

# The contribution of Functional Discourse Grammar to typological studies of Brazilian native languages

Marize M. Dall'Aglio Hattnher

*Universidade Estadual Paulista*

## 1 Introduction

Since Kees Hengeveld's first visit to the São Paulo State University (UNESP) in 2003, functionalist-based typological studies in Brazil, especially those using Functional Discourse Grammar (FDG; Hengeveld & Mackenzie 2008), have benefited greatly from his guidance, and his influence is strongly felt in the research currently being carried out by a large group of Brazilian researchers.

The typological work in FDG carried out in Brazil has prioritized indigenous languages, an orientation that quickly gained ground after the publication of Hengeveld et al. (2007). The almost 200 languages that still exist in the country –many of them in danger of extinction– need urgent attention, and typological research gives them visibility and encourages the interest in their study.

The fact that FDG is a typologically-based theory, for which the most important standard of adequacy is typological in nature, has been crucial in discovering recurrent and systematic patterns that could not have been identified simply on the basis of the individual descriptions of these languages.

The FDG typological studies of the Brazilian indigenous languages have focused on a variety of subjects, such as basic illocutions, adverbial clauses, semantic categories, relativization, word classes, transparency, aspect, and grammatical relations. The diversity of the language families involved makes it possible to compose samples suitable for analyzing a large number of linguistic issues and Kees's influence resulted in typological research being developed at different universities across the country.

To illustrate the influence of Kees's work and the typological adequacy of FDG, I will focus on two topics in typology, evidentiality and negation, indicating some possible directions of future research, to which the FDG model can greatly contribute.

## 2 Typological analyses of evidentiality and negation according to FDG

Its hierarchical architecture is responsible for the important role of FDG in typological work. As we point out in Hattnher & Hengeveld (2007: 9), “since the model carefully distinguishes, for every discourse act, its interpersonal, representational, morphosyntactic, and phonological characteristics, languages can be compared for each of these aspects separately.”

The approaches to evidentiality and negation take into consideration the scope relations between semantic and interactional categories relevant to each layer at the formulation levels of FDG. As Hengeveld (2011: 582) observes, “aspect, tense, modality, evidentiality and negation are not unified categories in their application to the semantic and pragmatic organization layers of the utterance, but they are divided into different subcategories according to their scope.”

The hierarchically organized levels of analysis allow for a series of predictions that may be used to test the existence of grammatical categories in a particular language, as can be seen in the classification of evidentiality proposed in Hengeveld & Hattnher (2015). Analyzing 64 Brazilian languages, we found four different evidentiality types, characterizing each one of them in terms of semantic scope: event perception, deduction, inference at State-of-Affairs, Episode and Propositional Content layers, respectively, at the Representational Level, and reportative at the layer of Communicated Content at the Interpersonal Level. A fifth type of evidentiality was added by Hengeveld & Fischer (2018), working with Cofán, an indigenous language spoken in Colombia: the quotative, at the layer of the Discourse Act. In Hattnher & Silva (2023) we attested the grammatical expressions of both reportative and quotative evidentials in at least five Brazilian languages. Adopting this new typology of evidentiality, Silva (2024) analyzed ten Brazilian languages from eight different families, and he identified a sixth type of evidentiality, non-witnessed evidentiality, at the layer of the Episode.

This classification of evidentiality is used here to expose the theoretical and methodological gains that FDG has contributed to typological research. To characterize all these subtypes, the studies mentioned above used the co-occurrence and scopal tests based on the hierarchical structure of FDG. The general prediction is that evidentials behave differently depending on their scope relations in their interaction with other grammatical categories.

To differentiate non-witnessed evidentials from those that indicate sensory perception, Silva used the interaction between evidentiality and tense. While the event perception evidential is restricted to contexts of simultaneity between the occurrence of an event and the obtaining of information, as in (1), the non-witnessed evidential is not subject to the same restriction, cf. (2):

(1) Sanumá (Autuori 2019: 280 *apud* Silva 2024:88)  
*Ulu a=ōkö ku=la=e.*  
 child 3SG=cry SENS=PRS=PROX.VIS  
 ‘The child is crying.’ (The speaker sees the crying child.)

(2) Jarawara (Dixon 2004: 51 *apud* Silva 2024: 13)  
*Jara tiwa na-tafi-no-ka.*  
 Branco(M) 2SG.OBJ CAUS-wake-REC.PST.NWIT.M-DECL.M  
 ‘The Branco woke you (and I didn’t see it).’

