

WHEN THE AUTHOR IS ABSENT: THE USE OF PASSIVE FORMS IN A CORPUS OF ROMANIAN TEXTS ON ECONOMICS

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Abstract: Scientific writing in general and academic writing in particular are centered round the ideal of impersonality and objectivity, with a focus on theories, applications and data and not on the person of the scientist, who is supposed to be self-effacing and detached. This effect is achieved – in English at least – mainly through the use of passive forms, also resulting in a different type of information packaging; the passives also lend the discourse an extra degree of formality. The present paper investigates to what extent – and in what manner – passive forms are used by writers of scientific texts in Romanian. Quantitative data extracted from a corpus of PhD theses on Economics and analysed with a view to identifying the most frequent structures (pasiv in Romanian), other ways of achieving impersonalization (metonymy), indicate that while the Active voice is still the prevalent form, indirectness is achieved through consistent use of the prototypical passive and also passive reflexive and impersonal verb phrases to an almost equal degree.

Keywords: *academic writing, passive voice, corpus, Economics, Romanian.*

Scientific writing in general and academic writing in particular are centered round the ideal of impersonality and objectivity, an ideal that can be traced back to Francis Bacon and which later developed in the Letters to the Royal Society, whose motto, *nullius in verba* (take nobody's word for it), not only voiced the belief that the study of Nature should rely primarily on experiment and observation and not on textual, possibly spurious, argumentation (Skouen & Stark, 2015:2), it was also an indirect invitation to doubt the author himself. One of the consequences of this new trend was to establish the persona of the scientist as self-effacing and detached, focusing on methods and results rather than on personal convictions and opinions, since the author's/scientist's identity was – ought to be – irrelevant for the results. While initially this model was intimately connected to English, it spilled over and informed or influenced to various degrees other cultures/languages.

The passive voice in scientific texts. This type of "author evacuated prose" (Geertz, 1988, in Hyland, 2002:1095) has been subject to extensive research over the years and the linguistic mechanisms through which impersonality is achieved in scientific prose have been studied from various perspectives: rhetoric (contrastive, later intercultural, but not only), pedagogical (LSP, Academic Writing), semantic (cognitive). The repertoire of forms includes pronominal constructions with a passive voice value, the use of the pronoun *on* in French (in the

KIAP project), of *one* and *one's* in English, impersonal phrases with *il*, the middle voice (*voix moyenne*) in French (see Reutner, 2010:95), nominalization, dummy “it” subjects (see Tarone et al., 1998), metonymy or “the personification of the textual elements and sections” (see Fløttum, Dahl and Kinn, 2006:212), the construction of “abstract rhetors” which nominalize a personal projection (see Hyland, 1996:444) and other deagentivizing constructions. Top of the list in the set of such instruments are the passive phrases with or without the agent mentioned (although in the case of the research article there is little doubt as to who the agents are, i.e. the author/authors themselves or the team producing the findings presented in the text.)

The passive has been found to be used for various purposes: Hinkel (1997:362, following Myers, 1989, and Cherry, 1988) considers that authors may see it as a politeness strategy aimed at minimizing attitudes that can be construed as an imposition on the reader and also relates it to the possibility of establishing a relation of solidarity between the reader and the author; Hyland (2005: 363-364) also discusses passivization in relation to stance as a way of engaging the reader in the process of creating knowledge. In using passive forms thus distancing themselves from the text, authors may seek various results: on the one hand, they may try to create vagueness and avoid precision (Chanel, 1994, in Hinkel, 1997:362) and to reduce responsibility regarding the statements they make, as passive constructions are effectual hedging devices (Hyland, 1996: 444), that is, they limit personal commitment and do not increase the precision of claims (Hyland, 1996:443); or, in Biber’s terms (2006:103), can serve avoiding the identification of the responsible party. All in all, it may be said that its potential to pass a subjective content under an impersonal form can be seen as leaving room for “suspicious manoeuvres” (Reutner, 2010:89) and for “inequitable relations of power between the writers and readers (Norton, 2010:xi, quoting Fairclough, 2003).

