

THE MODAL CONSTRUCTION ‘VAI QUE’ IN BRAZILIAN PORTUGUESE

A CONSTRUÇÃO MODAL ‘VAI QUE’ NO PORTUGUÊS BRASILEIRO

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ABSTRACT

This paper discusses the modal construction ‘vai que’ from Brazilian Portuguese. Our goal is to analyze its syntactic, semantic and pragmatic aspects. This construction is used when the speaker wants to convey that something is possible, thus, it is a modal construction. Our analysis follows proposals from cartographic syntax (Cinque, 1999; Tsai, 2015; Rizzi; Bocci, 2017), formal semantics (Kratzer, 1991; von Stechow, 2006; Hacquard, 2006, 2010, 2011) and formal pragmatics (Stalnaker, 1999; Portner, 2004). Previous analyses of ‘vai que’ have argued that it is: (i) weak; (ii) epistemic; (iii) conditional like; (iv) counterfactual; (v) high in the hierarchy; and (vi) a directive speech act (see Andrade, 2012, 2014, 2019; Dearmas, 2022, 2024; Ely and Cezário, 2023a, 2023b). We agree that it is a weak epistemic modal based on paraphrasing and contradiction tests (von Stechow; Heim, 2011), but we argue that ‘vai que’ is not part of a conditional structure, it does not convey counterfactuality, it is not higher than the epistemic modal head in the functional hierarchy, and it is also not a directive speech act. In our analysis, ‘vai que’ accesses the speaker’s beliefs through the speech event, following Hacquard (2006, 2010), and it presupposes another proposition in the common ground working as a justification for it.

KEYWORDS: ‘Vai que’. Modality. Speech act. Formal semantics. Cartographic syntax.

RESUMO

Este artigo discute a construção ‘vai que’ do português brasileiro. Nosso objetivo é analisar os aspectos sintáticos, semânticos e pragmáticos de ‘vai que’. Essa construção é empregada quando se deseja expressar a possibilidade de algo, ou seja, é uma construção modal. A nossa análise segue propostas da cartografia sintática (Cinque, 1999; Tsai, 2015; Rizzi; Bocci, 2017), da semântica formal (Kratzer, 1991; von Stechow, 2006; Hacquard, 2011) e da pragmática formal (Stalnaker, 1999; Portner, 2004). Análises anteriores discutindo ‘vai que’ argumentaram que é: (i) um modal fraco; (ii) epistêmico; (iii) condicional; (iv) contrafactual, (v) alto na hierarquia e (vi) um ato de fala diretivo (ver Andrade, 2012, 2014, 2019; Dearmas, 2022, 2024; Ely and Cezário, 2023a, 2023b). Concordamos que ‘vai que’ é um modal epistêmico fraco baseado nos testes semânticos de paráfrase e contradição (von Stechow; Heim, 2011), mas argumentamos que ele não faz parte de uma estrutura condicional, não expressa sentido contrafactual, não ocupa uma posição mais alta que a do núcleo modal epistêmico e não é um ato de fala diretivo. Em nossa análise, ‘vai que’ acessa as crenças do falante a partir do evento de fala, seguindo Hacquard (2006, 2010), e pressupõe uma proposição no *common ground* operando como uma justificativa para essa proposição.

PALAVRAS-CHAVE: ‘Vai que’. Modalidade. Ato de fala. Semântica formal. Cartografia sintática.

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1. Introduction

This paper describes the construction ‘vai que’ from Brazilian Portuguese (BP). This construction is used to convey the possibility of a situation, for example, by uttering the sentence in (01a), the speaker expresses that something working out is possible. Thus, on the surface, its meaning appears to be similar to modal verbs that convey possibility such as ‘poder’ in (01b).

- (01) a. Vai que [funciona].
 go.PRS.IND that [work.out.PRS.IND]
 ‘It might work out.’ (data from *X* former *twitter*)
- b. Pode [funcionar].
 may.PRS.IND [work.out.INF]
 ‘It may work out.’

This paper’s main goal is to describe syntactic, semantic, and pragmatic properties of ‘vai que’. For this analysis, we follow proposals from cartographic syntax (Cinque, 1999; Tsai 2015; Rizzi; Bocci, 2017), formal semantics (Kratzer, 1991; von Stechow, 2006; Hacquard, 2006, 2010, 2011) and formal pragmatics (Stalnaker, 1999; Portner, 2004). Most of the previous work on ‘vai que’ was done following a functionalist perspective (Ely; Cezário, 2023a, 2023b; Andrade, 2012, 2014, 2019), but there has been one formal analysis conducted by Dearmas (2022, 2024), which was also through the lenses of formal semantics, formal pragmatics and cartographic syntax. The core of those analyses is the assumption that ‘vai que’ is an epistemic modal that expresses possibilities, it is a counterfactual element part of a conditional construction (Ely; Cezário, 2023a, 2023b; Dearmas, 2022, 2024); and that its a directive speech act being higher than modal verbs in the functional hierarchy (Dearmas, 2022, 2024).

We agree that it is a weak epistemic modal, but, in our syntactic analysis, it is in the same position as other epistemic functional verbs. We also show that ‘vai que’ has some pragmatic constraints that ‘poder’ lacks.

This paper is divided into five sections from which this introduction was the first one. The second section presents the theoretical background of this research and also the methodological procedures adopted by formal semantics and cartographic syntax in order to uncover the syntactic and semantic properties of a linguistic expression. The third section describes the previous analyses of ‘vai que’ and argues against some aspects of those analyses. The fourth section presents the syntactic, semantic and pragmatic analysis assumed in this paper. The fifth and last section brings our final remarks.

2. Theoretical background and methodological procedures

This paper follows proposals from cartographic syntax (Cinque, 1999; Tsai, 2015; Rizzi; Bocci, 2017), formal semantics (Kratzer, 1991; von Stechow, 2006; Hacquard, 2006, 2010, 2011) and formal pragmatics (Stalnaker, 1999; Portner, 2004). The contributions of each paradigm will be explored below.

2.1. Syntactic cartography

Cinque (1999) proposes that there is a hierarchy of functional heads which is universal. Therefore, if an item is the grammaticalization of a functional head, its position in the hierarchy is rigid and determined by universal grammar. In order to determine the position that a function item appears, transitivity and precedence tests should be conducted comparing the position of the item to the positions of items that grammaticalize other functional heads. For example, according to Cinque (1999), the sentence (02) from Guyanese shows that markers of epistemic modality are above tense and markers of root modality are below tense in the hierarchy.

- (02) Jaan shuda bin get fu gu
 Jaan MOD_{epistemic} PAST MOD_R MOD_R go
 'Jaan should not have been able to be allowed to go.' (Cinque, 1999, p. 59)

By using precedence and transitivity tests, the author proposes that different flavors of modality occur in different positions. The epistemic modals occur between Mood_{evidential} and TP whereas root modals are lower, between Asp_{prospective} and VoiceP. Part of this hierarchy is illustrated in (03).

