Divide and Conquer: Split CP Hypothesis in Rhetorical Questions, the Case of SFPs in RQs

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ABSTRACT
Sentence final particles (SFPs) like Dutch *hè* and *hoor* add speaker-related information to sentences. Despite the fact that SFPs are not typically allowed in content-questions, particles like *hè* occur in rhetorical questions (RQs), while SFPs like *hoor* cannot. Here I propose that this is due to two factors: (i) RQs are different from ordinary questions, with the former only allowing for the answer the speaker believes is true, and (ii) SFPs operate at different 'structural levels'. Particles like *hè* convey a similar meaning as RQs, making them compatible, while SFPs like *hoor* function at a different level, incompatible with RQs.

Keywords
Rhetorical questions, sentence final particles, syntax-semantics interface, split CP hypothesis.

INTRODUCTION
Dutch, similar to languages like Cantonese, uses sentence final particles (SFPs), as illustrated in (1a,b):

(1) a. Hij houdt niet van taart hè?
he loves not of cake SFP
'He doesn't like cake, does he?'

b. Hij houdt niet van taart hoor!
he loves not of cake SFP
'He doesn't like cake!'

The sentences in (1a) and (1b) only differ at the last word, *hè* vs. *hoor*. From the translations of these sentences, it is clear that particles such as *hè* and *hoor* are untranslatable.

'Particle' is a term used by linguists to categorize tiny words that do not really fit into any of the major word classes (*nouns, verbs, adjectives, adverbs* or *prepositions*). The 'particle' category is often considered to be something of an 'escape category'. Or as Hurford puts it: "*If it's small and you don't know what to call it, call it a particle*"[1].

Native speakers of Dutch use these 'particles', like *nou, hè, hoor* and *toch* among many others, without thinking twice. But it would be very difficult for them to explain what these particles actually mean.

People asking questions about the precise meaning of SFPs are typically children or second language learners of Dutch (and curious linguists of course). Despite having difficulties explaining particles like *hè* and *hoor* to others, native speakers are not unaware of their meaning. In fact they have very clear intuitions about whether a particle is used appropriately or not.

Dutch is not the only language with SFPs. In fact, a language well-known for its extensive repertoire of different SFPs is Cantonese, an unrelated Sinitic language spoken in Guangdong province and Hong Kong, China. Sentence final particles are extremely interesting little pieces of language that are able to convey a huge amount of meaning. They are able to express nuances that are comparable to the nuances of different intonational contours in languages like English or Dutch.

Research on the meaning (semantics) and usage of sentence final particles can contribute to second language teaching of Dutch and to linguistic theory in general, as it is important to understand all the intricacies of SFPs. Most research thus far has focused on the semantic properties of SFPs[2,3] while less research has focused on the structural (syntactic) properties[4,5]. In this paper, the focus is on the latter, the positional properties of SFPs in questions.

SFPs are bound to some structural restrictions. Dutch speakers, for example, report that the sentences in (2) are ungrammatical (marked with an asterisk):

(2) a. *Hij houdt niet van taart hoor hè?
he loves not of cake SFP SFP

b. *Hij houdt niet van taart hè hoor!
he loves not of cake SFP SFP

From (2a) and (2b), it becomes apparent that the SFPs *hoor* and *hè* cannot be used together. This is not that surprising as Dutch speakers intuitively feel that the particles have conflicting functions. In (1a) the particle *hè* asks for some sort of confirmation, 'don't you agree?' while *hoor* in (1b) asks for anything but confirmation, 'don't tell me otherwise!'. The particles *hè* and *hoor* thus express a certain type of speaker attitude. They are also called speaker-orientated SFPs[4] (expressing the speaker's thoughts, feelings and estimations about the world)[i]. SFPs have some structural (syntactic) restrictions: they are

[i] Sometimes a distinction is made between different types of SFPs. SFP1s and SFP2s[4]. In this paper the SFPs are all SFP1s. SFP2s, like Dutch *nou* and *dan*, do not necessarily have to appear sentence finally (they can also be followed by other elements and even by SFP1s like *hè* and *hoor*), and they are able to combine with each other[4].

restricted to the absolute sentence final position and only one SFP is allowed per sentence.