On the other hand, however, the removal or de-emphasizing of the agent (usually the author/researcher) results in increased author anonymity, pragmatically “translated” as signs of credibility, reliability, objectivity, and ultimately authority (Rundblad, 2007:251). One of the most important purposes of scientific prose is thus facilitated: the semantic constraints identified in the type of verbs that undergo passivization suggest that, in English at least, this pattern is chosen to convey abstract information (Cao and Xiao, 2013:219); Biber (2009: 131) gives examples of cases when it allows an abstract concept (for instance, the findings of research) to become the topic/ subject of the discourse. Passive clauses reorganize the informational content and in doing so add to textual cohesion (Baratta, 2009:1410; Cao and Xiao, 2013:219) and facilitate the densification of meaning in scientific prose (Biber, 2009:123). Through the shift between theme and rheme, appropriately used passive structures assist the reader in following the argumentation in a prototypical writer-responsible culture such as the Anglo-Saxon. Passive is not, in fact, actually used without at least one of these ends in mind: as every other linguistic choice, it can reveal attitudes, social experience and even feelings (Baratta, 2009) and it can ultimately contribute to the construction of identity (Ivanič, 1994, Tardy, 2012).

The array of sometimes co-existing purposes results in different distributions of passive structures at discourse level. The difference between spoken and written language (studies refer

to English) has been widely documented: according to Biber (2006:64), spoken registers use active voice verbs up to 95%; in the written registers, differences have been noted between fiction (Robinett, 1980, in Tarone et al., 1998: 114, with figures roughly confirmed by Master, 1991, *ibid.*), with a comparatively smaller ratio (29% cases of passive forms of all verbs), and scientific texts, where the percentage rises up to almost a half (46%). While it has been found that authors prefer the passive over the active in scientific texts in French as compared to general purpose texts in the same language, it appears that this voice is by no means dominant (in medical texts, according to Rouleau, 1993:444, with other options such as the pronoun *on* or the active 1st person plural or certain hortative forms also operative). In Spanish texts results seem to indicate the reverse trend, with less than half (41.25%) passive forms compared to a steep 86.25% in English and “a very clear preference for the use of the active voice” (in experimental social sciences abstracts, according to Martín Martín, 2003:37). The same was found in a study of Russian passive vs active frequency, with 74% active verbs and a dominant combination of 1st person plural *we* and active verbs FOR (Tarone et al., 1998:128). Outside the area of (Indo) European languages, in a comparison between English and Mandarin Chinese, Xiao et al. (2006) find a disparity of ten to one in the use of passive forms. Variation has been detected in the study of learner corpora of English native and non-native authors writing in English, with the hypothesis that overuse of passive forms is the result of transfer of native language strategies (for Spanish, see van Aertselaer, 2008, in Paquot and Granger, 2012; for Chinese, see Teng and Tan, 2004, in Xiao et al., 2013).

Among the several subtypes of scientific texts, variation has been noted and researched in terms of genres and/or discipline. In terms of genre, research articles reveal an increased frequency of impersonal passivized forms compared to textbooks (Biber, 2009:128). Discipline also appears to influence preference for passive phrases: on the one hand, in science and engineering texts such forms are much more common than in humanities (Biber, 2009:46), while degrees can also be detected outside the so-called “soft sciences”: in textbooks in engineering, this type of phrases those in natural sciences (Biber, 2006:65). Within the same genre, they have been found to cluster in certain sections of the text (interpretation of data, presentation of methodology or research procedure etc.) (see Cao and Xiao, 2013; Hyland, 2002). Regarding frequency of passive forms and disciplinary variation, an interesting set of findings come from a study by Tarone et al. (1998), according to which, although extensive use in the “hard sciences” is highly expected, articles in astrophysics display an uncharacteristic pattern; the explanation suggested lies in the different rhetorical structure and argumentation, i.e. in texts where the methodology does not rely on experiment and directly observable phenomena, but rather on logic, on appeal to previously established procedure and mathematical calculations describing objects outside the observable universe. Other authors (Reutner, 2010, Vassileva, 1998, Clyne, 1987) point out that detected differences may also be accounted for by factors ranging from the idiolectal to the variable national discursive traditions and intellectual styles.

