THE PAPER SUGGESTS: INANIMATE SUBJECT + ACTIVE VERB IN ENGLISH LINGUISTIC DISCOURSE

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Linguistic discourse as a type of academic discourse

Academic discourse is generally thought of as rational, objective and dispassionate because it deals with facts, figures and arguments. However, on many occasions it has been described as persuading the reader not only by the "heavy" artillery, or relaying factual knowledge, but also using the "softer" strategy of persuading by an appropriate choice of linguistic means (Hyland 2004). The latter seems no less important than the former. Interestingly, along these lines a distinction between hard and soft knowledge disciplines is often drawn (ibid.). Despite differences among individual disciplines, generally in exact sciences argumentation seems to derive more from factual, or 'hard', knowledge, whereas human sciences rely more on interpretation. Linguistics seems to be strangely placed between the two extremes, since nowadays its instruments of research are increasingly modified and seem to acquire a similarity with social and in some cases even with exact sciences.

Thus linguistic discourse as a type of academic discourse might be treated as a discourse of social sciences, at some points overlapping with the discourse of exact sciences. The analysis of its textual features, including structural peculiarities, strategies of persuasion, some specific combinability patterns, might contribute to proving or disproving the claim.

Inanimate subject + active verb: a feature of academic discourse?

In general, academic discourse is characterised by its specific vocabulary, peculiar linguistic patterns and register. The Passive Voice is one of its well-established features. However, English academic discourse seems to equally favour the pattern 'inanimate subject + active verb' (IS+AV), like in the example provided in the title of the paper: *the paper suggests*. Recent investigation has manifested its well-established position in scientific research articles (see Master 2001) and popular scientific prose (Johns 2001). English favours the above structure

in the explanatory context, its major function being to link experimental or observational evidence to conclusions (Johns 2001:56), e.g.: *the evidence suggests, the results show,* etc. Johns' (ibid.) corpus-based study has identified the top three most frequent verbs in the above pattern: *indicate, suggest* and *show/demonstrate.* In many cases the above pattern functions as a hedge, mitigating the author's claim and saving his/her face, which in scientific discourse is no less important than relaying factual knowledge. Interestingly, the verbs *indicate* and *suggest* are among the top three most common hedging items (Hyland 1996: 481).

The function of hedging is closely linked or derived from the changed meaning of the constituents of the pattern: the inanimate subject, which often is an abstract noun, and the active verb, which in this context is not really 'active'. Master (2001) researched the frequency of the pattern in hard sciences and identified four types of environments where it occurs: cause-and-effect, change-of-state-or-location, presentation and explanatory. The first three types refer to the instigation of an event and employ such verbs as *cause* and *produce* (in cause and effect), *change* and *increase* (in change of state or location), *contribute* and *provide* (in presentation). The last type refers to the explanation of an event and employs such verbs as *suggest, show* and *describe* (ibid., p. 174). In hard sciences the last type seems to yield the highest number of the IS+AV patterns.

Interpretability of meaning in the framework of cognitive linguistics

The above pattern is interesting not only from the rhetorical point of view, despite that not all cases can be attributed to hedging (cf. *the test measures, the methodology calls into question*). From the semantic point of view it is interpretable as manifesting metonymical and/or metaphorical extension of meaning accounted for in the framework of the conceptual theory of metaphor (CTM).

The theory rests on a well-known claim that metaphor, which for many cognitive linguists also subsumes metonymy, is rooted in our thinking and understanding (see Lakoff and Johnson 1980/2003, Taylor 1995, Kövecses 2002) and emerges in language in the form of metaphoric expressions. The metaphor represents a cross-domain mapping, like in the English expression: *to put ideas into words* (the example has been taken from Taylor 1995: 134)*, which shows that linguistic forms, which represent the target domain, can be conceptualised as containers, representing the source domain (metaphors are usually written in small capitals: FORMS AS CONTAINERS). The metonymy represents a mapping within one and the same domain, like in the following: *Pass me the Shakespeare on the top shelf* (example from Evans and Green 2006: 313). In this case, the relationship between Shakespeare as an author and his book is that of a producer and a product and is one of numerous metonymical mappings (for other types see Croft and Cruse 2004, Evans and Green 2006). Thus, metonymy seems to work within conceptual contiguity (Paradis 2006) and in this respect is not incompatible with the traditional approach (see Taylor 1995:122).