An interesting feature of SFPs is that they are generally unable to occur in content-questions, i.e., questions with question words like *who* or *what*. This is true for almost all Cantonese SFPs (3a) and also seems to be the case for Dutch, as displayed in (3b):

(3). a. *bingo zin zo di cou me1[ii]?[4]
who cut ASP CL grass SFP (Cantonese)

b. *Wie houdt niet van taart hoor?
who loves not of cake SFP (Dutch)

While the SFP *hoor* is able to appear after declarative sentences (1b), it cannot appear in content-questions as displayed in (3). This is in accordance with the observation that SFPs generally do not occur in content-questions. There is however something peculiar going on with the SFP *hè* in Dutch, as it does appear in content questions (4):

(4). Wie houdt niet van taart hè?
who loves not of cake SFP
'Who doesn't like cake, right?'

The question in (4) however, is not an ordinary question (i.e., with rising intonation and true interrogative meaning); instead, it is interpreted as a rhetorical question (and with falling intonation), meaning something like 'Everyone likes cake, right?'. Interestingly, some[iii] of the Cantonese exceptions to the non-question restriction of SFPs as noted by Law[4] are particles used in rhetorical questions, or questions a person directs toward himself (5):

(5). bingo zin zo di cou le1/ne1?[4]
who cut ASP CL grass SFP
'Who has mown the lawn?'

The data above show us that there are particles that appear at the rightmost edge of the sentence, SFPs, and what these particles seem to have in common is that the majority cannot be attached to content-questions. This is not only the case in Dutch, but also in the completely unrelated language Cantonese, suggesting that this might be a property of SFPs in general. The crucial exception to this generalization concerns SFPs like *hè,* which are able to occur in special types of questions, e.g., rhetorical questions. This raises a relevant issue of what rhetorical questions actually are. Even though rhetorical questions appear to have the same syntax as ordinary questions, the question arises as to whether they carry interrogative force. Is a rhetorical question a question at all?

In this paper I look further into the meaning and properties of rhetorical questions in order to explain why some particles, like Dutch *hè,* can appear in this type of questions, while other SFPs like *hoor* cannot. By answering this question this paper contributes to the general knowledge on the properties of both SFPs and rhetorical questions.

In the following section I start by outlining the core elements of the solution proposed in this paper for the phenomenon described above. After this, a more elaborate explanation and supporting argumentation will be provided for the proposal.

PROPOSAL

Following the view that rhetorical questions are actually interpreted as statements of the opposite polarity[6,7], I argue that rhetorical questions (RQs) are different from ordinary questions (OQs) in both their meaning and structure. I adopt the semantics for rhetorical questions as proposed by Han[7], who argues that unlike questions, rhetorical questions lack true interrogative force. Instead of allowing for a range of answers, like question-words in true content-questions do, the question-words in rhetorical questions only allows for one answer (6a,b):

(6) a. Who helped Bill when he was down? – Nobody

b. Who gave birth to you? (mother to son) – You

This is due to the fact that ordinary questions are uttered by speakers who are seeking the answer to the content-question, while speakers using rhetorical questions imply that there is only one option fit to answer their question, namely the answer they believe is true.

In this sense rhetorical questions serve a similar function as the *hè* particle in Dutch: they both indicate the speaker's assessment about the truth value of their utterance. Since the rhetorical question force and *hè* particle operate at the same 'structural level', *hè* is able to attach to rhetorical questions. A particle like *hoor*, however, functions at a different 'structural level' than *hè* and rhetorical question force, making it incompatible with rhetorical questions. Neither of the particles are able to appear in ordinary questions, as ordinary questions allow a set of possibilities as their answer. The speaker is not able to provide a truth estimation over an unknown content.

Explained in a nutshell, the proposal above is based on two core hypotheses:

- Rhetorical questions are different from ordinary questions. Unlike ordinary questions, rhetorical questions are interpreted as statements of the opposite polarity.

- The meaning of a sentence is reflected at different syntactic layers and different SFPs function at different structural levels.

In the following section both hypotheses are discussed in more detail and arguments are provided to support them.

[ii] The number 1 indicates that the particle carries high tone. The gloss ASP stands for 'aspect marker' and the gloss CL stands for 'classifier'.

[iii] The only exception that remains is the Cantonese particle *aa3,* which is able to occur in regular interrogative questions. Also the Dutch SFP *jôh* is able to occur in ordinary questions. The meaning of the two particles is somewhat comparable, both being quite neutral discourse related particles which appear in a wide varieties of contexts[3,5]. It might be due to this neutral flavor, that specifically these two SFPs are able to occur in questions.