Among – and along with – other devices through which the scientific discourse achieves impersonalization and indirectness, the passive is expected in the academic text and its presence

is considered a mark of the academic discourse to such an extent that its overuse has been decried and deterred (“*Never* [added emphasis] use the passive where you can use the active,” peremptorily advises Orwell in *Politics and the English language*, 1946, cited in Pullum 2014). A relatively recent trend redefines the notion of academic modesty, which no longer represents a central value (Reutner, 2010) and encourages directness and conciseness through the use of the active voice in parallel with bolder assertion of the “I”. With such oscillations and a number of factors to play a role in the scientists’ choice whether to appear as linguistic actors in their own text or to extricate themselves by means of various impersonalizing devices, I have asked myself if the Romanian researchers in Economics choose to absent from the text and what happens when they do so, in other words: to what extent are passives used by Romanian writers of academic texts, whether they are preferred over the active voice and what other – if any – strategies they may employ in their effort of creating their scientific persona.

Corpus and methodology. To answer these questions, quantitative data were extracted from a corpus of texts on Economics in Romanian. Use of the passive verbs and other instruments of passivization are expected throughout a scientific text, balancing active forms. However, as shown above, the range and frequency may differ depending on several factors. One is the language: Romanian, as a member of the Romance group, has the active – passive opposition, but also has a reflexive voice, which in some cases may add a passive meaning that is used to deagentivize and generalize the content. Discipline also influences the author’s linguistic behaviour, in the sense that the distinct epistemological position of Economics at the crossroads between the social sciences, whose object it studies, and the hard sciences, whose ability to formulate universal laws with predictive power it aspires to, and whose mathematical apparatus it appropriates, brings an element of interdisciplinarity that the economists do not willingly admit, or, in the view of such rhetoricians of specialized discourse as Mc Closkey (1986, 1993), may not even be aware of, which results in characteristic lexical and structural choices. While most interest has focused on the research article, larger texts – with the possible exception of textbooks (mentioned in Biber, 2006, 2007, 2009), such as the MA dissertation or the PhD thesis – have not made the object of investigation on such a large scale. However, the genre has also been shown to have a bearing on information packaging; in the present case, the PhD theses may be said to have a different pragmatic orientation (in terms of the status of the authors, intended target audience and the overall communicative purpose). Given the large size of the finite text, density / densification of information may be expected to differ from the very compressed nature of the research article. This, in turn, results in distinct narrative patterns with distinct linguistic solutions to such problems as the presence/absence of the author in the text, and caveats have been issued regarding groundless generalizations in this respect (Rundblad, 2007:256). The corpus used for the present investigation consists of PhD theses, mainly theoretical in nature, some of which discuss economic theories and the scientists who proposed – or refuted – them, therefore much of the discourse is expected to be – and indeed is – narrative rather than argumentative in the sections where the emergence of these theories/theorists is presented.

