

WORDS DIFFERENTIATE SCIENTIFIC PAPERS IN SPORTS WRITING

(Research note)

Danica Pirs1 and Tea Pirs12

¹*University of Niš, Faculty of Physical Education and Sport, Niš, Serbia*

²*University of Niš, Faculty of Philosophy, Niš, Serbia*

Abstract

Academic discourse contains frames for scientific writing implying the existence of an array of formal unities that undertake the function of precision and logical order within the texts and assume types of texts such as for example, sports texts. They at the same time function to convey seriousness and academic note in the texts that is their autoreferential signal (references, sources, quotations, abstracts, keywords and schematics or figures). Certain frame of text type makes it recognizable and differentiate it from other types of texts, for example from engineering text. Rhetorical patterns made of humble words are different for different fields of science and are verified by numerous scientific studies according to Gunnarsson (1997).

Keywords: *discourse, sports texts, word, scientific paper, discourse community*

INTRODUCTION

Scientific writing frames a problem in the context of current work in the field and explicates the author(s)'s research using a format that is easy to skim for major findings and conclusions. Examples of scientific writing include articles for peer reviewed journals, grant proposals, and theses/dissertations in the sciences. Related genres include Laboratory Reports, Research and Grant Proposals, and specific domain Literature Reviews such as sports literature review. Scientific writing usually follows a standard formal structure, frequently abbreviated and known as IMRD (Introduction-Methods-Results-Discussion). Abstract is a brief summary of other sections typically 100-200 words long. Includes motivation, question, hypothesis, method and major conclusions. Introduction explains motivation for the research, literature review of previous relevant studies (background), question(s) addressed by the present research and hypotheses to be tested. Materials and Methods section of the paper presents summary of the technical information necessary to repeat the experiments. It includes experimental design, materials, and protocols. Results section provides an objective review of the experimental results. In other words, it answers the question what happened when the methods were performed. Discussion/Conclusions section addresses the question: "do the results support the hypothesis?" It evaluates the strengths and weaknesses of the experiment, summarizes the implications of the

results and proposes further research that might clarify or supplement the findings. Works cited usually follow APA format which is most acceptable. Every journal has its own formatting style; therefore an author should refer to the specific journals he submits the paper to for required models of literature listing.

Our intention in this paper is to by citing words or phrases from a corpus of sports literature help students and those who are already in the discourse community dealing with sports genre, to become experts and accepted members of the scientific community, their country and beyond, by utilizing certain forms and frames of writing sports texts. These little words are called discourse and metadiscourse markers each of them having its own function in the text. Discourse and metadiscourse corpus uses the English terms or sinntagmas and translation equivalents in Serbian and Montenegrin language where the Corpus included literature available in Montenegrin, but in this paper English translation will prevail for both. To understand the abbreviation TB we should say it denotes sports textbooks investigated and analyzed in the corpus (TB1- Karageorgis, K., Terry, P. (2011). Inside sports psychology, Champaign, IL. Human Kinetics: USA, TB2- Milojevic, A. (2010). Sports Psychology, Faculty of sport, Nis, Hay, G. (1978), The biomechanics of sports techniques, Prentice Hall; *Sport Mont*, Proceedings 15, 16, 17-IV, Congress of Montenegrin sports academy, Podgorica, Montenegro, pp.134-136; *Sport Mont*, 18,19, 20-V, Congress of Montene-

grin sports academy, Podgorica, Montenegro, pp. 39 – 45) distances analyzed on certain pages of the above cited sports literature.

Sports literature corpus analysis

1. *At the same time*

At the same time, achievement behaviors are premises that should be worked on in order to enhance an athlete's motivation. To understand why children exercise, one must realize what young athletes think about themselves, what they think about their tasks and how they consider their performance. (TB2, 44)

At the same time, Deal who has made a longitudinal study on the leading runners in modern times, has shown that, despite the significant changes in teaching methodology training for the last 40 years and substantial increase in records in distance running, maximum consumption of O₂, which evaluates the parameter of aerobic power, in the leading runners of that time, shows maximum O₂ consumption, which was 82, 6 ml / kg. min. (*Sport Mont*, 18,19, 20-V, Congress of Montenegrin sports academy, Podgorica, Montenegro, p.16)