Difference between rhetorical and ordinary questions

Han[7] proposes that ordinary questions and rhetorical questions differ in their semantic implications. Ordinary questions (OQs) seek information or an answer from the hearer, while rhetorical questions (RQs) do not expect an answer and have the interpretation of an assertion of the opposite polarity of what has been asked. A sentence can be ambiguous in being interpreted as an ordinary question or a rhetorical question (6a). In spoken language we often disambiguate between the two interpretations by means of prosody. Rising intonation indicates a true interrogative while falling intonation indicates a rhetorical interpretation. The rhetorical interpretation of (6a) can be paraphrased as 'Nobody helped Bill when he was down', a statement in the opposite polarity of the utterance [iv]. According to Han[7] the difference between the two interpretations is due to the possible answer sets presupposed by the question-word in content-questions. In ordinary questions, the question-word presupposes an answer set which includes all the possible answers available in a certain situation. When uttering a rhetorical question, the speaker does not consider all the possible answers to the question. In fact, the speaker strongly believes that there is only one answer that applies to this question. This answer is the most negative answer possible like 'nothing', or 'nobody'[v] but the answer could also be a singleton answer. This is the case in (6b) where the answer-set of the question presupposes that there is someone fulfilling the requirement of the answer. Obviously, the mother gave birth to her son, so the presupposed answer is 'you'.

This view is supported by the appearance of strong negative polarity items (NPIs) in rhetorical questions. The basic idea of NPIs is that they only appear in negative contexts[vi] as indicated in (7a) and (7b):

(7) a. *Mary **lifted a finger** to help Bill[8]

b. Mary didn't **lift a finger** to help Bill[8].

Strong negative polarity items, like *lift a finger*, are also able to appear in rhetorical questions (8), while they are not allowed in regular questions:

(8). Who **lifted a finger** to help Bill?[7]

The sentence in (8) can only be interpreted as a rhetorical question; the ordinary question reading is unavailable. Han[7] argues that the negative estimation of the speaker is the reason why NPIs are allowed in RQs.

There is also some indication that rhetorical questions differ in structure from ordinary questions[9, 10]. In Italian for example the question-word in RQs occupies a different position than the question-word in regular questions[10]. The subject comes after the question-word in ordinary questions while it precedes the subject in RQs.

The layers of SFPs

The main hypothesis postulated in this paper is that SFPs like *hè* function at a different structural 'level' from SFPs like *hoor*. The meaning of *hè* is compatible with the speaker's intention in RQs while *hoor* is not. Let us consider the meaning differences between these two SFPs in more detail. Consider the examples from (1a,b), repeated here in (9a,b), in the context of a birthday party:

(9) a. Hij houdt niet van taart hè?
he loves not of cake SFP
'He doesn't like cake, does he?'

b. Hij houdt niet van taart hoor!
he loves not of cake SFP
'He doesn't like cake!'

The sentence in (9a) could be uttered by the host who is serving cake to her guests. She could, for example, say this to the mother of a little boy, when she remembers that the boy does not like cake. In (9a) she is not really asking the mother whether the child likes cake or not, since she is quite confident herself that she remembered correctly. With *hè* she indicates this confidence, providing an estimation about the probability of her own utterance. She believes that the chances are very high that her proposition 'The boy does not like cake.' represents the truth. A negative answer from the mother, denying the proposition that the boy does not like cake, is highly unexpected in this scenario. The sentence in (9b) can only be uttered as a reaction to something else. In a similar birthday setting, the mother of the boy could say this to the host when she offers her son cake. The SFP *hoor* also signals an estimation of the speaker, but this time it is the estimation that the hearer makes some wrong assumptions. The host probably thinks that the boy would like some cake, but in fact he does not like cake at all.

