OBJECTIVISM/SUBJECTIVISM IN SCIENTIFIC ARTICLES FROM DIFFERENT FIELDS: THE HETEROGENEITY OF ACADEMIC WRITING

Ângela Francine FUZA *

■ ABSTRACT: This paper is aimed at discussing the homogenization of scientific and academic writing in the process of text constitution, by analyzing aspects related to objectivism and subjectivism in academic texts. The selection of some A1 Brazilian scientific articles from different fields of knowledge was carried out according to specific genre: compositional form, style and theme which delimit texts in terms of objectivism and subjectivism. The work is guided by the dialogic assumptions of the Bakhtin's Circle regarding genres, as well as some authors from the New Literacy Studies framework. Results show that: a) every utterance consists of subjective and objective elements; b) aspects delimiting objectivity and subjectivity are predominantly marked in the compositional and architectural forms and in the text style related to the theme; c) articles of different fields are similar while dealing with elements concerning objectivity, such as compositional form and language resources; d) the articles differ by showing aspects which, although observed in verbal materiality, find meaning in the extra verbal context, pervading subjectivity as a thematic choice as well as some variation in the amount of authors; e) objectivity and subjectivity nuances observed in the discourse allow us to characterize traces of heterogeneous writing in these fields.

■ KEYWORDS: Objectivism. Subjectivism. Academic writing. Scientific articles.

Introduction

Academic-scientific writing has been widely discussed in academic world by researchers of the Language Studies field in a variety of scopes and from diverse methodological perspectives. Among the research works we observed the academic community difficulty in producing the genres requested in their fields, since in many cases there is no definition for the practice of written production; in other words, it is assumed that their conventions are shared by all writers (LILLIS, 1999), leading to what may be called writing homogenization. Moreover, in dealing with academic writing,

there is a view that the common sense conventions are transparent to those participants of academic community and to the new writers in the referred field (LILLIS, 1999).

Those stances in writing academic genres, such as scientific articles, fall within the framework of autonomous literacy (STREET, 1984) and the model of academic socialization proposed by Lea and Street (2014). Through a homogenizing attitude, language is conceived in accordance with the assumptions of idealistic subjectivism[1] and abstract objectivism, as a stable system or as an inert source, disregarding factors external to communication (VOLOŠINOV, 1973).

Based on that assumption, this research conceives language in its social nature (VOLOŠINOV, 1973) and takes into account the discourses constituted by norms and restrictions, pervaded by discursive questions of utterance[2].

Thus, this paper[3] aims at analyzing scientific articles from different areas of knowledge, discussing the heterogeneity of writing[4] from the elements that constitute the genre: compositional form, style and theme. Thereto, this qualitative-interpretative study focuses on articles from A1 national journals of different fields – Human Sciences, Engineering, Social Sciences, Health Sciences, Linguistics, Languages, Literature and Arts, and Exact and Earth Sciences – collected on the WebQualis system[5]. In other words, following the discussion on academic writing homogeneity, this paper intends to examine how the question of objectivism/subjectivism is observed, highlighting the writing aspects as an element to be treated heterogeneously.

The research is grounded on the dialogical approach of language analysis, addressed by Bakhtin (1986) and Vološinov[6] (1973), regarding dialogism, genres, objectivism

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[1] According to Rodrigues (2001), there must have been problems ascribed to the referring language guidance for the term "idealistic subjectivism". For the author, in "Marxism and Philosophy of Language", there are two denominations for the same trend: "Idealistic subjectivism" and "individualistic subjectivism." However, in *Les frontières entre poétique et linguistique* (BAKHTIN; VOLOSHINOV, 1981), the term used is "individualistic subjectivism" (RODRIGUES, 2001, p. 13).

[2] Based on Bakhtin (1984), "discourses" are "language in its concrete living totality. They are not language as specific object of Linguistics, but something achieved through a completely legitimate and necessary abstraction from various aspects of the concrete life of discourse" (BAKHTIN, 1984, p. 181). The discursive issues are not restricted to a mere linguistic scope of the utterance, but also to the enunciative context of realization, considering extra verbal factors.

[3] Text based on the investigations of the author's PhD thesis (FUZA, 2015), which deals with other discussions about the heterogeneity of academic writing.

[4] As in Fuza (2015), in this paper, the notion of heterogeneity is originally based on Bakhtin and Vološinov. The author deals with the dialogical nature of language and the heterogeneity instituted as its property. The utterances do not present an absolute end or a definitive conclusion, with the principle of "inconclusiveness", of the preservation of heterogeneity (BAKHTIN, 1984). Corrêa (2004, 2006) claims the heterogeneous way of the constitution of writing – which justifies the treatment of academic-scientific writing in this text as heterogeneous and not as homogeneous practice. The heterogeneity in writing is then addressed, according to Corrêa (2004), because heterogeneity is understood as something inherent to its own practice.

[5] It is a platform (https://sucupira.capes.gov.br/sucupira/public/index.jsf), made available by CAPES (www.capes.gov.br), which allows the classification of journals that represent the intellectual production of Brazilian graduate programs in all areas of knowledge.

[6] For Faraco (2009, p. 12), there is "widespread confusion about the authorship" of Bakhtin Circle texts. Thus, there are three different trends to follow: "1) recognizing as Bakhtin's texts only those published under his name; 2) assigning all published work to Bakhtin; 3) including the two names in the authorship." (OHUSCHI, 2013, p.25). In this study, we chose the latter trend, an option also used in the research group *Interação e Escrita*, so, when referring to the work "Marxism and philosophy of language", quoted as Vološinov (1973).

and subjectivism, and on research works based on the assumptions proposed by the New Literacy Studies principles.

In the analysis, one article from each scientific area was selected and discursive-declarative regularities were found mainly on the compositional and stylistic levels of the scientific article genre, with emphasis on the theme. Specifically, in the compositional and stylistic contexts, aspects which highlighted the similarities and differences between the texts were verified. As outlined in the Methodology section, this strategy made it possible to deal with writing homogeneity and heterogeneity.

This paper is linked to the research project *Práticas de letramento acadêmico-científicas: a constituição dos discursos escritos* (UFT). Firstly, it deals with the question of the heterogeneity and homogeneity of discourse genres, objectivism and subjectivism in scientific writing. Secondly, it highlights the methodological section, the analysis of the observed data, results and discussion.

Discourse genres: homogeneous and heterogeneous aspects

Bakhtin (1986) states that the boundaries of each utterance are defined by alternating the subjects in the discourse, because "[…] words may cross our speech through others' individual utterances, thereby retaining to a greater or lesser degree the tones and echoes of individual utterances." (BAKHTIN, 1986, p. 88). Language has a founding role in the construction of the subjects' singularity as well as in the constitution of their marks of belonging to social groups (GOULART, 2006). This premise should be verified in the academic-scientific scope, since each knowledge area presents marks of its scientific communities that can be verified through their journals and articles. Therefore, academic writing should be conceived in its diversity and not in its unity.

By conceiving language as a dialogic process, discourse is manifested through texts and these are organized within certain discourse genres. Bakhtin (1986, p.60) defines three elements that shape the genre: the thematic content, the style, the compositional form: "All three of these aspects are inseparably connected to the whole of the utterance and are equally determined by the specific nature of particular sphere of communication […]".