- (03) Mood_{speech act} > Mood_{evaluative} > Mood_{evidential} > **Mod_{epistemic}** > TP(Past) >
 T(Future) > Mood_{irrealis} > Asp_{habitual} > AspP_{repetitive} > T(Anterior) > Asp_{perfect} >
 Asp_{retrospective} > Asp_{durative} > Asp_{progressive} > Asp_{prospective} / **Mod_{root}** > VoiceP >
 Asp_{celerative} > Asp_{completive} > Asp_{(semel)repetitive} > Asp_{iterative...} (Cinque, 1999, p. 76)

Tsai (2015) locates the epistemic head in the left periphery of the clause, in the CP layer (as illustrated in figure 1). The author justifies this position arguing that the epistemic head must be discourse oriented since it is anchored in the speaker's knowledge.

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We tested ‘vai que’ with both fronted adverbs, such as ‘rapidamente’ (fast), and with focus FocP to determine its position in the CP domain (c.f. subsection 4.1).

Therefore, the goal of our syntactic analysis was to determine ‘vai que’'s position in the hierarchy of functional projections, testing its interaction with items that grammaticalize other functional heads.

2.2. Formal semantics

In formal semantics, modality is the category of meaning associated with the expression of possibilities and necessities (Kratzer, 1991; von Stechow, 2006; Hacquard, 2011). For example, the functional verbs in (05) convey modality since they are associated with the expression of possibilities or necessities.

(05) Sandy must/should/might/may/could be at home. (von Stechow, 2006)

A modal item is considered strong if it conveys necessity and weak if it conveys possibility. For example, in (05), ‘must’ expresses a necessity, being classified as a strong modal, whereas ‘may’ expresses a possibility, being classified as a weak modal. This dimension is called an item’s modal force. The difference between a strong and a weak modal is represented in formal semantics as different quantifications over possible worlds. A strong modal such as ‘must’ quantifies over all possible worlds w' . This is called universal quantification and it is represented in logic by the operator \forall (for all) as illustrated in (06). A weak modal such as ‘can’ quantifies over some possible worlds w' . This is called existential quantification and it is represented in logic by the operator \exists (exists) as illustrated in (07).

(06) $\llbracket \text{must} \rrbracket^{w,f} = \lambda q_{\langle s,t \rangle} . \forall w' \in \cap f(w) : g(w') = 1$ (Hacquard, 2011, p. 1491)

(07) $\llbracket \text{can} \rrbracket^{w,f} = \lambda q_{\langle s,t \rangle} . \exists w' \in \cap f(w) : g(w') = 1$ (Hacquard, 2011, p. 1491)

To determine the force of a modal it is possible to use paraphrasis as illustrated below. For instance, ‘poder’ (may) is a weak verb since it can be paraphrased as ‘it is possible’ as illustrated in (08).

(08) a. Leo pode chegar cedo.
Leo may.PRS.IND arrive.INF early
‘Leo may arrive early.’

b. É possível que Leo chegue cedo.
COP.PRS.IND possible that Leo arrive.SUBJ early
‘It is possible for Leo to arrive early.’

Another way to determine the force of a modal is von Stechow and Heim’s (2011, p. 31) contradiction test. The authors show that using strong modals to coordinate sentences with incompatible propositions

results in a contradiction, as illustrated in (09a), but using weak modals to coordinate sentences with incompatible propositions does not result in a contradiction, as illustrated in (09b).

- (09) a. You must stay, and/but also, you must leave. (leave = not stay)

CONTRADICTIONARY

- b. You may stay, but also, you may leave.

CONSISTENT

(von Fintel; Heim, 2011, p. 31)

The modal force is not the only ingredient in the semantics of a modal item. There are also different criteria one can take into account to consider such possibilities/necessities. Kratzer (2012) describes how two interpretations are possible for modals: (i) one interpretation in which something is considered possible based on one's knowledge and (ii) another interpretation in which something is considered possible based on the circumstances of the situation. For example, (10a) may be uttered in a context in which one is traveling to another country and discovers that the soil and climate there are adequate for plum trees and, in such a situation, the utterance of (10a) expresses possibilities based on the circumstances of the place which allow for plum trees to grow. However, (10b) has an epistemic reading since the possibility is based on one's knowledge. For example, if the country one is traveling has had no contacts whatsoever with plum trees, the available evidence rules out the possibility that plum trees grow in that area.

- (10) a. In dieser Gegend können Zwetschgenbäume wachsen
in this area can plum trees grow

- b. Es kann sein, dass in dieser Gegend Zwetschgenbäume wachsen
it may be that in this area plum trees grow

(Kratzer, 2012, p. 52)

Hacquard (2006, 2010) connects proposals from formal semantics and cartographic syntax assuming that modals take an event as an argument. In her proposal, root modals always have a circumstantial modal base because they take the event denoted by the VP and, therefore, have access to the circumstances of this event and the epistemic modal base, on the other hand, is only available higher in the hierarchy since it needs to have access to the speaker's knowledge which is not available for the event at the VP level; thus, the modal can only have access to the speaker's knowledge if it takes the utterance event which is higher in the hierarchy. For example, the sentence in example (11) has an epistemic interpretation and the author assumes that the contribution of the modal 'might' is that there are possible worlds w' compatible with the beliefs of the speaker of the speech act event – represented in CON(e) in the logic form below the sentence in (11).

(11) Jane might be home.

SPEECH ACT_{declarative}(e*): $\exists w' \in \text{CON}(e^*): \exists e'[e' \text{ in } w' \ \& \ \text{be home}(e', w', J)]$

(Hacquard, 2006, p. 144)

However, epistemic modals are not the only items that need access to the speech event. Hacquard assumes that there are two types of deontic modality depending on who the obligation is placed on. In *ought-to-be* deontics, the obligations are placed on the addressee of the sentence and, in *ought-to-do* deontics, the obligations are placed on the subject of the sentence. For instance, both sentences in (12) describe obligations, but in (12a), those obligations are not placed on the subject (murderers) but on the society and it is analyzed as a *ought-to-be* deontic whereas in (12b) the obligation to apologize is placed on the subject of the sentence (Wickham) and it is classified as a *ought-to-do* deontic.

(12) a. Murderers ought to go to jail.

b. Wickham ought to apologize.

(Hacquard, 2006, p. 40)

According to Hacquard (2006), *ought-to-do* deontics are root modals. Thus, they have a circumstantial modal base and are low in the hierarchy. *Ought-to-be* deontics, on the other hand, are in the same position as epistemic modals (which is also assumed by Tsai (2015) — see Figure 1) since they also need to access the speech event, but for different reasons. Epistemic modals need the speech event to access the speaker's beliefs whereas *ought-to-be* deontics need the speech event to access the addressee of the event since the possible worlds, in this case, are not compatible with the speaker's beliefs, but with the addressee's To-Do List, as illustrated in (13).

(13) $f\text{DEONTIC}(e) = \lambda e.\lambda w. w \text{ is compatible with TO-DO LIST}(\text{ADDR}(e)).$

(Hacquard, 2006, p. 150)

Nevertheless, the modal force and modal base are not the only ingredients considered in the description of modal items. Root modals may have different readings and one way to make these readings explicit is to use clauses such as 'in the view of *p*' as illustrated in (14). The modals in (14a) have a deontic reading since the possibilities are according to John's parents' orders; the modal in (14b) has an ability reading since the possibilities are according to John's physical abilities; the modal in (14c) has an teleological reading since the possibilities are according to John's goals in life and; the modal in (14d) has an bouletic reading since the possibilities are according to John's desires.

