Chapter 11

Response particles beyond answering

Martina Wiltschko
University of British Columbia

In recent years, response particles (*yes/no*) have received some attention in the formal syntactic and semantic literature. Most analyses focus on the use of response particles as answers to polar questions as well as (to a lesser extent) as responses to affirmations. In this paper I extend the empirical domain to explore the use of response markers as responses to other clause types including wh-questions, imperatives, and exclamatives. It is established that response particles can be used as (dis)agreement markers. Moreover it is shown that in German, response particles can also be used to mark the following utterance as a response. A unified analysis is developed according to which the difference in function of response markers is syntactically conditioned. Following recent work on the syntax of speech acts, an articulated speech act layer is utilized to derive these functions. The case is made for a more fine-grained typology of response markers than previously assumed.

1 Introduction

In his recent monograph (Holmberg 2015), Anders Holmberg extends the empirical domain for generative syntacticians by exploring the syntax of *yes* and *no* (henceforth *response particles*, *ResPrt*) as in (1) (see also Holmberg 2001; 2002; 2007; 2013; 2014).

(1) Q: Did you feed the dog?
A: a. Yes. (= I fed the dog.)
b. No. (= I didn't feed the dog.)

While *ResPrt*s have been explored within other subfields of linguistics (e.g., conversation analysis) they have not been part of the core body of data generativists have typically taken into account (with the early exception of Pope 1976, and more recent studies such as Farkas & Bruce 2009; Kramer & Rawlins 2009, and Krifka 2013.) The absence of *ResPrt* from the syntactician's empirical domain may have to do with two factors. First, *ResPrts* are only found in conversations, while syntactic theory is typically concerned with sentences in isolation. Secondly, *ResPrt*s – as the term *particle* suggests – are frequently morphologically simplex. That is, in many languages, neither positive

Martina Wiltschko. 2017. Response particles beyond answering. In Laura R. Bailey & Michelle Sheehan (eds.), *Order and structure in syntax I: Word order and syntactic structure*, 241–279. Berlin: Language Science Press. DOI:10.5281/zenodo.1117726

nor negative *ResPrts* display any surface complexity: they are mono-morphemic. If we consider syntax to be concerned with understanding the ways complex structures are derived, then *ResPrt*s are not obviously an interesting object of exploration. However, modern syntactic theory is not only concerned with understanding word- or morpheme-order restrictions but it is a way to explore the relation between form and meaning. And in this respect, *ResPrts* are in fact interesting. Despite their morphological simplicity, they are able to convey a full fledged positive or negative proposition. So, the first question that is of interest to syntactic theory concerns the relation between the form of the *ResPrt* and its interpretation: how can we model the fact that a seemingly simplex form can convey a full proposition? And how is the content of this proposition determined? In §2, I review two current approaches to this question: Holmberg's ellipsis-based account and Krifka's (2013) pronominalization account. I then move on to the core empirical contribution of this paper. In particular, I explore other uses of *ResPrts* (§3) and whether they can be accounted for under current analyses. *ResPrts* serve as answers if they are used to respond to polar questions; but this is not their only function. Rather, I show that *ResPrts* can be used as responses to clause-types other than polar questions, in which case they function as agreement or disagreement markers, respectively. In §4, I propose an analysis for the (dis-)agreement function of *ResPrts:* they establish how the trigger of the response relates to the responder's set of beliefs. Furthermore, in §5, I introduce another use of *ResPrts:* in German *ResPrts* can be used to mark the utterance they precede as a response. In §6, I conclude.

For the purpose of this paper, I adopt the following terminological and representational conventions. It will be useful to distinguish between what the *ResPrt responds to* and what it *responds with*. I refer to the former as the TRIGGER (of response) and to the latter as the CONTENT (of response). This is exemplified in (1′) for the example in (1). Here the TRIGGER of the response is the polar question (*Did you feed the dog*?), which (by virtue of containing an unvalued polarity variable) introduces a proposition and its negation (p (*B fed the dog)* ∨¬p (*B didn't feed the dog*)). If the answer given is *yes*, the CONTENT of the response is the affirmation of the positive proposition (p: *B fed the dog*.). If the answer given is *no*, the CONTENT of the response is the negation of the proposition (¬p: *B didn't feed the dog).*[1]

(1′)	A:	Did you feed the dog?	TRIGGER: polar question (p ∨¬p)
	B:	Yes. (= I fed the dog.)	CONTENT: affirming p (= p)
		No. (= I didn't feed the dog.)	CONTENT: negating p (= ¬p)

Furthermore, I will use the term *responder* to refer to the speech-act participant who is responding; and I will use the term *respondee* to refer to the speech-act participant who the responder is responding to (i.e., the person who uttered the TRIGGER of the response).