Another prediction that follows from the FDG approach is that only markers of different subcategories will be allowed to co-occur in a single clause. Silva (2024) tested this prediction to ensure the specificity of the non-witnessed evidential, which may co-occur with Deduction (3), Inference (4), and Reportative (5) evidentials:

(3) Sanumá (Autuori 2019: 283 *apud* Silva 2024: 83)  
*A=tiä noa tha=li.*  
 3SG=weave DED NWIT=PST.PRE.HOD  
 ‘He wove it.’ (The speaker saw the sieve, but didn’t see it being made).

(4) Yanomami (Ramirez 1994: 354 *apud* Silva 2024: 84)  
*Ira=pë-ni opo.*  
 jaguar=PL-ERG armadillo  
*pë=të=pë=wa-i=no=ta-ra-he-xi*  
 3=IND=PL=eat-DYN=NWIT=INFR-PST.PRE.HOD-3PL/ERG-NWIT  
 ‘Jaguars usually eat armadillos, and this is the consequence of what happened between them in mythical times.’

(5) Jarawara (Dixon 2004: 214 *apud* Silva 2024: 80)  
*Jobe mee ai ne-mete-mone-ke.*  
 house(M) 3NSG build AUX-REM.PST.NWIT.F-REP.F-DECL.F  
 ‘It says that they built houses.’

Another very efficient test makes use of the newly identified quotative evidential proposed by Hengeveld & Fischer (2018). Quotation marks the reproduction of speech acts, which contain their original illocutions, and reportativity indicates the reporting of a message, encompassed by the illocution of the utterance that quotes it.

To verify this distinction, an essential criterion is whether the unit specified by the evidential contains its own illocution. This prediction was

confirmed in at least five Brazilian languages (Hattnher & Silva 2023). In Kwazá, for example, the quoted utterance and the one that quotes it are two distinct speech acts, with different illocutions, as can be seen in (6) and (7):

(6) Kwazá (van der Voort 2004: 403)

*Kwe-da- 'mŷ-ca-ra.*  
enter-1SG-VOL-IMP.EMPH-IMP  
'Say "I will enter"!'

(7) Kwazá (van der Voort 2004: 403)

*Kui-a- 'ni-tse.*  
drink-1PL-HORT-DECL  
'He wants us to drink!' (lit. 'He says "Let's drink!"')

What still needs to be tested in this respect is the predictions the model makes regarding the interaction between reportative / citation and propositional and behavioral illocutions (Hengeveld et al. 2007).

Another illustration of the applicability of the predictions made on the basis of the hierarchical structure of FDG can be seen in the description of negation. To discuss the methodological process of data reanalysis required for typological research and to demonstrate how this process can be optimized with FDG, we analyzed the expression of negation in Kamaiurá (Hattnher & Silva submitted), based on Seki's (2000) excellent descriptive grammar. Her work details how negation functions, considering different morphosyntactic and semantic criteria related to (i) the type of clause; (ii) the mood of the independent clauses; (iii) the type of non-verbal predicate; (iv) the semantic relation within the independent clauses; and (v) the syntactic scope of negation: the clause, constituent or stem. According to these criteria, the following types of negation can be distinguished: independent negation, imperative negation, exhortative negation, independent clause negation, radical negation, subordinate clause negation and derivational negation.<sup>1</sup>

The classification of negation proposed by Hengeveld & Mackenzie (2018) does not start from the morphosyntactic scope of negation markers; instead it begins with an account of their pragmatic and semantic scope, with operators with a negative value being found at all layers of the Representational and the Interpersonal Level. At the latter level, the negative operators "are actional in nature, and concern the actions that the current speaker is carrying out at the moment of speaking" (Hengeveld & Mackenzie 2018: 35). According to those criteria, the types identified are rejection, illocutionary negation, denial

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<sup>1</sup> A full description of this classification can be found in Seki (2000: 329-342).

and metalinguistic negation at the Interpersonal Level and disagreement, co-negation, non-occurrence, failure, local negation, antonymy and zero quantification at the Representational Level.

The different criteria used in these two proposals naturally lead to different classifications, and my intention is not to adapt one classification to fit the other but to show the advantages of the FDG proposal for the typological analysis. I will illustrate this point of view with the reanalysis of Seki's "independent negation" which we discuss in Hattnher & Silva (submitted).