(14) a. (In view of his parents' orders,) John *may* watch TV, but he *must* go to bed at 8pm.

b. (In view of his physical abilities,) John *can* lift 200 lbs.

c. (In view of his goals to get a PhD,) John *must* write a dissertation.

d. (In view of his desire to retire at age 50,) John *should* work hard now.

(Hacquard, 2011, p. 1485)

To account for these different readings of root modals, a third ingredient called ordering source is assumed. The ordering source will take the possible worlds from the modal base and rank them from best worlds to worse worlds according to a parameter. For example, suppose Jane has stolen many people. The possible worlds in the modal base will be accessed according to the circumstances, thus, possible worlds in which she has stolen many people. Then, what a deontic ordering source does is to rank the possible worlds from best to worse having the law as a parameter. If (15) is uttered in this context, the modal ‘must’ will have a deontic reading, thus implying that, given the circumstances, the best possible worlds according to the law are the ones in which Jane goes to Jail.

(15) Jane must go to jail.

(Hacquard, 2006, p. 35)

2.3. Formal Pragmatics

A sentence type is a specific syntactic construction or form reserved for a certain use (Sadock; Zwicky, 1985, p. 155). The different uses are analyzed in pragmatics as speech acts (See Austin, 1975; Searle, 1965, 1968). There are five types of speech acts as illustrated in table 1:

Table 1: Speech acts types

TYPES	OPERATION	EXAMPLES
Representatives	commit the speaker to the truth of the expressed proposition	asserting, concluding, etc
Directives	attempts by the speaker to get the addressee to do something	requesting, questioning
Commissives	commit the speaker to some future course of action	promising, threatening, offering
Expressives	express a psychological state	thanking, apologizing, welcoming, congratulating
Declaratives	effect immediate changes in the institutional state of affairs and tend to rely on elaborate extra-linguistic institutions	excommunicating, declaring war, christening, firing from employment

Source: The authors based on Levinson (2008, p. 240)

Stalnaker (1999, p. 49) assumes that communication normally takes place against a background of beliefs or assumptions which are shared by the speaker and his/her audience and it makes communication more efficient. For example, when giving a talk on Brazilian Portuguese’s null subject parameter to an audience of linguists working in generative grammar, a linguist could assume that it is part of the background beliefs with the audience that Brazilian Portuguese is the Portuguese variety spoken by Brazilian people and that a null subject structure is a structure in which there is a null expletive. According to Stalnaker (1999), an assertion introduces a proposition in the common ground. For example, if in a dialogue one utters “Maria has one dog”, the proposition of Maria owning a dog is now part of the speaker’s *common ground* with his/her audience.

Portner (2004) extends this analysis assuming that the discourse context has at least three components - the *Common Ground*, *Question Set* and *To-Do List*. For the author, a declarative sentence

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inserts a new proposition in the common ground as represented in (16), an imperative inserts a new property into the addressee’s To-Do list as represented in (17) and an interrogative sentence inserts a set of propositions in the question set as represented in (18).

(16) Declaratives: $CG \cup \{p\}$ (Portner, 2004, p. 238)

(17) Imperatives: $TDL(A) \cup \{P\}$ (Portner, 2004, p. 238)

(18) Interrogatives: $QS \cup \{q\}$ (Portner, 2004, p. 238)

In Hacquard’s (2006, 2010) analysis, there is an interaction of modals with the components described by Portner (2004) for the discourse. A declarative speech act has an epistemic modal base since it accesses the speaker’s beliefs, as illustrated in example (11), and a *ought-to-be* deontic modal base since it has access to the addressee’s To-Do list, as illustrated in example (13).

This section presented some theoretical tools and tests from cartographic syntax, formal semantics and pragmatics. Those concepts are going to be used in our analysis of ‘vai que’, but, before presenting our analysis, we will discuss the previous analyses of ‘vai que’ in the literature.

3. Previous analyses of ‘vai que’

Most of the previous work on ‘vai que’ was done following a functionalist perspective (see Ely; Cezário, 2023a, 2023b; Andrade, 2012, 2014, 2019), but there has been one formal analysis conducted by Dearmas (2022, 2024) through the lenses of formal semantics/pragmatics and cartographic syntax. All those analyses agree that ‘vai que’ expresses possibility. We will also argue that it is a weak modal based on paraphrasis and the contradiction test. These analyses also converge in the analysis of ‘vai que’ as an epistemic modal, except for Ely and Cezário (2023a) who assume that it also has a deontic use which emerged previously. For example, they argue that ‘vai que’ epistemic modality reading illustrated in (19a) is derived from a deontic use illustrated in (19b).

- (19) a. Vai que [chove].
 go.PRS.IND that [rain.PRS.IND]
 ‘It is possible that it will rain.’
- b. como se Deus falasse: [Vai [que você consegue]]
 as if God say.PST.IPFV.SBJV go.IMP that you get.PRS.IND
 ‘As if God has said: Go cuz you will get it.’

(Ely and Cezário, 2023a, p. 159)

One of Ely and Cezário’s (2023a) goal is to determine the path of grammaticalization followed

by ‘vai que’ and, according to them, examples such as (19a) and (19b) are evidence of a pattern of grammaticalization of modal items in which the first reading that emerges is the deontic one and later the item develops the epistemic reading. However, we disagree that the epistemic use illustrated in (19a) is derived from (19b). We assume those to be two different and unrelated constructions. In (19a), ‘vai que’ works as a functional verb and its main function is to indicate epistemic modality but in (19b), ‘vai que’ is a lexical verb, and its function is not to indicate deontic modality, but works as a call for action. Another evidence that those are not the same constructions is that ‘vai’ in (19a) is in the indicative mood and ‘vai’ in (19b) is in the imperative mood, as represented in our gloss. The fact that this verb has the same form for indicative and imperative and that both constructions have null subjects is misleading, but a closer look at the subjects of those structures makes the distinction between them clearer. Since the verb ‘ir’ in (19b) is in its imperative form, it requires a null subject which refers to the addressee and the null subject of (19a), on the other hand, does not have reference³. Therefore, we assume that the deontic modality reported by Ely and Cezário (2023a) for (19b) is a byproduct of the verb being in the imperative form, but not conveyed by ‘vai que’.

Andrade’s (2012, 2014, 2019) analysis, on the other hand, is that the epistemic use of ‘vai que’ most likely derives from the future use of the verb ‘ir’ (to go) illustrated in (20). Thus, this author assumes a grammaticalization path in which this verb is a lexical verb indicating movement that starts being used as a future auxiliary and later develops the epistemic reading. This hypothesis of grammaticalization seems more plausible due to the connection between future and modality since in both the proposition is in the realm of possibilities.

(20) Ela não vai sobreviver [...] (Andrade, 2014)
 ‘She won’t survive.’

Ely and Cezário (2023a, 2023b) also argue that ‘vai que’ is associated with conditional constructions such as ‘if p, q’. Dearmas (2022) also assumes that ‘vai que’ can occur in a conditional structure. Both ‘vai que’ constructions and conditional constructions present a situation which is hypothetical in nature. For instance, if we imagine a dialogue between two interlocutors in which the first does the question in (21), the second interlocutor could answer this question with part of a conditional construction, as in (21a), or with a ‘vai que’ construction, as in (21b). In both cases, the second interlocutor would be stating that the possibility of rain is a reason not to go to the beach.

