

RHETORICAL STRATEGIES IN INTRODUCTIONS TO SCIENTIFIC ARTICLES IN THE FIELD OF PSYCHOLOGY



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ABSTRACT

The introduction of the scientific article is an invitation to read the full work. The rhetorical strategies mobilized in its composition exert a decisive influence in convincing eventual readers to be interested in the theme of the research. Therefore, the objective of this work was to analyze, in the light of the CARS Model (Swales, 1990; 2004), the rhetorical movements and steps present in introductions to scientific articles produced by researchers in the field of psychology. To this end, the introductions of 30 scientific articles published in 2021 and 2022, in Portuguese, were collected in six journals in the disciplinary area of psychology. The results confirm the relevance of the rhetorical movements predicted by the analysis model and reveal a high recurrence of some steps, while others were infrequent. On the whole, the results signal both the preferences and the predominant rhetorical particularities in the subject area investigated.

Keywords: Scientific article. Introduction. Rhetorical organization. Movement analysis.

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INTRODUCTION

Located after the title, abstract and keywords, the introduction section, in the body of the scientific article, represents the reader's first contact with the complete work, serving as a "gateway" (Ritti-Dias; Bezerra, 2013) for the work itself. In this sense, the introduction of the article provides the reader with a comprehensive initial view, outlining the scope, purpose and relevance of the research to be presented.

From the reading of the introduction, the reader will come into contact with sociorhetorical strategies that can influence him to continue reading the work that will be presented, and the persuasive way in which the author of the scientific article writes the introduction is very relevant in this decision. In this sense, in the writing of this section of the scientific article, the realization of rhetorical movements capable of dialoguing with the reader's expectations plays an essential role.

In order to capture such movements, Swales (1990) developed the CARS Model (*Create a Research Space*), a methodological tool for the analysis of genres that makes it possible to identify the movements and rhetorical steps present in the introduction of the research article. The model has been tested and applied in several disciplinary areas and in different cultural contexts, with adaptations that highlight its flexible and dynamic character, which justifies its use in the methodology of this research.

However, the CARS Model does not presuppose a uniformity in the academic writing of the different disciplinary areas. It is common among gender analysts that there are peculiarities and differences in the way academic writing is practiced in different disciplinary cultures. When analyzing introductions of articles in a given area, it is assumed that variation is a predictable data. Among the various studies that apply the CARS Model to the analysis of introductions of scientific articles, we noticed that those that refer to research focused on scientific articles in the area of psychology are rare. An exception to this is represented by the works of Abreu (2016) and Bernardino and Abreu (2017), discussed below.

Thus, in order to broaden and deepen the understanding of the introductions of scientific articles in the field of psychology, our objective was to analyze the rhetorical movements and steps practiced by proficient writers in this disciplinary area. To do so, we used an expanded version of the CARS Model (1990; 2004), also seeking to identify the lexical-grammatical elements that signal the predominant rhetorical movements and steps

in the introductions, thus allowing us to describe the rhetorical patterns that characterize the organization of the introduction of the research article in psychology.

To this end, our work is divided into six topics in addition to this introduction. In the next section, we theoretically ground our conception of gender. Next, we present our understanding of the relationship between the scientific article genre and disciplinary culture. In the last theoretical section, we will present a brief review of studies that applied the CARS Model (1990) in introductions of articles from various areas, in order to demonstrate the flexibility of this methodology and the influences of the disciplinary culture in the writing of the scientific article. After that, we explain our methodological procedures and then present and discuss the results of the *corpus analysis*. Finally, we make our final considerations about the research carried out.

GENDER IN SOCIORHETORICAL PERSPECTIVE

The genre is multifaceted. On the one hand, there is a set of textual and structural traits that can be categorized, which we can conceive as the material expression of the genre. On the other hand, the notion of gender is much more complex, when considering the role of people, groups and contexts in the construction of meanings. Thus, we can conceive, with Bazerman (2006), that gender is both a socio-interactive category, open to joint construction and creativity, and a socio-historical category, not watertight and in constant change. When we seek to apprehend the complexity of the genre, we realize that it cannot be seen as a formal crystallization in time, but as the result of a very complex process that involves people, contexts and communicative purposes.

