

Research on multimodality in the context of highly qualified national scientific journals: a cartographic study

Pesquisa em multimodalidade no contexto de periódicos científicos nacionais altamente qualificados: um estudo cartográfico

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Resumo: Contemporary social practices are increasingly permeated by a variety of semiotic resources or, in other words, by the combination of verbal and non-verbal languages - multimodality. However, it was not until recent times that multimodality received the status of a field (BEZERRA; NASCIMENTO, 2013). The present study then aims at mapping the studies on multimodality published in five A1 national scientific journals that were developed in Brazil in the period from 2009 to 2013 in terms of 1) theoretical and methodological trends; 2) genres investigated; 3) generic aspects approached; and 4) the geographical distribution of the studies in Brazil. To do so, the abstracts and the articles of the experimental studies were considered in the analysis. The results indicate that there was a small amount of publication related to the field. However, it was possible to note a growth in the number of studies in the period investigated. The majority of these studies are comprised in the social semiotic basis (BEZEMER; JEWITT, 2010) investigating mainly genres (MOTTA-ROTH, 2008) on the media sphere, especially magazine cover and advertisement. The publications are mostly affiliated to institutions on the

Southeast region. It may be possible to argue that UFMG is the university in the Southeast region that is closest to holding a niche of investigation on multimodality, since there is a pattern in terms of theory use. The present study intends to contribute to the consolidation of the field in the national context as well as, pedagogically, help researchers and people interested in multimodality.

Palavras-chave: Cartografia. Multimodalidade. Periódicos científicos nacionais.

Abstract: Práticas sociais contemporâneas são cada vez mais permeadas por uma variedade de recursos semióticos, ou seja, pela combinação de linguagens verbal e não-verbal – multimodalidade. No entanto, apenas recentemente a multimodalidade recebeu o status de campo de pesquisa (BEZZERA; NASCIMENTO, 2013). Assim, a presente pesquisa tem por objetivo mapear estudos sobre multimodalidade publicados em cinco revistas científicas nacionais Qualis A1, desenvolvidos no Brasil no período de 2009 a 2013 em termos de 1) tendências teóricas e metodológicas; 2) gêneros investigados; 3) aspectos genéricos analisados; e 4) distribuição geográfica desses estudos no país. Para tal mapeamento, os resumos bem como os artigos completos foram considerados. Os resultados indicam que embora seja pequeno, é possível perceber um aumento no número de estudos publicados no período investigado. A maioria das publicações está alocada na base sociossemiótica (BEZEMER; JEWITT, 2010), investigando principalmente gêneros (MOTTA-ROTH, 2008) na esfera midiática, com ênfase especial nas capas de revista e publicidade. As publicações são, na maioria, afiliadas a instituições na região Sudeste. Ao considerar padrões teórico-metodológicos, é possível declarar que a UFMG é a mais provável universidade da região Sudeste a configurar um nicho de investigação em multimodalidade. Ao traçar esse mapa, a presente pesquisa pretende contribuir para a consolidação da área de estudo bem como, pedagogicamente, ajudar pesquisadores e interessados em multimodalidade a encontrarem estudos prévios, grupos de pesquisa, universidades que estudam o tópico, gêneros e aspectos genéricos investigados e também padrões em termos de literatura.

Keywords: Cartography. Multimodality. National scientific journals.

Introduction

People are constantly involved in social practices that require diverse semiotic abilities and knowledge in order to achieve mutual understandings. On a website, for example, it may be necessary to be able to read written texts in connection with images, with the layout of the page in order to interpret the meaning(s) being exchanged. In this view, “it is now no longer possible to understand language and its uses without understanding the effect of all modes of communication that are copresent in any text” (KRESS, 2000, p.337). Multimodality is so considered as “comprising a broad field of inquiry unified by the claim that people construct meaning and communicate through a range of resources that may include, but go beyond verbal language” (NASCIMENTO, 2012).

Although the “rapidly growing realization that representation is

always multiple” (KRESS; van LEEUWEN, 2006, p. vii), multimodality was not immediately given the status of a field of study (BEZERRA; NASCIMENTO, 2013). Publications have been proposed since the 1990s (O'TOOLE, 1994; KRESS; van LEEUWEN, 1996; 2006), but these frameworks were not until recently “adopted, explored and extended in multimodal approaches to communication” (BEZERRA; NASCIMENTO, 2013, p. 156).

Considering the importance of multimodality in contemporary society and the recency of the multimodal discourse analysis as a field of study, the present study aims at investigating the studies on multimodality developed in Brazil in a five-year period – from 2009 to 2013. This study considers the context of five highly qualified national scientific journals in order to provide a map of the: 1) theoretical and methodological basis that underlies the studies; 2) genres investigated; 3) generic aspects¹ approached; and 4) geographical distribution of these studies in national territory.

It is important to highlight that this work is part of an umbrella project titled Critical Genre Analysis and implications for multiliteracies² (HENDGES, 2012, GAP/CAL n^o 031609) which aims at developing genre analyses from the perspective of Critical Genre Analysis (MOTTA-ROTH, 2005, 2006, 2008) with implications to the pedagogy of multiliteracies. In this perspective, several multimodal genres have been analyzed, such as comic strips, pop science news, English textbooks, the academic poster, the audiovisual research article. The present study as well as other studies included in the umbrella project intend to contribute to the consolidation of the still young field of multimodal discourse analysis.

In order to accomplish the objectives of this research, the theoretical and methodological trends will be identified considering the approaches to multimodality proposed by Bezemer and Jewitt (2010). The genres and the generic aspects will be mapped, when necessary, on the view of Critical Genre Analysis (MOTTA-ROTH, 2005, 2006, 2008). The pedagogical implications of the present study will be projected in relation to the pedagogy of multiliteracies (THE NEW LONDON GROUP, 1996) perspective. These bases are discussed in section 2.

¹ In order to avoid misunderstandings, the term “generic aspect” will be used in the present study as referring to “aspect of a/the genre” and not to “general aspect”.

² The original title is *Análise crítica de gêneros e implicações para os multiletramentos* (HENDGES, 2012, GAP/CAL n^o 031609).

