


## The scientific dissemination of grammatical studies of Indigenous languages and their contribution to metalinguistic awareness/

### *A divulgação científica dos estudos gramaticais de línguas indígenas e sua contribuição para a consciência metalinguística*


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#### **ABSTRACT**

The central goal of this paper is to argue that the scientific dissemination of grammatical studies on Indigenous languages can promote the development of metalinguistic awareness among Portuguese speakers in their native language. In this sense, the text is propositive in nature; that is, based on our reflection, we establish suggestions for a research agenda and practical actions aimed at the popularization of grammatical studies. The article follows the following structure: initially, we address the scientific dissemination of Linguistics in the Brazilian context. Next, we discuss aspects of phonology, morphology, syntax, and semantics, based on data from four Indigenous languages: Makuxi (Karib), Kaingang (Macro-Jê), Ticuna (isolate), and Karitiana (Tupi). Once this stage is completed, we move on to demonstrate how to promote popularization. To stimulate reflection on language, we propose two dissemination strategies: one activity to be carried out in the classroom and one social media post aimed at popularizing linguistics.

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Through the combination of these stages, we propose that, as linguists, we incorporate the goal of developing metalinguistic awareness into our field's science communication strategies. Thus, we argue that a study such as this, which aims to disseminate grammatical studies on Indigenous languages to develop the metalinguistic awareness of Portuguese speakers in their native language, can contribute to the population's scientific literacy and to the educational context, especially in relation to writing.

**KEYWORDS:** Scientific dissemination; Indigenous languages; Grammatical studies; Scientific literacy; Metalinguistic awareness.

## RESUMO

O objetivo central deste artigo é defender que a divulgação científica de estudos gramaticais de línguas indígenas pode favorecer o desenvolvimento da consciência metalinguística dos falantes de português em sua língua materna. Dessa forma, este texto tem caráter propositivo, ou seja, a partir da nossa reflexão, estabelecemos sugestões para uma agenda de pesquisas teóricas e ações práticas voltadas à popularização dos estudos gramaticais. A condução do artigo obedece ao seguinte percurso: inicialmente, falaremos sobre a divulgação científica da Linguística em cenário brasileiro. Em seguida, tratamos de aspectos da fonologia, morfologia, sintaxe e semântica, tendo como base dados de quatro línguas indígenas: Makuxi (Karib), Kaingang (Macro-Jê), Ticuna (isolada) e Karitiana (Tupi). Concluída essa etapa, passamos a demonstrar de como promover a popularização. Na tentativa de instigar a reflexão sobre os usos linguísticos, propomos duas estratégias de divulgação: uma atividade a ser realizada em sala de aula e uma postagem de popularização da linguística em redes sociais. Por meio da combinação dessas etapas, propomos que façamos, enquanto linguistas, a inserção do objetivo voltado para o desenvolvimento de consciência metalinguística nas estratégias de divulgação científica da nossa área. Assim, defendemos que um trabalho como este, que visa disseminar estudos gramaticais de línguas indígenas para o desenvolvimento da consciência metalinguística de falantes do português em sua língua materna, pode contribuir para a alfabetização científica da população, para o contexto educacional, sobretudo na relação com a escrita.

**PALAVRAS-CHAVE:** Divulgação científica; Línguas indígenas; Estudos gramaticais; Alfabetização científica; Consciência metalinguística.

## 1 Introduction

The main goal of this paper<sup>1</sup> is to propose that the scientific dissemination of grammatical studies of indigenous languages can contribute to the development of metalinguistic awareness among Portuguese speakers in their native language. To defend this issue, we explore the themes of awareness of linguistic diversity in Brazil, the conditions of threat of extinction and preservation of languages; and, mainly, the linguistic research carried out in several scientific institutions in Brazil about this topic. It is worth mentioning, right at the beginning of our discussion, that we wrote this text thinking about its propositional nature, i. e., we will not present outcomes resulting from an experiment or study developed based on applied research. As mentioned above, our intention is centered on a proposal for reflection.

We start from the assumption that this dissemination is essential to deconstruct stereotypes regarding the grammars of indigenous languages. A classic example of this type of

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<sup>1</sup> We thank the anonymous reviewers for their comments on our manuscript that helped us to improve the final version of the text.

exotic view of languages, which, by extension, ends up being transmitted to the speakers themselves, is the myth that Eskimo language has numerous words to refer to snow, which would reveal their unique way of conceiving the world<sup>2</sup>. This is a fact that has, at the same time, based much discussion about the debate on the relationship between language and thought, but also stimulates the idea that the distinctions between languages represent a maximum difference between human groups.

Another exotic notion that is a popular topic in the 21st century regarding indigenous languages was the controversy surrounding the supposed lack of recursion in Pirahã, a language spoken by some Amazonian communities. The controversy, in this case, centered on the discussion of how this fact could or could not overturn the well-established hypothesis in contemporary linguistic theory that recursion is a universal property of human languages. Once again, the data was treated by the non-specialist public in a stereotypical way, shining the spotlight on a new community whose language would be unlike anything we have ever seen<sup>3</sup>.

In this paper, we are not interested in examining these two popular linguistic ideas about the languages spoken by the indigenous groups. Instead, we seek to highlight what they have (and do not have) in common with our language, thus contributing to deconstructing the view that these languages are exotic and full of properties that are almost incomprehensible to speakers of languages like Portuguese. At the same time, we understand that this movement also contributes to demystifying many prejudices directed at minority groups of speakers of indigenous languages in our country.

Additionally, we argue that presenting facts from different languages is a strategy that goes beyond clarifying the linguistic nature of these languages and can be very useful in improving the metalinguistic awareness of speakers of Portuguese as their native language. The main difficulties that prevent an increase in this reflection result from two factors. The first – of a more social nature – is well known and comes from the fact that Portuguese language classes are understood only as mechanisms for presenting classificatory instruments that are confused

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<sup>2</sup> We will not dwell on this idea, which has been called “linguistic determinism” or the “Sapir-Whorf hypothesis” and is now known as linguistic relativism. Our point here is not to argue against this idea, but to highlight how it ends up spreading a stereotypical view of native communities to society, which increases prejudice. For a discussion on the subject, we refer the reader to Martin (1986) and Pullum (1989).

<sup>3</sup> The truth is that the entire discussion about Pirahã was quite bad for the scientific dissemination of linguistics in general, since it presented the issue as the ultimate stereotype. We consider the insistent dissemination of the idea that there is a community that seems to lack properties that we consider unique and universal to our species (or would they not be human like us?) to be quite dangerous.

with correction rules, which creates a blockage between speakers and their own language, a linguistic insecurity.

The second – of a natural essence – comes from the fact that native language is the one that speakers use spontaneously in their daily linguistic activities, which can make it difficult – but not impossible – for it to be taken as an object of reflection and analysis. Let us think, for example, of the fable presented by Durant (2005), in which a frog asks a centipede how it walks (which part goes first and which part goes after), and the centipede is so disturbed by the question that it is unable to answer, since the act of walking is natural to it. We do not mean to say that the linguistic analysis of Portuguese would disturb speakers of this language, but that spontaneity, combined with the lack of appreciation that natural grammatical phenomena of orality have in the school environment, can make this process even more challenging.

This contradiction between the native language as an object so distant and artificial – if we consider the teaching of standard norms – and at the same time so close and natural – considering its internalized grammar – increases the challenge of developing speakers' awareness of their own language. To lead speakers to a reflective look at the language in which they are immersed, and promote the full development of writing skills, we seek to explore this natural factor that speakers are immersed in their languages, redirecting their gaze after reflecting on data from indigenous languages.

To do this, we will base ourselves on the field of knowledge of scientific dissemination (Bueno, 2010; Treulieb, 2020; Baronas, 2010; Hochsprung, 2023, and others), which we understand to be a great ally in this process. With this, we will present an illustration of an exercise and a posthumous Instagram post that can inaugurate a work agenda on the theme.