In this sense, Bazerman (2006) argues that genders frame social action. Through them, we not only express thoughts, but interact and communicate in a mutually intelligible way. Thus, according to the author, genres mean the familiar scenarios in which we engage to create intelligible communicative actions with each other, in addition to serving as guidance to explore unfamiliar situations. They also represent the contexts in which meaning is constructed and symbolize the strategies we use to accomplish a purpose.

In a direction consistent with Bazerman (2006), Marcuschi (2002) conceived genres as updated in communicative forms of social action, which are relatively stable and realized in texts situated in communities of social practices and in specific discursive domains. According to the researcher, these historical and social phenomena, influenced by culture and collective life, play a fundamental role in the organization of daily communicative

activities, being indispensable in any communicative context. Marcuschi (2002) warns that genres are not watertight and rigid instruments of creative action, but rather textual/discursive events that are highly malleable, dynamic and plastic.

According to Swales (1990), the author whose methodology of genre analysis we used in this work, there are five characteristics inherent to genre. Firstly, gender is seen as a class of communicative events, in which language plays a crucial role. To understand the genre, the participants of the communicative event, the role of the discourse, the context of production and reception, and the historical and cultural context must be taken into account.

Secondly, Swales (1990) points out that the main characteristic that differentiates a genre is the existence of a shared set of communicative purposes. Biasi-Rodrigues and Bezerra (2012) argue that this characteristic should not be confused with the intention of the author or writer. According to the researchers, the communicative purpose is not something individual, but rather conventionally determined by society or community. Genres and their communicative purposes are shaped by specific social practices, which vary according to well-defined cultural contexts.

As a third characteristic, Swales (1990) observes that the texts participating in a genre vary in their prototypicality, presenting specific forms that distinguish them from each other. Such variations are influenced by factors such as cultural context, communicative purpose, and individual preferences of the participants. Recognizing these variations is key to understanding the diversity of genres and how they are used in different situations.

The fourth characteristic highlighted by Swales (1990) is that each genre has an underlying logical structure that imposes specific restrictions on what can be included in its content, how this content is organized and how it is presented from a formal point of view. These constraints are determined by the conventions and expectations associated with gender. The underlying logic of a genre not only influences its content, but also its structure and style, ensuring consistency and understanding within the community that uses it.

Finally, as a last characteristic, Swales (1990) emphasizes that there tends to be a consensual nomenclature for genres within a discursive community, serving as a relevant clue to understand its functioning. This nomenclature works as a guide that guides community members on how to communicate within the norms and expectations established by it.

In short, Swales (1990) conceives that

A genre comprises a class of communicative events whose members share a given set of communicative purposes. These purposes are recognized by the expert members of the discourse community and thus constitute the rationale for the genre. This basis shapes the schematic structure of the discourse, influences and conditions the choice of content and style (Swales, 1990, p. 58).

In this context, Marcuschi (2002) reminds us that textual genres arise, are situated and are functionally integrated in the cultures in which they develop. According to the author, the main characteristics of genres are their communicative, cognitive and social functions, rather than their linguistic and structural characteristics. Defining genres accurately and formally is challenging, as it requires consideration of their uses and influences, which are shaped as social and discursive practices.

On the other hand, Ritti-Dias and Bezerra (2013) argue that, although creativity and personal style are manifested in genres, they also reflect characteristics defined by the discursive community in which they are used and by the specific objectives of these activities in which they are mobilized. This results in a certain stability, both formal and rhetorical, but it does not guarantee uniformity in the production of a given genre by different discursive communities, much less by different researchers. Thus, it has been consensual in gender approaches that each disciplinary culture, such as the area of psychology, can present peculiarities in the mobilization of rhetorical strategies for academic writing. The analyses of the scientific article genre, in whole or in its parts, such as the introduction section, follow this premise.

