

Academic Discourse Characteristics of Sports Scientific Literature



Sports

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Abstract

Research in discourse processing can help solve some of the pressing challenges in foreign or second language writing pedagogy. Discourse plays an important role in helping the learner shift from shallow to deep comprehension, from being a mere fact collector to becoming an inquisitive explainer and later on, competent domain specific (in our research - sports literature) writer. But to make our students proficient in text handling is a huge task. To accomplish this task we need tools and the right tools for the students to freely explore the wealth of sports writing are small but hugely significant words called metadiscourse markers. Knowledge of their functions, their proper meanings, and their well deserved place within the framework of the foreign or second language writing pedagogy is what separates the novice from the experienced sports texts writers. 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 sports texts from the engineering texts. Rhetorical patterns made of humble words we are analyzing in this paper, are different for different fields of science and are verified by numerous scientific studies according to Gunnarsson, 1997, p. 306.

Introduction

Academic discourse is a syntagm originating from the Anglo - American literature in which it occurs simultaneously with a syntagm scientific discourse, usually as its sinononim. If in the forefront of our observations we set the content of discourse, then we can talk about the scientific discourse (as opposed to administrative, judicial, legal), while, if our foreground observation are members of this discourse, then we talk about academic discourse. Also, it is considered that between the scientific and academic discourse there is no overlap completely, but that academic discourse is a broader scope of scientific discourse. In addition to various forms of scientific discourse, it includes forms of writing such as student work, particularly in the field of sports science, (seminars, written examinations, compositions and compulsory essays at the university level), as well as writing requests for funding of scientific projects, which are considered important in the recent Anglo - American literature.

Scientific writing frames a problem in the context of current work in the field and explicates the author(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 IMRD (stands for Introduction-Methods-Results-Discussion). Abstract is usually a brief summary of the other sections, typically containing 100-200 words. It includes motivation, question, hypothesis, methods used, and major conclusions. Introduction reveals the following: 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 as a rule provide Summary of the technical information necessary to repeat the experiments. These sections also include Experimental design, Materials, and Protocols. Results section is supposed to give to the targeted audience an objective review of the experimental results. In other words, to provide the answers as to what happened when the methods were performed? Discussion/Conclusions section (sometimes included at the end of the Results section) addresses the question: “do the results support the hypothesis?” It also 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 and also gives insights into some further research possibilities because of the limitations of the present study. Works cited also have certain obligatory scheme to follow such as for example the APA format which is most often acceptable and recommendable. Every journal has its own formatting style and the author is usually referred to follow the specific journals writing patterns and models.

Our intention in this paper is to by citing words or phrases used in a corpus of sports scientific literature to help students and those who are already in the given discourse community dealing with sports genre, to become experts and accepted members of the scientific community, within their country and internationally, by utilizing certain forms and frames of writing sports texts. These little words that were analyzed in the corpus are called discourse and metadiscourse markers each of them having their own functions in the text. Discourse and metadiscourse corpus uses the English terms or sintagmas 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. For the sake of understanding the abbreviation TB (J. M. Williams. 2001. *Applied Sports Psychology*. McGraw Hill Humanities, D. Knudson. 2007. *Fundamentals of Biomechanics*, Springer Science+Business Media, LLC) denotes sports textbooks investigated and analyzed in the corpus and SPORTMONT denotes the Montenegrin Journal of sports sciences, published by the Montenegrin sports association, between 2010 and 2015, and instances analyzed on certain pages.

I. 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. (SPORTMONT, corpus in Montenegrin originally, 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. (SPORTMONT, corpus in Montenegrin originally, 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)RTB2,