Review of literature

Multiliteracies

In contemporary life, social practices are increasingly pervaded by different semiotic modes, in other words, by the combination and interaction of verbal and non-verbal languages (BEZERRA; NASCIMENTO, 2013). At school, for example, Kress and van Leeuwen (2006) point out that images are highly encouraged by teachers in the early years of primary schooling (in the sense of illustration), but they start giving space to written expressions by the end of this period. In the secondary schooling, images make more part of school subjects in a specialized representation (maps, diagrams, charts).

In this sense, although the social practices lived by students in the school context comprise images as one mode of meaning, their role in each context is not really taught and, most importantly, “assessment continues to be based on writing as major mode” (KRESS and van LEEUWEN, 2006, p.16). Outside school, the image “plays an ever-increasing role” (KRESS; van LEEUWEN, 2006, p.17):

whether in the print or electronic media, whether in newspapers, magazines, CD-ROOMs, or websites, whether as public relations materials, advertisements or as informational materials of all kinds, most texts now involve a complex interplay of written text, images and other graphic or sound elements, designed as coherent (often at the first level visual rather than verbal) entities by means of layout. But the skill of producing multimodal texts of this kind, however central its role in contemporary society, is not taught in schools. (KRESS; van LEEUWEN, 2006, p. 17).

A number of studies have then presented the knowledge on multimodality as essential to an effective social interaction in genres (UNSWORTH, 2001; IEDEMA, 2003; BEZERRA; NASCIMENTO, 2013). These studies consider that:

being able to read a multimodal text is very important in a society where people are constantly bombarded with images and verbal language put together in a myriad of layouts across modes, media and genres, especially with the solidification of the internet. (BEZERRA; NASCIMENTO, 20013, p.138).

To take account of these issues in contemporary life, The New London Group (1996) proposes the concept of multiliteracies, which addresses “the multiplicity of communication channels and media,

and the increasing saliency of cultural and linguistic diversity” (p.63). Based on this concept, they create a pedagogy of multiliteracies that focuses on the teaching and learning of modes of representation that go much beyond verbal language. In this view, “language and other modes of meaning are dynamic representational resources, constantly being remade by their users as they work to achieve their various cultural purposes” (THE NEW LONDON GROUP, 1996, p. 64). Language is then no longer approached as monolingual and monocultural.

Multimodal discourse analysis emerges as increasingly important in multiliteracies studies, since it takes the responsibility of combing linguistic, visual, audio, gestural and spatial modes of meaning and of explaining their relationship in a meaning-making context (THE NEW LONDON GROUP, 1996). Different approaches to multimodality have then been developed.

Approaches to multimodality

Jewitt (2009) initially systematized the approaches to multimodality into three main different approaches: 1) social semiotic multimodal analysis; 2) multimodal discourse analysis; and 3) multimodal interactional analysis.

The first approach, social semiotic multimodal analysis, is originally associated with the work of Kress and Van Leeuwen (1996; 2006). In their book titled *Reading Images: The Grammar of Visual Design* (1996), the authors initially used Halliday’s theories of social semiotics and systemic functional grammar to build and offer “a framework to describe the semiotic resources of images and analyze how these resources can be configured to design interpersonal meaning, to present the world in specific ways, and to realize meaning” (JEWITT, 2009, p. 29). In social semiotic multimodal analysis, there is an emphasis on “how the context of communication and the sign-maker shaped signs and meaning” (JEWIT, 2009, p. 29), which means that the focus is centered on “the sign-maker and their situated use of modal resources” (JEWIT, 2009, p. 30). In this approach, “signs, modes and meaning-making are treated as relatively fluid, dynamic and open systems intimately connected to the social context of use” (JEWIT, 2009, p.30). Mode is in this perspective understood as “shaped by the daily social interaction of people” (JEWITT, 2009, p. 21) in a specific context.

The second approach, multimodal discourse analysis, is associated with the works of O'Toole (1994), O'Halloran (2004), and Baldry and Thibault (2006) (all cited in JEWITT, 2009). In this perspective, O'Toole (1994, cited in JEWITT, 2009) used Halliday's systemic functional grammar to build a "framework for the analysis of paintings using a constituent structure approach with ranks including pictures, figure and member" (JEWITT, 2009, p. 31). O'Halloran (2004, 2005, cited in JEWITT, 2009) used and extended this framework "to describe the grammatical systems that constitute the meaning potential of semiotic resources and the metafunction [...]" (JEWITT, 2009, p.32). In this sense, the approach emphasizes "the *metafunctional systems* underlying semiotic resources and the integration of system choices in multimodal phenomena [...]" (JEWITT, 2009, p.32). The focus is, thus, on the system and the system in use (semiotic resource not mode) in a hierarchical organization. So, analytically it is on:

how a system achieves this focus, how the metafunctions are realized through the systems of meaning which constitutes the meaning potential of semiotic resources, and how system choices integrate in multimodal phenomena to create meaning in the context of the situation and the context of culture (JEWITT, 2009, p. 32).

The third approach, multimodal interactional analysis, is associated with Interactional socio-linguistics (particularly Scollons' work on mediated discourse, but it also includes Goffman, Gumperez, Tannen, cited in JEWITT, 2009), Kress and Van Leeuwen's work on multimodality (2001, cited in JEWITT, 2009) and digital technology (JEWITT, 2009). This approach emphasizes "the notion of context and situated interaction" (JEWITT, 2009, p. 33). In this sense, the focus is "on the action taken by a social actor with or through multimodal mediational means [...]" (JEWITT, 2009, p.33). The attention in this approach is on the interaction which is considered as combining linguistic elements as well as gesture, gaze, posture, movement, space and objects in a specific situation (JEWITT, 2009). Also, in contrast with the previous approaches, modal systems are not a concern but the interplay between modes, since "mode, sign-makers, and context are too intimately connected to tear apart" (JEWITT, 2009, p.34).