THE SCIENTIFIC ARTICLE GENRE AND DISCIPLINARY CULTURES

From the above, we can conceive that the scientific article is not only, or necessarily, a set of similar texts, but constitutes a socially shared discursive practice, which creates and influences interactions, within the borders of a kind of general pattern of the genre. The participants of a specific scientific community, when producing an article, must align themselves with the beliefs, values and practices of their environment in order to be successful, which does not prevent a certain flexibility, as long as the writing remains, in some way, within the expectations of the disciplinary culture (Brasileiro *et al.*, 2022). In this sense, Bazerman (2020, p. 96) conceives that the scientific article "changes as it moves between times, locations, and specialties, with different assumptions, dynamics, and needs, as well as diverse material practices represented in the data and narrative."

According to Hyland (2000), the construction of knowledge varies according to the particularities of each disciplinary culture. Considering the typical diversity of academia, we can affirm that it is composed of distinct communities or social groups, referred to by the author as creators and holders of disciplinary cultures. The definition of the disciplines, according to Hyland (2000), is intrinsically linked to their approach to writing, and it should be noted that the differentiation between disciplines does not reside in the written content, but in the way writing is developed and evaluated by the participants.

Thus, academic writing is shaped by institutional and interpersonal influences, reflecting the social practices of writers in their respective disciplines. These disciplinary cultures vary in social and cognitive terms, presenting differences in objectives, social interactions, power dynamics, political interests, communication styles, and argumentative structures (Freitas; Bernardino; Pacheco, 2021). This has repercussions, from the point of view of writing, on the way in which each disciplinary culture mobilizes rhetorical strategies in the introduction of the research article, our object of study.

Silva and Pacheco (2019) highlight that academic writing must be understood in its heterogeneity, addressing different modes of production and consumption of academic genres. The authors highlight that the central premise is that the distinctive characteristics of disciplinary cultures are essential for the realization of these genres. In this sense, considering that the peculiarities of each disciplinary culture are reflected in its way of dealing with genres, we can conceive that each scientific community has a different way of writing and, therefore, the rhetorical strategies used in the preparation of the introduction of the scientific article vary between areas of knowledge. In fact, Swales' own studies (2004) indicate that, even if they agree on the performance of the main rhetorical movements, certain areas may value steps that are little practiced by others.

THE RHETORICAL ORGANIZATION OF THE INTRODUCTION OF THE SCIENTIFIC ARTICLE IN DIFFERENT AREAS

As we have argued, the introduction of the scientific article is a strategic section, in which the writers do not limit themselves to describing the work, but employ different rhetorical strategies to achieve the communicative purposes of the genre. Ritti-Dias and Bezerra (2013) point out that the introduction has the purpose of contextualizing and situating the text, implicitly arguing in favor of reading the full work. In this sense, Swales (1990) observes that rhetorical movements reflect the communicative purposes shared by

the academic community, so that a functional motivation is attributed to the choices of form, content and style.

According to Bezerra, Silva and Lêdo (2021), the strategies employed play a fundamental role in the preparation of the introduction section of a scientific article. In this section, it is expected that the researcher, among other possible actions, emphasizes the relevance of the research, contextualizes the theme in a more general scope, performs a brief review of the pertinent literature, clearly defines the objective of the study and offers an overview of the structure of the text. These elements are crucial to guide the reader and establish the necessary context to understand the contribution of the study that will be presented.

The rhetorical organization of the introduction of the scientific article has been investigated in several disciplinary areas, with both similar and distinct results. In the area of physical education, according to Silva and Pacheco (2019), it was presented as a brief and objective section. In this area, the introduction section begins with a literature review, highlighting the existing theoretical gaps regarding the investigated theme. Then, the problems that drove the study are highlighted, resulting in the explanation of the research objectives.

In the area of history, after analyzing the sociorhetorical configuration of the introduction section of the scientific article, Freitas, Bernardino, and Pacheco (2021) observed that the section usually begins with the historical contextualization of the topic, followed by the presentation of related research, works, and authors. Then, the objectives of the investigation and the method used are exposed.

