

Problems of Polish Science A.D. 2020 - Case of Physical Culture Sciences

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Abstract

Background: The scientific framework gives us the sociology of science and Polish theory of physical culture. We should see all processes holistically, in dimensions of time, context and becoming. **Aim:** The author describes and attempts to explain the situation of science in Poland in the "physical culture sciences" A.D. 2020. What are problems, trends, and possibilities? **Method:** The main methods are: sources analysis, and scientific literature content analysis - a broad discourse. **Results and Conclusions:** A more holistic, systemic approach resulting from the new paradigm will allow the logical coherence of physical culture sciences to be maintained. Overarching general theory can be the foundation for detailed theories. These sciences, as interdisciplinary, should maintain relative independence or autonomy. **Keywords:** sociology of science, pathology, sciences of physical culture, sport.

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INTRODUCTION

We have a great track record of physical culture sciences in Poland, especially in terms of their theoretical foundation and humanistic dimension. This is due to the theory of physical education developed by Polish scientists [1- 3], and a more general, humanistic theory of physical culture by Zbigniew Krawczyk [4-6]. Is it then correct to blindly copy the patterns adopted in the European Union regarding the institutionalization of physical culture sciences?

The draft Act 2.0 of the Polish Ministry of Science and Higher Education provided for a change in the name of the field and discipline in which Polish scientists had earned their degrees. In the "List of Scientific Fields and Techniques according to the OECD Classification" in Health Sciences there is a subsection "3.3.k - Sports and Physical Fitness Science". Will we not lose this cultural and humanistic dimension in Poland together with the concept of physical culture? Fortunately, the "sciences of physical culture" remained in this name.

Although sports / physical culture sciences also contain a humanistic or a social part (history of sport, sociology of sport, etc.) [7], but the assignment of these sciences to the field of health sciences causes that this humanistic part becomes a margin and the achievements of sports humanists cease to count in the evaluation of relevant scientific units.

The author presents successively the problems of science related to the threats that occur, the problem of paradigm change, the relationship of physical culture sciences to sports sciences, new ideas in this group of sciences and efforts to maintain autonomy in the institutional system.

The main methods are: sources analysis, and scientific literature content analysis - the so-called broader discourse analysis [8].

General problems

Among the general problems of science, not only Polish, let us pay attention to the attitude of science to the economy and the process of commercialization of other areas of human activity, the threats which the author called pathologies, and the reaction of the scientific community (representatives of scientific institutions) to the process of paradigmatic changes.

1.1. Ethos or economic calculation?

The specific ethics of people of science is indicated by outstanding representatives of the sociology of science, also called the sociology of knowledge [9-13]. It should be an area of high culture, protected by state and international institutions, and cultivated by the elite of society. In terms of pathology, the commercialization of science is presented, which is

referred to as "efforts for economic profit in science" [14, 13, 15]. Should scientific policy, classification of sciences, parametric evaluation of scientific units and their financing should take into account this ethos of science to a greater extent, or just the economic dimension [16]? Due to the fact that the humanities does not translate directly into the economy, higher education in this area and financing of humanities research seem to be relegated to the background [17].

Meanwhile, the humanities are closely related to physical culture. Wojciech Lipoński (linguist, anthropologist and historian) devoted his inaugural lecture at the University of Physical Education in Katowice to this topic, and then - in October 2015 - demonstrated the relationship between physical culture and high culture. Should we then reduce the science of physical culture to its biotechnical and biomedical part?

1.2 Pathologies

Extreme commercialization in science is one of the troublesome manifestations of the pathology of this sphere of human activity. Well, the commercialization of science is a progressive process, as evidenced by, for example, the functioning of commercial publishing houses, journals, scientific databases and companies conducting indexation of journals [16, 18]. An example is charging up to US \$ 2,000 for publishing an article in a given commercial journal. A system that requires "magic" Impact Factor points creates a favorable situation for such a pathology.

The extreme underfunding of scientific institutions and people of science is an even more painful problem. The embarrassingly low level of expenditure on science is an ailment that already existed in the times of the People's Republic of Poland, and remained a serious problem after the political transformation in 1989. The professors' appeals of 1994 and 1998 remained valid after 2000, as evidenced by their reprint in 2001 [4, 19].