In Romanian – a member of the group of Romance languages – indirectness is achieved mainly by means of passive structures; the prototypical passive (auxiliary *be*+participle, which in Romanian displays gender and number agreement with the grammatical subject) has the strongest pragmatic force; it allows the topicalization of the element whose referent is the most familiar within the discourse, while the agent is moved to a postverbal position, peripheral in terms of communicative force, and thus can be – and often is – omitted (Guțu-Romalo, 2005II:140); the auxiliary can be omitted, too, in some non-finite phrases, with the retention of the passive meaning (ibid, 133). Infrequently, other verbs (a *veni* “to come”, some other copulas and modal operators) can also occur as auxiliaries. The passive is preferred when the subject is seen as “individualized”; however, with a generic, non-individualized, usually non-personal, subject, the passive reflexive is preferred (ibid.136). Given the multiple functions of the clitic *se*, the common marker for the passive-reflexive, for the reflexive and for the reciprocal voice – in some authors also for the dynamic (see Irimia, 1997:206), the interpretation of certain phrases as reflexive has been the subject of arguments (Bidu Vrănceanu, 1997:404). In impersonal phrases (impersonal voice, see Irimia, 1997:206) the personal subject is omitted and the object is placed in subject position, with a passive meaning in the case of transitive verbs; such phrases can be created around both transitive verbs used impersonally and intransitive verbs, and in both cases the marker *se* is used (Bidu Vrănceanu, 1997: 244); this form is regarded as conveying the meaning of indetermination (Irimia, 1997:206). For this reason, and considering the fact that searches were performed with wild cards on the raw corpus, counts have covered all forms containing the clitic *se*, while passive forms included all phrases containing the auxiliary *be* and a participle, with the exception of aux. *a fi* (to be) + adjectives and other parts of speech that have been manually eliminated. This is in line with the methodology presented in Hinkel (2004) and in Rouleau (1993), who include non-finite forms (infinitives) and modals. However, even if as shown before participles with auxiliaries omitted retain their passive meaning, they have been excluded from counts since each would have necessitated individual consideration, which was not feasible, given the size of the corpus; the same treatment received other infrequently occurring forms interpreted as passives: “supin”, postverbal *-bil* derivational adjectives, nominal infinitives. After true reflexive forms have been manually removed, the count of verbs marked with the clitic *se* have been compared with the total of passives as they have also been regarded as instruments to impersonalize the discourse and shift the focus to content and away from the agents.

One other instrument used by authors to avoid mentioning themselves, metonymy, has been separately analysed, since it involves nominals, not verbs. While it has not received the same amount of attention in the specialized literature (Rundblad, 2007:251), it has been shown to be frequently used (ibid., 250) and to serve purposes of anonymization, generalization, and generally impersonalization. It has been defined as the situation where the personal subject – the author – is substituted by an inanimate nominal phrase such as *model*, *chapter*, *source* etc. as metatextual elements; metonymy has not been added to the count of passive forms since it may co-occur with some of these (see Rundblad, 2007) and would alter the results. The corpus

consists of 13 PhD theses in Economics, totalling a little over 1 million words (tokens, types). It was investigated with the specialised concordancer AntConc 3.4.3 for Windows. All figures have been normalized for 10,000 words.

Results and discussion. The forms counted were the passive and active verbs in the 3rd person singular and plural of the Present Indicative, “Perfect Compus” (Past) *a/au* (“has/have”) + (Past) Participle, Future *va/vor* (“will”) + Infinitive, Conditional (“conditional”) *ar* morpheme (“would”) + Infinitive/Perfect Infinitive and Gerunziu (non-finites ending in *-înd-* / *ând*). The data are presented in both table and graph form. There is a preference for the active voice in all cases

