Category of inclusiveness and evaluation: its correlation in scientific discourse

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Abstract. The paper deals with the correlation of the category of inclusiveness and the category of evaluation. The category of inclusiveness denotes inclusion of parts into whole or that some whole consists of some part(s). The category of evaluation expresses speaker's positive, negative or neutral attitude to message. The category of evaluation in the light of the category of inclusiveness denotes full inclusion or non inclusion. The main inclusive evaluative lexical units are: adverbs (completely, totally, fully, mainly, generally, often, typically, usually), adjectives (multi-purpose, universal, all-purpose, all-encompassing, comprehensive, inclusive, all-inclusive) and negative lexical units (no, not, without).

Keywords: Scientific discourse, language of science, category of inclusiveness, category of evaluation, , information and communication technology.

Introduction. Recently, there has been growing interest in studying discourse, to be more exact, scientific discourse. There is a considerable amount of literature on this question, to name a few: Bazerman C. [15], Darian S. [20], Hyland K. [24], Swales J.M. [27], Ilchenko O.M. [6], and others. Besides, there are lots of papers that have studied different categories in scientific discourse, that is: Akulenko V.V. [8], Ilchenko O.M. [6], Volf T.M. [3], Kosmeda A.T. [9], Kravtsova O.O. [10], Shalya O.I. [14], and others. We've decided to study the category of inclusiveness, because we consider it as integral category of scientific discourse. Moreover, current corpus linguistics studies show that the verbs of inclusive semantics such as "to group," "to system," "to include," "to involve" are among the most frequently used words in 120 billion words COCA Academic vocabulary lists of English [21].

We have considered the category of inclusiveness as a cognitive-discursive category that is verbally (explicitly, semi-implicitly, implicitly) as well as visually expressed with various linguistic devices signaling inclusiveness. We have already studied implicit, stylistic, non-verbal and lexical ways of rendering the category of inclusiveness, its linguocultural potential as well as correlation with the category of quantity. In the present paper we want to study correlation of the category of inclusiveness with the category of evaluation.

The goal of the paper is to describe and classify some features of correlation between the category of inclusiveness and the category of evaluation. The subject of our investigation is the category of inclusiveness in Anglo-American scientific discourse.

Materials and methods. To do our research, we used the language material selected from Anglo-American articles in the field of information and communication technologies, such as The International Journal on Advances in Internet Technology (IJAIT) (2010-2015), The International Journal on Advances in Systems and Measurements (IJASM) (2010-2015), The International Journal on Advances in Intelligent Systems (IJAIS) (2010-2014), The International Journal on Advances in Networks and Services (IJANS) (2010-2015), IEEE Communications Magazine (CM) (2008-2014). Overall number of the articles is 1686, or about 10 billion words. Dictionary definitions analysis, componential analysis and the method of opposition are used in our research.

A brief review of publications on the subject. Few attempts have been made to describe inclusiveness, but in aspects of another studies. Let's have a look on it in details. The core of the category of inclusiveness is the correlation "Part-Whole". First and foremost it was regarded by ancient philosophers Aristotel [1], Platon [2], Gusserl E. [4]. It's said that PART and WHOLE – are philosophical categories that express correlation between objects (or elements of other object) and connection, that unite these objects and create new (integrative) features. Lingual aspect of inclusiveness deals with inclusive (politically correct, gender neutral or non-sexist) language (Ter-Minasova [13], D'Souza D. [19], Jacobson C. [25], Ravitch D. [26], S. Walker [28]). Politically-correct language is used to describe all measures that are intended to avoid all stereotypes, which can touch members of particular groups of society. Inclusiveness also is associated with so called *"pluralis auctoris"* або *"pluralis inclusivus"*, i.e. using of pronoun WE to denote speaker and the audience as one whole.

In pedagogies, inclusiveness has to do with "inclusive education", i.e. education of disabled people or people with physical or psychological illness in common schools, universities, etc. [12].

In linguistics there are also some studies that deal with inclusiveness. First of all, it's brilliant American linguist D.G. Greenberg. He has regarded the category of inclusiveness as well as the category of quantity as universal categories [23]. As a cognitive category, inclusiveness was studied in psycholinguistics as a tool for structuring and understanding cognition [17]. B.Berlin has claimed that the category of hierarchical inclusiveness presents different levels of reality [16]. Professor Zhabotynska S. has considered inclusiveness (in her studying of lingual networks) in the context of inclusiveness-possessiveness [5]. In addition, US researchers have distinguished implicit, explicit and inclusive verbs. The latter one is used for description of connection among the elements of a whole [22].

The category of evaluation expresses speaker's positive, negative or neutral attitude to some message. It was studied by many researchers, such as: Volf T.M. [3], Kosmeda A.T. [9], Onyshchenko I.V. [11].

Results and discussion. While studying our empirical material, we have found different ways of correlation between the category of inclusiveness and the category of evaluation in scientific discourse. They are:

1. Adverbs *completely, totally, fully* are used to give positive evaluation to the inclusive verbs. In this case they denote full (100%) inclusion of parts. Let's have a look on some examples:

*The horizontal projection of the rectangle on any vertical line that intersects it must also be **completely included** in a segment of this line [IJASM, № 1-2, 2014, 83].*

*This article presents and compares two possible approaches to IP flow mobility offloading that are currently being considered by the IETF. The first one is based on extending existing client-based IP mobility solutions to allow flow mobility where <u>the user terminal **is fully involved in** the mobility process</u> [CM, October 2011, 124].*

*<u>Both the IEEE 802.22-2011 downlink and uplink subframes **have totally 60 subchannels**</u>, where each subchannel consists of 28 subcarriers out of which 24 data and 4 pilot subcarriers [CM, January 2014, 207].*

So, there is full inclusion of parts (*<u>the horizontal projection of the rectangle, the user terminal</u>*) into whole (*<u>a segment of this line, the mobility process</u>*) in the first two sentences. While in the last one, some whole (*<u>both the IEEE 802.22-2011 downlink and uplink subframes</u>*) possess some parts (*<u>60 subchannels</u>*). Nevertheless, all three sentences denote full inclusion.