The text is structured as follows: in section 2, we discuss the scientific dissemination of linguistics, presenting a history of what we have done so far and what are the possibilities for a proposed work agenda; in section 3, we present grammatical aspects of indigenous languages that can be useful for understanding the diversity of possibilities found in grammatical systems; in section 4, we focus on metalinguistic awareness, detailing its importance for the empowerment of speakers with less linguistic insecurity and greater mastery of meaning effects in written language. Finally, we move on to the final remarks.

## 2 The scientific dissemination of linguistics

In this section, we present a brief history of linguistic scientific dissemination in Brazil, highlighting its challenges, limitations, and above all its advances in recent years. The aim is to present a brief overview to contextualize and support the dissemination proposal that we will defend. More than two decades ago, Faraco (2003) pointed out that public reach was one of the challenges for Linguistics in the 21st century:

[...] I think we should make an effort to gain public space. I mean, the impression one gets is that linguistic studies have not yet managed to cross the academic wall. These discussions are still very much confined to the academic universe, to the interior of academia. So, the general population is unaware of our themes and our ways of approaching them. (Faraco, 2003, p. 70, translation<sup>4</sup>)

Baronas (2010) also drew attention to the need for linguists to adopt the practice of scientific dissemination in our work. According to the author, the view disseminated in the media about natural languages contributes to linguistic prejudice and grammatical traditionalism that are not, by any means, defended by the scientific community.

However, the scenario has shown some changes. Sampaio (2017; 2018) illustrates some examples of how linguistics has been gaining space in social media nowadays, but the author points out that, until the end of the last decade, the dissemination was done, to a large extent, by people who were not language scholars or experts. We assume that being a scholar in an area is not a prerequisite, but the dissemination must be done in a serious and responsible way, presenting facts, concepts and studies that are scientifically based. This does not exclude, however, the need pointed out by Baronas (2010) to also hold linguists responsible for this action.

Since 2020, the Brazilian Association of Linguistics (*Associação Brasileira de Linguística*, Abralín) has organized initiatives to promote discussion about the importance of popularizing our field. Examples of this are the event *Abralín em Cena 16*, which took place in 2021 and had dissemination as a central topic of discussion; the Roseta Magazine, which publishes texts for non-specialists; the creation of the Committee for the Dissemination and Popularization of Linguistics; and others. The National Association of Graduate Studies and

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<sup>4</sup> Original text: “[...] acho que nós deveríamos fazer um esforço no sentido de ganhar espaço público. Quer dizer, a impressão que se tem é que os estudos linguísticos não conseguiram ainda pular o muro da academia. Ainda são discussões muito presas ao universo acadêmico, ao interior da academia. Então, a população em geral desconhece os nossos temas e as nossas maneiras de encará-los. (Faraco, 2003, p. 70)”

Research in *Letras* and Linguistics (*Associação Nacional de Pós-Graduação e Pesquisa em Letras e Linguística*, Anpoll) is also concerned with this topic in events and discussions that encourage researchers to democratize access to their studies. For example, in 2024, there was the activity “Popularization of Linguistics: an urgent debate”, organized by the ANPOLL Working Group (GT) Description of Portuguese, in partnership with the GT Knowledge Transfer and Popularization of Linguistics of the Grad Program on Language Studies of the Fluminense Federal University (*Universidade Federal Fluminense*, UFF). This last GT also points to an attempt to institutionalize scientific dissemination and popularize linguistics within the scope of graduation programs at Brazilian universities.

In a parallel between the Brazilian and Portuguese scenarios, however, Cristóvão et al. (2022) present an interesting fact: here (in Brazil), it seems non-institutional initiatives have been more prominent, unlike what happens in Europe. During the pandemic that we have been facing since 2020, for example, many scholars made the internet their workspace and began to popularize linguistics on Instagram pages, YouTube channels, TikTok profiles, and other social media. Hochsprung (2023a; 2023b), aligned with the discussion proposed by Treulieb (2020), points to the internet as a favorable space for the dissemination and popularization of linguistics, since it can fulfill strategies to (i) ‘break the academic bubble’; (ii) present behind-the-scenes of a researcher’s life; and (iii) promote scientific interactions about data on studies (in our case, linguistic studies). Specifically dealing with grammatical studies, an example is the report by D’Almeida et al. (2024), which presents studies on a common syntactic structure in Manaus/AM (the duplication of the pronominal subject to the right, as in “*Eu vi o João, eu*”) were published and discussed on Instagram. Therefore, one of the spaces that we will explore in our dissemination proposal will be the internet, more specifically, Instagram.

We assume that understanding linguistic studies, however, is not the only skill to be developed among those who want to popularize language sciences. Scientific knowledge is as important as having a command of how this popularization can be done. To understand the different ways of disseminating science and to situate dissemination strategies such as the one we are going to propose, we first mobilize the work of Bueno (2010), who identifies four differences between what he calls scientific communication and scientific dissemination. While the latter targets a broader audience, the former is directed at specialists in a specific area. These distinctions extend beyond audience differences to include the nature (places), language uses and intentions. Communication tends to occur in spaces more restricted to academia, such as

journals, conferences and symposia, while dissemination is present in more mass media, such as television, the internet and popular magazines. Target audience and nature determine different discursive strategies.

A clear example of this is the use of jargon. For the academic community, it is appropriate to use metalanguage without going into too many explanatory loops, since a common notion of terminology is assumed among peers. When the discourse is aimed at non-specialists, the use of 'jargon for free' (cf. Gawne; McCulloch, 2023) is not appropriate, requiring explanations, examples and/or contextualizations that lead to a broader understanding of the concepts used. Furthermore, the two practices encompass different goals. Communication promotes scientific advances and the sharing of new discoveries for the field, while dissemination aims at other actions, such as dissemination of information, fostering curiosity and entertainment.

Then, it is clear that communication and dissemination have different intentions. If we focus exclusively on dissemination, we can also think that it can serve many purposes and has many reasons to be practiced and valued. Baumgarten (2011) says that more important than thinking about the way we disseminate science, we have to think about the reasons why we do it. In linguistics, we can list several objectives, as Lynne Murphy (2023) has already done, arguing that this practice can avoid prejudices and harmful linguistic ideologies; reach professionals from other areas who can benefit from linguistic studies; contribute to the educational context; and entertain and increase public knowledge about languages. Furthermore, we understand that dissemination can: (i) demystify language myths; (ii) foster interest in Letras<sup>5</sup> courses; (iii) present scientific methodology; and, as we argue in this article, based on Pires de Oliveira and Quarezemin (2016) and De Conto, Sanchez-Mendes and Rigatti. (2022); (iv) contribute to the metalinguistic awareness of speakers (Franchi, 2006). We will address this topic in more depth in section 4, where we focus on the issue of metalinguistic awareness with our proposed examples of dissemination. Before that, we present some grammatical studies of four indigenous languages that we consider illustrative to the proposal we defend.

### 3 Grammatical studies of indigenous languages

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<sup>5</sup> In Brazilian Portuguese, we call "Letras" course the undergraduate programs that are focused on Linguistics and Literature.

The aim of this section is to present a careful selection of grammatical facts from indigenous languages spoken in Brazil that are examples of linguistic themes that we consider important for the discussion of the metalinguistic reflection that we want to explore below. In particular, we have looked for phenomena that could explicitly dialogue with aspects of Brazilian Portuguese. Additionally, we took care to base ourselves, whenever it is possible, on publications by researchers who are speakers of the languages being illustrated, aiming to promote their protagonism. The section is structured based on Othero (2017), whose text aims to demystify the idea that indigenous languages are rudimentary. It firstly describes the linguistic diversity situation in Brazil and then presents examples of grammatical aspects of indigenous languages at the phonological, morphological, syntactic and semantic levels.