The politicization and ideologization of science were pathologies specific to totalitarian systems. During the martial law in the People's Republic of Poland a correspondent from Poland [1982] appealed in the pages of "Nature" for support for Polish scientists. But even today there are many examples of the politicization and ideologization of science carried out by Marx's spiritual children. These are, for example, EU grants, including gender themes and parities, such regulations of scientific organizations, political and newspaper correctness, censorship in many institutions and companies, also on the Internet. Unfortunately, politicization and ideologization is a problem concerning various scientific disciplines, especially social sciences [20]. E.g., in the sociological discourse the leftist ideas and the leftist origins continue to dominate [21].

Coterie or an excess of scienceometry does not have to be the only alternative. Michał Heller [21] speaks out against pacts (a colleague does something for a colleague), and he considers this matter to be crucial for a scientific career; moreover, he speaks against bureaucracy as a threat to the university idea. Similarly, Samsonowicz [23] is against numerical scienceometric assessment as the basis for qualifying for scientific promotion; against excessive administration and "bureaucracy" in science. *Nota bene*, bibliometry should not be confused with scienceometry [18].

In May 2015, at the author's initiative, employees of one of the universities met with a Polish representative of Thomson Reuters / Clarivate Analytics, during which attention was drawn to the fact of unfair competition from one commercial company indexed on Web of Science. Moreover, the author had highly enriching meetings and discussions with Prof. W. Pieter and Doc. Z. Reguli, concerning current and planned scientific activities. The conversation concerned, for example, the fetishization of the impact factor (IF) in scienceometry in some countries. Willy Pieter pointed out that IF is used (as a tool in scienceometry) only outside the US; yet American science is doing great. E. Garfield developed Impact Factor for libraries. Importantly, for specialties not very popular in the scientific community, IF and H-index will always be low [24].

1.3 A paradigm shift

Each change of the paradigm, understood as the methods of research and explanation of the reality under study recognized in the scientific community, gives rise to resistance in that community [25-27]. Scientists are reluctant to part with their ideas, even if they have already been falsified. In people faithful to the old paradigm, there is a psychological reaction called cognitive dissonance, an example of which is the reaction to the results of genetic research in recent years regarding the presence of the immediate ancestors of today's Poles in the territory of today's Poland in the first and second millennium BC [28]. Despite the hard evidence from research, and against logic, the falsified concepts are fiercely defended.

Generally, people outside the institution of a given scientific discipline (in the cited case - archeology and history) not only have a fresh perspective, but also have the courage to strike - through logical deduction - at the old, falsified paradigm. Especially since they do not know that "this is not allowed" (to write, speak or even think).

In the case of sciences classified in the nineteenth century, backed by institutional tradition, considerable confusion was created by the system theory, with the recommendation of a comprehensive approach to phenomena, which is applied to the

description of social life [27, 30-32], and then to explain the socio-cultural phenomena of sport [77], martial arts [5, 33] and tourism [34, 35]. This also translates into an appropriate, extended research methodology [36, 37].

Mircea Eliade and his concept of cultural dialogue explain very well the situations of diffusion of Western science with the wisdom of the East. At the same time, it forces the inclusion of both human corporeality and spirituality in anthropological reflection [36, 38, 39, 40, 41, 42, 43, 44]. On the other hand, Erich Fromm proposed going beyond classical logic and taking into account the social world of values, duty, moral evaluation and pedagogical application [79, 80].

Andrzej Szyszko-Bohusz (founder of the Holistic Pedagogy) is one of the first humanists to show the necessity to depart from the reductionist definition of physical culture and the need to treat human beings as a whole, especially in the educational process [46, 47]. His approach is constitutive of the Humanist Theory of Martial Arts. But philosophers such as Józef Lipiec [48] and Jan Szmyd [49] also participated in the creation of theoretical approaches to the new paradigm of science. Thus a new, systemic anthropology [50, 39, 51; 52]. It provided the basis for the anthropological theory of tourism [35, 52] and for the General Theory of Fighting Arts [33].

Of course, in the area of physical culture and scientific reflection in this respect, there are also concepts derived from other ontological, epistemological and axiological premises, for example concerning the pedagogy of martial arts [53, 54]. They are often devoid of a deep theoretical justification.

And what is this new paradigm for the 21st century to be like? Well, it is cultural, holistic and anthropological at the same time. Thus, man, as a psycho-physical being, is to be in the center of attention, taking into account the specifically human values of the higher government [18, 55]. We should see all processes holistically, in dimensions of time, context and becoming.