2. *Equally*

The complexity of understanding drug effects arises from the fact that any drug produces multiple changes in behavior and different drugs may produce similar changes in behavior. For example, drug A may reduce depression and also cause tremor. Equally, drug B may have same effects in reducing depression, but also cause drowsiness. Why? (TB1, 53)

The lack of a common biomechanical action is not the only problem encountered in the study of this class of drugs. The behavioral effects have been difficult to study. Equally, animal models seem rather silly when one is talking about hallucinations, artistic creativity or oneness with the universe. Objective measures of performance can be obtained and when the drug is effective these reports must be obtained from an individual who has an altered interpretation of the environment. (TB1, 172)

It is equally important for all categories of citizens, regardless of gender, age and social status. So I hope that this short review will, especially to physical education professionals, as well as other interested audiences, be a recommendation for use of this valuable publication. (*Sport Mont*, Proceedings 15, 16, 17-IV, Congress of Montenegrin sports academy, Podgorica, Montenegro, p. 70)

3. *In like manner*

To date, effective exercise programs comprise a combination of challenging and progressive balance exercises performed in weight-bearing positions that minimize the use of the upper limbs for support, resistance and endurance training combined with the balance exercises. In like manner, effective exercise programs have been individualized in intensity, progressed over time, targeted to an appropriate population, conducted

by trained personnel, of a sufficient duration (greater than 15 weeks, preferably 6 months or more). (TB2, 54)

The machine for inference is used to execute a knowledge base for solving problems in like manner as a conventional program with a database for sport. (*Sport Mont*, 18,19, 20-V, Congress of Montenegrin sports academy, Podgorica, Montenegro, p. 27).

4. *Likewise*

Coubertin also describes Simon's interest in the American republic. He writes that Simon himself did not risk a study trip to the United States because his advanced age prevented his carrying out comprehensive and strenuous scientific studies (cf. *IBID.* 653): "Likewise, the rapid growth of the United States, their new conceptions of government and society, were matters to him of perpetual wonder and reflection. (TB1, 304)

Likewise, cycles of introducing new creative approaches and systematic training of the best applied techniques were alternating. Most recent progress in understanding the basics of the functioning of intelligent systems enables their qualitative improvement and their better utilization and application in real systems. Sure, in order to implement good intelligent systems it is necessary to ask for more close cooperation of computer experts, mathematicians and experts in the relevant specific domain. The purpose of this and future work is to achieve a good model and design of intelligent systems that could be applied in various fields of sports. (*Sport Mont*, 18,19, 20-V, Congress of Montenegrin sports academy, Podgorica, Montenegro, p. 34)

5. *Similarly*

If an improved arch and a very marked flexion of the knees do not solve the problem, this means that the somersaulting angular momentum of the athlete is probably so small that it is necessary to make changes in the run-up and takeoff to increase it. Similarly, the athlete should be subjected to a detailed 3D biomechanical analysis, to determine the source of the problem and the best solution for it. However, such an analysis is not available to most high jumpers. Therefore, we have to look for a solution using video taping and qualitative analysis. (TB1, 277)

Today, Professor Opavski, among other things, deals with the literary work. In the field of sports literature he published three novels: JAN 1, 2 AND JAN 3, which use the myth of the hero as a form, and educational messages, read between the lines, as the content. Similarly, with this new project, a professor with fine manners and tremendous energy is trying to tell us through his word and deeds, how to create, educate and enlighten- through love and one's own example. We have to admit that in this respect even today he is still unsurpassed. (*Sport Mont*, Proceedings 15, 16, 17-IV, Congress of Montenegrin sports academy, Podgorica, Montenegro, p. 61)

Markers of textual connection with the meaning of enlargement have the function to indicate that propositional content from the previous sentence will be amen-

ded or expanded with some new element in the sentence that follows. All of these markers have a semantic component of addition and expansion. The analyzed corpus revealed following markers: above all, again, also, and, aside from this, further, furthermore, in addition, moreover, what is more.