In the area of nutrition, Pacheco and Bernardino (2017) observed that the introduction of the article proved to be a brief, concise and objective rhetorical unit, however, fundamental in the socio-rhetorical configuration of the genre, including because there is no section of the article dedicated exclusively to literature review. According to the authors, in the introduction of the scientific article in the area of Nutrition, the theme is presented through a brief literature review, evidencing the theoretical references that the authors consider most relevant for the construction of their study.

As for previous studies in the field of psychology, Abreu (2016) and Bernardino and Abreu (2017), analyzing a *corpus* of 30 articles, concluded that the introduction section generally describes the topic of the research, performs an extensive literature review, and presents the objectives of the work in a clear manner. However, by opting for the

proposition of their own descriptive model, composed of two movements ("Referring to previous research" and "Presenting the research", the latter with the specification of the steps "Presenting the theme" and "Presenting the objectives"), the authors seem to ignore an important part of the data obtained through the CARS Model. According to the researchers themselves, "the model that was most suitable for the analysis of our corpus was the one proposed by Swales (1990)" (Bernardino; Abreu, 2017, p. 473).

In this sense, this work, also focused on a *corpus* of 30 introductions of articles in the field of psychology, follows a different direction from the study by Abreu (2016) and Bernardino and Abreu (2017) by reaffirming the centrality of the CARS Model for the analysis of introductions. In addition, in order to capture as many rhetorical strategies as possible employed by writers in the field of psychology, we used an expanded version of the model, taking into account the later work of Swales (2004), as explained below, in the topic dedicated to the explanation of our methodological procedures.

It is important to point out that, in studies with movement analysis, applying the CARS Model (Swales, 1990), it is not uncommon to perceive that the writing of the introduction in each disciplinary culture may present rhetorical strategies not foreseen by the analysis model. In our experience, this can be minimized by using the additional steps suggested by Swales (2004), as exemplified in Bezerra (2022). Regardless of this, it can be stated that, in more general terms, the CARS Model has proven to be useful when used as a flexible tool for understanding the rhetorical organization of the introduction of the scientific article in several areas. As highlighted by Moreno and Swales (2018) and Lêdo, Bezerra and Pimentel (2023), there is considerable consensus on the structure of three rhetorical movements in the introduction, contrary to what occurs when it comes to other sections of the article, such as the final considerations, for example.

With this understanding, we move on to the explanation of our methodology, where we will detail the procedures adopted for the analysis of the *corpus*.

METHODOLOGICAL PROCEDURES

The method used in this study is the analysis of movements originated in the works of Swales (1990), when the "classic" version of the CARS model was published, with three rhetorical movements, after a previous experience with a four-movement model (Swales, 1981; 1984). Today, this methodology is internationally consolidated and has been applied

to different genres, resulting in different models of analysis to meet the peculiarities of these genres.

For the composition of our *corpus*, we selected five scientific journals, located in strata A1 and A2 of the Qualis/Capes system (quadrennium 2017-2020). The option for the higher strata is justified by the intention of taking as the object of analysis texts whose quality is formally attested by the discursive community of origin. In these journals, we selected only scientific articles written in Portuguese, published in the years 2021 and 2022, in the order in which they appeared in the respective abstracts. 30 research articles were collected, whose introductions were analyzed using the CARS model. For reference purposes throughout the analysis, the introductions were coded as A1, A2, A3... up to A30, where A refers to "article".

After this stage, we proceeded to analyze the data, seeking to analyze the main occurrences of rhetorical strategies in the introductions. On a board arranged from A1 to A30, we marked an "x" when a certain step occurred and left it blank when there was not. Based on Bezerra (2022), the version of the CARS model that we used for data processing combines the 1990 version and the additional steps identified by Swales (2004), which allowed us to analyze the rhetorical organization of the introductions in more detail. For greater clarity, in the tool suggested by Bezerra (2022), the steps arising from the review carried out by Swales (2004) are placed in brackets when they are incorporated into the analysis model, as seen in Chart 1:

Table 1: Enlarged version of the CARS model

Movement 1: Establishing a territory
Step 1: Claiming centrality
Step 2: Making generalizations about the topic
Step 3: Reviewing previous research
Movement 2 – Establishing a Niche
Step 1A: Counter-arguing
Step 1B: Indicating a Gap
Step 1C: Raising questions
Step 1D: Continuing a tradition
[Step 2: Providing justification]
Movement 3 – Occupying the niche
Step 1A: Sketching Purposes
Step 1B: Announcing the present survey
Step 2: Announcing Key Results
[Step 2A: Presenting hypotheses or research questions]
Step 3: Indicating the structure of the article
[Step 3A: Clarifying concepts]

[Step 4: Summarizing the methodology]
[Step 5: Reaffirming the value of research]

Source: Swales (1990; 2004), adapted by Bezerra (2022)

The CARS model (Swales, 1990) uses an ecological, environmental metaphor, focusing on the concepts of territory, broader, and niche, more specific. The three larger parts that make it up are called moves. These are Movement 1 (M1), "Establishing a territory", Movement 2 (M2), "Establishing a niche" and Movement 3 (M3), "Occupying the niche".

In general terms, Movement 1 is used by the author of the text to introduce, in a more generic way, the area in which the research is inserted. Then, in Movement 2, the niche to be researched is defined within the previously established territory. Finally, through Movement 3, a proposal is presented to occupy the niche, seen as a way to justify or indicate the space to be occupied by the research.

Each rhetorical movement, in turn, is carried out through strategies called steps, which are smaller units responsible for building the specific information of each movement. As can be seen in the table, the three movements comprise a total of sixteen rhetorical steps, among which eleven made up the original form of the CARS model (1990) and five were added from Swales (2004). To make M1, the author of the introduction has three steps; to perform M2, there are five possible steps; and for M3, there is a range of eight strategies available. It should be noted that the mobilization of a single step is sufficient to characterize the occurrence of the respective rhetorical movement.

After the data treatment, using the model, the resulting descriptive pattern, representative of the area of psychology, was analyzed considering the presence of linguistic elements that indicate the movements and rhetorical steps in the introductions. After presenting a general picture of the results, the most frequent steps in the *corpus* are illustrated and discussed through excerpts from the respective texts.

RHETORICAL MOVEMENTS AND STEPS IN THE INTRODUCTION OF SCIENTIFIC ARTICLES IN PSYCHOLOGY: WHAT THE DATA SAY

In the following discussion, for the sake of focus and space limitation, after a general appreciation of the results, we chose to highlight the most recurrent steps in each rhetorical movement. Thus, we seek to highlight the preferred options of the academic psychology

community when constructing the introduction of the scientific article. Chart 2 provides an overview of the results.

Table 2: Rhetorical organization of the introduction of scientific articles in psychology

RHETORICAL MOVEMENTS AND STEPS	OCCURRENCES
M1 – Establishing a territory	
P1 – Claiming centrality	5
P2 – Making generalizations about the topic	15
Q3 – Reviewing previous research	30
M2 – Establishing a Niche	
P1A – Counter-arguing	2
P1B – Indicating a gap	8
P1C – Raising questions	8
P1D – Continuing a tradition	6
[P2 – Presenting justification]	20
M3 – Occupying the niche	
P1A – Outlining Purposes (Objectives)	27
P1B – Announcing the present research	14
Q2 – Announcing the main findings	4
[P2A – Presenting hypotheses or research questions]	5
P3 – Indicating the structure of the article	7
[P3A – Clarifying concepts]	14
[P4 – Summarizing the methodology]	7
[P5 – Reaffirming the value of research]	7

Source: Elaboration by the authors

The first observation to be made, considering the picture, is the unequivocal confirmation of the predictive power of the analysis model, with regard to the performance of the three rhetorical movements. In this sense, our data confirm that the introductions of scientific articles in the field of psychology generally follow a predictable pattern, according to conventions that permeate several other disciplinary cultures already studied from this perspective. In the sense that Swales (1990) and Kanoksilapatham (2023) use the term, we can say that the three rhetorical movements predicted by the CARS model are mandatory from the point of view of the authors of scientific articles in the field of psychology.