1. The specificity of science about physical culture

The problems of physical culture sciences result from the fact that - similarly to the phenomenon of tourism - physical culture requires a multifaceted, multidimensional, and therefore multidisciplinary approach, due to the dispersion of disciplines established in the 19th century. This is not only the problem area: movement - body - health. Physical culture, as a part of general culture, extends its issues from natural and medical - to humanistic and social, and methodology - from quantitative to qualitative research strategies. It is essential here, for systemic research and findings, inter- and multidisciplinary [4, 56, 57].

Whether it concerns sport or other areas of physical culture, the whole person is at stake - his body, effort, pain, but also personality and spirituality, intellect, emotions, the world of values [58].

2.1. Sciences of physical culture and sport sciences

The 'physical culture' is an area of issues related to the physical activity of man. It comprises such areas as: sports, physical recreation, rehabilitation, physical education, active forms of tourism, martial arts and systems of psychophysical practices. This concept is present, for example in the definition of Budo philosophy [59]. Physical culture in literature was variously defined: in the past mainly in a reductionist way, e.g., by the category of the pro-corporal behaviour [60], currently by linking with other areas of culture [61].

Sport science, or more broadly, physical culture sciences, represent a continuum stretching from the humanities and social sciences of sport, the discipline of biomedical and biotechnical. Perceiving human holistically sport science cannot lose the humanistic dimension [62, 63, 64, 65, 66]. They should not be pigeon-holed as health sciences (as in Poland), or as pedagogical sciences (as in Slovakia). For they are the avant-garde of science of the 21st century. A representative of sport science should have knowledge about man in his biopsychosocial functioning. In particular, a specialist in the martial arts science should have further knowledge about the cultural contexts of martial arts.

In sport sciences erroneous ontology of logical positivism and reductionism caused confusion of the dimension of spirituality. The result is a lack of proper preparation of a player. Meanwhile, the spiritual dimension of training was already present in the ancient martial arts (*shin-gi-kai*: spirit-body-technique) and in *budo*. Jigoro Kano recommended "to put mental and physical energy" [67]. Thus, the theory of sports should take into account physical, psychological (e.g., mental) and spiritual training [68, 69]. In addition, erroneous and socially dangerous is permissive treatment of sports ethics [19, 65].

Physical culture sciences and sport sciences are derived from the theory of physical education. Their practical application is realized through pedagogy. Pedagogy of physical culture / sport is both part of pedagogy and of sciences of physical culture / sport. Similarly - the sociology of physical culture / sport and some other humanistic disciplines. Detachment from humanities would be bringing this science down to the thematic area in kinesiology.

2.2. New conceptions and directions

Stephen Silverman (Columbia University, USA) has shown - during the keynote speech of the World AIESEP Congress 2014 in Auckland - an

American perspective 1970-2013 of conceptions and methodologies in physical education and sport pedagogy in USA [77, 71]. Mixed method research with use of qualitative methods (multiple ways of doing research) are preferable now. We must extend our scholarly profile, to avoid a narrow vision of the reality [71].

Jerzy Kosiewicz [72] writes on the social science of sport from the institutional and functional point of view. This science is stretched between natural and humanistic determinants, which determine the research methodologies, topics and results interpretation used here. They are similarly recognized and described - movement studies and sport sciences in general. Movement studies are - like health studies - placed between natural sciences and cultural studies. Henning Eichberg [73] writes on contradictions, cross-disciplinary connections and overlaps, which help toward an understanding of human life. Bairner [74] writes on natural sciences and social sciences of sport, as about two languages, methodologies and kinds of a discours.

Andrzej Pawluczki analyzes the concept of "science of physical culture" [75]. This author introduces the sciences on medical culture from sciences on man (p. 281). This is a serious ontological and sociological justification for the sciences of physical culture. Doubts are only raised by the fact that this author separates the humanities and social sciences about physical culture (p. 70). This book by Prof. Pawluczki was awarded by Ministry for research for social development. T. Koszycz - on the basis of the indicated book, he stated: "it is more bold today to postulate the need for institutional independence of this field of science in the Central Commission" (from the editorial review - the fourth cover page).