1. Above all

There is no doubt that sport has become more and more of a business and this trend has become particularly marked in the last two decades. The “internationalization” of sport, with the increase in the number of international events and competitions above all, shows the unprecedented development of the economic dimension of sport driven in particular by the value of television rights. (TB2, 13)

The tutorial is illustrated with a large number of drawings, pictures and diagrams and designed so that it provides the reader, above all, students of physical education who are specially targeted, the necessary knowledge about how to detect physical deformities, the etiology of generation, pathological and anatomical changes and method of prevention and correction. (*Sport Mont*, Proceedings 15, 16, 17-IV, Congress of Montenegrin sports academy, Podgorica, Montenegro, p. 59)

2. Again

Again, these quotes speak to the preceding eccentric contraction as facilitator. Time to peak power improves with the addition of a counter-movement. However the counter-movement doesn't improve the entire concentric phase, only the initial part. As well, the concentric contraction is involuntary at the RFD of an SSC, dependent on the eccentric phase. (TB2, 191)

This approach again confirms the usefulness of physical exercise and especially of wrestling as an educational learning process and as a sport and art. (*Sport Mont*, Proceedings 15, 16, 17-IV, Congress of Montenegrin sports academy, Podgorica, Montenegro, p. 107)

3. Also

One study by Bosco et al. (1982) found differences between squat jump (SJ) and counter movement jump (CMJ) heights of 18% - 20%. Also, The CMJ jump is higher because as the jumper approaches the end of the decent, the muscle begins to act eccentrically to slow the body and initiate the upwards movement. As the muscle is activated, force is increased in the tendomuscular complex increasing its stiffness or resistance to stretching. (TB1, 111)

A multivariate relationship between goal orientation and intrinsic motivation resulted in two significant canonical functions obtained by a canonical correlation analysis. The higher task orientation corresponded to a greater interest and enjoyment in sports activities and to a greater investment of effort. Also, a higher ego orientation was associated with a higher perceived competence. (TB2, 39)

Also, it can be safely argued that in the choice of sports and recreational disciplines parents can exert a

strong influence in the commitment to a specific physical activity of children. The families of athletes spread their sporting spirit to increased involvement in sports and exercise often shared with parents (*Sport Mont*, Proceedings 15, 16, 17-IV, Congress of Montenegrin sports academy, Podgorica, Montenegro, pp.133)

4. And

Three tests were added -one, an adaptation of the well known *vertical jump (the frontal version of vertical jump)*. And two new coordination tests: *twisted (turn) jump to the right* and *twisted (turn) jump to the left*. The selected thirteen motor tests covered the space of latent dimensions that had already been proved to be important in RG. (TB2).

The main reason for this is the poor social and economic structure of the family in relation to earlier periods. And parents strongly influence the value system of children as well as the development of a permanent character trait. This influence is particularly exercised on the basis of philosophy of life and personal examples of parents. For permanent and proper guidance of children to sport and sports recreation it is very important that at least one parent was an athlete or regularly engaged in sports and recreation. (*Sport Mont*, Proceedings 15, 16, 17-IV, Congress of Montenegrin sports academy, Podgorica, Montenegro, p.136.)

5. Aside from this

“Athletics teaches you life lessons that cannot be learned in the classroom and how to be successful.” – “Athletics has prepared me physically, mentally, and spiritually for the future. I am more confident than ever.” – “Athletics teaches you to persevere, motivate yourself, and be self-reliant. Aside from this, matter much discussed is whether being a student-athlete in DIA program is an asset or liability in a student's development. (TB1, 12)

Aside from this, in the sample were included only competitors who are in permanent training regime. All participants at the time of testing were clinically healthy without expressed or latent health and psychophysical aberration. The basic pattern was rated at 60 subjects. This pattern is for research purposes structured into three subsamples of 20 subjects, who were formed on the principle of statistical randomness. (*Sport Mont*, Proceedings 15, 16, 17-IV, Congress of Montenegrin sports academy, Podgorica, Montenegro, p. 194).

CONCLUSION

There is one crucial difference between the stories in science fiction and in scientific writing: in science aesthetic function has never been in the forefront. The story has primarily effective arguments and cognitive function because the goal is to convince the academic community in the validity of the proffered theory or practical results - simply, „the science of beauty is not enough“ (Gross 1996: 5).