2. Adverbs *mainly, generally, often, typically, usually.* These adverbs also denote full inclusion, but

implicitly. For instance:

*<u>The cost of maintaining the network **mostly comprises** replacement packs and the labor</u> required to physically replace the failed packs in a shelf, which may be located anywhere in the network covering a given geographical area [CM, February 2010, 68].*

*<u>The access network</u> is the most expensive part of an operator's network and <u>**often comprises** many different types of network equipment</u> [CM, January 2014, 137].*

*<u>The criteria **are usually composed of** a function</u> that depends on the maximum likelihood estimator of the parameters of the model and a term that adjusts the first component to the context [IJANS, № 3-4 2012, 270].*

*<u>A home network **generally comprises** a large number of different devices</u> as well as distinct services, which may generate dramatically diverse data sources [CM, April 2011, 45].*

3. Adjectives: *multi-purpose, universal, all-purpose, all-encompassing, comprehensive.* It should be stated

that adjectives are considered to be the main axiological unit, because they denote quality of a subject as well as give qualitative characteristics to the subject. Let's consider some examples from our empirical material:

*Figure 1 shows various relay categories in three standards. 802.16j has <u>the most **comprehensive** relay categories</u> compared to the other standards [CM, August 2010, 40].*

Adjective *all-encompassing (including all or everything [29])* (composition of inclusive pronoun *all* and inclusive verb *encompass*) gives positive meaning to a noun (part) and characterize it as *full, all, complex* [7, p. 31]. For example:

*The automated adaption supports workflow diversity, reducing complexity and maintenance compared to <u>**all-encompassing** models</u> [IJAIS, № 3-4 2011, 171].*

Synonyms of the adjective *all-encompassing* are the adjectives *multi-purpose* and *universal*, they also have the meaning to cover everything, [7, p. 31, 364, 571], for instance:

*<u>This topology</u> is a popular <u>**multi-purpose** configuration consisting of 3 routers, 3 switches and 3 virtual PCs</u> [IJANS, № 3-4 2010, 374].*

Often, adjective *multi-purpose* was used as a part of special terms:

MIME Multipurpose Internet Mail Extensions standard [IJAIT, № 1-2 2012, 49]. In this example, *multi-purpose* is used to denote some whole (*standard*) that include large numbers of parts (*functions*).

As a rule, adjective *universal* is used in the terms in the field of information and communications technologies, as in the following examples:

Universal Mobile Telecommunications System architecture [IJAIT, №1-2 2012, 54; CM, May 2009, 96], Universal Integrated Circuit Card [IJAIT, № 3-4 2012, 86], Universal Description Discovery and Integration [IJAIT, № 3-4 2011, 93], The Universal Agent [IJAT, № 3-4 2010, 160], universal resource identifier [CM, April 2010, 115], Evolved Universal Terrestrial Radio Access [CM, May 2010, 86].

4. Adjective *inclusive* expresses inclusiveness. We have found such definition of the word "inclusive". If a

price is inclusive, it includes all the charges connected with the goods or services offered. For example:

*This concept of validity dates is used by other message types, too. It denotes a time span between the time indicated by <u>Valid From and Valid To</u>, both **inclusive** [IJAIT, № 1-2 2014, 102].*

We should mention well known *all-inclusive resort,* i.e. type of resort when transfer, hotel, food, some entertainment, etc. is included.

5. On the other hand, inclusive lexical units can give not only positive evaluation to a part or whole, but also

negative ones. Negative particle *not* belongs to this group. When *not* is joined with inclusive lexical units, it means that parts don't belong to whole. For instance:

*To indicate to the HA that the message is associated with an MC in an EVDO network, <u>it **doesn't include** an access technology extension</u> in the message [CM, June 2009, 129].*

*<u>Everyone participating</u> in the exploratory evaluation <u>**was not involved** in the project</u> before and saw the device for the first time [IJAIS, № 1-2 2014, 443].*

*<u>The Attributes field **doesn't contain any** privacy or security data</u> that may expose a user's identity information [CM, December 2011, 80].*

Negation can be expressed by lexical units *no* and *without:*

*A spanning tree of a graph is defined as any set of connecting branches that connects every node to every other node <u>**without forming any** closed paths or loops</u> [IJAIS, № 3-4 2012, 281].*

*Using this approach is quite beneficial, since the design becomes very modular and the structure becomes quite robust and compact as <u>**no connectors are involved**</u> [IJANS, № 3-4 2011, 266].*

Conclusions. In this paper we have studied ways of using inclusive and evaluative lexical units. We have outlined such types of evaluative lexical units in the context of the category of inclusiveness as: adverbs (completely, totally, fully, mainly, generally, often, typically, usually), adjectives (multi-purpose, universal, all-purpose, all-encompassing, comprehensive, inclusive, all-inclusive) and negative lexical units (no, not, without). Our future work will focus on other discursive features of the category of inclusiveness in scientific discourse.

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