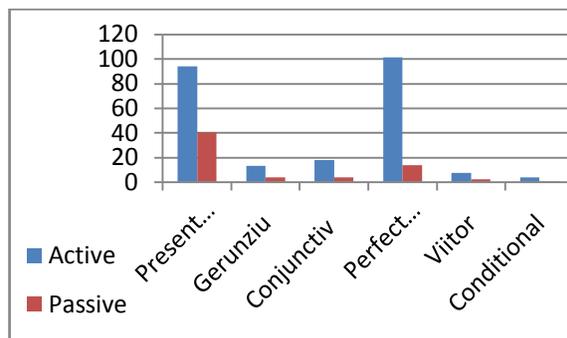


Figure 1. Verb forms in the Active and Passive Voice

considered, with a larger difference between the counts in the case of the Past Tense (Perfect Compus) and a less significant one in the case of the Present (Simple). Tense and voice have been studied in combination, along with their distribution in the various sections of the research article and/or the types of content they are used to convey: in English academic prose, past tense(s) are most frequently associated with narratives, while the present occurs in sections dealing with generalizations, and the relatively scarce future forms are employed occasionally to refer to future outcomes and conditions (in Hinkel, 2004). In abstracts of research articles in Spanish, the combination of Past and Passive has been found to be employed mainly, although not exclusively, in discussing methodology (Martín Martín, 2003); in the corpus of abstracts in Spanish, there is a clear preference for active forms (ibid.). While no comparison can be drawn due to the difference in genre, the same tendency is found in the Romanian corpus: active forms are prevalent (67%), with the passives (18%) and impersonal and passive reflexive forms marked with the clitic *se* (16%) rising to a total 34%. The ratio of active vs passive for the verb forms counted with the omission of the last category is 236.93 to 63.38/10,000 words, which is close to the almost 30%, “moderately frequent”, Biber (2006) gives for scientific texts (this is in engineering; the values for the closest discipline the English linguist offers, namely Social Sciences, are 100 to 80 per 1,000 words, ibid., Figure 4.9, 2006:65).

| Verb form | Active forms (per 10,000) | Passive forms (per 10,000) |
|---|---------------------------|----------------------------|
| Present Indicative 3rd singular and plural | 93.94 | 39.95 |
| “Gerunziu” (non-finite ending in <i>-înd-</i> | 13.04 | 3.38 |

| | | |
|---|--------|-------|
| / <i>ând</i>) | | |
| “conjunctiv” (<i>să</i> morpheme + specific verb form) | 17.79 | 3.79 |
| Perfect Compus (Past have + Participle) | 100.96 | 13.52 |
| Future (<i>va/vor</i> “will” + Infinitive) | 7.4 | 2.28 |
| “conditional” (<i>ar</i> “would”) + Infinitive | 3.8 | 0.46 |
| TOTAL | 236.93 | 63.38 |

Table 1. Verb forms in the corpus (values normalized per 10,000)

The impersonal and passive forms with the clitic *se* are an interesting class within the general picture. *Se* can be compared to some extent with the generic *one*, with the remark that it is less formal than its counterpart in English; in the case of the impersonal forms, grammarians agree that its reference is *people, everyone* (Guțu-Romalo, 2005:141). Sentences containing it are most often translated into English by passive phrases. (ex. *În acest hotel se vorbește engleza și franceza* “English and French are spoken in this hotel”) and sentences with *it* subjects (ex. *Se consideră/estimează că...* “It is said/estimated that...”). Similar impersonal constructions in French are formed with the pronoun *on* or impersonal phrases with *il* (*il est à craindre que...*). The figure for such phrases in the Romanian corpus is 55.93 / 10,000 words (16%), which is to that for passives (63.68 per 10,000, or 18%): this renders it as an important element in the repertoire of impersonalizing instruments. The result is largely the same with respect to the way information is presented to the reader: the subject in the case of both the passives and the impersonal is placed after the verb and the two types of phrases are interchangeable (syntactically synonymical, see Guțu Romalo, 2005:144): ex. [6533]. *Astfel, se vor avea în vedere cele patru aspecte* [9].txt can be paraphrased as *Astfel, vor fi avute în vedere cele patru aspecte* (translation “Thus, the four aspects will be considered”). It can, however, be sometimes overused, which may result in tortuous sentences that add to the impression of formality: e.g. [3321] *Toate cerințele care se necesită a fi îndeplinite pentru desfășurarea r...* [9].txt (approx. translation “All the requirements that are needed to be met for the development...”). The author’s option for one or the other may be influenced by the fact that the prototypical passive still leaves open the possibility to express the agent in prepositional form, *de către* (“by”), while the forms with the clitic *se*, through its parallel use in phrases with intransitive verbs, may render this possibility as more remote or entirely unnecessary, thus making the agent’s identity even more abstruse.