These three approaches categorized by Jewitt (2009) – 1) social semiotics multimodal analysis, 2) multimodal discourse analysis and 3) multimodal interactional analysis – represent the main perspectives on

the study of multimodal genres. One year later, in 2010, Bezemer and Jewitt reviewed this categorization and proposed two new multimodal approaches to multimodality: the social-linguistic and the social semiotic approach (BEZEMER, JEWITT, 2010). For the purpose of the present study in mapping the approach(es) adopted by research on multimodality developed in Brazil, these two perspectives will be considered to locate the theoretical and methodological basis underlying each research that constitutes the corpus.

In the social-linguistic approach, different modes of communication (gesture, gaze) other than language are addressed but in different degrees (BEZEMER, JEWITT, 2010). The “central units of analysis are usually linguistic units (e.g. ‘intonation unit’) or units defined in linguistic terms (e.g. a ‘turn’ is defined in terms of ‘who is speaking’)” (BEZEMER; JEWITT, 2010, p. 4). These different modes are concerned with “examining situated language and language use in interaction” (BEZEMER, JEWITT, 2010, p.4). Social-linguistic approaches include the works on “conversation analysis (PSATHAS, 1995), interactional sociology (GOFFMAN, 1981), interactional sociolinguistics (GUMPERZ, 1999), linguistic anthropology (DURANTI, 1997), micro-ethnography (ERICKSON, 2004) and linguistic ethnography (CREESE, 2008)” (BEZEMER; JEWITT, 2010, p.2).

The social semiotic approach, on the other hand, presents as starting point the idea of extending “the social interpretation of language and its meaning to the whole range of modes of representation and communication employed in a culture” (KRESS, 2009; van LEEUWEN, 2005 cited in BEZEMER; JEWITT, 2010, p.4). Based on this view, three theoretical assumptions are stated: 1) “social semiotics assumes that representation and communication always draw on a multiplicity of modes, all of which contribute to meaning” (BEZEMER; JEWITT, 2010, p. 4). So, it is central to analyze and describe each meaning-making resource used in specific contexts and to develop explanations on how these resources make meaning (BEZEMER; JEWITT, 2010); 2) “multimodality assumes that all forms of communication (modes) have, like language, been shaped through their cultural, historical and social uses to realize social functions” (BEZEMER; JEWITT, 2010, p. 5); and 3) “the meanings realized by any mode are always interwoven with the meanings made with those other modes co-present and co-operating in the communicative event” (BEZEMER; JEWITT, 2010, p.5).

For the second and third stages of this study, mapping the genres and the generic aspects that are investigated in these studies, the analysis will be guided by the concept of genre proposed within the framework of Critical Genre Analysis (MOTTA-ROTH, 2005, 2006, 2008), briefly reviewed in section 2.3.

Critical Genre Analysis

In contemporary life, there is “an increasing interest on the analysis of different discursive genres of social life from activities and social roles recurrent in daily life in a diversity of cultural contexts” (MOTTA-ROTH, 2008, p. 342). In this interest, Critical Genre Analysis “combines the theoretical framework from Genre Analysis, Systemic Functional Linguistics and Critical Discourse Analysis” (MOTTA-ROTH, 2008, p. 375). This combination has resulted in an expansion in the concept of the genre in the 2000s:

this expansion demands that the analysis consider the production, distribution and consumption conditions of texts, as well as, focus on texts that circulate in society considering the background of the historical moment. The purposes and economical organization of social groups are considered in terms of daily life, business, means of production, ideological positions, etc., that determine the content, style and composition of genres³ [...] (MOTTA-ROTH, 2008, p. 351).

Considering this view, genres “refer to relatively stable kind of ‘enunciados’ (cf.: Bakhtin, 1952-1953/1992 a; b), used to specific purposes in a specific social context. These are social processes that guide to recognizable and shared conventions and expectations (cf.: Grabe 2002: 250)” (MOTTA-ROTH, 2008, p.351).

Having these theoretical frameworks as bases, the data from the present study was collected and analyzed following the procedures discussed in section 3.

Methods

The corpus

The corpus of the present research consists of abstracts and articles of studies on multimodality published in five highly qualified national journals – *Linguagem em (Dis)curso* (LemD),

³The original title is *Coordenação de Aperfeiçoamento de Pessoal de Nível Superior*.

Gragoatá, *Revista Brasileira de Linguística Aplicada* (RBLA), *Ilha do Desterro* (Ilha) and *Documentação de Estudos em Linguística Teórica e Aplicada* (DELTA). All five journals are classified in the A1 level (*Qualis*) attributed by Coordination for the Improvement of Higher Education Personnel⁴ (CAPES). The abstracts and articles were available online and were collected in the journals website considering the period from 2009 to 2013.

These specific journals were chosen considering two main criteria: 1) the nature of the journal; and 2) acceptability through time. The first criteria refers to the selection of journals that cover a wide range of topics in order to verify the status of multimodality in different research fields. The second refers to the selection of important journals to the Laboratory for Research and Teaching of Reading and Writing⁵ (LabLeR), to which our research group is affiliated. This importance can be visualized when considering the number of studies published in these journals by members of LabLeR: considering the same relevant period of time for the current investigation, 2009 to 2013, all five journals present publications by researchers from LabLeR. LemD and RBLA, for example, published three studies affiliated to the lab, while Gagoatá, Ilha and DELTA published one each. This criterion was considered in order to check what is being published on multimodality beyond the work of our group.

Contextualization of the object of study

In Brazil, the national scientific journals are evaluated and classified on the basis of the *Qualis* system. According to CAPES (2009), *Qualis* “is a set of procedures used by Capes to evaluate the quality of the production of the post-graduation programs in Brazil”. The journals are classified from the highest level of quality – A1 – to the lowest level – C.

This classification is available in *WebQualis*, “an application that allows the classification and search of *Qualis* in each area as well as the publication of the criteria used to classify journals and proceedings” (CAPES, 2009). Using this application to search the A1 journals in the area

⁴The original citation is “tal expansão demanda que as análises considerem as condições de produção, distribuição e consumo do texto, e focalizem os textos que circulam na sociedade contra o pano de fundo do momento histórico. Olham-se as finalidades e a organização econômica dos grupos sociais, em termos de vida cotidiana, negócios, meios de produção, formações ideológicas, etc., que determinam o conteúdo, o estilo e a construção composicional dos gêneros [...] (MOTTA-ROTH, 2008, p. 351).