The adherents of the cognitive approach do not have a unanimous view as to clear-cut criteria which help distinguish between metonymy and metaphor in all cases; rather, the two types of meaning extension represent the end points of a continuum. Its middle positions are taken by metonymy-based metaphors (see Barcelona 2000, Radden 2000, Deignan and Potter 2004). The explanation for such treatment lies basically in the anthropocentric parameter, an underlying major principle of metaphorical (and metonymical) reasoning (see, for example, Boers 1999, Deignan and Potter 2004, Gibbs, Lima and Francoso 2004).

The IS+AV pattern has received a sufficiently convincing interpretation in Low (1999). The author admits that the pattern under investigation can be interpreted as both—metonymy and metaphor. In metonymy the meaning shift takes place in one and the same domain between the writer, or the producer of the text, and the text itself (as in the example *the paper suggests*). In metaphor, we deal with a cross-domain mapping between the paper (or a domain of written works), an inanimate product, and a person, or a human being, in general. So the artefact assumes some characteristics of a living being. The author adheres to the metaphorical interpretation of the pattern. His research focuses on measuring the acceptability of the personification *the paper takes the view/ believes/feels* based on the responses to a questionnaire completed by the teaching staff in two university departments.

Thus the present paper discusses the IS+AV pattern in research papers in applied linguistics attempting to identify major differences between linguistic discourse as a discourse of human sciences and hard sciences (as represented in Master 2001) and account for the usage and meaning of the pattern under investigation in the framework of the CTM.

Data and methods

The materials for the present investigation have been collected from the journal *Applied Linguistics* and cover a period from 2005 to 2008. The 6 research articles selected for the investigation mostly deal with issues of second language acquisition, language for academic purposes, native and non-native speaker interaction, teacher-learner interaction etc. The total number of words of the corpus amounts to 51, 625. The articles vary in length; the number of words in each of them is between 5,582 to 10,498 words (see Table 1).

The methodology of research is both quantitative and qualitative. The quantitative aspect of the investigation includes the overall frequency count of the pattern in the corpus and their distribution per 1000 words as well as the count of inanimate subjects and active verbs according to frequency. The qualitative aspect of the analysis involves the interpretation of the results in the framework of conceptual theory of metaphor (CTM). Finally, there is a comparative dimension involved in the investigation: the results of the present investigation into linguistic discourse roughly representing human sciences is compared to Master's investigation into 'hard' sciences (2001).

Further in the results sections, the source texts are referred to by their author/s. The full list of sources is given at the end of the paper, after the references.

Major tendencies. Overall results

In the total corpus of data the overall number of IS+AV patterns amounts to 475. The overall frequency of the pattern in 1000 words amounts to approx. 9.2, whereas the frequency of the occurrence of the IS-AV pattern in each article is reflected in Table 1 below:

*Table 1. **IS+AV employed by different authors***

Article (author)	No of words	No of IS+AV	Frequency per 1000 words
Alderson	9,539	64	6.7
Webb	7,304	87	11.9
Puffer and Nikula	8,455	74	8.7
Bell	10,247	99	9.7
North	5,582	72	12.9
Macaro and Erler	10,498	79	7.5
Total	51,625	475	

Table 1 shows that the distribution of the pattern across the six selected authors varies from 6.7 to almost 13. The difference might be concerned with the topic of the article: the highest frequency was identified in the article focusing on undergraduate writing and the lowest frequency was found in the article dealing with judging the word frequency by linguists.