2. Deans' conventions and discussion

On the initiative of Wojciech J. Cynarski ^[1], deputy dean for science at the Faculty of Physical Education of the University of Agriculture, an institution called the Convention of Deans of Physical Education Faculties (universities) appeared in Poland. In 2014 and 2015, four more such conventions were held: in Rzeszów 2014, Opole 2014, Szczecin 2015, and Biała Podlaska 2015. The next convention was to be held in Gorzów Wielkopolski, but it did not come to fruition.

The idea was to expand the forum of meetings, which so far only included representatives of the AWF, and to make it regular - in the interest of the entire community. Originally, this was to apply to both deans and rectors. Especially the deans of young faculties educating staff of physical culture tried to exist to a greater extent in the environment with older academic tradition. At that time, faculties in Opole, Rzeszów and Szczecin were trying to obtain academic qualifications to conduct doctoral dissertations. It was about the exchange of knowledge, arrangements regarding the procedures used, as well as a common voice representing this community. Cynarski twice [78] (at Deans' Conventions of Faculties of Physical Education in Rzeszów and Szczecin) formally applied for relative independence or autonomy for physical culture sciences in Polish science institutions, and sent a letter to the participants of the Convention in Biała Podlaska. Unfortunately, so far, to no avail.

* * *

According to the author, technologies change, but man remains the same. It makes no sense to change the science paradigm due to technological changes, e.g. in sports. On the contrary, changes dictated by the ideology of progress or the like are a mistake. However, changes can and should be made due to the explanatory power of individual theoretical concepts. Those with more power to explain the reality under study should displace the others.

Krawczyk's theory is holistic by definition, although it is based on a behaviorist definition of the concept of physical culture. A holistic approach, although understood in various ways, is also declared by the authors of competing definitions - W. Osiński and J. Kosiewicz [76, 2]. The humanistic theory of physical culture, understood on the basis of a new systemic paradigm of science as a whole, systemically and with an emphasis on cultural aspects, may constitute the basis for the General Theory of Fighting Arts (GTFA), which goes beyond the world of sport [33] and for the systemic anthropological theory of tourism (SATT), describing the phenomenon of tourism - fig. 1.

¹ He presented this idea to Zbigniew Borysiuk (Opole University of Technology) during the AIESEP conference in Warsaw in 2013. Dean Borysiuk was to organize the first such convention in Opole, but he withdrew from it. The initiative was then taken over by the deans of J. Nowocień (Warsaw) and W. Czarny (Rzeszów). As a result, the first Convention of Deans of PE Faculties was held in Rzeszów on April 25-27, 2014.

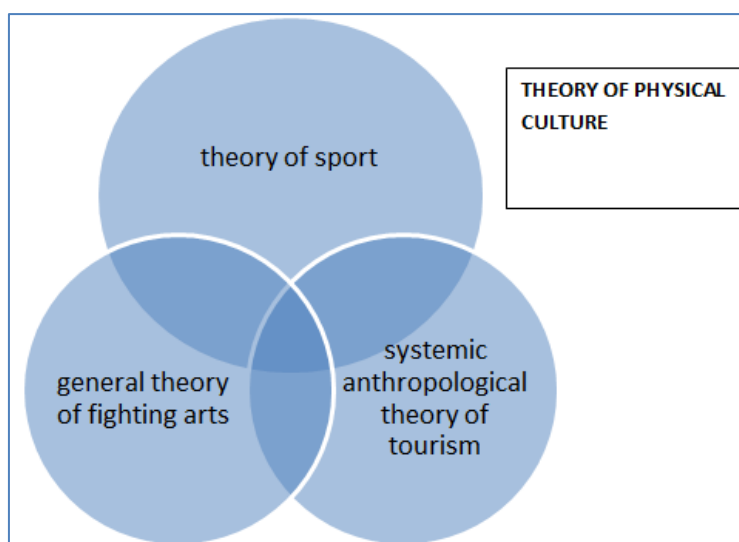


Fig-1: "Cultural" theory of physical culture vs. smaller theories

So are professors of health sciences to evaluate the cultural, social, spiritual, moral and economic aspects of sport, physical education, martial arts, tourism or other figures related to the field of physical culture? Let us leave this question to the decision-makers of the relevant ministerial departments.

CONCLUSIONS

A more holistic, systemic approach, resulting from the new paradigm, will maintain the logical coherence of the science of physical culture. The overarching general theory may be the foundation for detailed theories of physical education, sport, physical recreation, martial arts, or also tourism. It must, however, be closer to broadly understood anthropology and cultural sciences than to be reduced to biology and health.

