict, mainly that this biggest technological novelty of the recent years would focus the attention of its users at places and activities where they definitely should not – a street, driving, lunch, a school lesson, etc. The conscious camouflage of such negative effects can be explained by the prospects of being a pioneer, of achieving financial success, but above all – by the consciousness of huge power. Many sciences prove that the man has nurtured such needs in themselves for thousands of years. Therefore, it is hard to claim that both the designer of smartphones and scientists cooperating with him did not know about such needs and could not deduce implications (which is a basic methodological qualification) of such a huge technological breakthrough. In an original scientific paper, the best section for most important implications is "discussion" and "conclusion".

Technological features of ever-better generations of smartphones, ease of use, almost unlimited accessibility and mobility, do not make the user freer or better in the intellectual or moral sense, even if they appear to do just that. On the contrary, the use of smartphones fosters the plague of interpersonal violence and the problem of education to violence, which demonstrates the faults of the development of the modern man *en bloc*, in times when the extraordinary technological progress comes together with the era of post-truth. After all, pedagogy, psychology, ecology, sociology, political sciences are detailed sciences, but so far in the global social space (mainly mainstream social media) there is no coherent, interdisciplinary discussion of deep dehumanization. Despite disappointments and upset, it is thanks to the most recent technology that we have the potential to achieve sustainable development of man from the micro to macro scale. The simplest measurement of such development is a dignified life, in safe and healthy social environment, well-kept nature, with common yet responsible use of ecological technologies.

PART 2
Care of common goods as a goal of interdisciplinary actions from the micro to macro scale

The issue of "care of common goods" may be analysed in various ways and from different perspectives. For instance, as one of the effect of good manners, or as a method of survival of the entire human civilization, or as a means of therapy. Such fundamental issues (which are unfortunately suppressed in public space by media attractions, where only best-seller is sensation) can be described by a philosopher, pedagogue, psychologist, sociologist, ecologist, political scientist, historian, health science expert or other academicians, but also an artist, writer, journalist, priest – virtually anyone, as long as they meet three conditions: responsibility, competence and positive motivations. Social sensitivity by itself will not suffice.

The title of this essay and the three examples above bring together certain praxeology terms: "goal", "action", "way", "effect", "method", "means".

How many scientists (not to mention other professions) are fluent in the praxeology language? This elementary question has only one true answer – very few. If those words are widely used, but few people knows praxeology, then any attempt to solve an important practical problem (when it comes to effecting a much-needed change, or maintaining a morally accepted status quo, or for slowing down the destructive processes) bears a risk of miscommunication. Numerous examples are given by public debates. If any socially vital problem is discussed by politicians, scientists and journalists (at least one of them each), there is a chance that semantic dilemmas will mix with camouflaging real intentions of debating persons.

A clear formulation of problems requires methodological qualifications (including the knowledge of the theory of questions). If the problem concerns the protection of any of the common goods, then we need also honesty and courage. This is a basic requirement, as it is one of the most difficult tasks to show true colours of persons (people or groups) who in fact generate risks for at least one common good but create appearances of two kinds. The first kind is pretending that there is no problem at all; playing the issue down or generating the so-called "substitute problems". The second kind constitutes in declared readiness to solve the problem (the stage when a politician strives for power, a scientist for attractive grants, a journalist for a good contract as propagandist); followed by only pretending to actually solve it (the stage in order to keep as long as possible: the power, or resources for as long as possible). The number of scientists involved in the escalation of non-armed struggle is so big that the social roles of politicians, scientists or journalists tend to get fuzzy. According to figures from the last 20 years of the 20th c., more than 80% of all scientists in the world who were employed by the people in power were involved in non-armed struggle or in preparing military ones [6]. What is more, people with academic titles also try to seize power. As science has ways to find truth, it also knows how to manipulate it. Therefore, an academician in position of power may be either a skilled manipulator or a whistle-blower. The former considers ethical norms to be instrumental (as happens so often among people of power), while the latter respects at least some basic moral values in science and elsewhere.

How it is difficult to expose true intentions in a struggle was indirectly defined by Sun Tzu: „At first, be like a maiden; when the enemy opens the door, be swift as a hare; your enemy will not withstand you" [7 pp. 302-303]. This adage has not become obsolete in the struggle for power (not only the political one) in democratic societies. Modern technology allows us first to be "like a maiden", and then suddenly „be swift as a hare". And this is why the crucial part is the indirect power over technology (and at the same time, the control over scientists). What is more, we can never be sure if the person competing for power only holds it formally – the term "puppet government" (used here in the symbolic meaning) was created much before the sciences which deal with various aspects of power.

In this and previous academic essay, I refer directly to praxeology, but also use terms like "defence", "self-defence" and "struggle". What is more, in my previous essay I stressed that the language of praxeology is used by few people, and I mentioned the three categories of man's capacities: collaboration (positive cooperation), necessary defence, as a part of struggle (negative cooperation); concluding compromises.