Vološinov (1973, p. 99) posits the theme as "the expression of concrete, historical situation that engendered utterance", that is to say, it is determined not only by linguistic forms, but also by non-verbal elements of the situation, such as ideology. In general, the theme indicates the senses born out of the dialogical interaction, linked to the "ideological views on reality" (SOBRAL, 2009, p. 76), and the "meaning conveyed by the discourse in a real and unique situation of verbal interaction" (CEREJA, 2005, p. 203).

For Sobral (2009), the genre form should be understood as the materiality of the text (compositional form) and as discursive surface, that is to say, the way in which the material and the content are articulated (architectural form). This is pervaded by

ethical-moral values, objectives determining, for example, the relationship with the interlocutor and the compositional form (SANCHES, 2009).

According to Brait (2012), style reflects the subject's judgment on the theme; it considers previous experiences and what the other subjects may say about this theme. Bakhtin (1986) postulates that the impossibility of printing the personal style obscures the view of its enunciator, because style is the element that best explains its enunciator and it is fundamentally connected to the theme, since style is inseparable from thematic units. Its materialization is clearly manifested by linguistic choices made, regarding its interlocutor and the subject at hand.

In dialogue with Bakhtinian theories, Côrrea (2004, 2013b) addresses the homogeneous and heterogeneous aspects of discourse genres. In the first case, there is a strong trend in the verbal and compositional focus of the text, while heterogeneity goes beyond the limits (CORRÊA, 2013a) covering the "extra verbal context" (VOLOŠINOV 1976), that is, the "presumed ones" (CORRÊA, 2011, p. 394) which follow the word use as in "the theme of the genre", the institutional framework in which it is produced and the perspectives which, from outside the text, guide it [as the interlocutor's finishing]". These aspects go beyond a strictly pragmatic interpretation to reach "a socio historical dimension which bypasses the transparency of some strictly linguistic sense" (CORRÊA, 2013b, p.496).

In *Reflexão teórica e ensino da escrita*, Corrêa (2013b) argues on the "oppositions between "verbal" + "extra verbal" and its correlate: "Socially presumed" (VOLOŠINOV, 1976), on the one hand, and "hidden aspects of literacy" (STREET, 2009), on the other" (CORRÊA, 2013b, p. 494).

The term reference "hidden literacy" dates from Street's works (2009, 2010). The author has dealt with the hidden dimensions of academic writing assessments, which, for the most part, remain implicit. His interest was in "[…] hidden criteria that are used by counselors [...] by *journal reviewers. [He] wanted to make these dimensions explicit so that the authors could foresee what their readers would say about the work produced*" (STREET, 2010, p.542, emphasis added). In class, he elaborated with his students[7] a list of dimensions composed by: framing (genre, audience; purposes/objectives/arguments); contribution/ "What for?" (for knowledge, for research area, for future research); author's voice; point of view; linguistic marks; structure. On the aspects of literacy, Corrêa (2013b) asserts that they clearly refer to the non-explicit verbal materiality. In addressing them, there is the risk of keeping them restricted to some characteristics of the compositional structure or the lexical grammatical choices which characterize genre styles.

In "Discourse in Life and Discourse in Art", Vološinov (1976, p. 5, emphasis in the original) delimits three factors that make up the extra verbal context: "1) *the common spatial purview* of interlocutors [...]; 2) *the interlocutors' common knowledge and understanding of situation*, and; e 3) their *common evaluation* of situation."

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[7]   To go deeper in each of the dimensions, see Street (2010).

According to Fuza (2015), in scientific articles from different areas of knowledge, the academic sphere encompasses this genre. The scientific communities of each field present in this larger sphere would be understood as a (1) researchers' *common spatial horizon* with their own compositional writing characteristics, with their own culture of knowledge dissemination through the scientific article genre. To produce such knowledge, there are (2) the interlocutors that constitute the academic community's *common knowledge and understanding* of the situation, which enables the (3) *common evaluation* of the situation, or a scientific article, for example. Scientific article reviewers make an exact "evaluation" of the material that they receive, considering their own common space horizon of knowledge about the specificities of their scientific community. According to Vološinov (1976):

> On this 'seeing together' [scientific articles to be evaluated]; 'knowing together' [the authors' norms for submission of the articles and the norms of evaluation of the material used and known only by journal reviewers] and 'unanimously evaluated' [The reviewers of each area of knowledge express a common sense in the evaluation of the texts, making them in accordance with the specificities of their scientific community] – 'The enunciate is directly dependent on all that and everything is captured by its real and alive implications.' (VOLOŠINOV, 1976, p. 99).

The production of the scientific article genre occurs in the social relationship among the speakers and it is strictly connected with life itself which should not be divorced from life without losing its meaning (VOLOŠINOV, 1976, p. 4). In that sense, discourse genres must be understood in their heterogeneity, linked to the discursive area project, whose presupposition opposes unifying notions of writing.

Objectivism and subjectivism in scientific writing

Universal rationality and reason are the conceptual basis of scientific discourse. For Cortes (2009, p. 3), scientific discourse "[…] presents things as if they are acquiring life and speaking by themselves, postulating a neutrality character though." For Rodrigues (2009), the intent of scientific texts being objective and impartial are related to their effects of meaning: "[...] there are resources that allow them to "feign" that objectivity [...] The main strategy is to produce discourse in the third person, in the time of "then" and in the space of "there" [...] We pretend to distance ourselves from enunciation, which is by its turn "neutralized" (BARROS, 2005, p. 55-56 apud RODRIGUES, 2009, p. 4).

Among the formal strategies used in the text, which may cause the illusion of objectivity, the use of third person and passive voice stand out, pointing out to the absence of the research participant, constituting norms imposed by the scientific

community and accepted by each new member as the only true form of reasoning, of doing science (CORACINI, 1992). In view of that, Bakhtin (1993) poses that: "[...] It is an unfortunate mistake (a legacy of rationalism) to think that truth (*pravda*) should only be the truth (*istina*) if it is composed of universal moments; That the truth of a situation is precisely what is repeatable […]" (BAKHTIN, 1993, p. 37), disregarding individual truth.

For Bakhtin (1986), unity is formed by putting two concepts together, approaching subjectivity and objectivity, and the intention (subjective element) comes in combination with the object of meaning (objective) to form an indissoluble unity, the concrete utterance (indissoluble unit). It is possible to affirm that the dialogue between the intention and the object of meaning originates in the notions of idealistic subjectivism and abstract objectivism (VOLOŠINOV, 1973). While in subjectivism the focus is on the subject, in objectivism the focus is on the structure. Despite the apparent dichotomy between concepts, the authors postulate the dialogue between the individual and the other, because their choice is shared with other discursive subjects.

From that distinction, Sobral (2009) conceives the subjectivity in psychic, social and historical terms, instead of in purely psychological ones. The condition of possibility of subjectivity is the subject of language as an agent that acts in other agent(s') presence; in other words, he/she dialogues with several interlocutors.

For Cortes (2009), the alleged objectivity of scientific discourse is shaped as a moment which constitutes utterance. Thus, it is possible to conceive it according to the principle of "ixotopy" (BAKHTIN, 1993). In fact it is understood as the author's detachment from the object, followed by the moment of objectification. Cortes (2009, p. 4) states that "the moment of objectification should not be confused with indifference towards the object", since, once it has been uttered, it already means that the subject has assumed a certain attitude toward it.