⁵The original title is *Laboratório de Pesquisa e Ensino de Leitura e Redação*.

of Languages/Linguistic, the system provided a list with 120 journals (download in April, 2014). These journals were organized according to five categories (Table 1).

Table 1. Classification of national scientific journals in the area of Languages/ Linguistic at the A1 level

International / Printed or not free international journals	Brazilian journals			
	Printed	Exclusively about Literature	About Linguistics and/or Applied Linguistics (and Literature)	Others / Not identified
63	20	10	19	08
Total: 120				

For the purpose of the present research, only Brazilian journals that included studies on Linguistics and/or Applied Linguistics were considered. Once these were identified, the following criterion was the relevance of the title to the research group of LabLeR, as explained earlier, which led to the selection of five titles. Information on these five journals is given in the next subsections.

Linguagem em (Dis)curso

Linguagem em (Dis)curso (LemD), a publication of the *Universidade do Sul de Santa Catarina (UNISUL)*, focuses on “issues related to the fields of text and discourse” (LemD, 2014). Besides articles, the journal publishes presentations, essays, reviews, editorials and retrospectives. However, for the purpose of the present analysis, only the genre research article was mapped. From 2009 to 2013, a total of 103 articles were published by LemD in fifteen issues.

Gragoatá

Gragoatá is a publication of both the post-graduation program in language studies and the post-graduation program in literary studies from *Universidade Federal Fluminense (UFF)*. The journal publishes research articles and reviews that are relevant to the linguistic and literary areas (GRAGOATÁ, s/d). Considering exclusively the genre research article, Gragoatá has published ten issues and 147 studies from 2009 to 2013.

Revista Brasileira de Linguística Aplicada

Revista Brasileira de Linguística Aplicada (RBLA), a publication from *Universidade Federal de Minas Gerais* (UFMG), “encourages research in the field of Applied Linguistics” (RBLA, 2014). Besides articles, the journal publishes reviews and interviews. In the eighteen issues published between 2009 and 2013, RBLA brings 192 articles.

Ilha do Desterro

Ilha do Desterro is a journal linked to the post-graduation program from the *Universidade Federal de Santa Catarina* (UFSC) that publishes, since 1979, original articles and reviews on the areas of English language, Literature and Cultural Studies.

The journal has released ten issues and a total of 112 articles. In relation to the issue 57, the nine studies published do not present abstract. For this reason, they were not considered part of this research sample, since the abstracts are the units that were initially analyzed to define whether the journals present or not a multimodal study.

DELTA

Documentação de Estudos em Linguística Teórica e Aplicada (DELTA) is a publication from *Pontifícia Universidade Católica de São Paulo* (PUC-SP) “addressed to all areas of study concerning language and speech, whether theoretical or applied” (DELTA, 2014).

The journal publishes a wide variety of genres such as articles, reviews, booknotes, debates, round tables. Considering exclusively the number of articles, D.E.L.T.A has released 14 issues and a total of 105 articles.

Analytical procedures

Firstly, the 650 abstracts were analyzed aiming at the selection of the ones that present a study on multimodality. For this purpose, the abstracts were scanned in order to find keywords, in Portuguese and in English, that can characterize a study on multimodality, such as ‘multimodality’, ‘Multimodal Discourse’, ‘non-verbal’, ‘Kress’, ‘van Leeuwen’, ‘images’, ‘visual’, ‘semiotic mode’, ‘multiliteracy’.

Secondly, the abstracts selected were classified according to nationality, that is to say, whether they were reporting a national or international study by considering the author's institutional affiliation. Only the national studies are relevant to this research, since the objective is to map the studies on multimodality in the Brazilian context.

Thirdly, the studies were classified as theoretical or experimental. In this research, only the experimental ones were taken into account, since the objective here is to have a map of the genres that have already been investigated in order to offer subsidy to language teaching. Typically, only experimental studies, as opposed to theoretical ones, develop the analysis of an object of study such as a genre.

Fourthly, the final sample of abstracts and articles was analyzed in order to identify, if possible, the four categories mentioned in the objectives 1) theoretical and methodological trends; 2) genres being investigated; 3) the generic aspects being studied; and 4) the geographic distribution of the studies all over Brazil.

Lastly, the data was quantitatively and qualitatively analyzed in order to verify if there is predominance in one or more categories, if it is possible to find any pattern in the studies. As a final result, this study should provide a map of the multimodal studies developed in Brazil in terms of national journals.

Results and discussion

The results of the present study reveal that in the five national journals selected for the analysis, only 22 articles out of a total of 650, are related to multimodality (Table 2).

Table 2. Number of experimental studies on multimodality in the five national journals between 2009-2013

Journal	Number of issues (2009-2013)	Number of abstracts (2009-2013)	Number of articles on multimodality
LemD	15	103	9
Gragoatá	9	147	5
RBLA	18	192	4
Ilha	10	103	2
DELTA	14	105	2
TOTAL	66	650	22

Considering these results, it is possible to note that the number of publications on multimodality is small: only an average of

3,38% of the articles published in five years address this topic. At least two reasons can be related to this low frequency. First, research on multimodality is in its infancy (BEZERRA; NASCIMENTO, 2013). Second, the wide variety of topics covered in the journals indicates that there is space to publish studies developed in different research groups, but multimodality does not seem to be a very addressed issue (Gragoatá, for example, includes linguistics and literature, *Ilha* covers English, literature and cultural studies and *DELTA* addresses theoretical and applied linguistics).

If, on the one hand, the average of studies on multimodality is low, there has been a growth of interest on the topic in the investigated period (2009-2013). Table 3 reveals this intensification in the total amount of publications per year. Even though the rise was not continuous (there was a slight drop in 2013), in 2010 and 2011 the number of exemplars grew to five per year and then to six in 2012 as compared to 2009, when there was only one study published.