³ One anonymous reviewer has pointed out that for his/her portuguese variety, the use of subjunctive mood is not grammatical with ‘vai que’. In our data set, ‘vai que’ only occurs in epistemic contexts such as (19a). It may occur with the indicative as well as with the subjunctive mood. We have gathered 100 spontaneous data for our study and in 76 sentences the verb in scope of ‘vai que’ was in the indicative mood and in 18 sentences, it was in the subjunctive mood. In 6 sentences the verb under the scope of ‘vai que’ was either in the gerund form or elided. As far as our judgment goes, the use of indicative or subjunctive has no impact on the meaning of those sentences.

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- (21) Você vai na praia amanhã?
 ‘Will you go to the beach tomorrow?’
- a: Eu não vou, e se chover!
 ‘I won’t go, what if it rains!’
- b: Eu não vou, vai que chove!
 ‘I won’t, it might rain!’

Despite those similarities, we argue that an analysis of ‘vai que’ as part of a conditional structure is not consistent with what we know about the syntax and semantics of conditional structures. A fair analysis should consider conditional structures as a whole for comparison, not only part of conditional structures as in (22). Conditionals are bi-clausal structures composed of an antecedent *p* and a consequent *q* (see Traugott *et al.*, 1986, p. 5). For instance, for the sentence in example (22a), the antecedent *p* is ‘se chover’ (if it rains) and the consequent *q* is ‘eu não vou à praia’ (I won’t go to the beach). Conditional constructions and ‘vai que’ constructions do not seem to have the same syntactic structure. For conditionals, the antecedent clause, which introduces the hypothesis, is commonly analyzed as an embedded adverbial clause. For ‘vai que’ constructions, the part ‘vai que chove’, which introduces the hypothesis, does not seem to be an adverbial clause.

- (22) a. Se chover, eu não vou à praia.
 if rain.FUT.SUBJ 1.SG not go.PRS.IND to.the.F.SG beach
 ‘If it rains, I won’t go to the beach.’
- b. Eu não vou à praia, vai que chove.
 1.SG not go.PRS.IND to.the.F.SG beach go.PRS.IND that rain.PRS.IND
 ‘I won’t go to the beach, it might rain.’

In addition to having a different syntactic structure, one semantic argument is that the relation between those clauses in ‘vai que’ constructions is not conditional in nature. A conditional construction has two clauses expressing two propositions (*p* and *q*) in which *q*’s truth is conditioned to *p*’s truth, thus, there is a conditional link between those propositions. For example, (22a) is a conditional structure since there is a conditional link between the propositions, in other words, if the proposition of raining is true, the proposition of me not going to the beach will also be true. Thus, one cannot know beforehand if either *p* or *q* are true, just that *q*’s truth is conditioned to *p*’s truth. This is not the case of ‘vai que’ construction in (22b), because we know beforehand that the speaker is not going to the beach. Therefore, the truth of the first clause does not depend on the clause with ‘vai que’ and vice-versa.

Although ‘vai que’ is not part of a conditional structure, sentences with ‘vai que’ feel very odd if uttered out of the blue, as illustrated in (23). Andrade (2014, 2019) argues that ‘vai que’ must be used in a context in which it is associated with another eventuality serving as a justification for it. We agree with Andrade (2014, 2019) and will argue in this paper that this justification link is a condition on the *Common Ground* of the speaker and the addressee. What is being justified can be added in the *common ground* explicitly by the previous statement, as illustrated (23b), or be implicit in the context.

(23) CONTEXT: I am in the kitchen cooking with my boyfriend and decide to do some small talk.

Nossa, pode chover forte amanhã.
 wow may.PRS.IND rain.INF strong tomorrow
 ‘Wow! there may be strong rain tomorrow.’

#Nossa, vai que chove forte amanhã.
 wow go.PRS.IND that rain.PRS.IND strong tomorrow
 ‘Wow! there may be strong rain tomorrow.’

Ely and Cezário (2023a, 2023b) also argue that ‘vai que’ creates an expectation of the eventuality under its scope happening, but this also does not seem to be the case. If we compare ‘vai que’ with other functional verbs such as ‘dever’ (must) and ‘poder’ (may), it feels weaker than them and it seems to bring the expectation that the event is less likely to occur, as illustrated in (24).

- (24) a. Deve chover.
 must.PRS.IND rain.INF
 ‘It must rain.’
- b. pode chover
 may.PRS.IND rain.INF
 ‘It may rain.’
- c. Vai que [chove].
 go.PRS.IND that [rain.PRS.IND]
 ‘It might rain. (but I feel like it is not going to)’

Andrade (2019) and Dearmas (2022, 2024) also point out that, when ‘vai que’ is used, there is a low expectation for the event in its scope. The authors assume that this occurs because ‘vai que’ operates as a counterfactual item (Andrade, 2019; Dearmas, 2022, 2024). This analysis is based on the assumption that hypothetical situations are in the counterfactuality domain:

A common semantic feature of those constructions is that they convey a piece of information related to the world of the interlocutor’s subjective beliefs, describing alleged/hypothetical events or situations (irrealis). Thus, all of them are in the counterfactuality domain.⁴ (Andrade, 2019, p. 151, *translated by the authors*)

We argue that ‘vai que’ does not convey counterfactuality. The definition of counterfactuality adopted in a functionalist perspective differs from the definition of counterfactuality adopted in the formal semantics literature. Andrade’s (2019) work does not follow the formalist perspective, thus, it is expected that the notion of counterfactuality adopted by the author will be different from the definition of counterfactuality we are assuming in this paper. By considering just Andrade’s definition above, sentences with ‘vai que’ would be counterfactual since the speaker seems to use them for conjectures. However, this definition of counterfactuality has some problems. First of all, the definition of counterfactuality is related to “a piece of information related to the world of the interlocutor’s subjective beliefs” is too vague and abstract not allowing to distinguish counterfactuality and epistemic modality since both would be related to the worlds of the speaker’s beliefs.

Another problem in this definition is to assume that alleged/hypothetical events or situations are necessarily counterfactual because it blurs the distinction between counterfactuality and alleged/hypothetical events. Therefore, we intend to show that a definition that does not state clearly what counterfactuality is makes the classification too subjective and not useful for the analysis of empirical data.

The definition of counterfactuality in formal literature is the implicature that a situations are contrary to the facts (see Iatridou, 2000; von Stechow; Iatridou, 2023) as illustrated in (25). Therefore, for a sentence to be counterfactual, it must have the implicature that the situation is false as explicitly stated in “conveys, I don’t have a car” below.

(25) I wish I had a car. (conveys “I don’t have a car”) (Iatridou, 2000, p. 234)

This definition allows to distinguish counterfactuality from alleged and hypothetical events as illustrated in (26). For instance, a conditional clause can present a situation as an open conditional or as a counterfactual conditional (von Stechow; Iatridou, 2023, p. 1468). The conditional in (26a) is an open conditional since we do not know beforehand if Miranda and Emily knows the answer, thus, it is an open matter. For the conditional in (26b), on the other hand, there seems to be an inference that Miranda and Emily do not know the answer, thus, an implicature that the situations of Miranda and Emily knowing the answer do not hold in the actual world. This implicature is what the literature refers to when describing counterfactuality (see Anderson, 1951).