As shown previously, one other instrument an authors can deploy in order to avoid self mention is metonymy, a linguistic device by which the person of the author is referred to indirectly by metatextual elements such as *chapter, section, part, thesis, graph, formula* etc. and associated with verbs in the 3rd person. A preliminary investigation of the corpus in this respect at the level of just one item – the noun *chapter* – reveals a more than occasional use of metonymy. While the norm appears to be a personal subject expressed by a pronoun in the 1st person plural combined with the presence of the noun *chapter* in prepositional phrases (e.g. [321] *Așa cum am afirmat la începutul acestui capitol, Termodinamica ...*[8].txt) (translation “As we

have stated at the beginning of this chapter, Thermodynamics...), around one sixth of the total 311 instances extracted from the corpus (16.7%) introduce the noun *chapter* in subject position with textual verbs (in Thompson and Ye's taxonomy, 1991): e.g. [326] De aceea, capitolul trei se concentrează pe o modalitate cer [13].txt (translation "that is why Chapter three focuses on a way...), which could equally have been expressed as "that is why in Chapter three we have focused on a way..." The examples from the corpus seem to indicate that there is a constant swing from the author's presence marked by the pronoun *we* and the verbs in the active voice to his withdrawal from the discourse; moreover, in around another 12% of the cases the noun *chapter* occurs in sentences with a verb in the passive, as Rundblad (2007:251) also found in her corpus of medical texts.

Conclusions. Given the nature of communication in the specialized scientific discourse, I started from the premise that economists will use available linguistic/rhetoric instruments to create the effect of formality and an impersonal, detached academic voice in their texts: my purpose was to find to what degree and by what means this is achieved; while no comparison was possible, since no similar research has been done so far for Romanian, a parallel was drawn between the frequency of the various choices: active, prototypical *be + participle* passive, as well as other means such as reflexive passive and impersonal forms marked by the clitic *se* and, finally, metonymy, the device by which the personal subject is substituted by a metatextual element (*chapter* was used as an example). While the figures definitely indicate a preference for the actives (66%), impersonal forms rise to a total of 34%, with almost equal figures for the other two options (18% and 16% respectively). Counts for the use of metonymical nouns have not been added, since such forms may co-occur with the passive verb phrases, but the 16.7% instances when the noun *chapter* is used as a metonym point out that this process of impersonalization is not left unexplored. It appears thus that the Romanian researcher of Economics will make full use of the possibilities the language offers in terms of indirectness strategies; considering the almost total avoidance of the 1st person singular and the dominant use of verbs and pronouns in the 1st person plural (34.16/10,000 words, Ghivirigă, forthcoming), they seem to be comfortable in a peripheral position and willing to direct the focus on the content: not absent, but cautiously away.

Acknowledgment. The present paper is in partial fulfillment of the requirements for the postdoctoral project POSDRU/159/1.5/S/133652 *Profilul autorului de text de specialitate – utilizarea formelor autoreferențiale și referința la alți autori în discursul științific (economic) în limba română.*

BIBLIOGRAPHY:

Anthony, L. 2014. AntConc (Version 3.4.3) [Computer Software]. Tokyo, Japan: Waseda University. Available from <http://www.laurenceanthony.net/>