Table 3. Number of experimental studies on multimodality across time

Year	<i>LemD</i>	<i>Gragoatá</i>	<i>RBLA</i>	<i>Ilha</i>	<i>DELTA</i>	Total
2009	-	-	1	-	-	1
2010	1	2	2	-	-	5
2011	4	1	-	-	-	5
2012	2	1	1	-	2	6
2013	2	1	-	2	-	5

Table 3 also shows that the interest on the field has grown when each journal is considered separately. *DELTA* and *Ilha* include the topic in the later years (2012, 2013) and since 2010, *LemD*, *Gragoatá* and *RBLA* regularly publish at least one yearly article on multimodality. These 22 articles are then investigated in terms of the four aspects presented in the objective of this study.

Theoretical and methodological trends

In order to define the approach that each article follows, it was first necessary to verify what literature and technical concepts the study present in relation to multimodality. To do so, the literature review section or words typically connected to this section were analyzed. Later, the classification of multimodal studies proposed by Bezemer and Jewitt (2010) was used to identify the approaches to multimodality

in each study. The studies that could not be related to one of these two perspectives were classified as 'other bases'. This third classification congregates authors and publications used in the articles to provide the theoretical and methodological frameworks for their analysis, but it does not assure that there was a focus on multimodality in the study or that these frameworks were used for the investigation of images other than verbal language. These results are shown in Table 4.

Table 4. Theoretical and Methodological basis in the corpus of the experimental multimodal studies

Journal	Article Number ⁶	Social semiotic approach	Social-linguistic approaches	Other bases
LemD	20102#1	Gunther Kress e Theo van Leeuwen (1996);	-	-
	20111#2	-	-	Maingueneau (2010 ^a)
	20113#3	-	-	Análise do Discurso materialista Lagazzi, S. (2011)
	20113#4	-	-	Michel Foucault (2008),
	20113#5	-	-	conceito de policromia (SOUZA, 1995)
	20123#6	-	-	Vezali (2011) Klippi (2006) Marcuschi (2005/2008)
	20123#7	-	-	Linguística Textual Marcuschi (2008) Cavalcante (2010) Mondada e Dubois (2003)
	20132#8	-	-	Foucault (2008) Courtine (2011) Chéroux (2009)
	20132#9	Análise do Discurso Multimodal	-	-

⁶ For ease of reference, each exemplar of the corpus is identified with a code that starts with the year of publication (e.g., 2013) + number of the issue (e.g., 64) + number of the exemplar in the corpus (e.g., #3).

Gragoatá	201028#10	-	-	Bakhtin (1959-1961/2003)
	201029#11	-	-	Hénault (2006) Greimas (1983) Greimas & Courtés (2008)
	201131#12	-	-	Barthes (2003)
	201233#13	-	-	Gestalt Barthes (2008)
	201334#14	-	-	Debord(1997); Lacan (1998)
RBLA	20092#15	Kress e Van Leeuwen (2006)	-	-
	20101#16	-	-	Lemke (1995, 1998a, 1998b)
	20102#17	-	-	Conceitos Bakhtinianos
	20104#18	Kress (2003) Anstey; Bull (2010) Cope; Kalantzis (2000)	-	-
Ilha	201364#19	Kress and van Leeuwen (1996, 2006) Mitchell's (1995)	-	-
	201364#20	Kress& van Leeuwen (2001; 2006) Kress (2010)	-	-
DELTA	2012si#21	Kress e van Leeuwen (1996)	-	-
	2012si#22	Kress & van Leeuwen (2006) Hodge & Kress (1988) Argyle (1975, ARGYLE & COOK, 1976)	-	-
TOTAL	8	1	13	

Table 4 reveals that the majority of studies on multimodality (thirteen of the twenty-two) are classified in the “other bases” category. Two scientific journals require special attention in this classification because of the number of studies that consider theoretical bases other than the ones proposed by Bezemer and Jewitt (2010): LemD (six studies of nine) and Gragoatá (all five studies). It is important to highlight that all these studies consider semiotic modes other than the linguistic one and this could indicate a movement towards the consolidation of multimodality as a research area. However, their frameworks are not typical and mainly recognized as focusing on multimodal aspects, since they do not present categories for the analysis of images, such as the ones used in the social semiotic and social-linguistic approaches (the two main perspectives within multimodality). In other words, images were considered in the investigation, but the theoretical and methodological bases may not cover their analysis as they covered verbal language.

The second category in recurrence is the social semiotic approach which underlies the total number of studies on multimodality in DELTA and Ilha and a small number in RBLA and LemD (two for each journal). It is important to consider that the majority of studies presenting a social semiotic approach use at least one of the *Reading Images: The Grammar of Visual Design* editions written by Kress and van Leeuwen in 1996 (first edition) and 2006 (second edition): seven studies of eight. Such recurrence may be explained since the social semiotic approach is initially associated with the work of these authors (JEWITT, 2009).

Gragoatá is the only journal that does not present studies using the social semiotic approach. Also, the studies were published in different years (2010, 2011, 2012 e 2013). So, it may be possible to argue that this journal is more inclined to develop and publish researches on “alternative bases”.

Table 4 also reveals that the social linguist approach is not often used in the analysis of non-verbal language in the context of these five journals, since none of the studies of the corpus presented it in the literature review section. Also, based on the data, it seems uncommon to combine two or more approaches in a same study.

The second stage of analysis is the genre(s) investigated in each study. The results are shown in the next section.

Genres Investigated

The genres investigated in the 22 publications were mapped considering firstly a) the researchers definitions of their object(s) of study as genre (example 1); secondly b) the critical genre analysis (MOTTA-ROTH, 2008) approach to genres (example 2); and thirdly c) situations in which the genres could not be identified (example 3).

As shown in example 1, the article presents a discussion on the concept of genre using it to define the object under analysis – MSN Messenger – as a digital genre. In such cases, explicit reference to the object of study as a genre was considered to map the genre under investigation in the study.