The verbs in the corpus refer to one of the four environments singled out by Master (2001), even though it should be admitted that the classification of the environments is rather problematic (see next section). As can be seen in Table 2, the explanatory environment is most numerously represented, since the three top verbs (*show, demonstrate* and *suggest*) belong to the explanatory subset and make up almost ¼ of the total number of the pattern occurrences. The three other verbs of the top most frequent verbs in the corpus (*indicate, reveal* and *report*) are also in the explanatory subset. This finding confirms the tendency identified by Master (ibid.) in reference to exact sciences. However, the other environments (cause-and-effect, change-of-state-or-location and presentation), differently from Master's findings, are much less numerous in the linguistic corpus, with cause-and-effect and change-of-location environments hardly employed at all. The very frequent *provide,* according to Master, belongs to the presentation subset. Those that could be attributed to the cause-and-effect or change-of-state-or-location are rather scarcely represented. For example, *affect, use, allow*, according to Master (2001) attributed to the cause-and-effect environment, have only yielded from 1 to 5 occurrences each and have not been included into Table 2. Similarly, each of the verbs *behave, construct, come, raise, move* from the change-of-state-or-location environment has only occurred in 1-3 utterances; the only verb *measure* has 25 occurrences in the text. This might have been due to the fact that one of the articles focused on testing which is often concerned with measuring.

*Table 2. **Most frequent active verbs***

	Verb	Overall number	%
1	Show, demonstrate	68	14.3
2	Suggest	48	10
3	Measure	25	5.3
4	Provide	37	7.8
5	Indicate	11	2.3
6	Reveal	10	2.1
7	Report	10	2.1
8	Examine	10	2.1
9	Investigate/explore	10	2.1
10	Concentrate, focus	10	2.1

As seen in Table 3, the inanimate subjects (mostly abstract nouns) most frequently employed in the pattern are also from the explanatory subset and refer to the description of the investigation rather than to the process of research. Thus *research* in general together with *study* and *analysis* made up almost 20% of all occurrences. Interestingly, the item *word/s,* which at first sight should be in the focus of the linguist's attention, in the data corpus occurred only 7 times and was not included into the table. Elements of the written text or general words referring to the process of research irrespective of a field (like *results, findings, examples, data*) were also fairly frequent.

*Table 3. **Most frequent inanimate subjects***

Subject	Overall number	%
Research, study (/ies), analysis	92	19.4
Results, findings	33	7
Example/s, data	29	6.1
Table	17	3.6
Con/text	10	2.1

The results seem to confirm the idea put forward by Mauranen (2001) that the Anglo-American way of writing is much more transparent and reader-friendly and the writer tries "to make the text easily palatable" (ibid., p. 44). Hence the subjects referring to the text and results of investigation in general prevail over those referring to the process and/or details of research.

Another point of view: a key to interpretation

The classification suggested by Master (2001) seems to be open to criticism mainly on semantic grounds. The researcher gives no explanation as to how he classifies the verbs. Indeed, the attribution of many verbs to one or another class is quite debatable and not self-explanatory. For example, the verb *produce* and especially the very frequent *provide* in their

primary 'manufacturing' or 'acquisitive' meaning collocate with very different words and therefore can be interpreted as rendering several different meanings, which are hardly interpretable in terms of production or acquisition, cf. the following examples:

(1) *Measures of dispersion <u>provide an estimate</u> of how evenly spread across the different sectors of the corpus a given word is.* (Alderson)
(2) *(...) those tests <u>provided an opportunity</u> to score correctly through guessing* (Webb)
(3) *(…) encounters with unknown words <u>produced significant gains</u>.* (Webb)

In Master's (ibid.) study they both are attributed to the presentation subset. Here also belongs the verb *support*, which in its primary meaning is concerned with physical support. *Raise* is another ambiguous case. The author treats it as a word in the explanatory environment but its direct meaning seems to fall into the change-of-state-or-location subset. Certainly, it often collocates with words like *question* or *problem*, which would explain its attribution to the explanatory subset, but is it always the case in research articles, for example, focusing on engineering? Some studies (e.g. Low 1999) have shown that these and other cases might be interpretable in the framework of the CTM theory. The present investigation would tend to pursue this line of thought.

Major extensions of meaning within the CTM

Low (1999) noted that frequently treated as metonyms the patterns of *the paper suggests* type can be interpreted in the framework of the CTM. The theory seems to be instrumental when trying to interpret cases like *the study raises a question of* (…), where *raise* clearly moves from the domain of physical action to the domain of reasoning. The theory gives an opportunity to interpret the findings considering the whole image imparted not by a single word but rather by the overall utterance or collocation, sometimes extending to a paragraph or even a longer text. Thus in the corpus of linguistic research the following metaphors have been identified: RESEARCH AS A PERSON, RESEARCH AS A JOURNEY, RESEARCH AS CONSTRUCTION/ BUILDING, RESEARCH AS ECONOMIC ACTIVITY and RESEARCH AS (UNCOVERING) A SECRET.