- Baratta, Alexander M. 2009. Revealing stance through passive voice, in *Journal of Pragmatics* 41, pp. 1406–1421.
- Biber, Douglas. 2006. *UniversityLanguage. A corpus-based study of spoken and written registers*, John Benjamins.
- Biber, Douglas. 2009. *Register, Genre and Style*, Cambridge University Press.
- Biber, Douglas, et al. 1999, 2007. *Longman Grammar of Spoken and Written English*, Longman.
- Bidu Vranceacu, Angela, et al. 1997. *Dicționar general de științe ale limbii*, Editura Științifică, București.
- Clyne Michael. 1987. Cultural Differences in the Organization of Academic Texts. English and German, in *Journal of Pragmatics* 11 (1987), pp. 211–247.
- Cao, Yan, Richard Xiao. 2013. A multi-dimensional contrastive study of English abstracts by native and non-native writers, in *Corpora* Vol. 8 (2), pp. 209–234.
- Fløttum, Kjersti, Trine Dahl and Torodd Kinn. 2006. *Academic Voices: Across languages and disciplines*, John Benjamins Publishing Company.
- Ghivirigă, Teodora (forthcoming). Author identity in scientific texts on Economics.
- Guțu-Romalo, Valeria et al. 2005. *Gramatica limbii române* (I, II), Editura Academiei Române, București.
- Hinkel, Eli. 2004. Tense, aspect and the passive voice, in L1 and L2 academic texts, in *Language Teaching Research* 8,1, pp. 5–29.
- Hinkel, Eli. 1997. Indirectness in L1 and L2 academic writing, in *Journal of Pragmatics*, 27, pp. 361–386.
- Hyland, Ken. 2005. Representing readers in writing: student and expert practices, in *Linguistics and Education*, 16 (4), pp. 363–377.
- Hyland, Ken. 2002. Authority and invisibility: authorial identity in academic writing, in *Journal of Pragmatics*, 34, pp. 1091–1112.
- Hyland, Ken. 1996. Writing Without Conviction? Hedging in Science Research Articles, in *Applied Linguistics*, Vol 17 (4), Oxford University Press, pp. 433–454.
- Irimia, Dumitru. 2005. *Gramatica limbii române*, Editura Polirom, Iași.
- Ivanič, Roz. 1994. I is for Interpersonal: Discoursal Construction of Writer Identities and the Teaching of Writing in *Linguistics and Education* 6, pp. 3–15.
- Martín Martín, Pedro. 2003. A genre analysis of English and Spanish research paper abstracts in experimental social sciences, in *English for Specific Purposes*, 22, pp. 25–43.
- McCloskey, Donald. 1986. *The Rhetoric of Economics*, Wheatsheaf Books Ltd.
- McCloskey, Donald. 1994. *Knowledge and Persuasion in Economics*, Cambridge University Press.
- Norton, Bonny. 2010. Preface, in David Nunan and Julie Choi (eds.), *Reflective Narratives and the Emergence of Identity*, 2010, Routledge.
- Paquot, Magali, Sylviane Granger. 2012. Formulaic Language in Learner Corpora, *Annual Review of Applied Linguistics*, 32, pp. 130–149.

- Pullum, Geoffrey K. 2014. Fear and Loathing of the English Passive, in *Language and Communication*, published online 22 January 2014 at Science Direct <http://www.sciencedirect.com/science/article/pii/S0271530913000980>, 31.03.2015.
- Reutner, Ursula. 2010. *De nobis ipsis silemus?* Les marques de personne dans l'article scientifique, in *Lidil*, 41, Énonciation et rhétorique dans l'écrit scientifique, pp. 79 - 102.
- Rouleau, Maurice. 1993. La voix passive dans les textes médicaux et paramédicaux, in *Meta*, no 3 vol 38, pp. 440-448.
- Rundblad, Gabriella. 2007. Impersonal, General, and Social The Use of Metonymy Versus Passive Voice in Medical Discourse, in *Written Communication* 24, pp. 250 – 277.
- Skouen, Tina, Ryan J. Stark (eds.). 2015. *Rhetoric and the Early Royal Society. A Sourcebook*, Brill.
- Tarone, Elaine, Sharon Dwyer, Susan Gillette, and Vincent Icke. 1998. On the Use of the Passive and Active Voice in Astrophysics Journal Papers: With Extensions to other Languages and other Fields, in *English for Specific Purposes*, Vol. 17, No. 1, pp. 113 – 132.
- Thompson, Geoff, Ye Yiyun. 1991. *Evaluation in the Reporting Verbs Used in Academic Papers*, in *Applied Linguistics*, Vol. 12, No. 4, pp. 365 – 382. Downloaded from <http://applied.oxfordjournals.org/> at Memorial University of Newfoundland on May 27, 2014