The focus on objectivism and the defense of the scientific neutrality stems from the positivist assumptions used to prevail in the human sciences (RODRIGUES, 2009). According to Pasquotte-Vieira (2014), science centered on positivism focuses on observation and the act of writing academically would be like describing a state of the world (HAMMERSLEY; ATKINSON, 2007 apud PASQUOTTE-VIEIRA, 2014), without a positioning . However, nowadays, some sciences, such as the Human Sciences, question the principles of objectivity, "seeking to implicate the subjects who do science, preventing them from acting as mere reproducers of the scientific *status quo*" (RODRIGUES, 2009, p. 5).

Considering the role that discourse genre has played in this research (especially in scientific articles), as well as the issues related to objectivism and subjectivism, the methodology for selecting and choosing the corpus for analysis was developed as following.

Methodology

We chose the scientific article as our object of research because it is the most frequent genre in the academy and also because it characterizes important features of the academic community and the subjects involved. The journals and scientific articles analyzed were selected in the year 2012. Some criteria were considered in the selection of these objects, such as: the A1 classification in the *Qualis* ranking; knowledge fields; form of contribution; time of the journal and year of the data collection.

A1 journals have been selected because they convey the academic domain expectations in terms of excellence. According to *Qualis*, the journals have acknowledged publications in the area; they are in accordance with the standards of the Brazilian Association of Technical Standards (ABNT) and they also have national and international members in their editorial board.

Table 1 shows the number of journals in stratum A1:

Table 1 – Number of Stratum A1 journals according to ***WebQualis*** (2012).

AREAS	TOTAL OF A1 BRAZILIAN JOURNALS	TOTAL OF A1 FOREIGN JOURNALS	TOTAL OF A1 JOURNALS
AGRICULTURAL SCIENCES	00	449	449
BIOLOGICAL SCIENCES	00	753	753
HEALTH SCIENCES	2	1,677	1,699
EXACT AND EARTH SCIENCES	5	642	647
HUMAN SCIENCES	72	307	379
APPLIED SOCIAL SCIENCES	26	178	212
ENGINEERING	1	899	900
LINGUISTICS, LANGUAGE AND ARTS	55	78	133

Source: Fuza (2015, p. 118).

In the investigated areas of knowledge, the amount of foreign A1 journals is higher than that of Brazilian journals. On an increasing scale of Brazilian A1 journals, it is observed that there is no A1 ranked journal in Agricultural and Biological Sciences area; there is only one A1 journal in Engineering; there are two A1 journals in Health Sciences area; five in Exact and Earth Sciences; twenty-six in Applied Social Sciences; fifty-five in Linguistics, Language and Arts; and finally, there are seventy-two journals in Human Sciences.

Given that written production is pervaded by multiple practices, some articles from different areas of knowledge were selected. After the survey, their websites were accessed, the selection of journals of each area were made taking into account time acknowledged by their area or academic field. These journals were founded, respectively,

in 1929 (Area: Multidisciplinary; subarea: Engineering), 1950 (Human Sciences; subarea: History), 1979 (Applied Social; sub area: Social Service), 1983 (Linguistics, Language and Arts; sub area: Language/Linguistics), 1985 (Exact Sciences; sub area: Education), 1993 (Human Sciences; sub area: Nursing). The journals are identified by their areas of knowledge instead of by their titles, since that datum is not relevant for the study.

The selection of journals provided the search for a representative article which covered general characteristics of each area. In addition, certain singularities were taken into account, such as remarkable elements for their area, enabling the discussion of writing heterogeneity. In each website two journals published in 2012 (year of data collection on *Qualis*) and two issues published in 2013 were observed (the number of articles read from journal to journal varies, because of the number of texts published in each area).

Table 2 shows the number of articles read for possible selection:

Table 2 – Survey of articles in journals for text selection.

AREAS	Number of articles read for possible selection
HEALTH SCIENCES	88
EXACT AND EARTH SCIENCES	64
HUMAN SCIENCES	40
APPLIED SOCIAL SCIENCES	24
ENGINEERING	10
LINGUISTICS, LANGUAGE AND ARTS	32

Source: Author's elaboration.

An article from each area was selected and their discursive-declarative regularities were found. The regularities focused mainly on the compositional and stylistic levels of the scientific article genre, with emphasis on the theme[8].

In the compositional and stylistic aspects, similarities and differences from different texts and areas were found. As for the first aspect, there is objective evidence that tends to writing homogenization, such as (i) the organization of articles in "Introduction, Methodology, Results and Discussion" or "Introduction, Theoretical Section and Conclusion"; (ii) linguistic choices such as the use of the passive voice and the forms that indeterminate the subject, such as the *se* (one/it) particle.

At the same time, there are aspects that distinguish the articles from each area and characterize subjective evidences which tend to writing heterogeneity, such as (iii) subject matter choice, (iv) variation in the amount of authors, (v) use of verbal

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[8] This methodological proposal for the texts analysis by genre elements is justified for research purposes. Since they have an indissoluble character in the concrete materialization of the utterance, when dealing with composition and style, consequently, it is necessary to re-address the theme.

and non-verbal resources; (vii) submission to the Ethics Committee; (viii) language style with variations in the person of discourse, in verb use, pronouns, expressions and blunt explanations.

Through the above-mentioned aspects, it is possible to discuss what confers a more objective and/or subjective character to writing, as well as to approach the issue of writing heterogeneity and homogeneity.

Objectivism and subjectivism in the articles of different areas: brief analysis

In this section, we highlight the articles of each area of knowledge: Humanities, Engineering, Social Science, Health, Linguistics and Exact Sciences. Despite pre-existent categories of analysis focused on composition, style, theme of the article genre and other aspects (listed in the items *i* and *viii* of Methodology), it was decided to organize the analysis by knowledge area, reviewing some aspects whether necessary. Thus, there was no data segmentation and the reader could understand what specifically pervades the writing of each studied area.

The theme of the scientific article genre aims at communicating the results of the research, ideas and debates according to the area of knowledge and the researcher subject, within a series of possible thematic options, selects one of them to address, sharing his/her choice with other discursive subjects. Therefore, it can be stated that the thematic choice subjectively characterizes the scientific writing due to its own singularity.

The Human Sciences article (subarea: History) is entitled: *Why do humans act the way they do? Answers based on human nature and its reviewers* and aims to bring one of the possible answers to the title question.

On the subject, the utterance is organized and combined. Human Sciences articles are usually structured in three distinct sections: "Introduction, Theoretical Section(s) and Conclusion". There is no mention of the methodology, instruments of analysis or results sections, although they address issues which lead to the analysis of a topic of study. Moreover, the discussions revolve around theoretical points and they are responsible for supporting the ideas expressed and for the highlighted arguments.

Considering that the architectural form of the text is permeated by ethical-moral values and by objectives which delimit the content and the material, there are elements in its composition which allow subjectivity to be dealt with in the humanities article. The first of them, according to Coracini (1991), is the very organization of the scientific argument that will function as a persuasion strategy.

The Human Sciences area asks questions to guide the writing, although there are no explicit indications to the reader's role in answering them. From the title of the article *Why do humans act the way they do?* the abstract: *What explains the behaviors and actions of human beings?* until the theoretical sections: *collective or individual, natural or social/cultural?*, there is the frequent use of questions searching for answers through

the researcher's ideas which are added to other theorists'. It is a way of involving the reader in the search for answers, even if they are given by the researcher him/herself who states: "I will only *elaborate* one of the possible ways to answer the question in the title (Human sciences article, p. 19, emphasis added). For Amorim (2004), the patterns of division and organization of the text reveal the otherness. Moreover, the relationship between questions and answers is a way of responding to the other's questions in order to act in one's utterance.