While the SFPs *hè* and *hoor* could both be considered to operate at an *epistemic* level, displaying the speaker's thoughts about probability and predictability of information, *hè* is speaker-oriented while *hoor* is hearer-oriented. Basically *hè* says 'I am right, don't you agree?' while *hoor* just says 'you are thinking wrong'. It seems like we are only able to add one 'SFP flavor' per sentence, as *hoor*, *hè* and other SFPs (e.g. in Cantonese) cannot be used together in a sentence (2a,b). This can be explained through the structural properties of SFPs. SFPs are located in the left periphery-domain (also called CP) of a sentence, in which the content of an utterance is connected to the world by the speaker. Some[4] argue that there is only one position available for SFPs in this domain of a sentence and if this position is already filled, the next SFP cannot attach. Such a structural representation is not able to show us why some particles can co-occur with rhetorical questions, while others cannot. Other linguists have proposed that SFPs occupy different positions within the

[iv] If the sentence would have been 'Who didn't help John?' the canonical rhetorical interpretation is 'everyone helped John'.

[v] Negative rhetorical questions like 'Who doesn't like cake?' are actually interpreted as 'Everyone likes cake.'. This is due to the negation present in the content-question: the speaker believes that 'nobody' is the only possible answer to 'Who doesn't like cake'. Nobody doesn't like cake → Everyone likes cake.

[vi] This is a simplified summary of a very complicated issue. There are other accounts that provide a much more detailed explanation on NPIs[8].

left periphery-domain[vii]. They base themselves on the split CP hypothesis[11], which proposes that the left periphery-domain consists of several layers, each layer with its own specific meaning and function.

Evidence for such layering comes from the ordering and positioning of various linguistic elements , such as SFPs, across different languages[5,12]. It is for example the case that hearer-oriented elements are found to follow speaker-oriented elements[12] and that epistemic SFPs follow SFPs that mark clause-types (e.g. turn a sentence into a question). The ordering of these left peripheral elements are thought to be similar across languages. Combining data from various languages thus allows for a clearer mapping of the left periphery. The Cantonese SFP *le1/ne1* which is able to appear in rhetorical or self-directed questions (5) has been categorized as an epistemic particle[8], and I argue that *hoor* and *hè* can also be considered as such. The SFP *hoor* is however hearer-oriented while the particle *hè* is speaker-oriented, thus functioning at different levels of the left peripheral-structure[12].

CONCLUSION

This paper started out with the observation that rhetorical questions and ordinary questions differ in their compatibility with SFPs. Rhetorical content-questions allow the attachment of some particles, like Dutch *hè* or Cantonese *le1/ne1*, while ordinary content-questions do not. After looking more into the meaning and structure of rhetorical questions we have found that: (i) The semantic analysis of rhetorical questions reflect the estimations and certainty of the speaker, and (ii) that Italian question words occupy a different position in the sentence than regular question words[13]. Combining these observations we can hypothesize that rhetorical questions operate at the epistemic level, different from regular questions which are at the clause-typing level, marking sentences with interrogative force. The SFPs that are allowed in rhetorical questions, like *hè*, are particles that operate in the same domain, the epistemic speaker-oriented level. SFPs like *hoor*, which function at a different level, cannot occur in rhetorical questions.

Based on the conclusions drawn from this paper, we are able to make hypotheses about the interaction between SFPs and content-questions in other languages. We expect SFPs to be disallowed in most content-questions. If they are allowed, this either means that the questions they appear in are 'special' questions (e.g. rhetorical) or that the SFPs are particles functioning at a similar level as the special content-word[viii]. For RQs this means that the allowed SFPs are speaker-oriented epistemic particles.

Since it is difficult to elucidate the meaning of sentence final particles, especially in a foreign language, predictions like the ones made by this proposal can be used as a starting point for further mapping and interpretation of SFPs in other languages and allow us to research SFPs in a more systematic way. A better understanding of the structural environments that SFPs occur in and their functional properties also allows us to use this knowledge in second language education and natural language processing.

ROLE OF THE STUDENT

Maxime Tulling was an undergraduate student that formulated her thesis research question as a follow-up on the research conducted on a BA-course paper comparing Dutch and Cantonese SFPs. Both her course-paper and thesis were supervised by Prof. dr. Lisa Cheng, whom she occasionally consulted. The research was conducted and written down by the author herself. This paper is a short version of her BA-thesis.

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[vii] This view cannot account for the fact that only one SFP is allowed per sentence, though this could be due to semantic incompatibility. Choosing between the two views depends on where you want to place the semantic burden. In this paper I have chosen for the multiple-position view, as this helps the understanding of why certain SFPs cannot appear in rhetorical questions, while others can.

[viii] Or if the SFPs are very neutral, see footnote III.