According to the author, the science of physical culture, or the science of sports (and related areas) and the science of tourism, should have a relative independence. These are interdisciplinary fields. Probably the scientific institutions of the future will be just interdisciplinary, solving problems in a systemic way, not in a reductionist way. Thus, these groups of sciences are at the forefront of the scientific world.

SOURCES

A correspondent from Poland (11 Feb, 1982), *An SOS from a Polish scientist*, "Nature", no. 295, pp. 452-540; doi: 10.1038/295452d0.

Gardecki M. et al. / *Komitet Ratowania Nauki Polskiej* (1998/2001), *Ratujmy naukę w Polsce! Apel do Społeczeństwa* [Committee to Save Polish Science (1998/2001), Let's Save Science in Poland! Appeal to Society], "Ido Movement for Culture", vol. 2, p. 300 [in Polish].

Grabowski Z.R., Turski Ł.A., Kowalczykowska A., Głowiński M., Nawrocki M., Dziembowski W. (1994/2001), *List otwarty do członków KOMISJI BUDŻETU I FINANSÓW SEJMU RP* [An open letter to members of the BUDGET AND FINANCES COMMITTEE OF THE SEJM OF THE POLAND], "Ido Movement for Culture", vol. 2, p. 299.

Pieter W. (2014), Masaryk University, Brno, Nov. 2014. – direct interview.

REFERENCES

- Nowocień, J. (2013), *Study on pedagogy of physical culture*, 2nd corrected edn., AWF, Warsaw [in Polish].
- Cynarski, W. J. (2014). Polish achievements in the theory of physical education and new directions. *Ido Movement for Culture. Journal of Martial Arts Anthropology*, 14(2), 1-14.
- Pawlucki, A. (2015), *Nauki o kulturze fizycznej*, Impuls, Kraków [in Polish].
- Krawczyk, Z. (1994). *Humanistic sciences on physical culture. Structure and functions*, "Physical Education and Sport", 4; 3-5.
- Cynarski, W.J. (2005b). *Physical culture in the holistic perspective* [in:] J. Kosiewicz [ed.], *Sport, Culture and Society. In Honour of Professor Zbigniew Krawczyk*, AWF, Warszawa, pp. 196-204.
- Kosiewicz, J. [ed.]. (2005). *Sport, Culture and Society. In Honour of Professor Zbigniew Krawczyk*, AWF, Warszawa.
- Bakonyi, T. (2015). *Reflections on Sport Sciences (by Reading Norbert Elias)* [in:] 7th Conference ISSSS. *Book of Abstracts*, Budapest, 8.
- Krippendorff, K. (2004). *CONTENT ANALYSIS: AN INTRODUCTION TO ITS METHODOLOGY*, SAGE, THOUSAND OAKS, CA.