Example 1. Extract from 20101#16 article

Aqui cabe, portanto, levantarmos uma discussão recente, que surgiu praticamente ao mesmo tempo que os gêneros digitais: se os, então, denominados “gêneros digitais”, como e-mail, MSN Messenger, o blog, entre outros, seriam, de fato, gêneros digitais ou se deveriam ser considerados apenas como suportes, ou meios digitais, para a produção e divulgação de gêneros digitais. Muito embora entendamos alguns dos argumentos daqueles que defendem essa segunda posição, muito ligada, a nosso ver, a uma visão tradicional de compreensão dos gêneros, defendemos neste trabalho uma outra visão: a de que esses suportes digitais seriam também gêneros digitais. (My emphasis)

In Example 2, on the other hand, the article does not make reference to the concept of genre. So, the objects under investigation will be considered according to Critical Genre Analysis understandings on such genre. Therefore, example 2 does not make explicit reference to the flag and logo as a genre, but it was classified as one in the present study because it is seen as a recurrent social process/action in our society that is recognized by its conventional function and material features.

Example 2. Extract from 20092#15 article

Na seção seguinte, após um breve histórico sobre o MST, será feita uma discussão sobre a construção da identidade coletiva por meio do modo visual a partir da noção de multimodalidade. Na sequência, serão analisadas algumas imagens que foram escolhidas, tendo-se em mente essa construção identitária. Primeiramente, a bandeira e seu logotipo, pois se constituem provavelmente na imagem do MST mais veiculada pela mídia em geral e pelo próprio movimento. Como resultado, a bandeira transformou-se num poderoso ícone de autorrepresentação do sem-terra. Em seguida, serão analisadas as capas de duas edições da Revista Sem Terra. A razão de sua escolha deve-se ao fato de que, de alguma maneira, as imagens nelas impressas demonstram uma busca pelo MST de atrair pessoas cuja identificação com o movimento não é imediatamente óbvia, pois utilizam uma linguagem mais abstrata que em muito difere de seu discurso ativista, fortemente centrado no modo verbal. Por fim, será examinada a relação entre fotos e legendas em algumas imagens também retiradas de exemplares da revista[...]. (Myemphasis)

Lastly, example 3 refers to an article in which it was not possible to identify the object under analysis as a genre, although there was an object being investigated. Therefore, in such cases, the publication will not be considered in the “genre investigated” category of analysis.

Example 3. Extract from 20124#18 article

WebQuests são ambientes multimodais de aprendizagem colaborativa que incentivam os participantes a interagir no processo de desenvolvimento de projetos *on-line* pelo uso da *web* e de seus recursos. Representam um modelo de pesquisa orientada, focada na busca de informações para resolver uma situação problema, realizada no espaço da internet (DODGE; MARCH, 2007; DODGE, 2008). As fontes de pesquisa são recomendadas por meio dos *links* fornecidos para que os participantes não se “afundem” no oceano de informações da internet – são, pois, uma estrutura de aprendizagem assistida (MARCH, 2004). (Myemphasis)

Based on these criteria, a number of different genres were identified, as shown in Table 5.

Table 5 – Genres and spheres investigated in the corpus of the experimental studies on multimodality

Journal	Article number	Genre(s) investigated	Sphere(s)
LemD	20102#1	magazine cover; summary of magazine; advertisement	Media (magazine)
	20111#2	“enunciados de curta extensão” ²	Media (online newspaper)
	20113#3	journal cover;	Academic
	20113#4	literary book cover;	Literary
	20113#5	chronicle; audiovisual chronicle	Media (newspaper)
	20123#6	meetings	Academic
	20123#7	comic strips	Media
	20132#8	not identified	Not identified
	20132#9	interview	Media (television)
Gragoatá	201028#10	newspaper cover page	Media (newspaper)
	201029#11	advertisement; short story	Media (newspaper) / Literary
	201131#12	plays	Literary/Artistic (theatre)
	201233#13	visual poem	Literary
	201334#14	photo shoot	Media (outdoors)
RBLA	20092#15	flag and logo; magazine cover; photos and captions	Political; Media (magazine)
	20101#16	MSN Messenger	Technological (internet) / Pedagogical
	20102#17	literature book for children	Literary
	20124#18	not identified	Not identified
Ilha	201364#19	advertisement	Media (magazine)
	201364#20	magazine article; magazine cover; advertisement	Media (magazine)
DELTA	2012si#21	newspaper cover page	Media (newspaper)
	2012si#22	advertisement	Media (magazine)

The results show that a massive quantity of genres comes from the media sphere: twelve of the nineteen studies in which the genre could be identified. Two genres require a special attention since they are the most investigated: advertisement (five studies) and magazine cover (three studies). This high frequency suggests that, although social practices are becoming more multimodal (BEZERRA; NASCIMENTO, 2013), the focus is still on genres that are obviously multimodal, that is to say, in which images clearly play a central role in realizing the genre. Perhaps, this emphasis may be explained by the recurrence of such genres in people's daily life since it is possible to find them in several contexts, such as magazines, newspapers, websites, outdoors, pamphlets, shops.

It is also relevant to consider that although these two genres were studied in several exemplars of the corpus, a wide range of other genres are also investigated under the media sphere, such as the comic strip, the audiovisual chronicle, the newspaper page cover. This result shows the versatility of this sphere in holding a big number of different genres. Another important aspect is that all five journals present at least one genre belonging to the media sphere.

The second sphere in recurrence is the literary with five genres under investigation: literary book cover, plays, visual poem, short story and literature book for children. Gragoatá covers three of these five genres. This amount of publications in Gragoatá may be explained by the fact that the journal covers the field of literature in addition to linguistics/applied linguistics. Only DELTA and Ilha do not consider genres under this sphere in their publications, since it is not in the scope of these journals as stated on their websites.

Among the twenty-two studies, two belong to the third criteria: situation in which no genre could be identified. The focus of the analysis in these two publications is not in a genre, but in a happening (*enunciado-acontecimento*) and in a multimodal environment. Therefore they could not be considered in the present analysis.

When crossing the data from the theoretical and methodological trends with the genres investigated, it is possible to observe an interesting pattern. Table 6 shows that the media sphere is also predominant in the studies classified in the social semiotic approach. Of the eight publications associated to the studies of Kress and van Leeuwen (1996, 2006), seven analyze genres located in the media sphere, more precisely, magazine genres such as advertisements, magazine cover, magazine article.