There is whole separate type of academic discourse,

which is in some way part of it, but on the other hand is separated from it because it represents at the same time a look outside and a look inside and it is called *metadiscourse* of sports analyzed in the paper, because its subject matter is academic discourse, yet it is itself a part of academic discourse writers use when presenting sports sciences findings. Such dual position of all meta-academic texts is another in a series of challenges. Stylistic interpretation of some non-linguistic text, eg biology or sports texts, is partly internally positioned because in both cases it comes to science, but it is also externally determined because there is another scientific discipline. Therefore all this effort is directed to making easier for the PE and sport students to achieve the writing competence, use the language of sport with expertise in due time, and finally, find their place in their future discourse community worldwide.

REFERENCES

- Adams, M. J. and A. Collins. (1979). A schema-theoretic view of reading. In R.O. Freedle (ed.) *New directions in discourse processing* (1-22). Norwood, NJ: Ablex. 1-22.
- Atkinson, D. (1999). *Scientific discourse in sociohistorical context: The Philosophical Transactions of the Royal Society of London* (pp.1675-1975). Cambridge: Cambridge University Press
- Austin, J. L. (1962). *How to do things with words*. Oxford: Clarendon Press.
- Baker, M. (1988). Sub - technical vocabulary and the ESP teacher: An analysis of some rhetorical items in medical journal articles. *Reading in a foreign language*, 4(2), 91-105.
- Bakhtin, M. M. (1981). *The dialogic imagination*. Austin: The University of Texas Press.
- Bartsch, R. (1987). *Norms of language*. London: Longman.
- Bazerman, C. (1988). *Shaping written knowledge*. Madison, WI: University of Wisconsin Press.
- Bazerman, C. (2008). *Handbook of research on writing: History, society, school, individual, text*. Mahwah, New Jersey: Erlbaum.
- Bazerman, C. (1985). Physicists reading physics. *Written communication*, 2(1), 3-23.
- Bazerman, C., & Paradis, J. (1991a). Introduction. In C. Bazerman & J. Paradis (Eds.), *Textual dynamics of the professions* (pp. 3-12). Madison: The University of Wisconsin Press.
- Gross, R. (1996). The science of mind and behavior. *Journal of Verbal Learning and Verbal Behavior*, (5), 855-863.
- Gunnarson, B. L. (1997). *Discourse, Organizations and National Culture*. Stockholm: Stockholm University.
- Hay, G. (1978). *The biomechanics of sports techniques*. New Jersey: Prentice Hall.
- Karagheorgis, K., Terry, P. (2011). *Inside sports psychology*. Champaign, IL: Human Kinetics.
- Milojević, A. (2010). Sportska pedagogija. [Sports Psychology. In Serbia.] Niš: Fakultet sporta i fizičkog vaspitanja.
- Pirsl, D. (2011). *Retoričke i metadiskursne osobnosti naučno-stručnog diskursa engleskog jezika u registru sporta*. [Rhetorical and metadiscourse characteristics of scientific academic discourse in the register of sports. In Serbian.] (Unpublished doctoral dissertation, University of Novi Pazar. Novi Pazar: University of Novi Pazar.
- Stankovic, R., Herodek, K. & Bubanj, S. (2008). Nove tehnologije merenja položaja skokova u dalj. [New technologies in measuring standing long jumps. In Serbian.] *Sport Mont, Proceedings 15, 16, 17-IV, Congress of Montenegrin sports academy* (pp.134-136). Podgorica: Crnogorska sportska akademija.
- Stanković, R., Bubanj, R., Bubanj, S. & Herodek, K. (2009). Kinematička analiza veslačkog starta. [Kinematic analysis of the rowing start. In Serbian.] *Sport Mont, 18, 19, 20-V, Congress of Montenegrin sports academy* (pp. 39-45). Podgorica: Crnogorska sportska akademija.

Correspondence:

Danica Pirsl

University of Niš,

Faculty of Physical Education and Sport

Čarņojevića 10a, 18000 Niš, Serbia

E-mail: danicapirsl@gmail.com