9. Ben-David, J. (1971). *The Scientist's Role in Society*, Prentice-Hall, Inc., Englewood Cliffs, New Jersey.
10. Mulkoy, M. (1980). *Science and the Sociology of Knowledge*, London-Boston-Sydney.
11. Verhoog, H. (1980). *Science and the Social Responsibility of Scientists*, Leiden University Press, Leiden.
12. Popper, K.R. (1983). *Dwanaście tez o zawodowej etyce inteligencji* [Twelve theses about the professional ethics of intelligence], "Prezentacje", 7, 14-15 [in Polish].
13. Krawczyk, Z. [ed.]. (1990). *Sociology of Science. Outline of Problems*, Warsaw University Press, Warsaw [in Polish].
14. Fudalej M. (1990). *Pathology of scientific life* [in:] Z. Krawczyk [ed.], *Sociology of Science. Outline of Problems*, Warsaw University, Warsaw, pp. 219-251 [in Polish].
15. Strelau, J. (2014). *Humanistyczne paradoksy* [Humanistic paradoxes], "Forum Akademickie", 4; 14-15.
16. Woleński, J. (2013). *Uwagi o ewaluacji czasopism naukowych* [Comments on the evaluation of scientific journals], "Nauka", 1; 55-68.
17. Kozłowski, J. (2016). *Co z tą polską humanistyką?* [What about the Polish humanities?], "Forum Akademickie", 2, 48-51 [in Polish].
18. Cynarski, W.J. (2014a). *The New Paradigm of Science Suitable for the 21st Century*, "Procedia – Social and Behavioral Sciences", 149; 269-275.
19. Johns D.P. (1998). *Fosting and Feasting: Paradoxes of the Sport Ethic*, "Sociology of Sport Journal", 15; 41-63.
20. Cynarski, W.J. (2009). *Wpływ popularnych ideologii na teorie aktualnie dominujące w socjologii kultury. Zarys problematyki* [Influence of popular ideologies on the theories currently dominant in the sociology of culture. Outline of the problem] [in:] A. Andrusiewicz [ed.], *Studia Społeczno-Polityczne*, vol. 3, pp. 116-121 [in Polish].
21. Malcolm D. (2012). *Sport and Sociology*, Routledge, London – New York.
22. Heller, M. (2012). *Śmierć uniwersytetów* [Death of universities], "Tygodnik Powszechny", nr 28 z VII 2012.
23. Samsonowicz, H. (2014). *Profesorowie są lepsi i gorsi* [Professors are better and worse], "Forum Akademickie", 10, 30-31 [in Polish].
24. Cynarski, W.J., Reguli, Z. (2014). *Martial arts science institutionalisation: specialized scientific periodicals*, "Ido Movement for Culture. Journal of Martial Arts Anthropology", 14(1), 54-62.
25. Kuhn, T.S. (1962). *The Structure of Scientific Revolutions*, University of Chicago Press, Chicago.
26. Kuhn, T.S. (1977). *The Essential Tension: Selected Studies in Scientific Tradition and Change*, University of Chicago Press, Chicago - London.
27. Kuhn T.S. (1985). *Two poles. Tradition and innovation in scientific research*, PIW, Warsaw [in Polish].
28. Cynarski, W.J. (2018). *Propinquity of Scythians and Slavs. Remarks on the state of knowledge of Slavic ethnogenesis*, "Ido Movement for Culture. Journal of Martial Arts Anthropology", 18(1); 1-7.
29. Parsons, T. (1951). *The Social System*, Free Press, New York.
30. Parsons, T. (1971). *The System of Modern Societies*, Englewood Cliffs N.J.
31. Laszlo, E. (1995). *Systems theory at the end of the millennium: Revolution in science and transformation in society*, Presidential Address, International Society for the Systems Sciences, Louisville.
32. Luhmann, N. (2004). *Introduction to the Theory of System*, 2nd edn., Carl-Auer-Systeme Verlag, Heidelberg [in German].
33. Cynarski, W.J. (2017). *Towards a General Theory of Fighting Arts*, "Phys Activ Rev", 5; 83-90.
34. Obodyński, K., Cynarski, W.J. (2006). *The theory of tourism in system formulation* [in:] J. Kosiewicz [ed.], *Environmental Differentiations of Tourism*, Economical and Technical College, BK, Legionowo, 17-29.
35. Cynarski, W.J. (2010). *Meetings, Conflicts, Dialogues. Analysis of Chosen Areas of Physical Culture and Cultural Tourism*, 2nd edn expanded, Rzeszow University Press, Rzeszów [in Polish].
36. Wyka, A. (1993). *The social scientist to experience*, IFiS PAN, Warsaw [in Polish].
37. Obodyński, K., Cynarski, W.J. (2003). *Reflections about methodological and epistemological problems in sport sciences*, "Research Yearbook. Studies in the Theory of Physical Education and Sport", 9; 37-43.
38. Wilber, K. (2001). *The eye of spirit: An integral vision for a world gone slightly mad*, 3rd edn. expanded, Shambhala, Boston – London.
39. Cynarski W.J. (2001). *Evolution of science as an example of the sociology (from the nineteenth century into the future)*, "Ido Movement for Culture", 2, 161-179.
40. Cynarski, W.J. (2005a). *Problems of European civilization and new humanistic anthropology*, "Didactics of Literature", 25; 125-139 [in Polish].
41. Cynarski, W.J., Obodyński, K. (2008). *Global sport and sport for all in cross-cultural dialogue* [in:] M. Doupona Topic, S. Licen [eds.], *Sport, Culture & Society: An Account of Views and Perspectives on Social Issues in Continent (and Beyond)*, University of Ljubljana, Ljubljana, 23-28.
42. Saldern, M. von [ed.]. (2011). *Meisterung des Ichs. Budo zur Gewaltprävention?*, Books on Demand GmbH, Nordstedt [in German].
43. Tokarski, S. (2011). *Where West meets East in martial arts* [in:] W.J. Cynarski [ed.], *Selected Areas of Intercultural Dialogue in Martial Arts*,