Table 6. Genres investigated under the social semiotic approach in the corpus of the experimental studies on multimodality

Journal	Article number	Theoretical and Methodological Trends	Genre(s) investigated
LemD	20102#1	Gunther Kress e Theo van Leeuwen (1996);	magazine cover; summary of magazine; advertisement
	20132#9	Análise do Discurso Multimodal	interview
RBLA	20092#15	Kress e Van Leeuwen (2006)	flag and logo; magazine cover; photos and captions
	20124#18	Kress (2003) Anstey; Bull (2010) Cope; Kalantzis (2000)	not identified
Ilha	201364#19	Kress and van Leeuwen (1996, 2006); Mitchell's (1995)	advertisement
	201364#20	Kress & van Leeuwen (2001; 2006) Kress (2010)	magazine article; magazine cover; advertisement
DELTA	2012si#21	Kress e van Leeuwen (1996)	newspaper cover page
	2012si#22	Kress & van Leeuwen (2006) Hodge & Kress (1988) Argyle (1975, ARGYLE & COOK, 1976)	advertisement

By identifying the genres under investigation, it is relevant to see which aspect of these genres is actually being analyzed in each of these studies in the corpus. These results are discussed in the following section.

Generic Aspects

In order to locate the generic aspects being investigated in each of the 22 publications that belong to the corpus of the present study, only the objective(s) in the articles were considered.

According to the results, there seems to be no pattern in the aspects investigated. This may be related to the variety of approaches

that underlie these studies. Therefore, for lack of time, space and patterns, these results will not be shown and discussed. However, it would be interesting to consider, in further developments of the current study, what aspects are investigated only for the two most frequent genres – advertisements and magazine covers.

The next stage of investigation refers to the geographical distribution of these studies in the national territory.

Geographical distribution

The studies were analyzed in terms of geographic distribution by considering the authors' institutional affiliation. Table 7 details these data.

Table 7. Geographic distribution of experimental studies on multimodality

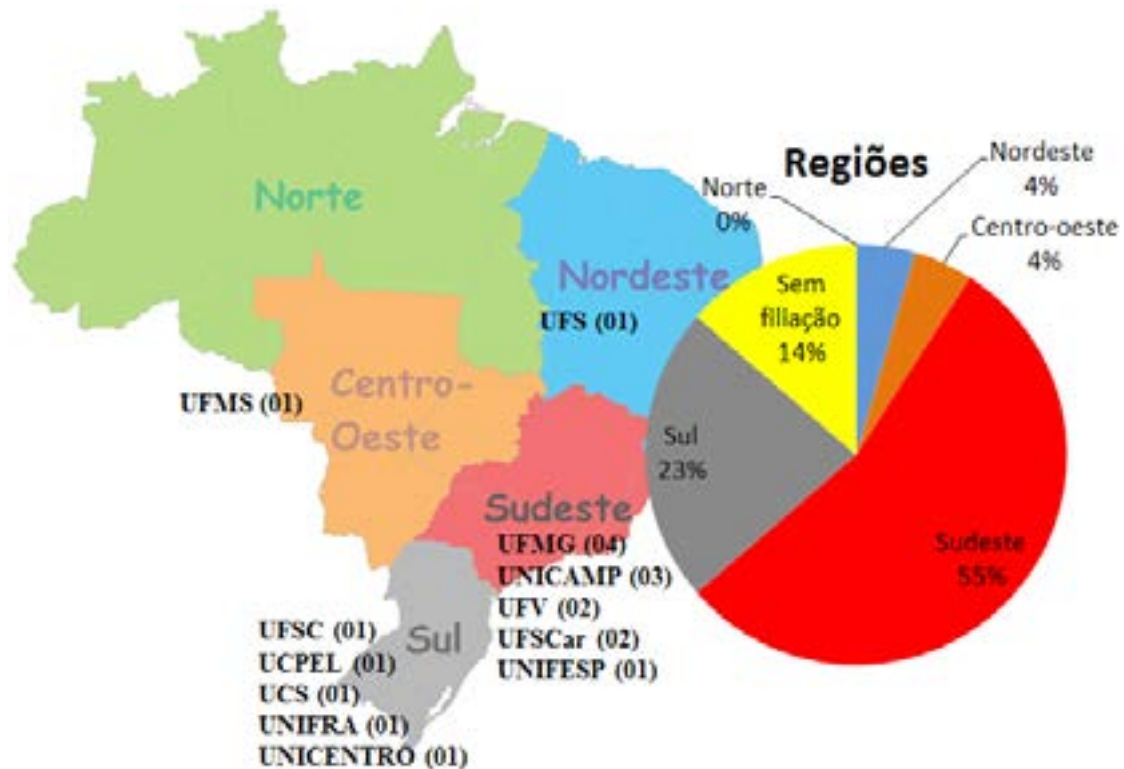
Journal	Article number	Institutional Affiliation	Region
LemD	20102#1	Universidade Federal de Viçosa	Southeast
	201101#02	Universidade Federal de São Carlos	Southeast
	20113#3	Universidade Estadual de Campinas	Southeast
	20113#4	Universidade Federal de São Carlos	Southeast
	20113#5	Universidade Estadual de Campinas	Southeast
	20123#6	Universidade Estadual de Campinas	Southeast
	20123#7	Universidade Federal de São Paulo	Southeast
	20132#8	Universidade Estadual do Centro-Oeste	South
	20132#9	Centro Universitário Franciscano	South

Gragoatá	201028#10	Universidade Católica de Pelotas	South
	201029#11	Not mentioned	--
	201131#12	Not mentioned	--
	201233#13	Not mentioned	--
	201334#14	Universidade de Caxias do Sul	South
RBLA	20092#15	Universidade Federal do Sergipe	Northeast
	20101#16	Universidade Federal de Mato Grosso do Sul	Midwest
	20102#17	Universidade Federal de Minas Gerais	Southeast
	20124#18	Universidade Federal de Minas Gerais	Southeast
Ilha	201364#19	Universidade Federal de Santa Catarina	South
	201364#20	Universidade Federal de Minas Gerais	Southeast
DELTA	2012si#21	Universidade Federal de Viçosa	Southeast
	2012si#22	Universidade Federal de Minas Gerais	Southeast

The results presented in Table 7 show that the Southeast region stands in first position in terms of the number of publications on multimodality, since twelve articles derive from universities located there. The most prominent states on this region are Minas Gerais and São Paulo, since they hold all twelve publications (six for each state). This region is followed by the South with five publications spatially distributed in all the three states of the region (three publications in Rio Grande do Sul and one in both Santa Catarina and Paraná). Both the Midwest and Northeast regions together present only one study on the topic.