The creator of modern praxeology (science about good work) is Polish academician Tadeusz Kotarbiński (1886-1982). He published a full lecture praxeology in Polish in 1955, in his magnum opus *A Treatise on Good Work* [8]. Kotarbiński stresses that praxeology is a proper methodology a science on effective achievement of goals of any intellectual or manual work. Small wonder then that the Communist government of Poland at that time was not interested in promoting such science (as the Communists held monopoly on everything). Despite that, *A Treatise on Good Work* has been translated into: English, German, Russian, Czech, Japanese, and Serbo-Croatian [4].

There is a crucial fact (not only because it may be omitted by potential researchers on praxeology) of the inspiring role of struggle for Kotarbiński's science about good work. He started with an assumption that a man develops the biggest amount of energy and smartness when he or she finds in constrained situations. Just in course of a struggle, an adversary devotes all his efforts to obstruct an action of the other side. In numerous kinds of struggles, there are plenty of such situations [8]. Before Kotarbiński completed his book, he had published through the Psychological Section of the Military Knowledge Association (in 1938, i.e. before the Second World War) his general theory of struggle, called agonology [9] (see

the paper available in English [10]). When dealing with struggle (negative cooperation) at the high level of generality, he reduces it to at least two subjects (assuming that a team can be a subject): „as any activity that is at least a two-subject one where at least one of subjects hinders the other" [9, 10]. He included it under the name of "a struggle technique" as a chapter to *A Treatise on Good Work* [8]. There is nothing strange in that as it more often happens that two subjects try to destroy one another than a situation where no party is involved in negative cooperation. Almost always, even between friendly persons, both elements intertwine – even when positive cooperation (helping) is dominant, however fragmentary of negative cooperation (hindering) still linger. This is depicted in the oriental symbol of *yin* and *yang*, also as graphic model of compromise.

Therefore, a broadly-understood praxeology (including agonology) sheds light and provides tools to research four possible states of facts in a relation of at least two subjects: "hindering through hindering" (an extreme example is a mutually destructive fight– an extreme example is a mutually destructive fight); "hindering through helping"(the worst kind of opponent is the one who follows this rule and camouflage their real intentions only to achieve their own selfish goals); "helping through hindering" (e.g. education through sports); "helping through helping" (for example, taking care of people with high level of disability) [11].

According to the principle of prioritizing military goals for scientific discoveries [1], after agonology, 1970 saw a Polish paper on the cybernetic theory of struggle (i.e. the theory of destructing [12]) by Józef Konieczny (1936-1984). The theorems of this theory are constantly verified in military laboratories, firing ranges and practical application in actual actions by military, police and secret services all around the world.

PART 3
What can innovative agonology bring to the studies?

Jarosław Rudniański (1922-2008), student of Tadeusz Kotarbiński, published a full lecture on agonology and theory of compromise in Polish in 1989 [6]. The cover of *Compromise and Struggle* includes a modest blurb: "Two parts of this book, one about the theory of struggle and another about the theory of compromise, come together in one logical conclusion." Before that (1983), the Communist government did not interfere when the first part, about non-armed struggle, was published [13]. Rudniański meticulously described the issues of vying for and keeping power with limited use of physical elimination of the opponent. Due to the martial law imposed in Poland at that time, the book was unavailable (although issued in 2000 copies). It is worth noting that the Russian troops left Poland only in 1993.

In his works, Rudniański stresses that the language of the general theory of struggle (agonology) can be applied to interdisciplinary connotations, but he did not explicitly say why. However, he does so indirectly. In extensive footnotes, he refers to paper in fine arts and social science, but also Holy Books or papers in biomedicine and other sciences. He does so as he uses detailed information to support his very general analysis of agonology, mainly when dealing with non-armed struggle. The Bible example of David, who vanquished Goliath, yields important information as to necessary preparations of man to fight in extreme situations – with a stronger opponent in the sense of somatic build, energy resources or experience in hand-to-hand fighting. David brings his moral posture and mastery of catapult. He developed those virtues as a shepherd and guardian of a herd entrusted to him by the Israeli people.

I am myself a student of Jarosław Rudniański and in Polish I published first (1991) the theory of defensive struggle along with the theoretical basis for cognitive-behavioural prophylactics and aggressiveness therapy [14]. The theory is apt to analyses of such events from a micro- to a macro scale. I conducted the empirical verification of mental effects at the micro scale (reducing aggressiveness and developing bravery) and motor effects (mainly predicting the effectiveness of safe fall and self-defence) in the course of an 8-month experiment with military cadets. I investigated the long-term effects of reducing aggressiveness with my method (which combined: self-defence exercises, judo exercises, relaxation and concentration exercises, intentional verbal action) before the end of 4-year studies by military cadets [15]. The positive results of the experiment and detailed conclusions from this innovative cognitive-behavioural prophylactics and therapy (and reducing aggressiveness is only one of many potential applications) provided foundations for the empirical theory of combat sports [16] published in 2000. This theory is just

narrowed to a micro scale (fights of one versus the other as it has place just in a group of combat sports or an individual versus a small group as it happens recurrently at non-sport confrontations).