The organization of arguments in the article composition can also be justified because the research brings out a more theoretical-documentary trait, which is organized in theoretical sections with discussions about human nature. Such structure aims at reaching a possible answer to the study question: *Why do humans act the way they do?* Thus, it approaches theories in specific sections through written verbal language, and it seeks to lead to the formation of an opinion about the theme. Thereby, in the end, one may perceive nuances of preferences for the social and cultural bias regarding human acting. There is no focus on highlighting only a panorama on the theme, yet, on establishing relationships between the theories, expressing opinions and assigning a rather subjective mode of text discussion.

The article in the Human Sciences area is characterized by the evidence of subjectivity in the thematic and compositional scopes of the genre. Besides that, it is conveyed in the linguistic choices made. While the other areas seek to erase the figure of the declarative subject, the Humanities article uses resources to emphasize it. For example, more subjective pronouns are employed,[9] acting "as a point of support for the clarification of subjectivity in language" (BENVENISTE, 1992, p. 53 apud RODRIGUES, 2009, p. 6) in a dialogue with other classes: demonstrative pronouns, adverbs, adjectives, to name a few.

The recommended subjective pronoun to be used in the scientific discourse genre is "it", the neutral or non-personal one. However, in addition to it, the use of the first person singular "I" and first person plural "we" was found in the Human Sciences article, which facilitates the hybridization of the role established by the researcher in the text:

> [...] I will only *elaborate* one of the possible ways to answer the question of the title (p. 19) [...] *We will find* numerous questions such as these in the article. *Here, I selected* some, previous *in my opinion* (p. 20) [...] further along, *I will get into* some detail over these approaches post-1964 [...] *I would like to refer* to [...] (p. 26). (Human Sciences Article, p. 19, 20 and 26, emphasis added).

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9   For the most part of this research study, the first-person marks and modalization are considered as characteristics of heterogeneous writing, depending on the scientific articles which are objects of analysis. However, it is understood that in other situations, the marked presence of the self may also indicate the predominance of a single voice over the heterogeneity of other discourses, given the different conditions of text production.

In the highlighted examples, there is the use of verbs in the first person of singular: "I will elaborate", "I selected", "I would like to refer to", and verbs in the first person of plural: "we will find", which are marks of subjectivity and inter subjectivity used by the enunciator, since the text seeks to promote, in a way, the relationship between questions and answers. Moreover, the deixis indicator – the adverb, organizes the spatial relationship around the researcher, taking "here" as a point of reference. The subjective pronoun "we" is used by the author meaning that: either the researcher privileges himself as the main enunciator or s/he remains in doubt as to which of the "we" are affirming it. In this case, specifically, there is the search for the involvement between what the researcher and the reader can find in the text. The use of "we" can be considered a way of deleting the subject enunciator and attenuating the focus on the person (AMORIM, 2004), but it may also represent the search for the researcher's involvement with his reader.

Furthermore, the article is characterized by the strong researcher's voice in the sense that besides the use of pronouns and verbs in the first person, some blunt expressions and explanations are used in order to argue about the theories the author brings to discussion. For example:

> [...] *I would like to refer to* which, as much in evolutionary biology as in related studies [...], it is possible to observe the metaphors that *I consider unfortunate* [...] expressions such as: "selfish gene" by Dawkins have proliferated; [...] These metaphors are*, in my view, misleading and, therefore, not very useful.* To give a single example: a gene does not interact with anything nor can have intentions [...] An individual, therefore, may eventually be characterized as selfish*; but a gene cannot!* (Human Sciences Article, p. 26, emphasis added).

> Human institutions are numerous [...] in order to explain that success depend on the mere fact of leaving offspring*!* (Human Sciences Article, p. 34, emphasis added).

> *Now,* in my view, this conviction is revealed as *doubtful* (Human Sciences Article, p. 36, emphasis added)

> *Delightfully* ideological is also the opinion expressed by Morris Silver that Israel prophets' vision was evil [...] What a *terrible* crime against our majesty, the market*!* (Human Sciences Article, p. 42, emphasis added).

Unlike texts of other areas, while proposing the search for answers about human action, a human sciences article is quite categorical in its statements of the researcher's evident positions regarding the items exposed. His style of language is pictorial when using the other's word (AMORIM, 2004), because interference may be observed in a very marked way. Moreover, it is not restricted only to the direct and literal quotations

which indicate a weak form of representation of the other's word (AMORIM, 2004). In the highlighted excerpt, adjectives and expressions are used, such as "unfortunate", "equivocal", "unhelpful", "doubtful", pointing out the researcher's opinion in relation to theories which deal with man's nature. The researcher uses the other's word as a way of establishing a dialogue; s/he uses a few direct quotations; s/he privileges indirect citations and paraphrases to reformulate the other's discourse and fit it in with the text reality (BOCH, 2013).

Another feature that is quite evident in the article writing is the use of exclamation marks ("a gene cannot!", "leaving offspring!", "the market!"), as well as question marks (conveyed in the title of the article), which attribute a more forceful, personal sense to the discourse. It is a rhetorical device to induce the reading of the period differently, which supposes an emotional state compatible with the conveyed sense. Thus, such device helps the researcher to imaginatively construct a virtual dialogue with the enunciator. The use of the adverb "delightfully", which modifies the "ideological" term, appears as evidence of the researcher's opinion about Morris' ideas. The use of "delightfully" is not something recurrent in academic writing, due to the personal trait of expressing opinion about a fact.

The Engineering area (subarea: Engineering III) provides the article, "Risk analysis in Orós dam spillway by excess of affluent flow" (original title). The article addresses the possibility of the water level overpassing in Orós dam spillway project and evaluates the empirical formula contained in the original project.

The article is organized in the following sections: "Introduction, Methodology, Results and Discussion", because it is an experimental research and uses verbal and non-verbal language in the data submission, a means which can lead to the area characterization. The images/figures are displayed at the introduction of the text, in the historical contextualization section of the Orós dam. One of them is of the reservoir map:

Figure 1 – Reservoir map displayed in the Introduction of the article
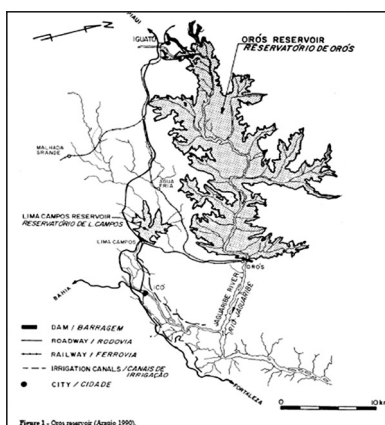
Source: Engineering articles (p.406).

The map image, for example, is displayed in order to inform the reader about the location of the reservoir. There is a dialogue with the article current discourse, as a way of illustrating what the researcher has said: "The Orós dam is located in the municipality of Orós, 450 km from Fortaleza [...] (Figure 1) (Engineering articles, p. 405).