The first myth that needs to be overcome regarding indigenous languages is their supposed uniformity. As Othero (2017) points out, there is no such thing as “the language of the indigenous”. The fact that the *Tupinambá* figure is always present in history books and in the few mentions of indigenous peoples, both inside and outside the school context, has led to the false idea that there is a certain ethnic, social, cultural and linguistic unity in Brazil. Rodrigues (1993) stated the existence of 220 indigenous groups speaking 180 different languages. This is a widely accepted number today, although, as Moore (2011) points out, a more detailed study of these languages based on a criterion of mutual intelligibility could reduce this total to 150. This is so because groups usually emphasize their linguistic differences due to social and political factors. Moore (2011) illustrates this difficulty, for example, with the case of the Zoró and Gavião, languages spoken in Rondônia, which could be described as dialects of the same language and not as different languages.

The plurality of criteria for defining whether to consider two varieties as two dialects of the same language or as two different languages can be fruitful in promoting metalinguistic awareness among speakers about their own dialect and how it fits into the national linguistic unity. Generally, when the theme of scientific dissemination focuses on linguistic variation, the materials are usually focused on the cause of combating linguistic prejudice, which is quite natural considering the importance of the topic. However, we believe that discussing the relationship between linguistic varieties of other languages can help to put into perspective the fact that all Portuguese speakers speak one dialect and that deciding the criteria based on which different dialects could be considered distinct languages is not an easy task and involves many

social and political aspects. This type of reasoning can contribute, for example, to a more mature debate about the relationship between Brazilian Portuguese and the European variety.

Besides the issue of the number of languages, another fact that deserves to be highlighted is the small size of the population of speakers of these languages. Rodrigues (2005) already pointed out that 76% of them have less than a thousand speakers, which emphasizes their big disappearance threat. This topic is urgent and also deserves to be explored in different media. However, it is worth noting that, more recently, many revitalization actions have been carried out in different contexts in Brazil, in which the case of Pataxó is the most emblematic. For an overview of these projects, we recommend the volume organized by Franchetto (2017).

Linguistic diversity is not only characterized by the number of languages, but also by their genetic differentiation. In Brazil, we have two major linguistic groups: Tupi and Macro-Jê. Each of these groups is subdivided into several linguistic families, which group together several languages. Tupi-Guarani, for example, which many people think is a single language, is actually a family of languages belonging to the Tupi group. In addition to these groups, we also have dozens of linguistic families, such as Aruák, Karib, Pano, Tukano, Yanomami, etc. There are also isolated languages, which are not related to any other language currently known. Thus, it is no exaggeration to say that the indigenous languages spoken in Brazil can be as different as Brazilian Portuguese is from Chinese or Russian, for instance.<sup>6</sup>

To illustrate grammatical aspects of this diversity, we selected data from four languages that attempt to encompass this diversity as much as possible, two of which represent the two major families (one Macro-Jê and one Tupi), one representing a large family (Karib) and one isolated language. From each of them, we selected an aspect from one of the levels of linguistic analysis as follows: phonological aspects in Makuxi (Karib); morphological aspects in Kaingang (Macro-Jê); syntactic aspects in Ticuna (isolated); and semantic aspects in Karitiana (Tupi).<sup>7</sup>

From a phonological point of view, it would be possible to illustrate characteristics of languages that have a different inventory of phonemes than ours (as in the case of the high central vowel [i] that is present in many indigenous languages and is normally spelled with <y> or <ü>, as is the case of Ticuna, which will be illustrated below), or even highlight suprasegmental

<sup>6</sup> One of the best materials we have for promoting this topic in Brazil is the Instituto Socioambiental (ISA) website: <https://mirim.org/pt-br/linguas-indigenas/troncos-familias>.

<sup>7</sup> We know that semantic aspects are not always considered as a level of linguistic analysis, but rather a criterion at the service of other levels. However, we assume that semantics is an independent level of analysis (Gomes and Sanchez-Mendes, 2018) and we want to value the research on semantics of the Karitiana language that stands out at national and international level.

properties of some of them, such as the existence of tonal languages (as cited in Othero, 2017). However, one point we would like to describe is the relationship between phonology and orthography, highlighting the difficulties of transposing orality into written form.

In Makuxi, for example, there is a rule for the sonorization of the consonant phonemes /p/, /t/, /k/, which occur as [b], [d], [g] when preceded by elongated vowels, nasalized vowels or the glottal consonant (Cunha, 2004; Raposo and Cruz, 2016). The examples below illustrate this phonological rule:

Ch. 1: Data in Makuxi

Writing	Phonetic Transcription	Translation
paapa	[paaba]	daddy
pîreetî	[pîreedî]	chilblain
pimiika'	[pimiiga']	to spicy
manka	[manga]	to transport
Arenta	[arenda]	to grow
Inkamoro	[ingamoro]	they
u'pu	[u'bu]	my foot
a'ta	[a'da]	hole
a'ka	[a'ga]	light

Font: prepared by the authors based on data from Raposo and Cruz (2016)

These data illustrate the difference between phonetic and phonological writing. Makuxi writing follows a phonological criterion, since consonants are written with the letters <p>, <t> and <k>, as can be seen in the left column of the chart. In the language, there is a predictable phonological rule that sounds these consonants in these particular environments. Therefore, in the middle column, these consonants are realized as [b], [d] and [g].

Presenting phenomena of this nature to the general public is useful to demonstrate that it is not always easy to consolidate an orthography based on phonological criteria. For this reason, this topic is always in dispute.<sup>8</sup> Speakers of Brazilian Portuguese, for example, often demand an orthography that is closer to speech, highlighting certain difficulties due to their distance (Cagliari, 2009). However, it makes no sense to propose an orthographic renovation that, for example, records *a-z bola-s* 'the+plural ball-plural' instead of *a-s bola-s* 'the+plural ball-plural' because of

<sup>8</sup> For examples of disputes over orthographic agreements for indigenous languages, see Franchetto (2008).

the sonorization that occurs in this environment. This would be excessively marking the difference and creating a distinction with cases such as *a-s casa-s* ‘the-plural house-plural’, in which sonorization does not occur.

Furthermore, an extralinguistic aspect would be involved, since not all speakers pronounce this final <s> as [s], but as [ʃ], which would be sonorized as [ʒ] in this environment. Thus, we do not want to argue that speakers from Rio de Janeiro would write in a way that is so different from speakers from São Paulo, for example. At this point, we can see how close we are to the Makuxi and their phonological writing reasoning. Just as the Makuxi do not need to signal predictable sounding rules in writing, neither do we.

From a morphological point of view, we could illustrate the possibilities of different morpheme positions in languages, as Othero (2017) did. However, at this point, we also want to bring up a dialogue between morphology, syntax and semantics based on the Kaingang (Macro-Jê) data present in the thesis by Nascimento (2017), an indigenous doctor from the Federal University of Rio de Janeiro (UFRJ). In the example in (1) and (2), we see that verbs in Kaingang can assume reduplicated forms. *rěnrěn* in (1b) is the reduplicated form of *rěn* in (1a) and *sĩnsĩn* in (2b) is the reduplicated form of *sĩn* in (2a).

- |     |    |                                    |     |                       |       |                      |
|-----|----|------------------------------------|-----|-----------------------|-------|----------------------|
| (1) | a. | Kakaně                             | tóg | <b>rěn</b>            | hori. |                      |
|     |    | fruit                              | NUC | ripen.SG              |       | already <sup>9</sup> |
|     |    | ‘The fruit has already ripen’      |     |                       |       |                      |
|     | b. | Kakaně                             | tóg | <b>rěnrěn.</b>        |       |                      |
|     |    | fruit                              | NUC | ripen.RED             |       |                      |
|     |    | ‘The fruits have already ripen’    |     |                       |       |                      |
| (2) | a. | Mỹrinh fi                          | tỹ  | Karenh <b>sĩn.</b>    |       |                      |
|     |    | Maria F                            | NUC | Karenh kiss           |       |                      |
|     |    | ‘Maria kissed Karenh’              |     |                       |       |                      |
|     | b. | Mỹrinh fi                          | tỹ  | Karenh <b>sĩnsĩn.</b> |       |                      |
|     |    | Maria F                            | NUC | Karenh kiss.RED       |       |                      |
|     |    | ‘Maria kissed Karenh várias vezes’ |     |                       |       |                      |

(Nascimento, 2017: 46)

<sup>9</sup> Abbreviations: NUC = sentence nucleus; SG = singular; RED = reduplication; F = feminine.