⁴ Um traço semântico comum a essas construções é o fato de veicularem informação relativa ao mundo da crença subjetiva do locutor, descrevendo eventos ou situações hipotéticas/supostas (irrealis). Sendo assim, todas elas situam-se no domínio da contrafactualidade.

- (26) a. If Miranda knows the answer, Emily knows the answer.
 b. If Miranda knew the answer, Emily would know the answer.

(von Fintel; Iatridou, 2023, p. 1469)

Therefore, the formal analysis that allows the distinction of counterfactuality and hypothesis // alleged events gives a better empirical coverage. There has been extensive work on counterfactuality in formal literature (see Anderson, 1951; Iatridou, 2000; Arregui, 2005, von Fintel; Iatridou, 2023 among many others). Counterfactuality is generally found in three types of constructions: (i) counterfactual conditionals, such as (27a); (ii) counterfactual desires, such as (27b); and (iii) counterfactual uses of modals, such as (27c) (see von Fintel; Iatridou, 2023). What those constructions all have in common is the implicature that the situation does not hold. For example, in (27a) and in (27b), we get the implicature that Rosa does not have money and in (27a) and (27c) we get the implicature that she did not make the bet.

- (27) a. If Rosa had money, she would have made a bet.
 b. Rosa wishes she had money.
 c. Rosa should have made a bet.

Constructions with ‘vai que’ do not give rise to the same implicature. For example, in (28a), we do not know beforehand if Rosa has money and in (28b) we are not sure if Rosa has made a bet. Thus, in both constructions, the situation is described as an open matter and the analysis of ‘vai que’ as counterfactual cannot be sustained.

- (28) a. Vai que Rosa tem dinheiro.
 go.PRS.IND that Rosa have.PRS.IND money
 ‘Rosa might have money.’
- b. Vai que Rosa apostou.
 go.PRS.IND that Rosa made.a.bet
 ‘Rosa might have made a bet.’

Although ‘vai que’ itself is not a counterfactual operator, there are some constructions with ‘vai que’ that convey counterfactuality. Those are constructions in which the proposition below ‘vai que’ is marked with the auxiliary for perfect aspect ‘ter’ (have) + participle. For example, in (29), there is the implicature that Rosa did not make a bet. This implicature emerges because of the past layer introduced by the perfect auxiliary and the counterfactuality reading is generally attributed to this past marker (see Iatridou, 2000) or to the interaction between this past marker and a modal (see Arregui, 2005; von Fintel; Iatridou, 2023).

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- (29) Vai que Rosa tivesse apostado.
 go.PRS.IND that Rosa had made.a.bet
 ‘It was possible that Rosa had made a bet.’

The emergence of a counterfactuality reading with ‘vai que’ when there is an auxiliary for perfect aspect under its scope is expected and occurs with other modals such as ‘should’ as illustrated in (27c). This does not mean that ‘vai que’ itself is a counterfactual marker. If that was the case, we would expect all constructions with ‘vai que’ to have counterfactual readings and that is not the case, as illustrated in (28).

The construction ‘vai que’ has been described in a formal perspective by Dearmas (2022, 2023, 2024). The author does an extensive description of ‘vai que’, analyzing its syntax, semantics and pragmatics based on cartographic syntax and formal semantics/pragmatics. He assumes that: (i) ‘vai que’ occurs only with a finite clause in its scope, as illustrated in (30a); (ii) there is no agreement between ‘vai que’ and any other constituent in the clause, as illustrated in (30b); (iii) it is above negation as illustrated in (30c); (iv) that it can occur above or below the topic projection, as illustrated in (30d-e); (v) that it is a MCP (main clause phenomena), as illustrated in (30f), (vi) that it occurs below vocative, as illustrated in (30g). Because of this behavior, the author assumes that ‘vai que’ is very high in the hierarchy.

- (30) a. Vai que chove mais tarde.
 go.PRS.IND.3SG that rain.SUBJ more late
 ‘It may rain later.’ (Dearmas, 2022, p. 50)
- b. *Vão que eles se encontram lá.
 go.PRS.IND.3PL that they themselves meet.PRS.IND there
 (Dearmas, 2022, p. 50)
- c. *Não vai que dá certo.
 not go.PRS.IND that give.PRS.IND right
 (Dearmas, 2022, p. 69)
- d. O livro vai que você não encontra depois.
 the book go.PRS.IND that you not find.PRS.IND after
 ‘The book, you may not find it later.’ (Dearmas, 2022, p. 73)
- e. Vai que o livro você não encontra depois.
 go.PRS.IND that the book you not find.PRS.IND after
 ‘You may not find the book later.’ (Dearmas, 2022, p. 73)
- f. *Essa é a rua que vai que eu sou assaltado.
 this COP.PRS.IND the street that go.PRS.IND that I am robbed
 (Dearmas, 2022, p. 76)

- g. Meu amor, vai que isso não tá funcionando.
 my love, go.PRS.IND that this not COP.PRS.IND work.PROG
 ‘My love, this may not be working.’

(Dearmas, 2022, p. 79)

In his semantic description, the author points out that this verb differs from the verb ‘ir’ (go) that indicates movement since it does not refer to any event or state and also because it does not attribute thematic roles (Dearmas, 2022, p. 51). In his pragmatic description, the author points out that ‘vai que’ constructions are not assertive since they do not have truth conditions (Dearmas, 2022, p. 62) and that constructions with ‘vai que’ are used as warnings or requests (Dearmas, 2022, p. 63).

Due to this syntactic, semantic and pragmatic behavior described above, the author assumes that this verb is a functional item which is very high in the syntactic projection, above the inflection projection. He (Dearmas, 2022, p. 84) assumes that ‘vai que’ occupies the ForceP position, which is higher than other modal verbs with epistemic reading such as ‘poder’ (may). The author assumes that it is necessary for ‘vai que’ to occur in this position because it indicates the attitude of the speaker towards the content of the proposition being a directive speech act.

We agree with most of the syntactic and semantic descriptions provided by the author, but we argue that it is not necessary for ‘vai que’ to be higher than epistemic readings of ‘poder’ (may) since this position allows for modals to interact with different types of speech acts following Hacquard’s (2006, 2010) proposal. We also argue that ‘vai que’ is not a directive speech act. In directive speech acts, the speaker attempts to get the addressee to do something (Levinson, 2008), thus, directive speech acts updates the addressee’s To-Do List (Portner, 2004). Constructions with ‘vai que’ do not require a To-Do List update. For example, in (31) my mother is the addressee of the verbal interaction and my reply does not function as a warning or a request to her. Therefore, ‘vai que’ does not update the addressee’s To-Do-List and cannot be analyzed as a directive speech act.

(31) CONTEXT: I am in a video call with my mom. She is in São Paulo and I am in Rio.

Mom: você vai na praia hoje?
 you go.PRS.IND in.the beach today
 ‘will you go to the beach today?’

Me: eu não, vai que chove.
 I not go.PRS.IND that rain.SUBJ
 ‘I won’t go. What if it rains.’

We present our analysis in the next section.

4. Analysis

This section presents our analysis of ‘vai que’ syntactic, semantic and pragmatic properties. It is divided into three subsections, one for each level of analysis.