According to Miller (1998), visual elements in scientific articles have increased over the years; thus some scholars have devoted to study them[10]. In order to verify how scientific articles in the Electrical Engineering field combine verbal and non-verbal text, Nascimento (2002), for example, states that the use and meaning of non-verbal texts, such as figures and tables, are defined by disciplinary values "[…] according to which it is not conceived to analyze the practices of a discipline in a way that it is disconnected from its production and consumption context." (NASCIMENTO, 2002, p. 2). For the author, the relationship between verbal and non-verbal text in academic articles is the choice of an academic community, not only regarding the formal scope of the genre (text structure), but also the discursive scope. In other words, he considers "[…] the text as a mediator of social interaction and as a vehicle for values and meanings of particular groups […]" (NASCIMENTO, 2002, p. 3).

In a way, in the academy, especially in the Human Sciences, there is frequent use of purely verbal genres (NASCIMENTO, 2002). However, the dialogue between verbal and non-verbal information is responsible for the message constructed in the text, since scientific research articles depend on the use of visual representations such as graphs, tables, images (LEMKE, 1998).

In the article analyzed there are two figures in addition to eight tables for displaying materials and methods, results and discussion. These elements characterize one of the heterogeneity traits regarding the construction of the Engineering text, compared to those from other areas in this paper. That is due to the fact that Social Sciences employ only figures, whereas Health Sciences employs only tables. The verbal-visual marks observed in scientific articles are characterized as "an declarative-discursive dimension which reveals (individual or collective) authorship" (BRAIT, 2013, p. 62).

Some scholars[11], as pointed out by Nascimento (2002), assert that regarding the distribution of non-verbal means, the section which brings them together are Results and Discussion. In the Engineering area, non-verbal resources are found in the Materials and Methods section (one figure and three tables), Results (five tables) and Discussion (one table). According to Volpato (2015), if the research focus is on the Results, and these are conveyed as numbers, consequently the best way to organize the data is by using tables.

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[10] In order to group evidence to support the analysis of scientific articles, since there is a greater recurrence of studies aimed at scientific dissemination articles, this work will highlight research studies which include the verbal-visual condition of language as a discursive production and as an object of study, citing them in dialogue, in view of the relevance of the discussions.

[11] Researchers who address the relationship between verbal and non-verbal language in scientific texts: Jonhs (1998); Busch-Lauer (1998); Palmer and Posteguillo (1998), Hemais (2001).

In this article, for example, in the Discussion section, the results are presented and the risk analysis indicators are summarized through table eight, highlighted below:

Figure 2 – Table from one of the Engineering articles

Method	b = 160; H_{adm} = 8.5	b = 146; H_{adm} = 8.5	b = 160; H_{adm} = 9.0	b = 146; H_{adm} = 9.0
AFOSM	0.3415%	0.6453%	0.1738%	0.3565%
PEM	0.0057%	0.0217%	0.0013%	0.0062%
Monte Carlo	0.2000%	0.2000%	0.0000%	0.0000%

Source: Engineering Articles (p. 414).

For Miller (1998), one advantage of using non-verbal texts, such as tables, is that they evidence a reality that is difficult to describe verbally. In order to introduce the table, the researcher uses verbal written language, using "anticipation and recapitulation" markers (NASCIMENTO, 2002, p. 19). For example, before actually displaying the table, the researcher assumes that it will summarize the calculations exposed during the text: "Table VIII summarizes all the calculations" (Engineering Articles, p. 414). Based on Swales and Feak (1994), Nascimento (2002) states that this anticipation is the first part of the organization of the comments which accompany the non-verbal text. Next, there is a description of the content: "Where: PEM is the "Point Estimate Method"; B the free length of the spill way(m)" etc. (Engineering Articles, p. 414) and, finally the concluding comment: "In the same Table VIII, we see that the risks to overpass the water depth of the project are almost insignificant […]".

Data organization and presentation by means of tables are part of the researcher's choices and characterize the area. The Engineering article was configured by a quite precise English text, using the pronoun "we" in specific moments of the article: "We made*"* (Engineering Articles, p. 408); "we considered" (Engineering Articles, p. 409); "we found" (Engineering Articles, p. 414); "we used" (Engineering Articles, p. 414). However, by the very general characteristic of the text, which prioritizes a rather objective language, this use was only due to seeking generalization and it highlights a more massive and indefinite person (AMORIM, 2004), since there are no other explicit marks of subjectivity in the text. The impersonal tone conveyed in the text is closely related to the type of data show through tables with such detailed information.

According to Nascimento (2002), it is considered that Engineering, like other hard sciences, developed its own visual means to deal with what it researches, since only written linguistic resources were not enough to fulfill its cognitive and communicative needs: "[…] the fact that engineers use a high index of non-verbal texts in the structure of scientific articles reinforces the notion that we can no longer ignore the hybrid constitution of academic genres." (NASCIMENTO, 2002, p. 101), since graphs, tables, etc. bring about proper meaning to the subject.

Another element which enables the discussion about the marks of subjectivity in academic writing is the use of the English language, since it is part of the journal standards. When considering writing from international journals, as in the case of the

article under review, familiarity with non-verbal language "may, to a certain extent, ease difficulties with the verbal code" (NASCIMENTO, 2002, p. 102) given the universality of the non-verbal language. Miller (1998) states that there is a rather precise description when employing numbers [...] figures; thus, the researcher groups ideas and understands them (NASCIMENTO, 2002).

The fact that the Engineering journal establishes "articles written in clear and concise English" as standards for submission responds actively to what is expected in the universe of academic publication, since scientific articles assure scientific influence through language. The journal from which the article was extracted is a pioneer in Brazil, dating from 1929, and its maintenance in stratum A1 requires the response to factors such as internationalization[12].

The Social Sciences article (subarea: Social Service), *The social workers' occupational space: their juridical and political framework*, aims at gathering the legal-political safeguards available for the challenges found in social workers' job and seeks to know if they are enough to qualify the professional practice.

As for the compositional form, the text is organized in three sections: "Introduction, Theoretical Section(s) and Conclusion". Moreover, the discussions address theoretical issues which support the text goals: "The normative pillars of professional practice", "The 30-hours- law: the most recent achievement", the "Legal-political apparatus concerning the socio-occupational space", "The council's audit action " and "Law processes in progress".

Because it is a documentary research, there is a detailed presentation of laws and resolutions which guide the work of the professional social assistance. For example, in the section about the bill on the wage floor, the paper states:

> Authored by congresswoman Alice Portugal (PC do B-BA), it proposes to amend Law no. 8,662 / 1993, defining the wage floor for the category in the amount of R $ 3,720.00 for a journey of 30 weekly hours and six daily hour shifts [...] The bill was approved with reservations [...] and currently awaits review (Social sciences article, p. 145).
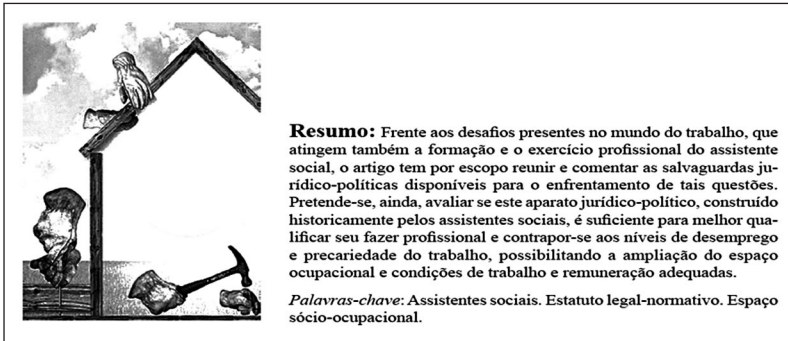
The researcher discusses laws, highlights fragments and elaborates a panorama on the subject, which allows the reader to have a general scenario of the legal-political development historically constructed by social workers.

