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NEW SUPPLEMENTS TO THE BIOGRAPHY OF SCIENCE OF PHYSICAL CULTURE

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Abstract. *In the section of physical education (FIS Communications '96), a discussion about the necessity of professional and terminological definition of theoretical-practical activity in the field of physical culture has been initiated. Starting from the sociological ideas that the forms of social conscience (religion, morality, philosophy, science, art) are, in fact, the contents of culture and cultural patterns, it is more accurate to name our whole motor and mental activity as PHYSICAL CULTURE. Therefore, a theoretic-scientific category level of our activity has evolved from the narrow views about self-appropriate "science of motion", to the SCIENCE OF PHYSICAL CULTURE, whose base is "the essence of science" of physical culture which consists of: theory of physical culture, theory of medium level (theory of physical education; theory of sport; theory of recreation) and theory of motor activity.*

Key words: *science of physical culture, essence of science, theory of physical culture, theory of medium level, theory of motor activity*

1.

In the section of physical education (FIS Communications '96), a discussion about the necessity for professional and terminological definition of theoretical - practical activity in the field of physical culture has been initiated. The suggestion of the section, that had appeared at the plenary session of FIS Communications '96, gained its practical realization in the discussion within the Round table of FIS Communications '97, named "Terminology in physical culture".

It is creatively correct and productive to open any terminological dilemma in our profession because there are a lot of terminological dilemmas in it. The result, however, of all terminological discussions is a conceptual, terminological and epistemological definition of OUR PROFESSION, because it is impossible to have any other discussions

about terminology without it.

What is the name of our profession and do we have the LANGUAGE and SCIENCE of the PROFESSION? What is the SUBJECT of RESEARCH of our profession and do we possess a developed METHODOLOGY of the PROFESSION? Do we have corresponding PROFESSIONAL TEACHING STAFF and INSTITUTIONS that can create and develop the THEORY and SCIENCE of the PROFESSION?

2.

The answer to these questions is not so simple. Many generations before us have dealt with it, we deal with it nowadays, and it seems that future generations will do the same.

Historically looking, in the early phase of development in our profession, we were not burdened with these questions, we were dealing with PHYSICAL EXERCISES. The transfers of some cultures have changed the name of the profession into PHYSICAL CULTURE, in its leap we continued to grow and develop with physical exercises as an aspect of culture. New time has brought the development of one part of physical culture, of that competitive, top creativity in MOVEMENT - SPORT. One question has emerged at once : can it be A NEW CULTURE in the approach to physical exercises, so called SPORTS CULTURE? Parallel with this process of development in the profession or ACTIVITY, professional and scientific ideas have developed, and therefore the question of CONSTITUTING SCIENCE of the PROFESSION (ACTIVITY) has more and more imposed.

3.

In some domestic and foreign sources a great number of ideas for the name of the profession (activity) and its scientific establishment appeared (only some of them are quoted):

1. Physical culture and Science in / of physical culture
2. Physical activity and Science of physical activity
3. Physical education and Science of physical education
4. Physical culture and within it "independent science of movement" ("kinesiology")
5. Sport and Science of sport
6. Human kinetics and Science of human kinetics
7. Human locomotion and Science of human locomotion
8. Psychkinetics and Science of human movement
9. Antrophokinetics and Science of antrophokinetics
10. Antrophomotorics and Science of antrophomotorics

Besides an abundance of ideas for the name of our profession and science (both in our country and abroad), here are the terms that have been used most frequently, both in professional communication and in practical activity :

1. PHYSICAL CULTURE - SCIENCE OF PHYSICAL CULTURE
2. SPORT - SCIENCE OF SPORT
3. PHYSICAL CULTURE (PHYSICAL ACTIVITY) -

SCIENCE OF MOVEMENT ("kinesiology")

The representatives of the idea of PHYSICAL CULTURE and its corresponding SCIENCE OF PHYSICAL CULTURE are: Polič, B., Leskošek, J., Stefanović, V.-Petrović, D., Berković, L.- Blagajac, M., Matic, M., Živanović, N., Matveev, L. P., Ponomarjov, N. I., Stoljarov, V. I., Kravčik, J., and others.

The representatives of the idea of SPORT and SCIENCE OF SPORT are: Polič, B., Nišavić, M., Tomić, D., Kristan Silvo and a number of authors from western countries where "sport" is a synonym for "physical culture".

The representatives of the idea of PHYSICAL CULTURE (PHYSICAL ACTIVITY) and its corresponding SCIENCE OF MOVEMENT ("kinesiology") are: Mraković, M., Horvat, V., Momirović, K., Šugman, R., Strel, J., Malacko, J., Bala, G., and also a number of authors from the west where "kinesiology" has been treated as "science of movement", though there are those authors who treat kinesiology as biomechanics.

Which of the three quoted and most frequently used terms has the largest quantity of "valid variance" for a professional consensus?