Independent negation is expressed in Kamaiurá by the particle *anite* and it occurs "as a single constituent of the sentence, usually followed by particles, or as an element in opposition to a complete sentence" (Seki 2000: 336). Seki recognizes four functions for this particle: (i) to serve as a response to imperatives; (ii) to refute a statement, an affirmation or a suggestion; (iii) to deny a statement, introducing a correction to what has been said; and (iv) to serve as an answer to a polar question. The first of these uses is exemplified in (8):

(8) Kamaiurá (Seki 2000: 336)

- a. *E-rur=atsã=ane ne=jy-a je=upe.*  
2SG-bring=ATEN=CONT 2SG=axe-N 1SG=DAT  
'Lend me (bring) your axe please.'
- b. *Anite a -reko=rane.*  
NEG 1SG-have=CONT  
'No, not now [I still have it].'

In (8b) *anite* is used to encode the speaker's refusal to perform an action. This use is in fact actional. As Hengeveld & Mackenzie (2018: 36) state, this type of use of the negative marker "challenges the imperative speech act" of another speaker, which allows it to be classified as a Rejection, a Discourse Act negation operator.

Compare now (8b) with a further use of the independent negation, described by Seki (2000) as an answer to a polar question, as in (9b):

(9) Kamaiurá (Seki 2000: 103)

- a. *Po ne=ŋa-ay.*  
INTER 2SG=head-hurt  
'Does your head hurt?'

(9) b. *Anite / na=je=akaŋ-ay-ite.*  
 NEG NEG=1SG=head-hurt-NEG  
 'No, my head doesn't hurt.'

As we point out in Hattnher & Silva (submitted), in (9b) *anite* acts as the core of the answer given by one of the interlocutors. In this case, the particle inverts the polarity of the propositional content in the interlocutor's question, giving the statement a meaning equivalent to "my head does not hurt". This type of negation is analysed by Hengeveld & Mackenzie (2018) as propositional negation. The propositional scope of *anite* can be compared with the scope of the circumfix *n(a)= ... -ite*, used in (9b) to express the non-occurrence of an event (Seki 2000: 33).

Seki's independent negation corresponds to at least two very different types in Hengeveld & Mackenzie (2018) typology of negation, one actional (8b) and one semantic (9b). On the other hand, one type of interpersonal negation identified by Hengeveld & Mackenzie, illocutionary negation, corresponds to two types in Seki's classification, the imperative negation and the exhortative negation. According to Hengeveld & Mackenzie, there are two specialized forms to negate imperatives (the suffix *-em*) and to negate exhortative sentences (the suffix *-um*):

(10) Kamaiurá (Seki 2000: 332)  
*Ere-'u-em.*  
 2SG-eat-PROH  
 'Don't eat!'

(11) Kamaiurá (Seki, 2000: 333)  
*T=a-ha-um-e=n.*  
 HORT=1SG-go-DISHORT-EPENT=POT  
 'May I not go!'

These two morphemes are specialized in the expression of prohibitive and dishortative illocutions and therefore function as negative illocutionary operators in FDG.

Although it is impossible in this squib to compare all the different types of negation distinguished in the two classifications, we may assume, just like Hattnher & Silva (submitted), that the consideration of interactional and semantic criteria offered by Hengeveld & Mackenzie (2018) increases the typological relevance of Seki's (2000) consistent description.

Negation has been described for several Brazilian languages with different theoretical approaches, resulting in a large variety of morphosyntactic strategies, with a possible areal distribution. A complete semantic and pragmatic

comparison remains to be carried out, and FDG would offer solid criteria for such an investigation.

### 3 Final considerations

In Hengeveld & Mackenzie (2008: 25–26) the authors consider both “the influence of typology upon the theory of FDG and the role it could play in typological work”. I hope to have shown how much the typological work on Brazilian native languages has benefited from the theory. Nevertheless, although the analysis of evidentiality and negation in these languages has improved with the identification of subtypes at the Interpersonal and Representational Levels, much remains to be done, and this only shows that the work started by Kees Hengeveld must continue.

### Uncommon abbreviations

ATEN = attenuative; CONT = continuative; DED = deduction evidential; DISHORT = dishortative; DYN = dynamic; EMPH = emphasis; EPENT = epenthetic; HOD = hodiernal; INFR = inferential evidential; INTER = interrogative; NSG = non-singular; NWIT = non-witnessed evidential; POT = potential; PRE.HOD = prehodiernal; REC.PST = recent past; REM.PST = remote past; REP = reportative; SENS = generic sensory evidential; VIS = visual evidential; VOL = volitive.

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