4.1. Syntactic properties of ‘vai que’

It is a consensus in linguistic literature that an epistemic modal is high in the hierarchical structure of a sentence, above *tense* (Cinque, 1999; Stowell, 2004; Hacquard 2006, 2010; Tsai, 2015, among others). A step forward is to determine the exact position by observing interactions with other functional heads in the left periphery of the sentence, in which lies the interaction between proposition content expressed by the IP and discourse (Rizzi, 1997).

The epistemic being high in the hierarchy is motivated by the properties of this modal. For Hacquard (2006, 2010), it being a high modal has as consequences that the moment of evaluation for the speaker’s knowledge is the utterance time and it is oriented to the speaker since it is the participant of the speech event. These elements are only available high in the hierarchy. Tsai (2015) argues that epistemics are in the CP domain, as illustrated Figure 1, using the actuality entailment. It is important to point out that, for Tsai, the epistemic modal and *ought-to-be* deontic are in the same position, which was also assumed by Hacquard, who presents a single position for the interpretation of epistemic and deontic *ought-to-be* modals (Hacquard, 2006, 2010) (see section 2.2). Figure 1 shows that the epistemic head is in the CP domain, above *tense*. Tsai (2015) does not specify the position of epistemic and deontic *ought-to-be* in relation to other functional heads in the left periphery of the clause. In order to determine this position more accurately, we have used ordering and precedence tests observing the interaction of epistemic modal and other elements from the left periphery.

We assume that ‘vai que’ can only convey epistemic reading and that the speaker’s knowledge being considered is the one available at the utterance time. Thus, it exhibits properties of an item high in the hierarchy. Thus, our goal in this subsection is to determine ‘vai que’’s position by observing how it interacts with other functional items which are also high in the hierarchy.

The first aspect we would like to demonstrate is that both ‘vai que’ and the modal ‘poder’ (may) with epistemic reading may occur in matrix clauses, as illustrated in (32) and embedded clauses, as illustrated in (33).

- (32) a. Pedro pode conseguir o emprego.
 Pedro can.PRS.IND get.INF the job
 ‘Pedro may get the job.’
- b. Vai que Pedro consiga o emprego.
 go.PRS.IND that Pedro get.SUBJ the job
 ‘Pedro might get the job.’

- (33) a. A previsão alertou para deslizamentos porque pode chover hoje.
 the forecast alert.PST.PFV for slides because may rain.INF today
 ‘The weather forecast has alerted us to landslides because it may rain today.’
- b. Eu não vou à praia porque vai que chove.
 I not go.PRS.IND to.the beach because go.PRS.IND that rain
 ‘I won’t go to the beach because it might rain.’

This data is important for the identification of *vai que* in the structure of the clause. Some elements are restricted to main clause domain (Haegeman, 2004) check features that are related to the speaker/addressee. Such features are checked in the cP head, responsible for context information (Portner; Pak; Zanuttini, 2019). Thus, examples such as (33a) e (33b) show that this is not the case of the epistemic reading of ‘poder’ (may) and neither of ‘vai que’, since they can occur in the embedded domain. This syntactic distribution is not compatible with elements grammaticalizing speech acts.

Another behavior that corroborates the analysis that ‘vai que’ occurs in the same position as epistemic modals is that it can cooccur with root modals, but not with epistemic modals, as illustrated in (34):

- (34) a. Vai que não pode estacionar aí.
 go.PRS.IND that not can.PRS.IND park.INF there
 ‘What if we can’t park there.’
- b. *Vai que pode chover.
 go.PRS.IND tha can.PRS.IND rain

The sentence (34a) shows that it is possible to have a sequence with ‘vai que’ and ‘poder’ (can) if the second has a root interpretation such as deontic modality. However, if ‘vai que’ is followed by ‘poder’ (may) with epistemic reading, this results in an ungrammatical sentence as illustrated in (34b). Thus, the impossibility of combining ‘vai que’ with another modal with epistemic reading suggests that both occupy the same position in the hierarchy.

According to syntactic cartography fundamentals, the same head may have different spell outs. The epistemic head, for example, might appear as ‘poder’ (may/might), ‘dever’ (must), *ter que* (have to) (in certain contexts, see Pessotto, 2015) and also as ‘vai que’, in our analysis. However, ‘vai que’ does not have a root reading and that makes the results of tests more transparent. In order to determine ‘vai que’'s position in the CP layer, we have tested it with other categories that are also in the left periphery of the sentence, such as *wh*-elements, focus and some fronted adverbs, such as ‘rapidamente’ (fast) (Rizzi, 1997; Rizzi; Bocci, 2017; Rech; Guessier, 2022). We repeat the configuration of the left periphery of the sentence below:

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(35) [Force [Top* [Int [Top* [Foc [Top* [Mod [Top* [Qemb [Fin [IP ...]]]]]]]]]]]]

(Rizzi; Bocci 2017, p. 9)

We start testing ‘vai que’ with the *wh*- ‘por que’ (why), which is merged at Spec of IntP and interpreted in the CP domain, a position high in the hierarchy. Since this item is below Force, it can give evidence of the position of another head located at the CP domain if it interacts with it, as illustrated in (36):

(36) Speaker A - Vai que Rosa tem dinheiro.
 go.PRS.IND that Rosa have.PRS.IND money
 ‘Rosa might have money.’

Speaker B - Por que vai que Rosa tem dinheiro?
 why go.PRS.IND that Rosa have.PRS.IND money
 ‘Why are you thinking Rosa might have money?’

Speaker A - Rosa apostou nesta semana.
 Rosa made.a.bet in.this week
 ‘Rosa have made a bet in this week’

The question in B can be answered stating that Rosa made a bet, which is part of the speaker’s knowledge used to state the probability of Rosa having money, and this answer is compatible with epistemic modality used with ‘vai que’. This possibility shows that a *wh*-element such as ‘por que’ (why) has scope over epistemic modal ‘vai que’. This result shows that the IntP category is above the Mod_{Epistemic} category.

The example in (37) shows the interaction of ‘vai que’ and the fronted adverb ‘rapidamente’ (fast):

(37) (*Rapidamente) Vai que (rapidamente) ele realize o trabalho.
 (*fast) go.PRS.IND that (fast) he do.PRS.IND the job
 ‘He may do the job fast.’

Frontend adverbs such as ‘rapidamente’ correspond to the ModP category in the CP configuration in (35) (Rizzi; Bocci, 2017). Thus, (37) shows that ‘vai que’ occupies a position above the adverb. Therefore, we assume that ‘vai que’ is between the IntP and ModP categories.

The example below shows the interaction of ‘vai que’ and focus:

(38) a. Vai que O PEDRO (não o Carlos) traia a Maria.
 go.PRS.IND that THE PEDRO (not the Carlos) betrayals the Maria
 ‘What if PEDRO (not Carlos) betrayals Maria.’

- b. *O PEDRO (não o Carlos) vai que traia a Maria.
 THE PEDRO (not the Carlos) go.PRS.IND that betrayals the Maria

The grammaticality contrast observed in (38) shows that ‘vai que’ is above the FocP category.