On the basis of the consulted literature and a long-range research in this field I have come to the conclusion that the best term for the PROFESSION-ACTIVITY is PHYSICAL CULTURE, while SCIENCE OF PHYSICAL CULTURE is the best term for the scientific discipline that does the research on this activity. Both terms should be included in the nomenclature of activities and scientific disciplines in the Ministry of science and technology in the Republic of Serbia.

4.

What are the New supplements to the biography of PROFESSION AND SCIENCE OF PHYSICAL CULTURE?

I would not give any explanations for the terminological definition of the PROFESSION - ACTIVITY, because I think that this question has not appeared in any relevant studies (so, it has not been published, it has not been discussed), except in the published studies of the mentioned home and foreign authors: Polič, Leskošek, Stefanović-Petrović, Berković-Blagajac, Matic, Živanović, Matveev, Ponomarjov, Stoljarov, Kravčik, and others - where they DEFINE PHYSICAL CULTURE AND ITS STRUCTURE.

I would open a discussion about TERMINOLOGICAL DEFINITION AND ESTABLISHMENT OF SCIENCE OF PHYSICAL CULTURE with a complete turnabout and statement that PHYSICAL CULTURE as a profession (activity) IS NOT DEFINED ONLY BY ONE (self-dependent) SCIENCE OF MOVEMENT ("kinesiology"), BUT ALSO BY THE ESSENCE OF PHYSICAL CULTURE which includes:

1. PHILOSOPHY (THEORY) OF PHYSICAL CULTURE
2. THEORY OF MEDIUM SCOPE:
 - a) THEORY OF PHYSICAL EDUCATION
 - b) THEORY OF SPORT
 - c) THEORY OF RECREATION
3. THEORY OF MOTOR ACTIVITY ("science of movement")

If the following interdisciplinary scientific branches, usually classified into:

4. BIOLOGICAL-MEDICAL SCIENCES and

5. SOCIAL (HUMANISTIC) SCIENCES

are added to the ESSENCE OF SCIENCE OF PHYSICAL CULTURE, then we get the STRUCTURE OF SCIENCE OF PHYSICAL CULTURE where the THREE SPECIAL SCIENTIFIC DISCIPLINES can independently exist:

1. SCIENCE OF PHYSICAL EDUCATION (1, 2 a, 3, 4, 5)

2. SCIENCE OF SPORT (1,2 b, 3, 4, 5)

3. SCIENCE OF RECREATION (1, 2 c, 3, 4, 5)

An explanation for the "ESSENCE OF SCIENCE"!

Why the "essence of science", and not "only one science and only self-dependent science-kinesiology", as a number of authors considered?

At the moment of creation of "self-dependent science" ("kinesiology") at the Zagreb Faculty of physical culture, professor M. Mraković introduced an idea that "THEORY IS NOT SCIENCE":

"Only so called THEORY OF PHYSICAL CULTURE was the opponent to many trends, but since IT IS NOT SCIENCE there were no obstacles to digression."¹

What a lie! If theory deals with the processes of analysis-synthesis, induction-deduction, as special logical processes in establishing scientific truths about studied problems-just the same as science does, then it is not true that THEORY is not also SCIENCE or vice versa, SCIENCE is not also THEORY. As an addition to this claim, there is B. Pavlović's opinion, that says:

"SCIENCE always possesses THEORY of the questions it deals with, and almost always THEORY PRECEDES SCIENCE both in methodological, and wider, in philosophical and ideological way."²

On the basis of this quotation, we can claim with lots of reliability that if there had not been THEORY (even it was insufficient), there would have been no SCIENCE OF MOVEMENT, that is, no SCIENCE OF PHYSICAL CULTURE.

The quoted opinion of prof. M. Mraković (by the way, in 1978 he wrote mimeographed notes named "Elements of physical culture", what is particular "Theory of physical culture"), was indispensable to the authors of "self-dependent science" because, in that way, they eliminated the ESSENTIAL BASIS OF SCIENCE OF PHYSICAL CULTURE-ITS THEORY, and since at that time theories of medium scope (of physical education, sport and recreation) were not developed while theories of certain special branches were even less developed, there was a free passage to the constitution of "self-dependent science"- "kinesiology". There is one question - why prof. M. Mraković denied his own "Theory of (elements of) physical culture"? Many of us know the answer to the question because such an approach was necessary to get some financial sources in the Ministry of science for a new scientific field "kinesiology" easier, because at that time scientism of physical culture was denied.

That deliberate mistake in defining NEW SCIENCE came back as a boomerang to "kinesiology" itself. Namely, from the first definitions of "kinesiology" as:

¹ Mraković, M. (1984): *Starting points in defining efforts for development of scientific-professional work in the field of physical culture*, "Fizička kultura", Beograd, 2, p.91.

² Pavlović, B. (1979): *A discussion about philosophical elements of science*, Nolit, Beograd, p.285.

"SCIENCE of laws that regulate maximal efficiency of human movements"³, to developed ideas about "Elements of theory of kinesiological systems" (Horvat, V., Mraković, M., 1978.), where kinesiology is no longer discussed as science of movement but as "Kinesiological systems" and specific states of the systems that have been controlled.