The RESEARCH AS A PERSON metaphor seems to account for many metonymic extensions; moreover, it moves even further accounting for more complex cases. For example, sentence (4) can be interpreted as a metonymic extension, where *approach* is contiguous with the person/ researcher putting forward the idea of teacher reliance:

(4) *(...) a general <u>approach</u> which <u>suggest</u>s teacher reliance rather than self-reliance* (Macaro and Erler)

Actually, almost all utterances with *suggest* can be interpreted along these lines, since in the collected corpus the inanimate subjects include such abstract nouns as *discrepancy, similarity, research, evidence, writing, knowledge, approach, data, results, tests, test scores, extract, study, table, paper, interactions, comments, differences, findings, examples* etc.. The *results* used in 6 utterances seem to be most productive in the collocation. Most of the above

subjects can be interpreted as products of a producer (researcher) and thus are compatible with the metonymic interpretation. Many of them perform the function of hedges in the text.

However, in some other cases of personification the strictly metonymic interpretation seems unlikely, since the relationship between the product and the producer, most frequently employed in research articles, seems to be more distant and less transparent. For example:

(5) *Tests of vocabulary size tell us about language proficiency* (Alderson)

(6) (…) the *finding (...) speaks for students being at some level aware of the complex pragmatic conditions in classrooms* (Puffer and Nikula)

(7) *None of the texts favoured the intervention cohort.* (Macaro and Erler)

Speaking abilities, favouring (like in examples (5)-(7)) and other more emotionally-charged activities are characteristic of humans, which is why the interpretation of the above expressions within the metaphor RESEARCH AS A PERSON seems to be more plausible than within metonymy.

Another image of research is concerned with conceptualising RESEARCH/ LEARNING/ UNDERSTANDING AS A JOURNEY OR MOVEMENT. Thus, research seems thought of as moving forward (never backward), on your way of research you might encounter problems or obstacles, the data are seen as coming from certain sources etc., e.g.:

(8) (…) *comprehension of a text (...) might otherwise provide obstacles and de-motivate the reader* (Macaro and Erler)

Understanding LANGUAGE AND RESEARCH AS A STRUCTURE OR BUILDING seems to be quite natural and conforming to the intuitive understanding of the world as a building. Hence the productivity of the metaphor RESEARCH IS CONSTRUCTION/BUILDING; however, as already noted (Šeškauskienė 2008), the building employed in researching linguistic issues has a basis, a foundation and is usually supported, the other elements, like windows or roofs, are missing, e.g.:

(9) (…) *playful talk frequently builds on references to culturally specific or in-group information* (Bell)

(10) (…) *evidence supporting the theory* (Webb)

The metaphor RESEARCH AS ECONOMIC ACTIVITY is manifested through using such verbs as *provide, use*, *utilize* or *offer* and the noun *resources,* as in the following examples:

(11) (…) *language provides a variety of resources* (North)

(12) (…) *sense-creation strategies which utilize both language and situational clues* (Macaro and Erler)

The image of research associated with economic activities in most cases exploits the verb *provide* which departs from its narrowly economic meaning and moves into more abstract domains, hence its combinability with such expressions as *evidence, information, assessment, results, opportunities, a way of viewing, accurate picture, resource, site, point of de-*

parture, estimate, distinction, obstacles, clues, insights, a clear contrast, access, occasions, resources, indicator, support, confidence in judging etc.

Another conceptualisation of linguistic research seems to be related to uncovering a secret, which is again not counter-intuitive, since researchers always aim at discoveries. Thus many patterns employing the verb *reveal* are usually metaphoric expressions of the metaphor RESEARCH AS (UNCOVERING) A SECRET, e.g.:

(13) (…) *students' <u>way of formulating questions</u> (...) often <u>reveals</u> a great deal about the social reality of the classrooms* (Puffer and Nikula)

Equally revealing are *data, language play, analysis, research, distribution of speech acts* or even the *first column*, as attested by the data of the present research corpus.