In the examples above, the translations give us clues about the semantics associated with this morphological reduplication. In pair (1), the non-reduplicated form is associated with the translation ‘has ripen’ while the reduplicated form is associated with the form ‘have ripen’. In English, we would say that this is a way of marking the plural number of the verb, which is an agreement with the subject. Interestingly, unlike English, which expresses the plural in *fruits*, in Kaingang, the subject of the verb marked for plural, that is, the reduplicated form, has the same form as the subject in the singular sentence (1a). This seems to indicate that only the verb marks the plural in this language (which is usual in other indigenous languages). The data in (2) reinforce this hypothesis, since they have proper nouns as arguments, that is, that are singular. The reduplication in (2b), in this case, marks not a plural of agreement with the subject, but a plurality of events of kissing.

Thus, the Kaingang data show a morphological peculiarity of some indigenous languages, the presence of reduplicative morphemes. In Brazilian Portuguese and in English, we can repeat the whole verb to express an effect of intensity, as in *andei, andei, andei* (I walked, I walked, I walked). However, in Brazilian Portuguese, this repetition does not have a morphological status as in the indigenous languages mentioned. Another interesting comparison regarding this plural morphology is its different morphosyntactic nature among these languages. In English and in Portuguese, the person and number marker in the verb indicates agreement, that is, it has no impact on verbal semantics, unlike mood and tense morphemes. In Kaingang, in turn, the plural has a direct impact on verbal semantics, indicating a plurality of events. In this sense, we would not say that, in Kaingang, reduplication has the status of agreement.

From a syntactical point of view, Othero (2017) highlighted the possibilities of ordering constituents in sentences by showing languages with orders that are different and distinct from the one found canonically in Portuguese. In this text, we illustrate another property linked to word order, which is the occurrence of postpositions. To do this, we will use data from Ticuna (isolated) present in Carvalho Neto (Atchigücü) (2019), a speaker of this language and a master in linguistics from the Museu Nacional/UFRJ.

In (3a) below, we show that the phrase that is translated in Brazilian Portuguese as *na sorva* (*at sorva*, an amazonian fruit), in Ticuna, presents the gloss ‘sorva-LOC’, indicating that, in this language, the locative marker is postpositional, that is, in Ticuna it is said something like

“sorva in”. In (3b), we see the same phenomenon with the phrases in Ticuna *petchinü-wa* glossed as ‘border-LOC’ and *ngateü-wa* glossed as ‘ravine-LOC’.

- (3)    a.    Ga                    nucüma-cü                    nge’tchi-wa            tcha-puracü  
               PART(PASS)    formerly-NMLZR            sorva-LOC            1P-work  
               ‘I used to work at sorva’
- b.    Petchinü-wa    ga                    rü            ngateü-wa  
               border-LOC    PART(PASS)    TOP            ravine-LOC  
               ‘on the edge of the ravine’

(Carvalho Neto (Atchigücü), 2019: 26-27, adapted example)<sup>10</sup>

The Ticuna data help us to reflect on the syntagmatic relationship between lexical and functional words. In Portuguese classes, it is common for students to have difficulty analyzing prepositional phrases due to the grammatical nature of these constituents. For example, it is common for students to analyze the indirect transitive verb in sentence (4) as *gosta de* (‘like PREP) and its complement as *chocolate*, indicating that the preposition would be part of the verb and not of the complement phrase. However, we know that, although the preposition, in this case, is required by the verb, it constitutes a phrase together with the complement [*de chocolate*]. That’s how it is. So much so that, in postpositional languages, we would expect to find something like [*chocolate de*]. We understand that syntagmatic awareness is a crucial factor for the full development of metalinguistic awareness, since it promotes mastery of the structuring of a language.

- (4)    João    gosta    [de    chocolate].  
           João    likes    PREP    chocolate

Finally, we bring an illustration of a semantic property of Karitiana (Tupi), the indigenous language which has been mostly studied from this perspective. Semantics is not an area of

<sup>10</sup> For the sake of simplification, we removed the phonetic transcription of the data and kept only the orthographic transcription. Abbreviations: PART = particle; PASS = past; NMLZR = nominalizer; LOC = locative; 1p = first person; TOP = topic marker.

description as widespread as phonology, morphology and syntax. For this reason, it is not even represented in Othero's text (2017). That is why we would like to highlight this point in this text.

Karitiana is a representative language with regard to the occurrence of nominal phrases without functional material in argumental position. Like some other indigenous languages spoken in Brazil, it does not have articles or quantifiers in the determiner position. Furthermore, the nouns do not present morphology of any kind, such as gender, number or case. Thus, the sentence below can be translated by all the nominal options presented, since it literally only says something like “Man ate snake”.

- (5)    Taso    naka-'y-t                      boroja  
         man    DECL-comer-NFUT                      snake<sup>11</sup>  
         'The/a/some man/men ate the/a/some snake(s)'

(Müller, Storto, Coutinho-Silva, 2006, 189)

The big theoretical discussion that data like this raise is how these languages express some types of reasoning that we assume to be universal, such as those involved in universal quantification. In a semantic approach that is epistemologically connected with logical philosophy, it is expected that all languages are capable of expressing a syllogism like the one illustrated in (6).

- (6)    a.        Every man is mortal.  
         b.        Socrates is a man.  
         c.        Socrates is mortal.

In the syllogism above, we have a valid conclusion in (6c) derived from the true premises in (6a) and (6b). The question, then, is whether languages that do not have words for a universal nominal quantifier such as *every* could be capable of expressing this type of quantification. Or, in other words, how universal would this type of logical reasoning be? As much as the idea of having found a language so different from anything we have ever seen and immediately

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<sup>11</sup> Abbreviations: DECL = declarative mood; NFUT = non-future.

postulating new perspectives may seem appealing<sup>12</sup>, actually, it is possible to approach this challenge from another angle: assuming that this type of reasoning is universal, what would be the form of expression of universal quantification in a language without quantifiers in the determiner position? Müller, Storto and Coutinho-Silva (2006) showed that, in Karitiana, universal quantification is expressed by a subordinate clause, as illustrated in (7). The phrase that constitutes the object of the verb *to shoot* does not have a determiner, but expresses the semantic notion of universality with a relative clause that literally denotes something like ‘pigs that are/are/exist’, that is, all pigs.<sup>13</sup>

- |     |          |          |                     |                    |
|-----|----------|----------|---------------------|--------------------|
| (7) | Sojxaaty | aka-tyym | na-pon-pon-Ø        | João.              |
|     | pig      | be-SUB   | DECL-shoot-RED-NFUT | João <sup>14</sup> |
- ‘João shot in all pigs’ (lit: ‘João shot in pigs that are/are/exist’)
- (Müller, Storto, Coutinho-Silva, 2006, 194)

Thus, we see that Karitiana, although not having a quantifier word in the determiner position, has a grammatical structure to express the same logical meaning. This led Sanchez-Mendes (2006) to classify Karitiana as a language that does not have determiner quantification, called D-quantification in the literature (Partee et al., 1987), but only adverbial quantification, called A-quantification.

