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PECULIARITIES OF ACADEMIC WRITING ON ARCHITECTURE: HEADINGS

Scientific publication is an effective way to promote new ideas in the international academic community. The English language and academic writing skills are very important here. Good knowledge of linguistic and stylistic features is a key to successful academic writing. A detailed study of the grammatical and lexical structures of a scientific publication is of great importance today. The paper focuses on studying the linguistic specifics of the heading structures in the English-language journal articles on architecture and developing recommendations for their composition. The role of headings in different texts is not the same and largely depends on the text speech style. In scientific texts, headings express the main idea and reveals its conceptual essence. Linguistically, it is the name of a text which concisely presents its main idea. The following parameters were analyzed: the most frequent syntactic models; the average length of the headings structure; the most frequent parts of speech; the most typical grammatical patterns. The study analyzed the heading structures of fifty journal articles from a number of architectural journals indexed in the Scopus Citation Base using observation method and quantitative analyses of the linguistic means used in headings as well as the method of generalizing the results obtained. The study showed that headings in journal articles are structurally unified and have the following specific features: all the headings analyzed are complex word combinations that typically include some three-member word combinations as nominative groups; these groups are connected with prepositions (usually prepositions of place and location) or the preposition "of"; the average heading length is 11-12 words; nouns and adjectives are the most frequent parts of speech used in headings; the articles, both definite and indefinite ones, have a limited use; verbs, adverbs, numerals and infinitives are not used in headings there are seven most typical grammatical patterns that include different combinations of nominative groups as adjective + noun; noun + noun; participle + noun; preposition + noun; gerund + noun and can be complexed with adjectives. Based on the results a set of recommendations for heading writing is given. The results obtained can be the basis for developing a set of recommendations to write journal articles thus improving their linguistic and writing quality. The recommendations can be also used by young and experienced writers as well as by teachers in teaching academic writing.

Keywords: *journal article, heading, academic writing on architecture, academic writing quality, grammatical pattern.*

I. Introduction

Ideas exchange in the field of architecture on various issues such as green design, ecologically friendly technologies, concepts of "smart", "automated" and "passive" home, comfortable city environment, etc. is of great importance for the world trends development in this area and improving the aesthetics and comfort of our living conditions.

Scientific publicating is an effective way to promote these new ideas in the international academic community [22]. Numerous scientific journals in the field present articles by young and experienced researchers willing to share their scientific results. It can be confidently stated that the field is experiencing a real boom in publication activity as it is an indicator of the successful career in the scientific field.

At the same time, the English language and academic writing skills are very important here. Good knowledge of linguistic and stylistic features is a key to successful academic writing [6, 7, 10, 12] . Thus, a detailed study of the grammatical and lexical structures of a scientific publication is of great importance today.

This paper focuses on studying the linguistic specifics of the heading structures in the English-language journal articles on architecture

and developing recommendations for their composition as in different linguistic cultures heading in the text of one and the same style do not always perform the same functions [3, 4, 5, 11, 23] and have a number of peculiarities in using lexical, grammatical and syntactic means [9, 14].

We analyzed the heading structures of fifty journal articles from a number of architectural journals indexed in the Scopus Citation Base using observation method and quantitative analyses of the linguistic means used in headings as well as the method of generalizing the results obtained.

The recommendations presented in our paper can be used by a wide range of specialists to write journal articles on architecture.

II. Theory

A heading is an important element of the journal articles structure [17]. Linguistically, it is the name of a text which concisely presents its main idea. It is a key to its understanding [15]. Metaphorically, it is compared to a spring that reveals its capabilities in the process of its winding off [2].

The role of headings in different texts is not the same and largely depends on the text speech style. In scientific texts, headings express the main idea and reveals its conceptual essence [19]. Whereas, in literary texts the name is only indirectly associated with the information presented in the text and is conveyed with a metaphor or a metonymy [2].

Text headings have the following functions:

– a nominative function (names the object according to one of its characteristics, i.e. theme);

– an evaluative function (conveys an explicit evaluating text information);

– a delimiting function (separates one text or a part of it from another one);

– a predictive function (forms recipient's expectations);

– an advertising and contact-setting function (influences the reader to attract and interest him) [7].

The analysis show that headings in journal articles perform mainly a nominative function, carrying a significant communicative meaning and expressing the main scientific idea of the article in a compressive form [21] or describing the research subject according to one of its characteristics.

There are several approaches to classifying text headings [18, 19]. They can depend on heading syntactic and grammatical structure, i.e. a word, a phrase or a sentence; or a noun, a verb, an adjective, an adverb; or a combination of different parts of speech; or according to

the nature of figurative means, i.e. a metaphor, allusion, antithesis, etc. [1].

In our study, we used a classification according to the types of the syntactic and grammatical structures, since figurative means are not used in scientific texts [20, 25].

In our heading analysis, we studied the following parameters:

– the most frequent syntactic models;

– the average length of the headings structure;

– the most frequent parts of speech;

– the most typical grammatical patterns [16].