Most of PhDs promoted by me in 2000-2018 and young scientists cooperating with me positively verifies other applications, too. The biggest part of empirical evidence (available in academic journals, mostly in English) is decided to diagnosing and reducing the susceptibility to body injuries during the fall (SBIDF) [17, 18]. The smallest part concerns the compensation of negative effects of hitting the ground [19] or a vertical obstacle [20], as well as avoiding and compensating hits with an object moving towards a standing person [21, 22].

As basic justifications and explanations concern the theory of safe fall, it is only natural to combine the language of agonology with the terminology of physics and mechanics [23-26]. The methods and terms of biomechanics are best suited to study and describe the results of observations in laboratory conditions of falls and hits with the ground [19, 27] or a vertical obstacle [20], avoiding hits with a moving object [21, 22]. The results of diagnosing and reducing SBIDF through proper interventions concern: people of various age, gender and motor experience [28-33]; people with mental disorders [34-36]; blind children and adolescents with eye diseases [37, 38]; people after amputation or with abnormalities of lower limb [39]; obese people [40]. Therefore, the language of agonology can be combined with knowledge provided by detailed sciences in medicine, health studies, psychology, etc. As the most effective method of reducing SBIDF is teaching safe fall [41-45] (an individual case of motor adjusting to events which cannot be completely eliminated from daily physical activity), therefore we obviously use references to motor control and performance [46], methodology, pedagogy, personal safety (survival ability) and ergonomics.

Innovative agonology is a short name for prophylactic and therapeutic agonology [47] i.e. evidence-based science about struggle. The basis method for this science, which since 2017 has piqued justified interest by hosts of reputable congresses and conferences in various areas is interdisciplinary approach. One of its obvious examples is the method of mixed assessments (efficiency and ethic) used to evaluate any mental and manual actions of individuals or teams in the perspective of agonology [48]. Four categories of such assessments are possible: "effective – ethical (fair)"; "ineffective – ethical (fair)"; "effective – unethical (shameful)", "ineffective – unethical (shameful)" [49-51]. An extreme example of ineffective is counterproductive (when a doer achieved goal opposite than intended).

And this is not all. Notwithstanding the above applications and many barriers to be overcome [52], innovative agonology offers also in cognitive and behaviour dimension: measurement of positive health and survival abilities [53-58], using mainly non apparatus, quasi apparatus tests [28, 59-65] and multidimensional tests [67]; self-defence and defence (of other persons) against intellectual and institutional violence [47, 68] as well as a novel approach to counteraction of threats [69]; specific health-related training [63]; a new approach to art therapy [70, 71] and music therapy [57]. Innovative agonology does not run against modern technology. On the contrary, in cognitive dimension it provides simple language (a conceptual apparatus), unique theories, clear definitions and methodology, which on one part allow to identify threats generated by factors like modern technology, and on the other are conducive to the systemic (interdisciplinary) countering the threats to sustainable development from the micro- to macro scale. Such activity may not ignore a positive potential of modern technologies.

CONCLUDING COMMENTS

The notion of **dense social environment** ("people linked to each other with various technological information measures and in a high degree dependent on each other due to mutual connection of their interests; more precisely: impossibility of achieving satisfaction without participation of people from own family circle and even satisfaction of basic needs or their majority") was defined by Jarosław Rudniański [13] more than thirty years ago. However, he did not see the times where the escalation of various shades of violence (from common insults and hate to subtler form of intellectual violence) thanks to the outstanding growth of information technologies is something that cannot be reined in by the governments, scientists or moral pundits. Paradoxically, the need to defend against this kind of violence fits the concept of monitoring knowledge through regular AHFE conferences

(Applied Human Factors and Ergonomics), as many people cannot live with dignity in dense social environment. Another paradox is that adding yet another conference (2018 saw 32 simultaneous single-subject conferences in one place, including the 19th edition of the leader) maybe will not cause logistic issues, but also will not bring us any closer to overcoming the key challenges with global reach – if anything, it is the opposite. It is possible to adopt the AHFE formula in interdisciplinary approach – if in one place, then not separately, but together as often as possible, at many sessions. However, we need to change the paradigm of doing science first.

At the risk of sounding sarcastic, we are very far from adding the following apps to the smartphones: warning against inevitable hit with a moving object; automatic turning on an antigravity field upon a loss of balance, or a defensive field upon an attack by aggressor; automatic "delete" of any abusive content.

The alternative is education [2, 72], supported with modern technology but one which only fosters verbal communication, satisfaction with learning proper motor responses in dangerous situations, or sports which teach respect for rules and own or the opponent's body (as in basketball). Such education may not go without two innovative methods: agonology bibliotherapy (which should also apply to any extreme human activity [73]) and alternative bibliophylactics based on library resources [10, 74]. It is necessary to give up the name „martial arts bibliotherapy" [75, 76], as the expansion of neogladiatorship in electronic media, posing as *mix martial arts* (MMA), is counterproductive in the psychological and social sense. In social consciousness, the name "martial arts" (in any combinations of words) will be inevitably more and more associated with extreme brutalization, no respect for dignity and universal values, public feeding of the lowest instincts [11, 77, 78]. As a result, it may turn into an effective system of demoralization, which itself can put humanity on the path to self-destruction.

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