One of the possible benefits of presenting data like Karitiana's for speakers of other languages, such as Brazilian Portuguese, is to show that languages can have different grammatical mechanisms to express identical or very similar logical content. In the case of quantification, specifically, for example, this type of data can help to illustrate the notion that, in Brazilian Portuguese, quantifiers that appear in the determiner position can, in some cases, be replaced by quantificational adverbs, as can be seen in the illustration below, which associates the semantics of a sentence with an adverb and a nominal quantifier.

<sup>12</sup> See, for example, the discussion of the controversy based on Daniel Everett's publications.

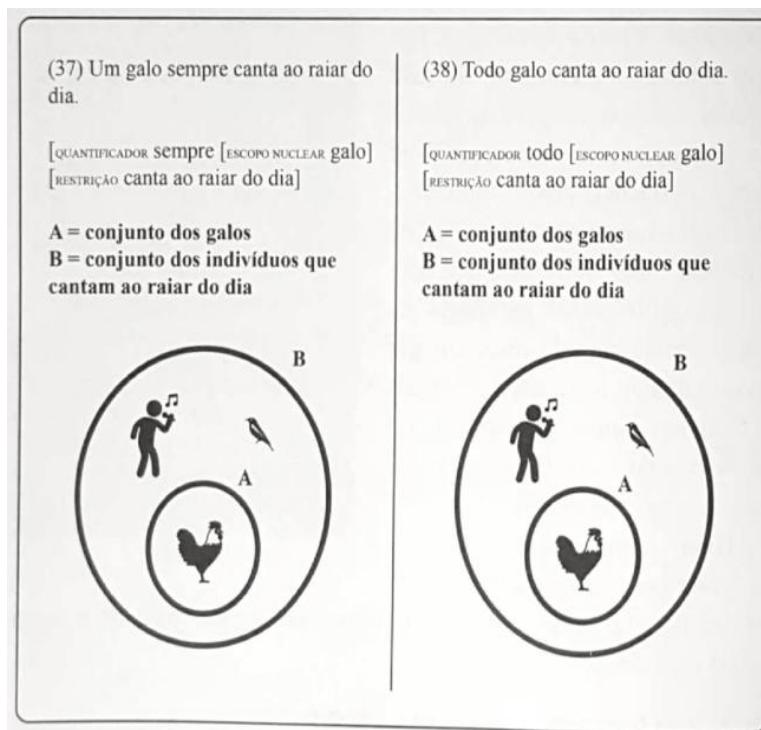
<sup>13</sup> *Sojxaaty* is actually the species *Tayassu pecari* (scientific name), which is translated to English as *white-lipped peccary*. We used *pig* at the data translation to simplify.

<sup>14</sup> Abbreviations: SUB = subordinator; DECL = declarative mode; RED = reduplication; NFUT = non-future.

Fig. 1: Universal quantification by adverbs and nominal quantifiers

A rooster always crows at sunrise. / Every rooster crow at sunrise

A = set of roosters / B = set of singers at sunrise



Source: adapted from Gomes e Sanchez-Mendes, 2018, p. 184

Having provided this overview of the linguistic properties of indigenous languages that may be useful for discussing grammatical phenomena in Brazilian Portuguese, in conjunction with the debate on the scientific dissemination of linguistics previously discussed, we will address, in the next section, the development of metalinguistic awareness based on these discussions above.

#### 4 Metalinguistic awareness in focus

In this section, we highlight the advantages of presenting a method that promotes metalinguistic reasoning. The argument that the scientific dissemination of grammatical aspects of indigenous languages can be useful for the development of metalinguistic awareness among speakers of Brazilian Portuguese is a legitimate concern and it is supported by arguments that can be broken down into two levels: (i) school; and (ii) scientific literacy.

Regarding the first level, we know that, traditionally, students see language classes as mere reproductions of instructions on proper usage and correction. This creates in speakers a posture described in the literature as linguistic insecurity (Labov, 1966), in addition to paralyzing speakers in their daily and professional activities involving writing. In this sense, we assume that speakers with refined metalinguistic awareness have greater mastery of writing, because they go through a phase of systematically controlled reflection based on data manipulation. An example of a proposal in this sense is the method discussed by Franchi (1987), which combines linguistic experimentation in epilinguistic activities with semantic reflection and metalinguistic systematization. Franchi's idea is that grammar classes should involve reasoning that goes beyond instrumental technical knowledge, but that is at the service of the speaker's creative needs.

This classic Franchi's proposal is in line with what some researchers defend, such as Pires de Oliveira and Quarezemin (2016), Tescari Neto (2017), Hochsprung (2022), Othero and Folharini (2024), who, regarding the teaching of grammar in a school context, assume that knowledge about grammatical theory is fundamental for the metalinguistic mastery of language. At this point, it is necessary to make it clear that there is a distinction between metalanguage and nomenclature, not only in conceptual terms, but also in terms of distinct teaching practices.

Nomenclature is encompassed within metalanguage, making them closely related processes, but they should not be confused. A study focused on nomenclature seeks to enhance methods of classification based on the memorization of "grammatical labels." Metalinguistic reflection, on the other hand, goes beyond mere labeling, as it involves recognizing systematic patterns in linguistic phenomena. Consequently, metalinguistic reasoning requires additional cognitive skills, such as segmentation, organization and paradigmatic reorganization, reproduction, and transformation of grammatical aspects.

We understand that metalinguistic reflection as a result of epilinguistic manipulation activities contributes beyond the more traditional grammatical aspects that are present in the levels of analysis of the so-called "core" of grammar (phonological, morphological and syntactic levels). We argue that the development of these different cognitive skills leads to a linguistic domain that has been called metacognitive (Maia, 2019; Pilati, 2024). We understand this domain as an ally of semantic reflection in the terms of Sanchez-Mendes (2024) that is mobilized in the interpretation and production of discourses.

Although the roles of scientific dissemination of linguistics and grammar teaching are distinct, we assume that it is possible to make some significant connections between them. First, for example, we recover Lynne Murphy (2023), who points out the contribution to teaching as one of the possible objectives of dissemination. Once focused on metalinguistic awareness and not on nomenclature, the scientific dissemination of grammatical studies can strengthen linguistic mastery in a school context.

However, we argue that linguistic dissemination would not only benefit Portuguese language instruction in schools but could also play a significant role in promoting scientific literacy. Pires de Oliveira and Quarezemin (2016) propose activities that introduce the scientific method — an analytical process involving data observation, hypothesis formulation, testing, and phenomenon analysis to reach sophisticated conclusions about grammatical studies. Drawing on Honda et al. (2010), the authors assert that working with grammar provides a valuable opportunity to demonstrate how much of science operates, as linguistic analysis can be conducted based on students' own intuition and reflection. In this context, metalinguistic reasoning is sharpened through scientific practice.

Expanding this perspective beyond the educational context and allocating it to scientific dissemination, we can think about our second topic, which is the process of scientific literacy, that is, starting from basic skills and knowledge about science, developing in people “the ability to organize their thoughts in a logical way and assist in the construction of a more critical awareness of the world” (Pires Martins, 2018: 31).<sup>15</sup> Scientific literacy, therefore, can also be a goal of scientific dissemination itself. We argue that this practice, when carried out within the science of language, contributes significantly to the metalinguistic awareness of people (even those who are no longer in school context).

For instance, in 2023, during the XXV Abralin Institute, an event preceding the XIII International Congress of the Brazilian Linguistics Association, one of the courses focused on demonstrating how grammatical data observation and analysis could be conducted with individuals who are not necessarily linguists. On this occasion, professors Richard Larson and Maya Honda presented, among other activities, an exercise developed by the linguist Filomena Sândalo (IEL-Unicamp), which focused on data from Kadiwéu (Guaikurú).

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<sup>15</sup> Translated from: “a capacidade de organizar seu pensamento de maneira lógica e auxiliar na construção de uma consciência mais crítica do mundo”.