Considering the ordering of wh-elements, fronted adverbs such as ‘rapidamente’, and focus, we assume that this item occupies a position high in the hierarchy, between the IntP and the FocP heads. Moreover, the fact that it can be used in embedded clauses is evidence that ‘vai que’ is not in the Speech Act head. Thus, we assume that ‘vai que’ is a weak epistemic that occupies the same position as ‘poder’ (may). The tests here support that its position is similar to the one Tsai (2015) assumes for epistemic (see figure 1), right below TopP. Since the author does not present a full picture of the categories which are in the CP domain, we have opted to make further tests in order to give a more precise position for the epistemic head. The position we have given for the epistemic modal in the left periphery of the sentence is compatible with Hacquard’s (2006, 2010) proposal, in which the epistemic head has access to the speech event.

4.2. Semantic properties of ‘vai que’

This subsection analyzes the semantic properties of ‘vai que’. For this analysis, we consider the three ingredients discussed in section 2 - the modal force, modal base and ordering source.

4.2.1. ‘vai que’'s modal force

We agree with the previous analysis discussed in section 3 that ‘vai que’ is a weak verb. We can paraphrase a sentence with ‘vai que’ as ‘it is possible’ as illustrated in (39). This shows that its contribution is in the realm of possibilities.

- (39) a. Vai que Leo chegue cedo.
 go.PRS.IND that Leo arrive.SUBJ early
 ‘It is possible for Leo to arrive early.’
- b. É possível que Leo chegue cedo.
 COP.PRS.IND possible that Leo arrive.SUBJ early
 ‘It is possible for Leo to arrive early.’

Another evidence that ‘vai que’ expresses possibilities is that it can be used to coordinate sentences that express incompatible propositions without generating contradiction, as illustrated in (40) in which the propositions of ‘vai que minha mãe venha visitar’ (it is possible that my mother will visit me) and ‘vai que ela não vem’ (it is possible she will not come) are coordinated without resulting in a contradiction.

- (40) Eu vou colocar um vinho na geladeira,
I FUT put.INF a wine in.the fridge
vai que [minha mãe venha visitar hoje],
go.PRS.IND that my mother come.SUBJ visit.INF today
mas não vou colocar um vinho caro
but not FUT put.INF a wine expensive
porque também vai que [ela não vem].
because too go.PRS.IND that she not come.PRS.IND

'I will put some wine in the fridge, my mother might visit me today, but I won't put an expensive wine because she might also not come.'

Therefore, we assume 'vai que' does an existential quantification over possible worlds, which will be represented in its denotation as $\exists w$ '.

4.2.2. 'vai que's modal base

Last section has argued that 'vai que' is high in the hierarchy, in the same position as other epistemic modals such as 'poder' (may/can). The difference is that 'poder' can appear in different positions having both epistemic and root interpretation whereas 'vai que' is restricted to a high position having only the epistemic interpretation as illustrated in the contrasts in (41-44). This corroborates the analysis of 'vai que' as modal that solely relies on the speaker's beliefs.

- (41) (Considerando as instruções de seus pais,)
Consider.PROG the instructions of his parents
a. João pode assistir TV.
João can.PRS.IND watch.INF TV
'(If we consider his parents' instructions,) João can watch TV.'
b. #vai que ele assiste TV.
go.PRS.IND that he watch.PRS.IND TV
- (42) (Considerando suas habilidades físicas,)
Consider.PROG his abilities physical
a. João pode levantar 100 kg.
João can.PRS.IND raise 100 kg
'(If we consider his physical abilities,) João can lift 100 kg.'

- b. #vai que ele levante 100 kg.
go.PRS.IND that he lifts 100 kg
- (43) (Para entrar na universidade,)
to enter.INF in.the university
- a. João pode fazer o ENEM.
João can do.INF the ENEM
'(To enter university, João can do ENEM.)'
- b. #vai que João faça o ENEM.
go.PRS.IND that João do.SUBJ the ENEM
- (44) (Se ele quer comprar um carro,)
if he want.SUBJ buy.INF a car
- a. João pode fazer um financiamento.
João can do.INF a financing
'(If he wants to buy a car,) João can finance it.'
- b. #vai que ele faça um financiamento.
go.PRS.IND that he do.SUBJ a financing

However, 'vai que' differs from epistemic modals in some respects. Epistemic modals can occur in the scope of attitude verbs as illustrated in (45). The verb 'vai que', on the other hand, cannot occur in this position as illustrated in (46).

- (45) Lizzie *thinks* that Darcy *must* be at home. (Hacquard, 2006, p. 123)
- (46) ?Lizzie *acha* que *vai* que Darcy está em casa.
Lizzie think.PRS.IND that go.PRS.IND that Darcy COP.PRS.IND at home

We assume that this is a pragmatic restriction. Hacquard (2006, p. 139) argues that epistemic functional verbs might take the beliefs of the speaker through the speech event or the beliefs of an attitude holder through an propositional attitude verb as illustrated in (45). We argue that a construction with 'vai que' can only take the speech event. This restriction might be linked to the fact that a construction with 'vai que' is only felicitous if it justifies another proposition in the *Common Ground* (CG) (c.f. section 4.3). Since the CG represents the speaker and the addressee's shared assumptions, this would explain why 'vai que' is restricted to the speech event. Another difference is that 'vai que' is incompatible with direct evidence that the proposition is likely to happen as illustrated in (47).

- (47) Está cheio de nuvens escuras no céu,
 COP.PRS.IND full of clouds dark in.the sky
 ‘the sky is full of dark clouds,’
- a) Pode chover a qualquer momento.
 may.PRS.IND rain.INF at any moment
 ‘It may rain at any moment.’
- b) #Vai que chove a qualquer momento.
 go.PRS.IND that rain.SUBJ at any moment

This incompatibility is assumed by Dearnas (2022) as evidence that ‘vai que’ is counterfactual. However, we have argued that ‘vai que’ does not convey counterfactual meaning (c.f. section 3). We explain the contrast in (47) assuming that, although ‘poder’ and ‘vai que’ are weak epistemic modals, sentences with ‘vai que’ are not assertive in nature and that is why it feels weaker than ‘poder’ (c.f. 4.2.3).

4.3. Pragmatic analysis

Although we have equipped ‘vai que’ and ‘poder’ as weak epistemic modals, in section 3, we discussed how ‘vai que’ seems to convey a low expectation for the event in its scope happening, somehow feeling weaker than ‘poder’. This low expectation made Andrade (2019) and Dearnas (2022, 2024) analyze it as a counterfactual marker. We have also argued that ‘vai que’ does not have a counterfactual reading since it does carry the implicature that the situation did not happen, thus, this cannot be the source of ‘vai que’ feeling weaker than ‘poder’.

In this section we attribute this low expectation of ‘vai que’ to the fact that ‘vai que’ sentences are not assertive in nature. This fact has been pointed out by Dearnas (2022, p. 62) who states that they do not have truth conditions. Therefore, for comparison, when speakers utter a sentence with ‘poder’, they commit to the possibility of the eventuality occurring. This is illustrated in example (48a) which shows that a sentence with ‘poder’ can be used to confirm the existence of a possibility. On the other hand, with ‘vai que’ sentences, speakers do not commit to the possibility of the eventuality under the scope of the modal. This is illustrated in example (48b) which shows that a sentence with ‘vai que’ cannot be used to confirm the existence of a possibility.