Despite the predominance of verbal language, on the first page of the article, along with the title, author and abstract, there is a figure (there is only one in the text):

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[12]   In Fuza (2015), a more detailed discussion is presented on the role of the English language in academic production.

Figure 3 – Image found in the introduction of the Social Sciences article

Resumo: Frente aos desafios presentes no mundo do trabalho, que atingem também a formação e o exercício profissional do assistente social, o artigo tem por escopo reunir e comentar as salvaguardas jurídico-políticas disponíveis para o enfrentamento de tais questões. Pretende-se, ainda, avaliar se este aparato jurídico-político, construído historicamente pelos assistentes sociais, é suficiente para melhor qualificar seu fazer profissional e contrapor-se aos níveis de desemprego e precariedade do trabalho, possibilitando a ampliação do espaço ocupacional e condições de trabalho e remuneração adequadas.

Palavras-chave: Assistentes sociais. Estatuto legal-normativo. Espaço sócio-ocupacional.

Source: Social Sciences Article (p. 131).

According to Volpato (2015), projections in scientific publications are still timid, but there is already a movement towards incorporating, for example, miniature figures at the beginning of the paper between the Abstract and the Introduction. The insertion of the figure seems to happen in the Social Sciences text. The image used complete text information, since it represents the building of a house foundation through the help of subjects.

Different from the image used in the engineering article, it is upon the reader to infer that the text will deal with elements which provide a basis for the discussion of the "legal-political apparatus historically *constructed* by social workers" (Social sciences article, p. 131, emphasis added), and elaborate a meaning for its use in the text. In the abstract, the researcher relies on the term "constructed" as a reference to the process of constitution of legal and political elements which are elaborated in the course of time by several hands, just as the image registers. The visual element articulates with the verbal "[…] in different ways in each statement, interfering in the compositional form, in the style and, consequently, in the themes produced. They are, therefore, verb-visually constituted projects of knowledge construction […]" (BRAIT, 2013, p. 62).

According to Lemke (1998), scientists build their logical arguments by means of verbal information in dialogue with other expressions as images, that is to say, unique visual genres, unique to that moment of discourse production. Hemais (2001) states that academic articles, due to the popularization of science studies, establish a narrative of science. That is to say, we try to organize the events in order to defend a thesis, presupposing an audience of peers interested in the proposed study. The image displayed by the researcher indicates, in a way, the elaboration of the apparatus which underlies the social worker's work and it is configured as a concept, since it manages to reduce, in a single resource, the central theme of the text. In general, the scientific article with the visual and the verbal help in the construction of scientific knowledge, "plotting the two languages", adding values (BRAIT, 2013, p. 60).

In the Social Sciences area, there are traits which allow subjectivity to be addressed, such as the authors' and theorists' choices in order to ground discussion, while the style of the text seems to point out to the researcher's distance from the object studied or from the enunciator and enunciate. Therefore, linguistic resources are used as an attempt to mask subjectivity, as in the highlighted excerpt:

> By its publication, *it is intended* not only having a pedagogical function for [...] the social workers' training. *It is envisaged* to critically evaluate whether this juridical-political apparatus [...] is now sufficient to better qualify its attributions and competences and *counteract* the levels of unemployment. (Social Sciences Article, p. 134, emphasis added).

The use of the passive voice and forms which indeterminate the agent subject, such as the particle itself, produces a distancing effect, for example: "It is intended not only..." (Social Sciences Article, p. 134), among other examples.

The Health Sciences article (subarea: Nursing), "Moral distress in nursing workers", seeks to analyze the frequency and intensity of moral suffering experienced by nursing workers in the South of Brazil. This is an experimental study, organized in the sections "Introduction, methodology, results and discussion".

One of the marks of subjectivity is the number of authors provided in the text. This factor is not only a formal matter of constitution of the article according to the journals standards, but an understanding that addresses the academic community that these subject-researchers are a part of. According to Sanches (2009), the authors's voice and their affiliations grant the text and the research some credibility. The Health Sciences article brings forward six authors and distance from other areas: one author (Social and Human Sciences, Engineering, Linguistics) and two authors (Exact Sciences).

The literature highlights the growth of sharing scientific production and, according to the area of knowledge, such as the Health Sciences, there is a reduction of the works signed by a single researcher. Scientific collaboration can be established amid knowledge networks through interactions between subjects, as it seems to occur in the Health Sciences article analyzed, because they are connected with "Federal University of Rio Grande".

One of the factors which favor the collaboration or the co-authorship is the research area and its nature. According to Smith (1958), theoretical works produce articles with fewer authors than experimental ones. This finding is noticed in the case of the articles analyzed in this paper, because, while there are six authors in the Health Science experimental study, the theoretical study, centered on documentary research, as in the Social Sciences area, brings only one.

In the analysis of the article, another trace of subjectivity is the use of verbal and non-verbal elements. In the Results section, the Health Sciences area uses three tables which allow the visualization of the perceptions regarding moral suffering in the analyzed teams. Busch-Lauer (1998) deals with the use of non-verbal elements in

Medical/Health sciences articles. According to him, the section which brings these texts together are mostly those of Results and Discussion, as observed in this study, and visual representations are used in practically all texts.

Its presentation form is quite standard. The tables are displayed after paragraphs exposing the results, as a form of data systematization. There is a textual explanation of the data and, by means of a cataphoric term, it signals the reader that, in the sequence, s/he will find the table: "The descriptive analysis (*Table 1*) allowed us to identify the perceptions of nursing teams" (Health Sciences Article, p. 4, emphasis added); "From the analyzes of variance performed (*Table 2*), some correlations [...]" (Health Sciences article, p. 5, emphasis added) etc.

One of the factors which characterize the writing of the article in the Health Sciences area is the approval of the work by the Ethics Committee: "The project was previously evaluated and approved by the Research Ethics Committee, with Opinion n. 70/2010." (Health Sciences Article, p. 3), demonstrating the ethical response of the text to the legislation of research and "the collective construction of science as a collective patrimony" (FAPESP, 2012, p. 9).

The style of the text tends to objectivism, since it values, among other factors, the use of the third person, "[...] it was observed that *disrespect to the patient's autonomy* reached the highest average in the study, followed by the *insufficient working conditions construct*" (Health Sciences Article, p. 6, emphasis in the original). Although the researchers applied the questionnaire and tabulated the data, in the Discussion they try to be unbiased and highlight the strength of the data found. According to Volpato (2015), many journals present impersonal writing rather due to the custom than based on the logic of academic writing, because there are attempts to change the use of language nowadays, with a focus on personalities in writing, as in some foreign or international journals.

The authors present the data by means of verbs in the past to indicate actions that have already occurred: "The lack of competence in the work team *constituted* the construct that *presented* the greatest cause of MS in workers [...]" (Health Sciences Article, p. 6, emphasis added). In the discussion, in turn, there is a predominance of modalization. For example, "The perception of MS *seems* strongly associated with the need to exercise power [...] which *may represent* the need for confrontations of conflicts" (Health Sciences article, p. 6, emphasis added). The combined verbs "it seems" and "may represent" (modal auxiliary: verb "to be able to" and "represent"), indicate in a way doubt and/or uncertainty about the arguments, because they are interpretations on the data. According to Volpato (2015, p. 9), for a long time, it was assumed "that any reader, based on the data showed in the article, should arrive at the same conclusion as the author", it was said: "It is concluded", because everyone reaches the same conclusion. The article presently analyzed, while affirming something, and then, while modifying it, seems to propose the dialogue between the authors' voices, opening up the way for possible readers' answers.