Less numerously represented are such metaphors as RESEARCH AS A CONTAINER and RESEARCH AS A PICTURE, exemplified in such metaphoric expressions as the following:

(14) <u>*Songs and rhymes*</u> *(...) often <u>fall outside</u> the category of 'humorous language play'* (Bell)
(15) <u>*Correlations*</u> *do not <u>tell the whole picture</u>* (Alderson)

The latter utterance, however, is a case of blending when two target domains (person and picture) blend together. This type of extension serves as another argument that metonymical interpretation of the IS+AV pattern is not sufficient.

Conclusion

The present research has attempted to quantify and interpret the pattern IS+AV in English linguistic research articles comparing the findings with Master's findings in hard sciences (2001) and going further to interpret them in the framework of the CTM. The tendency to use the pattern in the explanatory environment has been confirmed. However, other environments (cause-and-effect, change-of-state-or-location and presentation) were much less frequently represented than in the hard sciences. Moreover, the classification suggested by Master (ibid.) is only partially instrumental since the identification of some environments is problematic, mainly for semantic reasons.

The interpretation of the results in the framework of the CTM has yielded several major metaphorical extensions: RESEARCH AS A PERSON, RESEARCH AS A JOURNEY, RESEARCH AS CONSTRUCTION/BUILDING, RESEARCH AS ECONOMIC ACTIVITY, RESEARCH AS (UNCOVERING) A SECRET, RESEARCH AS A CONTAINER and RESEARCH AS A PICTURE. The last two were nor very systematic, whereas the conceptualisation of research as a person or as a journey, construction/building, economic activity or a secret were the most outstanding. The personification type of metaphor (RESEARCH AS A PERSON) seems to overlap with what is usually interpreted as metonymy, but of a large variety of human features it only exploits his/her speaking and reasoning abilities. The RESEARCH AS A JOURNEY metaphor highlights moving forward and obstacles, RESEARCH AS CONSTRUCTION/BUILDING focuses on the foundations, support and some rather general unidentified structures, RESEARCH AS ECONOMIC ACTIVITY relies mostly on providing things, RESEARCH

AS (UNCOVERING) A SECRET is mostly concerned with unexpected but very much appreciated revealing of a fact or tendency.

This research has been limited to English linguistic discourse. It has some implications for teaching academic English to non-native speakers of English, especially speakers of languages which do not have any such patterns. Also further study into the field would be of interest if other languages in a cross-linguistic perspective were involved. For Lithuanian such studies seem to have broader implications, since it now seems under the influence of English. In today's busy world it is much less resistant to language innovations, including, among other things, the pattern under discussion in Lithuanian academic discourse.

REFERENCES

Barcelona A. 2000. On the plausibility of claiming a metonymic motivation for conceptual metaphor. In: A. Barcelona (ed.) *Metaphor and Metonymy at the Crossroads. A Cognitive Perspective.* Berlin and New York: Mouton de Gruyter. 31–58.

Boers F. 1999. When a bodily source domain becomes prominent. The joy of counting metaphors in socio-economic domain. In: R. W. Gibbs & G. J. Steen (eds). *Metaphor in Cognitive Linguistics.* John Benjamins. 47–56.

Croft W. and D. A. Cruse. 2004. *Cognitive Linguistics.* Cambridge University Press.

Deignan A. and L. Potter. 2004. A corpus study of metonyms and metaphors in English and Italian. *Journal of Pragmatics* 36: 1231–1252.

Evans V. and M. Green. 2006. *Cognitive Linguistics. An Introduction.* Edinburgh University Press.

Gibbs R. W., P. L. C. Lima and E. Francoso. 2004. Metaphor is grounded in embodied experience. *Journal of Pragmatics* 36: 1189–1210.

Johns T. 2001. From evidence to conclusion: the case of 'indicate that'. In: M. Hewings (ed.) *Academic Writing in Context. Implications and Applications.* The University of Birmingham University Press. 55-62.

Hyland K. 1996. Nurturing hedges in ESP. *System* 24-4: 477–490.

Hyland K. 2004. A convincing argument: corpus analysis and academic persuasion. In: U. Connor and T. A. Upton (eds) *Discourse in the Professions.* John Benjamins. 87–112.