In this activity, the pluralizing suffixes [-dĩ] and [-tedĩ] in Kadiwéu are presented through data sets. Participants were encouraged to observe these data and formulate hypotheses to explain the phenomenon of pluralization in the language, which is based on morphophonological patterns. They were also asked to consider potential counterexamples. This analysis requires metalinguistic reflection and some familiarity with the scientific methods. We believe this is an example of an initiative that can popularize not only linguistics but also scientific reasoning itself.

Inspired by the exercise made by Sândalo (2023) and based on data from Sanchez-Mendes (2017), we propose an activity whose focus is a set of semantic aspects based on data from Karitiana, in order to sharpen metalinguistic reflections.

### Problem set – verbs in Karitiana

Karitiana is an Indigenous language from the Tupi stock, Arikém family, spoken in Brazil. The Karitiana reserve is located in the western Amazon.

Some features of this language have drawn the attention of many linguists, including Ana Müller, a professor at the University of São Paulo (Universidade de São Paulo, USP), and Luciana Sanchez-Mendes, a professor at the Fluminense Federal University (Universidade Federal Fluminense, UFF). In one of their analyses, the researchers studied the behavior of verbs in the grammar of Karitiana.

Before sharing some findings, do you think you can come to maybe some similar conclusions? Let's go! Below, we have two sentences in Karitiana translated into Brazilian Portuguese.

Karitiana	Brazilian Portuguese
João <b>ipykynat</b> .	João <b>correu</b> . (John ran)
João <b>ipykynatpykenat</b> .	João <b>correu</b> mais de uma vez. (John ran more than once)
João <b>iosedn</b> .	João se <b>alegrou</b> . (John rejoiced)

João **iosednosedn**.

João se **alegrou** mais de uma vez. (John rejoiced more than once)

Source: Data from Müller e Sanchez-Mendes (2021)

As you may have noticed, the sentence structure in both languages is different. To make it easier, we have already highlighted the verb.

A) Based on these initial data, what is your hypothesis about the behavior of verbs in Karitiana?

*Expected answer: Here, we cannot require the person responding to have knowledge of nomenclature, such as "events." Therefore, we expect answers like: "The verb changes when the action happens more than once and we are sure of it." Other answers may arise and should be evaluated according to the description in Sanchez-Mendes (2017), which should be fully reviewed by the person applying the exercise.*

Now, observe the following sentence, part of the corpus of Luciana Sanchez Mendes (2017):

#Inacio **namangatmangadn** myhint Nadia ka'it.

This sentence is meant to mean, in Brazilian Portuguese, "Inacio levantou a Nadia uma vez hoje" (Inácio lifted Nadia once today). The verb is highlighted, *myhint* means "once", and *ka'it* means "today." However, the symbol # in front of the sentence indicates that it is not an acceptable sentence in Karitiana, meaning speakers would not say it, and if someone did, people would likely find it strange.

B) Why do you think this happens? Take a guess at how the sentence should be written to be correctly interpreted.

*Expected answer: Here, the expectation is that the person would say something like, "Because he lifted her only once. If he had lifted her two or more times, the verb could be in the form it is." So, the guess could follow something like, "Inácio mangat myhint Nadia ka'it," but for that, they should reason that it involves duplication. If they don't come to this conclusion on their own, the person applying this exercise can guide them toward this observation.*

Taking this into account, now observe some sentences in Brazilian Portuguese:

Carla pintou o mesmo desenho duas vezes. (Carla painted the same drawing twice.)

As meninas pintaram a casa em um dia. (The girls painted the house in one day.)

João caiu de bicicleta ontem. (João fell off his bike yesterday.)

Pedro e Paulo caíram enquanto estavam correndo. (Pedro and Paulo fell while they were running.)

Verbs in Brazilian Portuguese also change, right? The forms for singular and plural are not marked in the same way. Making a comparison with Karitiana, answer:

C) Do verbs in Brazilian Portuguese and Karitiana behave the same way regarding number marking?

*Expected answer: Here, it is expected that they understand that in Brazilian Portuguese, verbs inflect according to the number of participants in the action, while in Karitiana, the change occurs according to the number of times (events) the action is performed.*

It is important to mention that the exercise presented above must be adapted according to the context in which it is used. We understand, for example, that what was presented is more appropriate for the school context. Considering the popularization of linguistics in an extracurricular space, such as posts on a social media, there must be adaptations.

Taking this into account, we present below a post script for Instagram feed, thinking of a carousel of ten photos, in which each of the photos has the corresponding text in the following box. The theme is the same as the exercise proposed previously, but, because the nature (place) of the channel is different, some adaptations are necessary.

1	[Cover] Title: Not all languages are the same...
2	Have you ever gone to a friend's house and noticed differences and similarities with your own? The arrangement of rugs, the decor, the tiles... some things are very different, and others are quite similar. In natural languages, we can also observe differences and similarities. Today, let's talk about verbs in Karitiana. [Insert images of different houses]
3	Karitiana is an indigenous language from the Tupi stock, Arikém family, spoken in Brazil. The Karitiana reserve is located in the western Amazon. This is one of the few populations that have been growing in both population and settlements. [Insert

	authorized image of the Karitiana people]
4	Some features of this language attract the attention of many linguists. Among them are the linguists Ana Müller, professor at the University of São Paulo (USP), and Luciana Sanchez-Mendes, professor at the Fluminense Federal University (UFF). In one of their analyses, the professors studied the behavior of verbs in the Karitiana grammar. [Insert authorized images of the professors]
5	Here are some data in Karitiana and Brazilian Portuguese:  João <b>ipykynat</b> . (João correu.) - John ran João <b>ipykynatpykenat</b> . (João correu mais de uma vez.) - John ran more than once João <b>iosedn</b> . (João se alegrou.) - John rejoiced João <b>iosednosedn</b> . (João se alegrou mais de uma vez.) - John rejoiced more than once
6	Did you notice that the verb changes when the action happens more than once? If not, go back to the previous image and compare! It looks like there's a "duplication" of verbs in Karitiana, right? This doesn't happen in Brazilian Portuguese.
7	In Brazilian Portuguese, verbs do change between singular and plural, but the reason for this change is not based on how many times the action occurs but on how many participants are involved in the action.  João <b>correu</b> . (John ran) João e Pedro <b>correram</b> . (John and Peter ran)
8	The researchers observed these differences after a lot of field research, data collection, and linguistic analysis. If you want to act like a linguist too, pay attention to the next image >>>>

9	<p><b>#Inacio <u>namangatmangadn</u> myhint Nadia ka'it</b></p> <p>This phrase is meant to mean “Inácio lifted Nadia once today.” (In BP: Inácio levantou a Nádia uma vez hoje). The verb is highlighted, but the symbol # in front of the sentence indicates that it's not a good sentence for Karitiana grammar, meaning speakers wouldn't use it, and if someone did, it would probably sound strange.</p> <p>Why do you think this happens? Leave a hypothesis in the comments about how this sentence should be written to be properly interpreted.</p>
10	<p>To learn more:</p> <p>[Images from the reference articles]</p>

If we compare the exercise with the post script, we will notice some differences. First, the exercise presents a question-and-answer dynamic that helps the teacher to guide the knowledge construction as the questions are answered. In the post, there is only one challenge to answer, in image 9. The goal, in this context, in addition to the construction of knowledge and linguistic analysis, is engagement with the scientific dissemination content.

When we think about a post on Instagram, the choices must also be justified as communication strategies. Taking as a basis what we presented in section 3 of this article, we can think, considering Bueno (2010), that Instagram is a nature (place), in the sense of a 'communication channel', that reaches a wide audience using a language appropriate to this channel. In addition, Treulieb (2020) determines that one of the advantages of the social media is scientific interaction.

It is possible to notice, in the script, the usage of direct, simple and audience-directed language, intending to capture the reader's attention. From image 1, with the title 'Not all languages are the same...', we already aim to attract the reader's curiosity. It's likely that the person reading knows this, but doesn't know which languages we are talking about or what characteristics we will address. This could make them swipe to the second image.