III. Results

The most frequent syntactic models

The quantitative analysis shows that 100 % of the headings analyzed are complex word combinations that typically include some three-member word combinations.

Examples.

1. Recognition of management structure (1) and spatial planning (2) in Tehran metropolitan area (3).

2. Urban planning and design (1) in unauthorized neighborhood (2) using case studies (3).

Two- and four- member word combinations are also possible.

Examples.

1. Sustainability focused decision-making (1) in building renovation (2).

2. Present practice (1) and future prospect of rooftop farming (2) in Dhaka city (3): A step towards urban sustainability (4).

The average length of the headings structure

The average heading length is 11-12 words (table 1).

Table 1

Percentage	Length
20	6-7 words
30	14-19 words
50	11-12 words

Examples.

1. Acoustics of monolithic dome structures (**6 words**).

2. Investigating the effect of urban configurations on the variation of air temperature (**12 words**).

3. Conservation and character defining elements of historical towns: A comparative study of Cape Coast and Elmina streets and castles (**19 words**).

The most frequent parts of speech

As the study showed, nouns and adjectives are the most frequent parts of speech used in headings. It is due to their nominative function

which provides compressive describing new ideas, concepts, technologies, methods, etc [24]. Thus, verbs, adverbs, numerals and infinitives are not used in headings (table 2).

Examples.

1. Spatial (an adjective) analysis (a noun) of (a preposition) housing (a gerund) quality (a noun) in (a preposition) Nigeria (a noun).

2. The (an article) transformation (a noun) of (a preposition) urban (an adjective) industrial (an adjective) land (a noun) use (a noun): a (an article) (an adjective) quantitative (an adjective) method (a noun).

Table 2

Part of speech	%
Noun	45
Adjective	15
Preposition	18
Article	1
Gerund	0,06
Conjunction	0,04
Participle	0,03
Verb	0
Infinitive	0
Numeral	0
Adverb	0
Pronoun	0

"In" and "of" are the most frequent prepositions used in headings. The former usually have the meaning of spatial relations and the latter is used to express the genitive case, i.e. possession.

Examples.

1. Indoor air **quality of non-residential** urban buildings **in Dehli**, India.

2. Traditional **manufacturing of clay brick** used **in the historical buildings of Diyarbakir**.

The articles, both definite and indefinite ones, have a limited use. The definite article is typically used before the noun with a preposition "of", and the indefinite article have the meaning of numeral "one".

Examples.

1. Urban sustainability through strategic planning: **a** case of Metropolitan planning in Khulna city.

2. **The** transformation **of** the inherited historical urban and architectural characteristics of Al-Najaf's Old City and possible preservation insights

The most typical grammatical patterns

We found seven most typical grammatical patterns used in the article headings. All of them include different combinations of nominative

groups: adjective + noun; noun + noun; participle + noun; preposition + noun; gerund + noun. Every group can be complexed with adjectives.

Pattern 1. The (a/ zero article) + noun + of … Examples.

1. **A review of** computerized hospital layout modelling techniques and their ethical implications

2. **Reconstruction of the remembrance:** Palace of Culture in Slantsy.

3. **The Game of capitals:** Production of influential online architecture.

Pattern 2. A nominative group + of + a noun (a nominative group)…

Example.

1. **Comparative study of the factors** affecting the generativity of office spaces.

2. **Italian perspective** on the planned preventive conservation **of architectural heritage**.

Pattern 3. Gerund + noun (or a noun group) + for (of) + a nominative group …

Examples.

1. **Determining** transit nodes **for** potential transit-oriented development: Along the LRT corridor in Addis Ababa, Ethiopia.

2. **Analyzing** capacity **of** a consumer-grade infrared camera in South Africa for cost-effective aerial inspection of building envelopes.

Pattern 4. Noun + of + noun (nominative group): a nominative group (gerund group)

Examples.

1. **Statics of space syntax:** Analysis of daylighting

2. **Perception of privacy in a university building**: The transparency paradox

Pattern 5. Noun (nominative group): a case study of + a nominative group …

Examples.

1. Design response to rising sea levels in the Maldives: A study into aquatic architecture.

2. Improved indoor environment through optimized ventilator and furniture positioning: **A case of** slum rehabilitation housing, Mumbai, India

Pattern 6. Noun (a nominative group) + through + a nominative group …

Here "through" has the meaning "with the help of".

Examples.

1. Sustainable regional development **through** knowledge networks: Review of case studies

2. Improved indoor environment **through** optimized ventilator and furniture positioning: A case of slum rehabilitation housing, Mumbai, India

Pattern 7. Noun (nominative group): noun (nominative group) + in + noun (with meaning of location) …

Examples.

1. Determining transit nodes for potential transit-oriented development: Along the LRT corridor **in Addis Ababa**, Ethiopia.

2. Towards international: China-aided stadiums **in the developing world**.

IV. Recommendations on heading structures

Based on the analysis conducted, we can give a set of principles one should follow while writing a journal article on architecture in English and heading it.