Kövecses Z. 2002. *Metaphor. A Practical Introduction.* OUP.

Lakoff G. and M. Johnson. 1980/2003. *Metaphors we Live By.* University of Chicago Press.

Low G. 1999. "The paper thinks…": Investigating the acceptability of the metaphor AN ESSAY IS A PERSON. In: L. Cameron and G. Low (eds) *Researching and Applying Metaphor.* CUP. 221–248.

Master P. 2001. Active verbs with inanimate subjects in scientific research articles. In: M. Hewings (ed.) *Academic Writing in Context. Implications and Applications.* The University of Birmingham University Press. 169-181.

Mauranen A. 2001. Descriptions or explanations? Some methodological issues in Contrastive Rhetoric. In: M. Hewings (ed.) *Academic Writing in Context. Implications and Applications.* The University of Birmingham University Press. 43-54.

Paradis C. 2006. Where does metonymy stop? Senses, facets and active zones. *Working Papers in Linguistics*, 6: 1–15. Retrieved 13 June 2008 from http://www.englund.lu.se/ images/stories/pdf-files/ workingspapers/vol03/Paradis-Wheredoesmetonymystop.pdf

Radden G. 2000. How metonymic are metaphors? In: A. Barcelona (ed.) *Metaphor and Metonymy at the Crossroads: a cognitive perspective.* Mouton de Gruyter. 93-108.

Šeškauskienė I. 2008. The language of linguistic research: is there room for meaning extension? *Kalbotyra* 58 (3): 271-280.

Taylor J. R. 1995. *Linguistic Categorization. Prototypes in Linguistic Theory.* Oxford: OUP.

SOURCES

Alderson Ch. J. 2007. Judging the frequency of English words. *Applied Linguistics* 28/3: 383–409.

Bell N. D. 2005. Exploring L2 language play as an aid to SLL: A case study of humour in NS–NNS interaction. *Applied Linguistics* 26/2: 192-218.

Dalton-Puffer Ch. and T. Nikula. 2006. Pragmatics of content-based instruction: teacher and students directives in Finnish and Austrian classrooms. *Applied Linguistics* 27/2: 241–267.

Macaro E. and L. Erler. 2008. Raising the achievement of young-beginner readers of French through strategy instruction. *Applied Linguistics* 29/1: 90–119.

North S. 2005. Disciplinary variation in the use of theme in undergraduate essays. *Applied Linguistics* 26/3: 431–452.

Webb S. 2007. The effects of repetition on vocabulary knowledge. *Applied Linguistics* 28/1: 46–65.

TYRIMAS APTARIA: NEGYVAS SUBJEKTAS + AKTYVŲ VEIKSMĄ REIŠKIANTIS VEIKSMAŽODIS ANGLIŠKAME LINGVISTINIAME DISKURSE

Inesa Šeškauskienė

S a n t r a u k a

Straipsnyje aptariama modelio *negyvas subjektas + aktyvų veiksmą reiškiantis veiksmažodis* realizacija lingvistiniuose straipsniuose anglų kalba. Nustatomas bendras modelio dažnumas bei dažniausiai pasikartojantys veiksmažodžiai bei subjektai, atskleidžiama jų reikšmė ir funkcijos. Rezultatai lyginami su lingvisto Master'io (2001) straipsnyje aprašomais tyrimo, grindžiamo moksliniais straipsniais tiksliųjų mokslų tematika, rezultatais. Abiejų tyrimų metu nustatyta, kad tiriamas modelis vyrauja aiškinamojo tipo kontekstuose.

Kvantitatyvinis aspektas papildomas interpretaciniu, pasitelkiant konceptualiosios metaforos teoriją. Nustatytos šios dažniausiai pasitaikančios metaforos: TYRIMAS YRA ŽMOGUS, TYRIMAS YRA KELIONĖ, TYRIMAS YRA STATINYS, TYRIMAS YRA EKONOMINĖ VEIKLA bei TYRIMAS YRA PASLAPTIES ATSKLEIDIMAS. Pirmoji metafora iš dalies sutampa su metonimijomis.

Šio tyrimo rezultatai galėtų pasitarnauti diskurso analizės tyrimams bei dėstant akademinį rašymą negimtakalbiams.