In image 2, we present a daily situation to help the reader start identifying themselves with the content they are reading. This familiarization continues in images 3 and 4, which serve to contextualize the content that will be presented. In image 3, we introduce the language we are going to study, and in image 4, the people who are the foundation of our post. It is almost like the structure of a scientific article: introduction, theoretical framework, and so on. The difference lies, among many other things, in the language. Notice how we mention the names of professors Ana

Müller and Luciana Sanchez-Mendes. It is quite different from what we are used to see in academic papers.

We must consider that the audience of scientific dissemination is usually not familiar with academic language and may not recognize that the structure “Surname (Year of publication)” refers to someone who studied the topic and their respective publication. This could distance the audience. Additionally, the way we described the scientists helps to humanize them, providing information about their workplace and how their curiosity led to some discoveries. This is also emphasized in image 8.

The data are presented and discussed in images 5, 6 and 7. It is essential for a scientific dissemination post on grammatical studies to include data from the languages presented, as this allows the reader to visualize the content in a dynamic way. It is also important to note that in these images, the data is not presented in the same way as in scientific articles. Just compare it with section 3, in which we present data from some indigenous languages accompanied by glosses and information that would fit in this publication, but not in an Instagram post.

Furthermore, it is in this section (thinking about the linguistic comparison seen in the exercise presented earlier) that we highlight the proposal we defend in this text: the development of metalinguistic awareness in Brazilian Portuguese speakers through Indigenous languages. Without adhering to traditional grammatical approaches – whether in school contexts or on the internet – we provide information about verbal agreement after all. This information was presented in a dynamic, comparative, and scientifically grounded manner. Beyond knowledge dissemination, we can also stimulate the curiosity of those who engage with the content and/or respond to the exercise, who might want to continue researching related topics.

Following the same “ABNT escape” that we did when citing the authors, it is also preferable that we do so when presenting the references – as in image 10. Images of publications can be more dynamic than structuring them according to the rules. An alternative would also be: “Article title – written by scientist 1 and scientist 2 (year)”.

These strategies should be accompanied by an attractive and eye-catching design, as well as a caption that proposes that fosters a good dialogue between the content creator and the audience. It is also extremely important to think of ways to make the content accessible to people with visual impairments. Instagram has advanced alternative text tools to describe each of the images.

We will make a final reflection on this and other issues in the closing section below.

## Final remarks

In this paper, we have argued in favor of the potential contribution of presenting data from indigenous languages to fostering unbiased linguistic reflection of Brazilian Portuguese speakers. In our perspective, this awareness, if well developed, contributes to the examination of our own native language (and other languages) as a legitimate object of analysis. In this sense, we have proposed, in this text, a work agenda and a call for future actions aimed at popularizing grammatical studies through indigenous languages.

In summary, we based our reflection on the discussion about the scientific dissemination of Linguistics in the Brazilian context and on the selection of data from four indigenous languages from distinct families (Makuxi, Karib; Kaingang, Macro-Jê; Ticuna, isolated; and Karitiana, Tupi). Our proposal, by uniting these two fronts, is precisely to think that the development of metalinguistic awareness should be part of the main goals of disseminating linguistics.

Therefore, we have developed two ways to present this dissemination: a knowledge-building exercise and a social media post. These strategies must, of course, be adapted according to the context in which they will be carried out. We do not offer here a protocol that will work in all possible environments. This is perhaps one of the difficulties of scientific dissemination, an activity that requires planning, organization, study, sensitivity and time. Furthermore, we are aware that we still have many other challenges to face, such as the lack of policies aimed at popularization within our field, the still brief discussion by scholars when it comes to the subject and the still timid attempt to train disseminators.

However, we also understand that this publication can also be a stimulant for capturing new ideas so that we can think of strategies to develop a work agenda thinking about the dissemination of grammatical studies despite the challenges. Thinking about the training of disseminators, one of the paths could consist of creating research/extension projects that allocate vacancies to students who are responsible for the dissemination and popularization sector. Thus, these people would plan and organize ways to disseminate what the group studies to a wider community, studying and preparing scientific dissemination materials.

Furthermore, another strategy, already adopted by some university professors, such as Luana de Conto (UFPR), Helena Guerra Vicente (UnB), Márcio Martins Leitão (UFPB), Luciana

Sanchez Mendes (UFF) and Cristiane Lazzarotto-Volcão (UFSC), would be to include activities and projects in the disciplines aimed at developing materials for the dissemination and popularization of Linguistics. Personal initiatives are also welcome, as long as they are done responsibly, understanding that scientific dissemination is, in addition to a practical activity, an area of knowledge.

Based on what has been presented in this article, we believe that it is not trivial to include the development of metalinguistic awareness among speakers among the goals of disseminating and popularizing our field. However, we argue that one way to do this is to present grammatical data from languages other than Brazilian Portuguese. Indigenous languages, as we have seen, are great allies in this regard.

We hope that this publication can start this research and dissemination agenda.

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## Referências

- ANTONO, G., MAKUSI, F. F. M.; COSTA, I.C.; LIMA, S. Pluractionality of events in Macuxi: a morpho-syntactic and semantic analysis. *Languages*, v. 8, n. 4, 225, p. 1-16, 2023.
- BARONAS, R. L. Da necessidade premente de se cometer uma política de divulgação científica qualificada dos trabalhos da lingüística do Brasil. *Revista da Anpoll*, v. 1, n. 29, 2010.
- BAUMGARTEN, M. Divulgação e Comunicação pública de Ciência e Tecnologia. IV Simpósio Nacional de Ciência, Tecnologia e Sociedade. In: *Anais do IV Simpósio Nacional de Ciência, Tecnologia e Sociedade*, Curitiba, 2011, p. 1 – 9.
- BUENO, W. C. Comunicação científica e divulgação científica: aproximações e rupturas conceituais. *Informação & Informação*, v. 15, n. 1 (esp), p. 1-12, 2010.

CAGLIARI, L.C. Aspectos Teóricos da Ortografia. In: SILVA, M. (org.) *Ortografia da Língua Portuguesa: história, discurso, representações*. São Paulo: Contexto, 2009.

CARVALHO NETO (ATCHIGÜCÜ), D. *Formas linguísticas em Ticuna de apontar e conhecer: narrativas e prática escolar*. Dissertação de Mestrado em Linguística e Línguas Indígenas, Museu Nacional, Universidade Federal do Rio de Janeiro, Rio de Janeiro, 2019.

CRISTOVÃO, V. L. L.; FERREIRA, L.; CARDOSO, I.; PEREIRA, L.; AMBRÓSIO, S. Uma cartografia da divulgação científica em ciências da linguagem no Brasil e em Portugal. *DIACRÍTICA*, Vol. 37, n.º 1, 2023, p. 284–309. DOI: doi.org/10.21814/diacritica.5400

CUNHA, C. M. *Um estudo de fonologia da língua Makuxi (Karib): Interrelações das teorias fonológicas*. Tese de doutorado, Universidade Estadual de Campinas, 2004.

D'ALMEIDA, D. H. S.; HOCHSPRUNG, V.; GUESSER, S.; QUAREZEMIN, S. O redobro pronominal no final de sentenças na fala manauara: estratégias de divulgação científica e popularização da linguística. In: OLIVEIRA, L. C. et al (org.). *Letras Pós-Humanas: Linguística e Ensino de Línguas como Questão*. Campinas: Pontes Editores, 2024.

DE CONTO, L.; SANCHEZ-MENDES, L.; RIGATTI, P. C. Quando o falante faz Linguística. *Cadernos de Linguística*, v. 3, n. 2, p. e653-e653, 2022.