- (48) CONTEXT: You are visiting Florianópolis for the first time and you are planning to go to the beach. However, you have seen that the forecast says it may rain tomorrow. You think the prediction might not be correct since today was very sunny and there are no clouds in the sky. You decide to ask Mary who lives in the city if she really thinks there will be rain tomorrow. She replies.

- a. Mary: Sim, Pode chover amanhã.
 yes, may.PRS.IND rain.INF tomorrow
 ‘yes, it may rain tomorrow.’
- b. Mary: #Sim, vai que chove amanhã.
 yes, go.PRS.IND that rain.PRS.IND tomorrow
 ‘Yes, it may rain tomorrow.’

Thus we assume that ‘vai que’ is used when speakers want to discuss a possible scenario without asserting this possibility. Thus, the fact that ‘vai que’ seems to be weaker than ‘poder’ can be an implicature triggered by the use of a non-assertive modal. The reasoning goes as follows: if the speaker could commit to the possibility, he/she would have used the assertive ‘poder’; therefore, if he/she did not use ‘poder’, it must be that he/she does not have evidence that allows to assert it.⁵

In section 3, we have shown that ‘vai que’ sentences are odd in out of the blue contexts. This is illustrated again in example (49).

- (49) CONTEXT: I am in the kitchen cooking with my boyfriend and decide to do some small talk.

#Nossa, vai que chove forte amanhã.
 wow go.PRS.IND that rain.PRS.IND strong tomorrow
 ‘Wow! there may be strong rain tomorrow.’

Andrade (2014, 2019) argues that ‘vai que’ is used when one wants to justify something. We assume that the oddity of (49) is due a pragmatic restriction of ‘vai que’. In order to ‘vai que’ to be felicitous, it needs to be used in a context in which there is another situation salient and it works as a justification for it. This justification can be implicit in the context, as illustrated in the answer in (50a), or explicit, as illustrated in (50b).

- (50) a. A: Põe o seu biquini.
 put.IMP the your bikini
 ‘Put your bikini’
- B: Ah não. Vai que chove.
 Oh no. go.PRS.IND that rain.IND.PRS
 ‘Oh no. What if it rains.’

⁵ One anonymous reviewer has pointed out that for him, ‘vai que’ can be used in contexts in which the likelihood of the eventuality occurring is high. One advantage of treating this as an implicature is that it can be canceled and this explains why some speakers feel ‘vai que’ is weaker than ‘poder’, but at the same time occur in contexts in which there is a high chance of something happening.

- b. Eu não vou à praia porque vai que chove.
 I not go.PRS.IND to.the beach because go.PRS.IND that rain
 'I won't go to the beach because it might rain.'

Using Stalnaker's (1999) notion of *Common Ground* (CG) as the background of beliefs and assumptions assumed by both the speaker and the addressee, we can assume that when 'vai que' has a pragmatic restriction requiring another proposition q to be present in the CG and that the construction 'vai que' [p] works as a justification for it. This pragmatic restriction is represented in (51).⁶

- (51) Given a sentence S with the structure 'vai que' [p]: The utterance of S in a context c in w implies that there is another proposition q in the CG and p is possible in w and that p justifies q in w .

5. Final remarks

This paper analyzed the syntactic, semantic and pragmatic aspects of 'vai que' constructions from Brazilian Portuguese following cartographic syntax (Cinque, 1999; Tsai, 2015; Rizzi; Bocci 2017), formal semantics (Kratzer, 1991; von Stechow, 2006; Hacquard, 2006, 2010, 2011) and formal pragmatics (Stalnaker, 1999; Portner, 2004). Previous analysis of 'vai que' have argued that it is: (i) weak; (ii) epistemic; (iii) conditional like; (iv) counterfactual; (v) high in the hierarchy; and (vi) a directive speech act (see Andrade, 2012, 2014, 2019; Dearnas, 2022, 2024; Ely and Cezário, 2023a, 2023b).

In our syntactic analysis, we have argued that 'vai que' interacts with root modals, but not with epistemic modals. Our tests have shown that 'vai que' is in a position in the CP domain, as has been argued by Tsai (2015). In order to have a better understanding of its position, we have analyzed how 'vai que' interacted with categories in the left periphery of the sentence, such as wh- element 'por

⁶ An anonymous reviewer has suggested that the pragmatic operation 'vai que' does is to introduce a new possibility in the discourse. We could assume that 'vai que' introduces a proposition p which is not yet in the CG. However, we don't think this is the case. Firstly because inserting a new proposition in CG is what every assertion does according to Stalnaker (1999)'s and Portner's (2004) model, therefore, the contribution of 'vai que' would be trivial. Another counterargument is that, if 'vai que' introduced a possibility in CG, we would expect it to be assertive and that is not the case as illustrated in (48b). Lastly, speakers can use 'vai que' even when the possibility has been previously established in the discourse as illustrated in (i).

(i) CONTEXT: You have a trip to the beach with your friend. On the day of the trip, your mom says you should not go to the beach because she has dreamt of you drowning in the beach. Your friend says that your mother is very superstitious and insists that you should go, that the beach is calm and there is not possibility of you drowning. Then you say.

Eu não vou. Vai que eu me afogo.
 I not go.PRS.IND go.PRS.IND that I me drown.PRS.IND
 'I won't go. I may drown.'

If 'vai que' operation was to insert a new possibility which had not established, we would not expect it to occur naturally in the context above.

que’ (why), focus and fronted adverbs such as ‘rapidamente’ (fast). The results show that ‘por que’ (why) has scope over ‘vai que’, which in turn has scope over focus and fronted adverb ‘rapidamente’. Considering this ordering of elements, we assume that ‘vai que’ corresponds to the epistemic modal head (ModEpistemic), in a position between the IntP head, lexicalized as ‘por que’ (why) in Portuguese, and FocP, as represented in (52):

$$(52) \quad [Force[Top*[Int [Top*[ModEpistemic[Top*[Foc [Top* [Mod [Top* [Qemb [Fin [IP \dots]]]]]]]]]]]]]]]]]]]]]]$$

In our semantic analysis, we have argued that ‘vai que’ is not part of a conditional construction since a conditional structure ‘if p, q’ has an antecedent and a consequent and ‘vai que’ constructions are neither of those. We have also argued that it is not counterfactual since counterfactuality is the implicature that the situation does not occur and this implicature is absent in ‘vai que’ construction. Lastly, we assume it is not a directive speech act since it does not operate on the addressee’s To-Do list.

We agree with previous analysis that ‘vai que’ is a weak epistemic modal based on the paraphrasis and contradiction tests (von Stechow; Heim, 2011), but, in our analysis, ‘vai que’ accesses the speaker’s beliefs through the speech event, following Hacquard (2006, 2010). It differs from ‘poder’ in two respects: (i) since it is not assertive, the addressee reasons that the speaker does not have enough evidence to fully commit to the eventuality being possible, generating the implicature that ‘vai que’ is weaker than assertive modal verbs such as ‘poder’ and (ii) it cannot occur on completive clauses with propositional attitude verbs due to a pragmatic restrictions. We also assume that ‘vai que’ is restricted to the speech event because it needs access to the speaker and addressee’s common ground since it is only felicitous in contexts in which the speaker’s utterance works as a justification for another proposition in the common ground.

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