New ideas and addition to "kinesiology" evolved at the II PFKJ Congress (Zagreb, 1984.), where they talked about STRUCTURE of "kinesiology" and in 1987. about "STRUCTURE OF KINESIOLOGICAL SCIENCE" and in this context they gave the following definition:

"KINESIOLOGY IS SCIENCE of laws that regulate maximal efficiency of human movements and transformative processes under the influence of motor activities"

Evolving from KINESIOLOGY AS SCIENCE to KINESIOLOGICAL SCIENCE, even to SYSTEM (STRUCTURE) OF KINESIOLOGICAL SCIENCE, "kinesiology" as "self-dependent science" in physical culture showed that IT IS IMPOSSIBLE TO BUILD SCIENCE OF PHYSICAL CULTURE WITHOUT STRUCTURE, that is SYSTEM, that is SCIENTIFIC ESSENCE.

An explanation for "PHYSICAL CULTURE"

In my opinion, all academic discussions about the adjective "PHYSICAL" next to "CULTURE" are over. The classical concept of those authors who denied this term was a dualistic approach towards the man as a divided being of "body" and "mind". That critical approach has been exceeded because the adjective "physical" is not considered strictly in the meaning of separation of "body" and "mind", but in Aristotle's interpretation of something GIVEN BY NATURE, FOUNDED IN NATURE, and therefore unique and indivisible.

It is good to ask for help and support of sociologists for the term "CULTURE". In some older editions of the Sociology, it is said that the FORMS OF SOCIAL CONSCIENCE are: religion, morals, philosophy, science and art.⁴

In recent sociological conceptions, CULTURE is considered as another expression for the forms of social conscience, which means that morals, religion, philosophy, science and art are the CONTENTS OF CULTURE AND CULTURAL PATTERNS OF BEHAVIOUR.

"The concept of culture has been understood in a very different way in social sciences. Some theoreticians think that the concept of culture means 'a complete life process of people's in the widest socio-anthropological meaning. For others, the word 'culture' is a more precise and adequate term which can be used for better designation of various human activities in the society containing science, art, philosophy, etc., beside material production which belongs to the field of material culture."⁵

After discussing 257 various definitions of culture (registered by the American authors Kreber and Kluckhohn) and classifying them into main categories by the type, Ilić, M.

³ Momirović, K. (1969): *Influence of scientific establishment of physical culture on its social establishment*, in the book: Theory of physical culture, NIP Partizan, Beograd.

⁴ Marković, D. (1974): *Elements of general sociology*, "Savremena administracija", Beograd.

⁵ Mitrović, D., Tripković, M., Koković, D. (1987): *Sociology*, "Naučna knjiga", Beograd, p.243.

(1983) made an integral (complete) definition which says:

"Culture is a group of all processes, changes and creations arising as a result of material and spiritual intervention of human society (in nature, society and opinion), and the main meaning of culture is to make existence, continuation and progress of human society easier."⁶

Since "PHYSICAL ACTIVITY AND BENEFITS CREATED BY IT"⁷, is a common substratum in the essence of physical culture, which consists of physical education, sport and recreation, and since PHYSICAL CULTURE IS AN INTEGRAL PART OF GENERAL CULTURE, the adequate and the most comprehensive term for defining OUR PROFESSION (activity) is the term PHYSICAL CULTURE.

The quoted theoretical aspect in understanding PHYSICAL CULTURE has an important PRACTICAL-HUMANISTIC AND PROFESSIONAL DIMENSION, BECAUSE IT OFFERS AN EQUAL DEVELOPING TREATMENT to each part of physical culture. It is not the case with any other term for our profession because all mentioned one - way terminological interpretations lead to the magnification in relation to the other parts of physical culture.

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NOVI PRILOZI BIOGRAFIJI NAUKE O FIZIČKOJ KULTURI

Božo Bokan

U sekciji za fizičko vaspitanje (FIS Komunikacije '96) pokrenuta je rasprava o potrebi stručnog i terminološkog određenja teorijsko-praktične delatnosti u oblasti fizičke kulture. Polazeći od socioloških shvatanja da su oblici društvene svesti (religija, moral, filozofija, nauka, umetnost), zapravo sadržaji kulture i kulturni obrasci-ispravno je čitavu našu motornu i duhovnu delatnost nazivati FIZIČKA KULTURA. Shodno tome, teorijsko-naučni kategorijalni nivo naše delatnosti evoluirao je od uskih shvatanja o sebi odgovarajućoj "nauci o kretanju" - do NAUKE O FIZIČKOJ KULTURI, u čijoj osnovi je "jezgro nauke" fizičke kulture koju čine: teorija fizičke kulture, teorije srednjeg obima (teorija fizičkog vaspitanja; teorija sporta; teorija rekreacije) i teorija motorne delatnosti.

Ključne reči: nauka o fizičkoj kulturi, esencija nauke, teorija fizičke kulture, teorija srednjeg nivoa, teorija motorne aktivnosti