As for the rhetorical steps performed in each movement, although all of them are usually considered optional, we can argue that M1P3, "Reviewing previous research", deviates from this norm and can be classified as mandatory from the authors' point of view in our *corpus*, since it is the only recurrent step in all the texts. According to this data, the introduction of the article is a privileged and necessary place for dialogue with previous research on the theme that is intended to be addressed. The following is an example of this step, in which the theoretical framework of the work is evoked by means of a direct quotation.

Excerpt 1: M1P3 (A16) – Reviewing previous research

In the Marxist tradition to which we are linked, *as Siqueira (2014) further discusses*, poverty is understood not only as a manifestation of the "social question", but as "the result of the exploitative relationship between capital and labor inherent to the capitalist mode of production" (p. 246) [...]

With the accomplishment of this step, present in all texts, the authors of the disciplinary culture of psychology recognize the importance of discussing works that are related to the object of their research or that give theoretical support to it. In the excerpt, we notice that, in addition to citing an academically accredited source, the author values and explicitly links himself to the theoretical position of the cited researcher. According to our data, the mobilization of M1P3 indicates both the search for the legitimacy of the research and the intention to situate the proposed work within a broader "territory". The strategic use of references not only reinforces the credibility and relevance of the study, but also provides a solid basis for argumentation.

Still in the initial movement, another very frequent strategy was M1P2, "Making generalizations about the topic", present in 15 introductions, that is, in half of the texts. According to Swales (1990), this step tends to present more neutral or consensual general propositions, referring to knowledge, practices or phenomena. The following excerpt is an illustration of this strategy.

Excerpt 2: M1P2 (A26) – Making generalizations about the topic

Technological innovations are always accompanied by numerous feelings and perceptions by society. The internet and virtual social networks are a recent example of how such advents mobilize different thoughts and affections among individuals.

As can be seen, the statements contained in the excerpt seem to suppose a consensus in the discursive community, and the way they are presented suggests that there is no need for them to be substantiated.

In Movement 1, therefore, steps 3 and 2 constituted, with 30 and 15 occurrences respectively, the strategies preferred by the authors of the analyzed texts to situate their work in the territory selected for the research: reviewing previous research and making generic statements about the themes addressed. In this movement, M1P1, "Claiming centrality" is shown as an optional step, having occurred only 5 times in the *corpus*.

As for Movement 2, the most frequent strategy was, curiously, a step classified as optional in the model revised by Swales (2004). In our sample, 20 occurrences of M2P2 were verified, "Presenting justification", in which the realization of the proposed study is described as something positive and even necessary.

Excerpt 3: M2P2 (A12) – Presenting justification

For this reason, it is urgent to look at the psychological effects of the experience of social isolation, mothers often feel compelled to renounce pleasurable and self-care activities, which are relevant conditions for the maintenance of their physical and mental health.

We conjecture that the occurrence of this step in two-thirds of the texts, which would characterize it as "conventional" or "quite stable" (Kanoksilapatham, 2023), is due to the fact that the authors of the disciplinary culture of psychology consider it important to reinforce the need for the proposed research, in order to enable the achievement of the communicative purposes of the article. In other words, this rhetorical strategy not only contextualizes the study as relevant to the discipline, but also establishes its broader social and academic relevance. In the excerpt, the author, after presenting specific evidence from previous studies, uses the cohesive element "for this reason" to justify the urgency of his research. This rhetorical strategy establishes a direct relationship between the conclusions of the previous studies mentioned in M1P3 and the need for investigation of the proposed theme.

With 08 occurrences, another strategy of Movement 2, optionally mobilized in the texts to "establish a niche" for the research, was M2P1B, "Indicating a gap".

Excerpt 4: M2P1B (A10) – Indicating a gap

However, little attention has been given by the scientific literature to this important relationship [...] only one work was found [...]. Although it is known that the most negative images and the most blatant expressions of prejudice against blacks have changed in recent decades [...], there is not much empirical evidence on how these new contents of stereotypes are associated with explicit and implicit expressions of prejudice.