The article, "The constitution of school writing as an object of linguistic analysis studies", from Linguistics, Language and Arts area (subarea Language / Linguistics), addresses school writing: "In this article we observe the emergence of academic interest in written production of a scholarly nature – more specifically, textual production called *school writing*" (Linguistics, Language and Arts article, p. 283, emphasis added). Furthermore, the *corpus* of analysis consists of the "first articles on school writing published in the country" (Linguistics, Language and Arts Article, p. 284).

It is a documentary research, organized in the following sections: "Introduction, Theoretical sections merged with Discussion and Conclusion", through verbal language. In order to expose the reader to the way writing was constituted for linguistic studies, the author highlights the following main sections: "The period of emergency of the school essay as object of linguistic analysis", "Analysis based on linguistic knowledge", "The opposition to the normative, arbitrary and non-exhaustive character of the traditional grammatical studies", "The opposition to the notion of linguistic incompetence", "The causes attributed to the problems found in school writing" and "The period of emergency: the constitutive controversy".

The text renders a standard article writing compositional form. This fact is in the same trend as the results presented by Miranda (2016, p. 2), who observed "the reshaping of displaying forms in academic articles" in Applied Linguistics (AL) journals. For the author, the articles did not adhere to the "new formats for the displaying of scientific research contents" (MIRANDA, 2016, p. 11), as well as they remain with intercalated images and graphics, link indications, etc. Despite the finding, it states that it cannot be concluded that the articles published in AL are outdated compared to other areas, because it is necessary to consider the specificities of the area, the type of research, and the like.

As for the article writing style, it falls on the objectivity of writing, the erasing of the enunciating subject and focusing on the object of analysis. The article, as well as any discourse, presents its singularities according to the theme (school writing), theoretical choices (analysis according to French discursive perspective), the use of predominantly verbal language, etc.

From the Exact Sciences area (subarea: Teaching[13]), the following article is highlighted: *Reading and writing in the construction of mathematical knowledge in high school*, which investigates reading and writing strategies in mathematics teaching and the instrument through which students express their perceptions, the portfolio, during the teaching and learning process.

The article is organized in the following way: "Introduction, Methodology, Results and Discussion" and "Data Analysis", a specific section in which the researcher analyzes the data he collected and discussed in the Methodology section. It is a more experimental sort of research which analyzes a problem, focused on the role of intervention in

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[13] The fact that the subarea of the journal is "Teaching" will influence the constitution of the Exact Sciences article. Despite this, it was chosen to highlight it, since, at the time of collection, it was the only Brazilian A1 journal in this area and the texts that constitute it are all addressed to questions of teaching, involving mathematical issues.

Mathematics classes using portfolios to build knowledge. The theory is highlighted during the Introduction section and/or Results, since there is no specific section in the text, as it follows:

> As for the last three students, it can be concluded that most of the instruments used and the activities carried out were hampered by their non-participatory attitude [the students'] […] For Vygotsky (2001) the each individual's characteristics are being formed from the constant interaction with the environment [...] (Exact Sciences Article, p. 521).

The journal subarea in which the article is published is "Teaching" and this directly influences its constitution, since most of the cited authors belong to educational context, with a predominance of Vygotsky's quotations.

Similar to the Social Sciences and Linguistics articles, the language style lies in the objective molds of academic language. The use of modalization seems to bring a rather subjective feature to the text. According to Coracini (1991), this makes the enunciator assume with greater or lesser force what s/he states. This notion does not exclude scientific discourse even if it is characterized by the use of linguistic elements capable of "making one believe" (Exact Sciences article, p. 113) in the impartiality of the research. The author approaches the modalization through a pragmatic bias[14], as an argumentative resource, "in favor of the enquirer's desire for impartiality which, despite this, reveals himself surreptitiously judging, evaluating, justifying his research, suggesting new research" (CORACINI, 1991, 121).

In the Exact Sciences article, in the "Results" section, the following examples can be observed:

> Regarding the twelfth student, *one can conclude* that the instruments used and the activities carried out had a reasonable result, and that most of the problems *seem to be* due to difficulties with the Portuguese language [...] As for the last three students, it can be concluded that most of the instruments used and the activities carried out were hampered by their non-participatory attitude [the students'] […] As for the last three students, it can be concluded that most of the instruments used and the activities carried out *may have been* hampered by their non-participatory attitude [the students'] (Exact Sciences Article, p. 520, emphasis added).

The excerpt shows the use of the modals by means of modal auxiliary (modal verbs "may" and "have"), in order to indicate that the results were reasonable regarding the activities performed. The researcher begins by saying: "one can conclude that [...]";

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14   The study of the modality can be amplified from Lyons (1977), in the work *Semantics*, and from Palmer (1986) in *Mood and modality*.

from that, in postulating the results, there is the use of expressions that suggest the presence, although hidden, of someone who judges, comments, as in "seems to be more [...]". This is a way to disengage the researcher; however, it is observed that there are verified results. There is no categorical statement of the results: "may have hampered his/her development".

The Exact Sciences area is the one that most uses the modulator resource. By using this element, the researcher intends not to be responsible in a way for what he says, demarcating doubt and uncertainty as to his/her arguments. Thus, questions, objections and attenuation of the subjectivity marks are avoided, which does not fail to reveal signs of the enunciator's involvement with the enunciate itself, but it creates the effect of a sense of objectivity.

Results and discussion: differences and similarities of articles from different areas

In the study of the scientific article discourse genre, there are relations between the homogeneous and heterogeneous aspects of writing. Some of them are responsible for the similarities among the texts of the different areas of knowledge, marked in the compositional and stylistic scopes of the genre, making the texts more homogeneous, such as: (i) the organization of articles in "Introduction, Methodology, Results and Discussion" or "Introduction, Theoretical Section and Conclusion"; (ii) linguistic choices, such as the use of the passive voice and the forms which indeterminate the subject, such as the *se* (one/it) particle.

As for the first element, there is standardization in the composition of texts, which is based mainly on academic discourses, such as the ABNT or the journals themselves, which can be understood by their norms. Furthermore, the type of research, while it characterizes the area, also leads to the standardization of the text format. The analyzed articles of the Human and Social Sciences areas organize the text according to the sections: Introduction, Theory and Conclusion, since they are documentary research[15]; the experimental works in the Health, Linguistics and Engineering areas show: Introduction, Methodology, Results and Discussion, adding data analysis in the case of the Exact Sciences. Thus, there is little variation in the areas regarding the compositional form.

The use of linguistic resources, in order to provide the distancing of the researcher-subject from the object, also constitutes an objective aspect, which standardizes writing. For example, in all areas, the use of the third person and the particle *se* (one/it) seen as a way of deleting the enunciator subject. These forms are not chosen randomly, but are responses to academic discourses, to the scientific spheres that postulate this normalization.

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[15] These data suggests the reality of the analyzed articles and cannot be considered as a rule in the writing of other areas texts.