- Lykeion Library vol. 14, Rzeszow University Press, Rzeszów, 46-55.
44. Kielar, M.B. (2012). *Ken Wilber's integral vision and its application in education*, Wydawnictwo Akademii Pedagogiki Specjalnej, Warsaw [in Polish].
 45. Cynarski W.J. (2003). *Introduction to the logic of the new paradigm of science*, "Ido Movement for Culture", 3; 19-32.
 46. Szyszko-Bohusz, A. (1989). *The Holistic Pedagogy*, Ossolineum, Wrocław [in Polish].
 47. Szyszko-Bohusz, A. (2003). *Theory of Genetic Immortality in relation to the holistic education and martial arts* [in:] W.J. Cynarski, K. Obodyński [eds.], *Humanistic Theory of Martial Arts - Concepts and Problems*, Rzeszow University Press, Rzeszów, pp. 17-23 [in Polish].
 48. Lipiec, J. (2011). *Phenomenology of Journey. Studies in the Philosophy of Tourism*, Fall, Krakow [in Polish].
 49. Szmyd, J. (2011). *Reading the present: The anthropological, ethical and educational prospect*, Krakowskie Towarzystwo Edukacyjne – Oficyna Wydawnicza AFM, Kraków [in Polish].
 50. Cynarski, W.J. (2000). *Towards a new, humanistic science on man. Anthropology of psychophysical progress*, "Ido – Ruch dla Kultury / Movement for Culture", 1; 99-103.
 51. Cynarski, W.J. (2013a). *Chapter one. A review of literature: definitions, ideas, theories, anthropology, values and roles in physical education and recreation* [in:] Zeng H.Z., Cynarski W.J., Xie L., *Martial Arts Anthropology, Participants' Motivation and Behaviours. Martial Arts in Chanshu: Participants' Motivation, Practice Times and Health Behaviours*, Lambert Academic Publishing, Saarbrücken, 9-54.
 52. Cynarski, W.J. (2012). *Non-entertaining excursion in the perspective of the systemic-holistic anthropology of tourism* [in:] I. Jirasek, J. Kosiewicz, D.N. Roberson [eds.], *Sport and Physical Education in the Mirror of the Social Sciences. 3rd Conference of the ISSSS*, Palacky University, Fac Phys Culture, Olomouc, Czech Rep. <http://apps.webofknowledge.com>, pp. 124-130.
 53. Wolters, J.M. (2005). *Budo-Pedagogy*, "Ido Movement for Culture", 5; 193-205.
 54. Figueiredo, A., Avelar-Rosa, B., Gomes, M., Vences, de Brito, A. (2013). *Pedagogical intention of martial arts and combat sports in physical education classes* [in:] 2013 International Budo Conference by the Japanese Academy of Budo. Abstracts, University of Tsukuba, Sep. 10-12, 83.
 55. Cynarski, W.J. (2014b). *O nowym paradygmacie nauki. Konferencja LUMEN w Iasi, 24 kwietnia 2014*, „Forum Akademickie”, forumakademickie.pl/Aktualności/Problemy_nauki.
 56. Godlewski, P. (2013). *Nauki o kulturze fizycznej to przede wszystkim badania społeczne i humanistyczne!* (?) [in:] M. Kazmierczak, J. Kosiewicz [eds.], *Sport i turystyka. Uwarunkowania historyczne i wyzwania współczesności*, AWF, Poznań, pp. 36-46 [in Polish].
 57. De Tchorzewski, A.M. (2013). *Osobliwość nauk o kulturze fizycznej* [The peculiarity of the science of physical culture], "Wychowanie Fizyczne i Zdrowotne" [in Polish], Dec., no. 11, pp. 9-14.
 58. Femiak, J. (2012). *Corporeality in the theory of physical education. From materialism to holism*, AWF, Warsaw [in Polish].
 59. Matsunaga, H. (2009). *Budo: The Martial Way of Japan*, Nippon Budokan, Tokyo.
 60. Krawczyk, Z. [ed.]. (1995). *Sociology of Physical Culture*, AWF, Warsaw [in Polish].
 61. Szyszko-Bohusz, A. (2011). *Review of the book* [in:] W.J. Cynarski [ed.], *Selected Areas of Intercultural Dialogue in Martial Arts*, Biblioteka Lykeion vol. 14, Rzeszów University Press, Rzeszów, 164-167.
 62. Osiński, W., Kiwerski, J. (2005). *Stanowisko Komitetu Rehabilitacji, Kultury Fizycznej i Integracji Społecznej PAN w sprawie polityki badań naukowych i rozwoju kadr w dziedzinie nauk o kulturze fizycznej*, „Sport Wyczynowy”, 5-6; 5-12 [in Polish].
 63. Pawlucy, A. (2007). *Homo sportivus*, "Forum Akademickie", no. 11, http://www/forumakad.pl/archiwum/2007/11/58_homo_sportivus.html [in Polish].
 64. Cynarski, W.J., Obodyński, K., Zeng, H. (2012). *Martial arts anthropology for sport pedagogy and physical education*, "Romanian Journal for Multidimensional Education Lumen", 4(2), 133-156.
 65. Kosiewicz, J. (2010). *Sport and Philosophy. From Methodology to Ethics*, BK, Warsaw.
 66. Ponczek M. (2011). *Czy historia kultury fizycznej oraz inne dyscypliny humanistyczne nauk o kulturze fizycznej mogą mieć pola badawcze i metodologię* [in:] J. Dżereń [ed.], *Z wybranych zagadnień metodologii i organizacji kultury fizycznej oraz, rehabilitacji i turystyki w Polsce*, Szkoła Wyższa im. Pawła Włodkowica w Płocku, Wydawnictwo Naukowe Novum, Płock, pp. 19-31.
 67. Murata, N. (2013). *The differences between jujutsu and judo: modifications to jujutsu made by Kano Jigoro in creating judo*, oral presentation during the 2013 International Budo Conference, JAB and University of Tsukuba, Sep. 10-12.
 68. Pasterniak, W., Cynarski, W.J. (2012). *Selected reasons for failure at the Olympic Games. An interview with Prof. zw. dr hab. Wojciech Pasterniak, Head of the Department of Philosophy of Lusatian Education at the Higher School of Humanities in Żary*, "Ido Movement for Culture. Journal of Martial Arts Anthropology", vol. 12, no. 4, pp. 74-77.