As can be seen, the step is introduced by an adversative connective and is marked by linguistic elements that signal insufficiency in scientific knowledge ("only one work"; "not much empirical evidence is available"). It is a powerful rhetorical strategy, in which the writer presents himself as someone who knows both the state of the art and the relevance of the topic he wants to study. The argument of this step follows as a predictable development of the establishment of the research territory via citation of previous works, carried out in Movement 1.

Completing the exposition and discussion of the most recurrent steps in Movement 2, we found M2P1C as another strategy valued by the researchers, also as 08 occurrences in the set of texts. According to Swales (1990), this step is characterized by posing a question or problem in the face of existing research, in order to legitimize the realization of a

new study on the subject. Excerpt 5, which occurs in the original text right after the reference to the theorist's thought on which the study is based, illustrates well how the step works.

Excerpt 5: M2P1C (A23) – raising questions

Would university discourse be the discursive modality that would best articulate the discursive impact of capitalism or would this fit the discourse of the capitalist proposed in 1972? *The formulation of this question in the form of an "or ... or "it's not what we take as a direction" [...]*

In the present case, the question is explained directly and marked by the question mark. Other times, the realization of this step can take place through an indirect question, as shown by Swales (1990). Here, however, the fact that the question will be treated as a research question is signaled even when the researcher declares that he will not "take it as a direction" to treat it as a question of yes or no.

Movement 3, "Occupying the niche", covers the strategies available for the researcher to present his proposal to fill the gap or answer the question raised in Movement 2. In our *corpus*, the preferred strategies were M3P1A, "Outlining purposes", the correlated M3P1B, "Announcing the present research" and M3P3A, "Clarifying concepts". The former was recurrent in 27 texts, while the latter had 14 occurrences each. Let's go to the examples and the respective discussion.

Excerpt 6: M3P1A (A17) - Sketching Purposes

Thus, *this article aims to* present and discuss the concept of professional representations, situating the reader on theoretical elements that distinguish them and bring them closer to social representations.

In the introduction of the research article, the performance of M3P1A, that is, the explanation of the objective of the research, is crucial information and, it seems to us, expected by the academic community, even as a way to make clear what distinguishes the proposed study from others already carried out. Among the various ways of stating the objective, some are more direct and well signaled linguistically. Our example illustrates this well when it clearly links "this article" to the term "objective." It should also be noted that the personification of the scientific article as an entity that "has" an objective, in a somewhat traditional formulation, in which the person of the author fades behind the language adopted. More indirect, but more personal, ways of outlining the objective were also detected in our *corpus*, such as when verb forms such as "intend" are used, indicating the authors' intention in relation to the study. It should be noted, however, that the use of the

first person plural does not necessarily indicate the existence of more than one author, but only the parsimony in using the first singular.

Excerpt 07: M3P1B (A5) – Announcing the present research

This text presents theoretical-practical considerations extracted from work developed at the postdoctoral level, linked to the research 'Transmission and Filiation', registered with the Research Ethics Committee [...], and based on recent doctoral research. We will start from the Freudian and Lacanian notions of 'helplessness' and the conception of 'specific action' [...]. The concepts mentioned will be discussed, applying them to the analysis of a case [...]

By opting for this strategy, which is recurrent in 14 introductions, the author of the article shows the reader what the research consists of, not outlining the objective, but describing the parts that textually compose the work, or even the steps followed in the research. With this, to a certain extent it anticipates, in the introduction, what the reader will be able to read in more detail in the body of the work. As a result, the authors eventually feel relieved of presenting a clearly defined objective for the study. However, our *corpus* presented a reasonable number of cases in which the two strategies cooccur in the same text.

To close the discussion of our highlights in Movement 3, we come to M3P3A, "Clarifying concepts", a strategy in which the author seeks both to guide the reader on the understanding of some technical term and to make clear the meaning in which he is using this term. Like the previous one, this strategy was used 14 times in our *corpus*.