There is evidence of subjectivities that individualize the fields linked to compositional and stylistic aspects (compositional form and architectural form), which allows one to deal with heterogeneity as: (i) the choice of theme, (ii) variation in the number of authors in the text, (iii) the use of the English language, (iv) the use of verbal and non-verbal resources; (v) the issue of the Ethics Committee; (vi) language style, with variations in the person of discourse, the verbs employed, etc. This occurs because discourses have their "meaning determined by the contexts in which they are produced" (GOULART, 2006, p. 455).

In order to express his/her knowledge, the researcher-subject uses the scientific article and is surrounded by conditions of genre, imposed by ABNT, by the academic discourses which seek to standardize aspects of scientific writing. There is a dialogue between what is appropriate to the area, because the theme expresses a concrete historical situation, and general aspects related to the scientific sphere.

The Human Sciences article has as a compositional form: Introduction, Theory and Conclusion. However, the way in which the arguments are organized, the dialogues or discussion of the discourse place the area apart from all others, since they generally choose to organize a dialogue between theoretical texts and results obtained in their studies in an interchangeable way. The relation between question and answer occurs only in the Human Sciences area, since the text itself is constructed from this dubious relationship between asking and responding and aims at the otherness of the discourses which becomes highlighted throughout the text. According to Souza and Albuquerque (2012), the understanding of the topics which one wants to investigate in Human sciences research occurs through the researcher's confrontations of ideas and negotiation of possible meanings. The alternation of questions and answers transforms the research study into a living process of producing meanings in terms of perceiving human nature, for the researcher does not only ask for answers, but, by asking and answering, "s/he poses himself/herself as a subject and from the researcher's standpoint, s/he brings forth diverse perspectives and values "(SOUZA, ALBUQUERQUE, 2012, p. 308) in such a way that, in parts or moments of the text, s/he puts him/herself as the "I" of the discourse.

To a certain extent, in the Human Sciences article, the style conveyed the researcher's value judgment of the subject, because it necessarily depends on what he wants to state. If there were, in the organization of the arguments, the alternation between subjects, consequently, it is up to the researcher to place himself in the text, impressing a particular style upon it. To do so, linguistic aspects such as the use of the first-person pronoun, expressions and explanations in the moments of theoretical discussions, pictorial citations and punctuation marks are needed attributing a personal meaning to what is being exposed in the discourse

In the Health area, two elements potentiate dealing with subjectivity, since they are not observed in other areas. The first one is the fact that the article is written by six authors, whereas others highlight one or two. Some factors promote cooperation among each other in the academy, such as: the research area and the interdisciplinarity

of Modern Science, which imposes the dialogue among researchers from various fields; the economic factors regarding the high costs of equipment/investment, such as in the Health area; the social factors related to the researcher's professional and personal network (LUUKKONEN; PERSSON; SILVERTSEN, 1992) etc.

The Health area article also acknowledges the Ethics Committee, an argument that is not included in texts of other areas, although it is delimited in the journal publication norms. The article in the Health area shows heterogeneous writing regarding ethical aspects, once in other areas the texts analyzed do not show concern about that factor. Perhaps this is due to the nature of research, as in the case of the Social and Human Sciences, which indicate a more theoretical and discursive treatment; Linguistics, Exact Sciences and Engineering focus on analytical objects and not on the human being. Therefore, in these areas, there is no room to address ethical issues.

The language style tends to objectivism, although it makes use of modalization in some parts of the text, as it happens in the Exact Sciences area differing from the others, specifically because of that and of the subject matter.

Another element which enable speaking about heterogeneity is writing in the English language, as it is observed in the Engineering area article. In addition to that, the use of verbal and non-verbal elements are characteristic of three areas only: Health, Engineering and Social Science. The images are used in the Engineering and Social articles; in the latter the figure is displayed as a way of introducing the article. In the case of Engineering, the figures emerge in dialogue with the current discourse of the article as a way of illustrating what is said, and make the text a descriptive legend for what is discussed, unlike the Social area which does not show any explanatory link between text and image, and it is up to the reader to make inferences.

In addition to images, tables are used to introduce research results, specifically in the case of the experimental studies of Engineering and Health, which are considered as a characteristic of the areas. According to Brait (2013, p. 60), the use of visual resources is not a simple illustration, since "[…] they participate in the construction of the knowledge that is being exposed, in the constitutive dialogue with the verbal element."

Considering that there is a verbal-visual dimension essential to the comprehension of the analyzed articles, it can be understood as a moment of the organization of the verbal-visual material in the compositional form and as a materialization of the authors' discursive project. This is because verbal and non-verbal resources refer not only to the compositional aspect of the genre but to the discursive design of the areas, escaping the "transparency of the strictly linguistic" (CORRÊA, 2013b, p. 11).

Final Remarks

This paper aimed to analyze scientific articles from different areas of knowledge – Human Sciences, Engineering, Social Sciences, Health Sciences, Linguistics, Language

and Arts and Exact and Earth Sciences, parting from the elements that constitute the genre.

The analysis of the articles enabled to verify that, although the academic-scientific discourse tends towards objectivity, considering the mainly linguistic means, there is evidence of subjectivity in all areas, since every statement is constituted by the dialogism between the subjective and the objective. What happens in writing is that some areas may present greater nuances of subjectivity, while others insist on the assumed objectivity of scientific discourse and seek impartiality (exception from all subjectivity). The declarative-discursive regularities, especially at the compositional and stylistic levels of the texts, also considering the subject matter, enabled us to deal with the objectivity and subjectivity of writing as ways of characterizing the areas, approaching them according to aspects such as: the organization of texts and linguistic choices, and differentiating them according to aspects such as the choice of theme, variation in the number of authors, use of verbal and non-verbal language, etc.

The results of the analysis point out to the need of thinking the articles writing according to the areas of knowledge in order to single them out, despite what is stable in the texts. This would make it possible to present the researcher-subject, besides norms of the linguistic scope, aspects that characterize his/her area of knowledge which often remain hidden from the writer and may directly influence the written production.

- *RESUMO: A existência do discurso que postula a homogeneização da escrita acadêmico-científica no processo de constituição do texto é a problemática que desencadeou esta pesquisa. Nesse sentido, o objetivo deste estudo é analisar artigos científicos brasileiros de periódicos A1 das diferentes áreas do conhecimento a partir dos elementos que constituem os gêneros, forma composicional, estilo e temática, delimitando aspectos que tendem ao objetivismo e ao subjetivismo nos textos. O trabalho se pauta nos pressupostos dialógicos do Círculo de Bakhtin, no tocante aos gêneros, ao objetivismo e subjetivismo, e nas pesquisas desenvolvidas segundo os princípios dos Novos Estudos do Letramento. Os resultados apontam que: a) todo enunciado é constituído de elementos subjetivos e objetivos; b) os aspectos que evidenciam objetividade e subjetividade marcam-se predominantemente na forma composicional (e arquitetônica) e no estilo dos textos, em diálogo com a temática; c) os artigos das diferentes áreas se assemelham, ao tratar de elementos que tendem à objetividade, como forma composicional e recursos linguísticos; d) os artigos diferem quando apresentam aspectos que, embora estejam na materialidade verbal, encontram significação no contexto extraverbal, perpassando a subjetividade, como escolha temática; variação no número de autores no texto etc.; e) a existência de nuances de objetividade e de subjetividade permite caracterizar a escrita nas áreas de forma heterogênea.*

- *PALAVRAS-CHAVE: Objetivismo. Subjetivismo. Escrita acadêmica. Artigo científico.*

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