69. Pasterniak, W., Cynarski W.J. (2013). *The possibilities of spiritual sports training*, "Ido Movement for Culture. Journal of Martial Arts Anthropology", vol. 13, no. 4, pp. 49-51.
70. Locke, L. (1977). *Research on teaching physical education: New hope for a dismal science*, "Quest", 28(1), 2-16.
71. Silverman, S. (2014). *Tracing our past and looking forward: Research and the physical education pedagogy community*. Keynote lecture during the AIESEP Congress, Auckland, Feb. 10, 2014.
72. Kosiewicz, J. (2013). *Social sciences of sport: natural and humanistic determinants* [in:] J. Kosiewicz, K. Obodyński [eds.], *Social Sciences of Sport. Assumption and Perspectives*, University of Rzeszow, Rzeszow, pp. 3-13.
73. Eichberg, H. (2014). *Explanation or understanding? Movement studies between natural sciences and cultural studies*, "Physical Culture and Sport. Studies and Research", vol. LXIII, 5-21.
74. Bairner, A. (2014). *Challenges for the social sciences of sport: revisiting 'the two cultures'*, "Asia Pacific Journal of Sport and Social Science", 3(1), 1-5.
75. Pawlucki, A. (2012). *Physical culture sciences* [in:] W.J. Cynarski, J. Kosiewicz, K. Obodyński [eds.], *Sport in the Context of Social Sciences*, Rzeszow University Press, Rzeszów, 9-24.
76. Cynarski, W.J. (2013b). *Budo, Martial Arts and Combat Sports – Definitions, Ideas, Theories*, "Research Journal of Budo", 45(3), 222-241.
77. Bette, K.H. (1999). *Systemtheorie und Sport*, Suhrkamp, Frankfurt am Main [in German].
78. Cynarski, W.J. (2002). *The Process of Globalization. Dialogue of Cultures or Conflict of Values?*, Institute of European Social Studies, Rzeszów [in Polish].
79. Fromm, E. (1973/1992). *The Anatomy of Human Destructiveness*, Henry Holt, New York.
80. Fromm, E. (1976/1989). *To Have or to Be. The Spiritual Foundations of a New Society*, Klub Otrycki, Warsaw.