Excerpt 08: M3P3A (A7) – Clarifying concepts

Altruism has been conceptualized in numerous and distinct ways (Rodrigues et al., 1999; Batson & Powell, 2003; Chou, 1996 [...]). Definitions change according to different variables, a heterogeneity that makes it difficult to define the term precisely [...]. One of the less subjective attempts to conceptualize the terminology arose from the study by Vilalva and Lohr (2019, p. 151), who sought to understand altruism as a learned behavior.

It is important to observe, in this example, how rhetorical strategies are not watertight stages in the construction of the research work. Rhetorical movements and steps are not grammatical or structural units per se, but functional units. They are not sentences, periods or paragraphs. Thus, in excerpt 08, the step "Clarifying concepts" (M3P3A) is intertwined with "Reviewing previous research" (M1P3) in the same syntactic structure, making it unfeasible to delimit the formal boundaries of each strategy. We recall, as appropriate, that some steps may be recurrent within the same text, configuring what Swales (1990) called

"cyclicity". This is what often happens with M1P3, which can be realized at several points in the same introduction.

FINAL CONSIDERATIONS

From the point of view of socio-rhetorical analysis of genres, the way in which each discipline culture conceives writing leaves marks on its texts, which can be identified, described and interpreted through the analysis of rhetorical movements and steps. In this study, the use of the CARS model (Swales, 1990; 2004) for the analysis of the rhetorical strategies mobilized in a set of texts of the disciplinary culture of psychology allowed us to offer a sample of the peculiarities of the area in the construction of the introduction section of scientific articles.

As this is an exploratory, qualitative study, based on a small-scale sample, it is not the case to offer generalizations. However, considering only the scope of our study, some observations can be made, including as clues for further investigations.

A more general, but no less relevant, observation concerns both the writing of the scientific article in psychology and the CARS model. The expressive confirmation of the occurrence of the three movements predicted by the model shows, on the one hand, that the scientific community of psychology shares many of the conventions in force in academia in general, with regard to the production of the scientific article and, in particular, of the introduction section. On the other hand, the results point to the analytical potential of the model, which in numerous studies has been instrumental in revealing regularities and instabilities in the writing of article introductions in various areas of knowledge.

The second observation is about the diversity of strategies mobilized by researchers for the weaving of rhetorical movements. The full range of 16 steps provided by the analysis tool is used at some point in the introductions, although the frequency of use of each strategy varies significantly. Specifically, the most used strategy was, as we have seen, M1P3, "Reviewing previous research", which was recurrent in all texts. Conversely, M2P1A, "Counter-arguing", occurred only twice as a strategy to establish the niche for the research. Considering all the occurrences, Chart 2 shows that only three steps occur between twenty and thirty times. Another three occur more than ten and less than twenty times, while the remaining ten steps occur less than ten times each. This fact is significant for the conception of gender as a construct that is both stable and malleable, conventional, but open to the writer's agency.

As for the most recurrent steps, it should be noted that one is distributed in each rhetorical movement of the introduction of the article in psychology. This result allows us to affirm that, according to our sample of texts, the preferential construction of the introduction of the research article in psychology requires, first, establishing a research territory that is very well grounded in the literature of the area (Movement 1); then, argue consistently about the need or relevance of the proposed study (Movement 2); and, finally, to clearly present the objective of the work (Movement 3). This would be the backbone of the introduction of the scientific article in the field of psychology, according to our data.

Still on the M1P3 rhetorical strategy, the only one hundred percent recurrent step in the *corpus*, it should be noted that, as verified in the study by Abreu (2016), many articles contained in our *corpus* do not have a specific section for literature review, which contributes to making the introductions of the articles more extensive and denser from the point of view of citations of previous research.

Finally, this study offers, according to the previously established objective, an exploratory view of the rhetorical organization of the introduction section in scientific articles in the disciplinary area of psychology, paying attention to the movements and steps performed in the texts, as well as to the linguistic clues that indicate them. Future studies can contribute to consolidate the results presented here, including adding to the analysis of movements additional methods that make it possible to capture, by means other than the texts, the purposes and communicative intentions of the discursive community in question.

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