1. Do not give too short or too long heading structures. The optimal length is 11 or 12 words (including articles and prepositions).

2. The heading structure should not be a sentence, it should be a complex phrase (word combination).

3. Use phrases with nouns, adjectives, prepositions, gerunds, participles. Adjectives and participles are used before nouns. Do not use verbs, adverbs, pronouns and numerals in headings.

4. The major element of a heading is a nominative group that typically includes the combinations (a nominative group): "adjective + noun"; "noun + noun"; "participle + noun"; "preposition + noun"; "gerund + noun". Every combination can have adjectives before nouns.

5. A heading can have at least two or three nominative groups that are connected with prepositions (usually prepositions of place and location) or the preposition "of".

6. Use the following structural patterns of nominative groups:

– the (a/ zero article) + a noun + of …;

– a nominative group + of + a noun (a nominative group);

– a gerund + a noun (or a noun group) + for (of) + a nominative group …;

– a noun + of + a noun (nominative group): a nominative group (gerund group);

– a noun (nominative group): a case study of + a nominative group …;

– a noun (a nominative group) + through + a nominative group …;

– a noun (nominative group): a noun (nominative group) + in + a noun (with meaning of location).

V. Conclusion

The study showed that headings in journal articles are structurally unified and have specific length (number of words); the range of parts of speech; syntactic models and grammatical patterns.

The results obtained can be the basis for developing a set of recommendations to write journal articles thus improving their linguistic and writing quality. The recommendations can be also used by young and experienced writers as well as by teachers in teaching academic writing.

References

1. Arnold I. Semantics. Stylistics. Intertextuality: a collection of articles. – SPb.: Publishing house of St. Petersburg. University, 1999. – 444 p.

2. Galperin I. Text as an object of linguistic research. – M.: Nauka, 1981. – 137 p.

3. Gurevich V. Stylistics of the English language. – M.: Flinta: Nauka, 2008. – 67 p.

4. Gvishiani N. The language of scientific communication: issues of methodology. – M.: Higher School, 1986. – 280 p.

5. House J. Text and context in translation // Journal of pragmatics, Vol. 38 (2006). – P.238 - 358.

6. Korneeva M. Textbook on the developing abstract writing skills for senior students. – M.: Publishing House of Moscow State University, 1992. – 72 p.

7. Kukharenko V. Text Interpretation. – M.: Prosvjaschenije, 1988. – 192 p.

8. Kushneruk S. Documentary linguistics (Russian business text). – Volgograd: Volgograd State University Publishing House, 1999. – 96 p.

9. Matveeva T. Functional styles in terms of text categories. Synchronous and comparative sketch. – Sverdlovsk: Publishing House of Ural University, 1990. – 210 p.

10. Musnitskaya E. Learning to write: Text of lectures on the course "Methods of teaching foreign languages. – M.: MGPIFL, 1983. – 312 p.

11. Reiss K. Type, kind and individuality of text // The translation Studies Reader / Ed. By L.Venuti. – London and New York, 2003. – P. 160 - 171.

12. Rubtsova M. Reading and translating English scientific and technical literature: Lexical and grammar reference. – Moscow: OOO Publishing House AST, 2003. – 384 p.

13. Ryabtseva N. Scientific speech in English: A guide to the scientific presentation. Vocabulary. – M.: Flint: Nauka, 2002. – 598 p.

14. Schweitzer A. Translation theory: status, problems, aspects. – Moscow: Nauka, 1988. – 215 p.

15. Shapkina E. Features of the translation of a scientific article: abstract / Bulletin of the South Ural State University. Ser. Linguistics. – 2015. – T. 12, No. 2. – P. 10

16. Shapkina E. Peculiarities of translating texts of specific purposes special // SUSU science. Materials of the 67th scientific conference. South Ural State University: 2015. – P. 1095 - 1102.

17. Shapkina E. Scientific article as one of the genres of modern scientific prose // SUSU science. Materials of the 67th scientific conference. South Ural State University: 2016. – P. 939 - 945.

18. Slavina G., Kharkovsky Z., Antonova E., Rybakova. – M. Abstract writing. – M.: Higher school, 1991. – 156 p.

19. Skrebnev Yu. Fundamentals of the English language stylistics. – M.: Astrel: AST, 2003. – 220 p.

20. Solganik G. Text stylistics: Textbook. – M.: Flinta: Nauka, 1997. – 252 p.

21. Turaeva Z. Text Linguistics: structure and semantics. – M.: Prosvjaschenije, 1992. – P. 649 - 653.

22. The style of scientific speech and literary editing of scientific works / M. P. Senkevich. – M.: Higher school, 1984. – 319 p.

23. Vermeer H. Scopos and commission in translational actions // The translation Studies Reader / Ed. By L.Venuti. – London and New York, 2003. – 514 p.

24. Zemsky E. Language as an activity: Morpheme. Word. Speech. – M.: Languages of Slavonic culture, 2004. – 688 p.

25. Znamenskaya T.A. Stylistics of the English language. – M.: Editorial URSS, 2002. – P. 78.

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