Although it is clear that the number of publications on Multimodality is low, Table 7 shows that the studies are spread over almost all regions of Brazil (except the Northern region). This means

that interest on this area of study is not isolated, but of national



relevance, as visually represented in Figure 1.

Figure 1. Spatial distribution of experimental studies on multimodality in Brazil

Considering each journal, there seems to be no direct relation between each title and the geographical origin of the studies on multimodality they publish. RBLA, for example, despite being affiliated to a Southeastern university from Minas Gerais, contains exemplars from three different regions (Northeast, Midwest, Southeast).

The data also reveal that the studies are spread in different universities in each region. South, for example, holds five publications affiliated to five different educational institutions. UFMG is the university that outstands, since it hosts four of the twelve studies. In this view, except UFMG and perhaps Unicamp (three publications), there seems to be no research niches on multimodality in terms of universities. If, on the one hand, it is not reliable to affirm the existence of research groups on multimodality, it may be possible to consider that this topic is drawing attention of researchers in many different educational institutions.

Two interesting patterns could be addressed when crossing the results from theoretical and methodological trends with the geographic

location. Firstly, the identification of three studies affiliated to UFMG as belonging to the social semiotic approach. Apart from being the university with the highest number of publications on multimodality, almost all of them (three in four) use the same theoretical and methodological basis to the analysis of genres. Considering these data, UFMG is the closest university to be classified as holding a research niche on multimodality. Secondly, adding the three studies affiliated to UFMG and the two to UFV, these five publications using the social semiotic approach configures Minas Gerais as the state holding the majority of studies in such approach (Table 8).

Table 8. Relation between social semiotic approach and institutional affiliation of experimental studies on multimodality

Journal	Article number	Theoretical and Methodological Trends	Institutional Affiliation
LemD	20102#1	Gunther Kress e Theo van Leeuwen (1996);	Universidade Federal de Viçosa
	20132#9	Análise do Discurso Multimodal	Centro Universitário Franciscano
RBLA	20092#15	Kress e Van Leeuwen (2006)	Universidade Federal do Sergipe
	20124#18	Kress (2003) Anstey; Bull (2010) Cope; Kalantzis (2000)	Universidade Federal de Minas Gerais
Ilha	201364#19	Kress and van Leeuwen (1996, 2006); Mitchell's (1995)	Universidade Federal de Santa Catarina
	201364#20	Kress & van Leeuwen (2001; 2006) Kress (2010)	Universidade Federal de Minas Gerais
DELTA	2012si#21	Kress e van Leeuwen (1996)	Universidade Federal de Viçosa
	2012si#22	Kress & van Leeuwen (2006) Hodge & Kress (1988) Argyle (1975, ARGYLE & COOK, 1976)	Universidade Federal de Minas Gerais

The other combinations, such as genres investigated and the geographic location, have not provided patterns and, for this reason, were not explored in the present analysis.

Final remarks

The present research aimed at the investigation of the experimental studies on multimodality developed in the national context considering five years (2009 – 2013). To do so, the corpus of the research counted with five Brazilian scientific journals – LemD, Gragoatá, RBLA, Ilha and DELTA – in order to map the 1) theoretical and methodological basis that underlies the studies; 2) the genres investigated; 3) the generic aspects approached; and 4) the geographical distribution of these studies.

In summary, the results reveal that in a total of 650 abstracts scanned for key words typically connected to studies on multimodality, only 22 could be identified. Although the small amount of publications on multimodality, it was possible to note a growth in the number of studies in the period investigated (one study to six studies). When addressing the theoretical and methodological trends, considering Bezemer and Jewitt's (2010) classification of the approaches to multimodality, it was possible to observe that the social semiotic basis outstands in relation to the social linguistic (despite the fact that the majority of the studies belong to bases other than these two). This approach configures an interesting pattern when combined with the genres investigated: almost all these studies are connected to the media sphere, especially magazine cover and advertisements. When considering the geographic distribution, the Southeast region holds the majority of the studies from the corpus, with special attention to the states of Minas Gerais and São Paulo. Another interesting pattern can be observed by crossing the studies on multimodality classified in the social semiotic with the geographic distribution. This combination suggests that UFMG is the closest university to be considered as a niche of study on multimodality.

This study, similarly to the previous studies developed within the umbrella project and/or by our research group at LabLeR, such as the analysis of the relation between verbal and non-verbal texts in electrical engineering research articles (NASCIMENTO, 2002); analysis of comic strips from the perspective of multimodality (CATTO; HENDGES, 2010), analysis of the image in popular science news (HENDGES; NASCIMENTO; MARQUES, 2014), this study has the intention of contributing to the consolidation of the still young area of multimodality (BEZERRA; NASCIMENTO, 2013) in the Brazilian context.

The results from the mapping of the four categories of the

analysis also intend to contribute, in terms of pedagogical applications, to help students and researchers interested in the field of multimodality to find previous studies, research groups, universities interested in the topic, genres and generic aspects already investigated, theoretical and methodological approaches used by providing them with a panorama of the field in the context of A1 national journals.

Three considerations in relation to the limitations of the present study need to be addressed: first, we understand that the number of journals selected and the corpus of the present research is still small to fulfill the purpose of this study in such a national magnitude and, for this reason, further research needs to be conducted. However, these results can be considered an initial view of studies on multimodality in the specific context of A1 national context. Second, we tried to delimit keywords to reach the largest number of studies on multimodality when scanning the abstracts. However, it is highly possible that these words have not covered all the studies considering multimodal aspects. Third, for lack of time, other national journals or even different contexts could not be included in the present study. In light of these considerations, further research about the situation of multimodality in Brazil is necessary to provide a wider view of the field in our country and a more solid amount of data for language teaching within the perspective of multiliteracies (THE NEW LONDON GROUP, 1996).

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