DURANT, J. O que é Alfabetização Científica? In MASSARANI, L.; TURNEY, J.; MOREIRA, I. de C. (Org.) *Terra incógnita: a interface entre ciência e público*. Rio de Janeiro: Vieira & Lent, UFRJ, Casa da Ciência, Fiocruz, 2005.

FARACO, C. A. Carlos Alberto Faraco. In: XAVIER, A. C.; CORTEZ, S. (Orgs.) *Conversas com linguistas: virtudes e controvérsias da linguística*. São Paulo: Parábola, 2023.

FRANCHETTO, B. A guerra dos alfabetos: os povos indígenas na fronteira entre o oral e o escrito. *MANA*, v. 14, n. 1, p. 31-59, 2008.

FRANCHETTO, B. (ed.) *Revista LinguiStica*, n. 13, v. 1, 2017.

FRANCHI, C. Criatividade e gramática. *Trabalhos em Linguística Aplicada*, n. 9, p. 5-45, 1987.

FRANCHI, C. A. Criatividade e gramática. In: FRANCHI, C. A.; NEGRÃO, E.; MULLER, A. L. *Mas o que é mesmo “gramática”?* São Paulo: Parábola, 2006. p. 34-101.

GAWNE, L.; MCCULLOCH, G. Communicating about linguistics using lingcomm-driven evidence: Lingthusiasm podcast as a case study. *Language and Linguistics Compass*, v. 17, n. 5, 2023.

GOMES, A.P.; SANCHEZ-MENDES, L. *Para Conhecer Semântica*. São Paulo: Contexto, 2018.

HOCHSPRUNG, V. Divulgação científica: notas sobre a popularização da linguística na internet e na sala de aula. In: SILBALDO, M. *Ensino de línguas: propostas e relatos de experiência*. São Paulo: Bluscher, 2023.

HOCHSPRUNG, V. O 'big brother brasil' como ponto de partida para a divulgação científica e a popularização da linguística. *Revista do EDICC*-ISSN 2317-3815, v. 9, 2023.

HOCHSPRUNG, V. *A consciência sintática de professores a respeito do sujeito do português brasileiro*. Dissertação de mestrado. Florianópolis: UFSC, 2022.

HONDA, M. et al. On promoting linguistics literacy: Bringing language science to the English classroom. In: DENHAM, K; LOBECK, A. (Eds.). *Linguistics at school: language awareness in primary and secondary education*. Cambridge University Press, 2010. p. 175-188.

LABOV, W. The social stratification of English in New York City. Arlington, VA: Center for Applied Linguistics, 1966.

LIMA, S. O. Plurality and distributivity in Juruna: some considerations about verbal cumulativity. In: *4th Conference on the Semantics of Underrepresented Languages in the Americas*, 2007, São Paulo. UMOP 35: Proceedings of the 4th Conference on the Semantics of Underrepresented Languages in the Americas. Amherst: UMOP Publications, 2007.

LYNNE MURPHY, M. Blogging and microblogging linguistics for the lay reader. In: PRINCE, H. MCINTYRE, D. (Eds.) *Communicating Linguistics*. Routledge, 2023. p. 38-48. MAIA, M. (org.). *Psicolinguística e Metacognição na Escola*. Campinas: Mercado de Letras, 2019.

MARTIN, L. "Eskimo words for snow": A case study in the genesis and decay of an anthropological example. *American Anthropologist* n. 88, v. 2, jun., p. 418-423, 1986.

MOORE, D. Línguas indígenas. In: MELLO, H.; ALTENHOFEN, C.; RASO T. (orgs.) *Os contatos linguísticos no Brasil*. Belo Horizonte: Editora UFMG. 2011. p. 217-239.

MÜLLER, A.; STORTO, L.; COUTINHO-SILVA, T. Número e a Distinção Contável-Massivo em Karitiana. *Revista da Abralín*, v. 5, p. 185-213, 2006.

MÜLLER, A.; SANCHEZ-MENDES, L. Pluractionality in Karitiana. In: GRØNN, A. (ed.) *Proceedings of SuB12*, Oslo, 2007, p. 442-454.

MÜLLER, A.; SANCHEZ-MENDES, L. Pluractionality: the phenomenon, the issues and a case study. In: GUTZMANN, D.; MATTHEWSON, L.; MÉIER, C.; RULLMANN H.; ZIMMERMANN, T. E. (eds.) *The Wiley Blackwell Companion to Semantics*. Oxford: Wiley, 2021.

NASCIMENTO, M. *Evidencialidade em Kaingang: descrição, processamento e aquisição*. Tese de Doutorado, UFRJ. 2017.

OTHERO, G. A. *Mitos de Linguagem*. São Paulo: Editora Parábola, 2017.

OTHERO, G. A.; FOLHARINI, L. Linguística como Ensino de Ciências. *Cadernos de Estudos Linguísticos*, v. 66, p. 1-12, 2024.

PILATI, E. *Aprendizagem Linguística Ativa: da teoria à gramaticoteca*. Campinas: Pontes Editores, 2024.

PULLUM, G.K. Topic...Comment. *Natural Language and Linguistic Theory* 7, p. 275–281, 1989.

RAPOSO, C.A.; CRUZ, SOUSA, M.O. *Dicionário da Língua Makuxi*. 2. ed. rev. ampl. Boa Vista: Editora da UFRR, 2016. PARTEE, B.; BACH, E.; KRATZER, A. *Quantification: A Cross-Linguistic Perspective*. Amherst: UMass, 1987.

PIRES DE OLIVEIRA, R.; QUAREZEMIN, S. *Gramáticas na escola*. Petrópolis: Vozes, 2016.

PIRES MARTINS, R. *Políticas públicas de popularização da ciência no Brasil: perfil de atividades realizadas de 2003 a 2015 por meio do CNPq e intersecções entre ciência, educação e desenvolvimento territorial sustentável*. Dissertação (Mestrado). Matinhos: UFPR-Litoral, 2018

RODRIGUES, A.D. Línguas Indígenas: 500 anos de descobertas e perdas. *DELTA*. V.9, n.1, p. 83-103, 1993.

RODRIGUES, A.D. Sobre as línguas indígenas e sua pesquisa no Brasil. *Ciência e Cultura*, v. 57. N. 2, p. 35-38, 2005.

SAMPAIO, T. O. M. Onde estão os Linguistas na Divulgação Científica Brasileira?. *Revista do EDICC-ISSN 2317-3815*, v. 5, 2018.

SAMPAIO, T. A importância da divulgação científica da Linguística e entrevista com o canal Enchendo Linguística. *Revista Linguística Rio*, 3(1), 2017.

SANCHEZ-MENDES, L. Número Verbal. In: MÜLLER, A.; STORTO, L. (Orgs.). *Material de Apoio ao Estudo da Gramática da Língua Karitiana*. São Paulo: Paulistana, 2017. p. 9-18.

SANCHEZ-MENDES, L. Contribuições da Semântica Formal para o ensino de língua materna: o componente semântico como elo entre gramática e texto/discurso. In: FERREIRA, L. F.; FRUTOS, L.; COELHO, O. (orgs.) *Jornada pelos significados: contribuições de Ana Müller para a semântica*. Campinas, Pontes Editores, 2024. p. 145-178.

SANDALO, F. Conjunto de problemas 5: Formação de substantivos plurais em Kadiwéu. In: LARSON, R.; HONDA, M. *Ensino de Língua(s) como ciência da Educação Básica (Curso)*. XXV Instituto da Abralín, Curitiba, 2023.

TECARI NETO, A. Constituição sintática, ambiguidade estrutural e aula de português: o lugar da teoria gramatical no ensino e na formação do professor. *Working papers em Linguística*, v. 18, n. 2, p. 129-152, 2017.

TREULIEB, L. *Menu de ideias: Como fazer divulgação científica nas novas mídias das universidades?* Mestrado. Programa de Pós-Graduação em Comunicação (USCS), 2020.