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. (SPORTMONT, corpus in Montenegrin originally, 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): "The rapid growth of the United States, their new conceptions of government and society, were matters to him of perpetual wonder and reflection. *Likewise*, Jules Simon turned his eyes frequently, in surprise and admiration, toward the New World. (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. (SPORTMONT, corpus in Montenegrin originally, 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. (SPORTMONT, corpus in Montenegrin originally, 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 amended 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. In its Helsinki Report back in 1999, the European Commission already identified various factors behind this phenomenon, including the rise in popularity of sport (in terms of television viewers); the "internationalization" of sport, with the increase in the number of international events and competitions; *Above all*, the unprecedented development of the economic dimension of sport, is 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. (SPORTMONT, corpus in Montenegrin originally, 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, dependant 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. (SPORTMONT II, corpus in Montenegrin originally, 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%. 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. The result is storage of elastic energy in the muscle and tendon which is recovered during the subsequent concentric phase making it more powerful (Bosco & Komi, 1979). *Also* contributing to the potentiating of the concentric muscle action is a reflex increase in neural stimulation to the muscle, brought about by the sudden stretch stimulus (Gollhofer & Kyrolainen, 1991; Schmidtbleicher, et al, 1988). (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 and a feeling of pressure/tension in sports, which is congruent with previous findings. (Kim & Gill, 1997). (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 show much higher percentages of their brothers and sisters involvement in sports and exercise often shared with parents (Koprivica, 2004). (SPORTMONT II, corpus in Montenegrin originally, p. 133)

4. And

Most of the variables used in the research were selected from the battery of standard motor measurement instruments as described in Gredelj and associates (1975). 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*, as described in Starosta (1994). The selected thirteen motor tests covered the space of latent dimensions that had already been proved to be important in RG.

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. (SPORTMONT II, corpus in Montenegrin originally, 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. It also improves skills in dealing with others. (Comment from an individual student-athlete.) “I feel my athletic experience has allowed me to excel in time management. *Aside from this*, matter much discussed is whether being a student-athlete in a D1A 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. (SPORTMONT II, corpus in Montenegrin originally, 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. 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* because its subject matter is academic discourse, yet it is itself a part of academic discourse. Such dual position of all meta-academic texts is another in a series of challenges. Stylistic interpretation of some non-linguistic text, e.g. 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.

Swales' influence on genre studies stretches outside of applied linguistics because the concepts he establishes are so powerful and widely applicable to genre theory and teaching alike. If we want to translate the obtained findings of this study we have to create such teaching materials to guide our PE students through the wealth of sports writing norms and specificities. Swales' concepts are also highly rhetorical, involving such classically rhetorical concepts as purpose, audience, and means.

Our purpose is not to teach students all types of markers but to help them out to know that there are small words as they call them, with extensive functions to emphasize their purpose for writing a paper, to attract the audience, to convince them that their research is worth reading and to know how to use research methods, obtain valid data, interpret them and finally, draw some conclusions. Consequently, we as teachers just guide them and make them realize that text is a living thing, which their thoughts have to be disciplined and expressed following some order. It is so frequent to hear them say that it is not easy to write down what they have discussed in the class, and that they miss the words. At this point we come upfront and help them find the right words and the right story frames they need.

Pedagogical implications

Many in genre studies, including those following the work of Swales, have developed rich, grounded, and elaborated pedagogies to improve students' genre competence. What is still required, though, is instruction in genre performances, the ways that abstracted genre competence plays out in actual texts, including ones the students will write during their study time. A time-honored way of addressing performance is experiential: having students write, reading out their paragraphs, offering feedback, and having students reflect and revise after discussion with their classmates. That instruction, too, is helpful, necessary, and valuable.

Experiencing their own performances is surely the most powerful way for students to learn to write better. To educate students more fully, though, and prepare them for leaving our classrooms and transferring their genre knowledge to other contexts, it would be helpful if they

also had a higher-level understanding of why their performances still-to-come will differ from both the competence they have gained and the practices they have performed. Here we come to conscious and responsible learning leading to the autonomy which they experience with their first seminar paper written. In addition to students' needs to practice writing in multiple genres and rhetorical modes while at university, they also need opportunities in which they can practice writing for the sake of practice, or for sheer practice.

There is much to be said for the old saying practice makes perfect. Just like dancers do not go out on the stage without practicing first, academic writers, too, need opportunities to practice academic writing when there is no grade or teacher evaluation at stake. Such an environment promotes experimentation with new ideas, styles, and techniques. How are students to learn whether or not their ideas are practicable unless they try them out? Most students, however, are not willing to take risks in writing when they know it could damage their grade. When writers feel free to experiment and to express themselves, they are also more likely to enjoy putting their ideas down on paper so that others can read them. It can also be assumed that when students are given the opportunity to practice expressing their ideas in a stake-free environment, they will be likely to acquire a more favorable attitude toward writing than when only practicing writing under the threat of receiving a grade each time they write.

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