[1]For a discussion of answers to negative questions see §2 below.

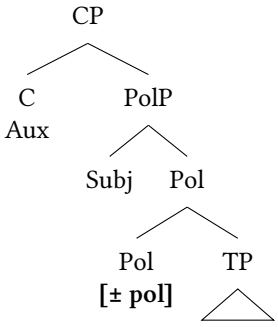
2 Holmberg's syntax of answers

Holmberg (2015) (following previous work of his) argues that *ResPrts* that are used to answer polar questions are best analyzed as combining with a full propositional structure the content of which depends on the preceding question. Their apparent simplicity stems from the fact that the propositional structure can be elided (i.e., remain unpronounced) as shown in (2), where strike-through indicates the elided constituent.

(2) Q: Did you feed the dog?
A: Yes [~~I fed the dog~~].

This much accounts for the distributional properties of *ResPrts* – as we shall see – but what about their interpretation? How can they serve as answers to polar questions? Holmberg argues that polar questions introduce a polarity variable [±pol] inside the propositional structure (henceforth p-structure). In particular, as illustrated in (3), the polarity variable is analyzed as the head of a polarity phrase between CP and TP (though the position of PolP is assumed to be subject to cross-linguistic variation in Holmberg (2015); cf. also Laka (1990) for an early version of this idea).

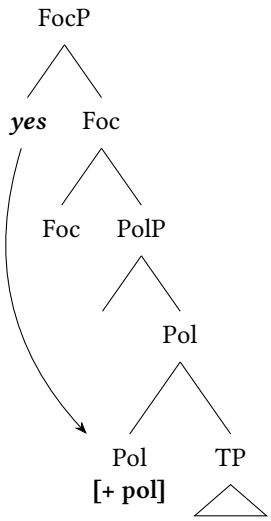
(3) Did you feed the dog?



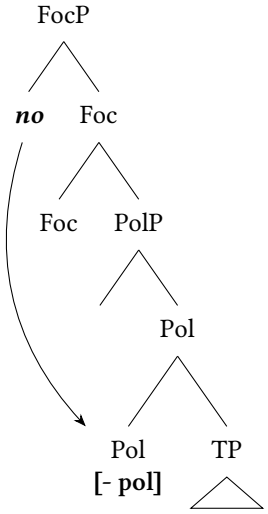
Thus, according to Holmberg (2015: 4) the interpretation of a polar question is something like: *What is the value of* [±pol] *such that 'you fed* [±pol] *the dog' is true?*. The contribution of the *ResPrt* is to bind the polarity variable in the embedded p-structure. It does so from the specifier position of a focus phrase (FocP). If the answer is *yes*, the polarity variable is valued as [+pol], yielding the answer [*you* [+pol] *fed the dog*] as in (4a). In contrast, if the answer is *no*, the polarity variable is valued as [-pol] yielding the answer [*you* [-pol] *fed the dog*], as in (4b), which translates as '*You didn't feed the dog'*.

(4) The *ResPrt* binds the polarity variable

a. the contribution of *yes*



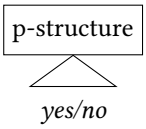
b. the contribution of *no*



The reason that the constituent following the *ResPrt* (i.e., PolP) can be elided is that it is essentially identical to the propositional clause in the question it answers, i.e., it has an antecedent.

Since anaphoricity can be signalled via ellipsis or via pronominalization, it is not surprising that *ResPrts* have also been analyzed in terms of pronominalization. For example, Krifka 2013 argues that *ResPrt*s can be viewed as *propositional anaphors*. As such, they are assumed to replace the entire p-structure, as illustrated in (5).[2]

(5) *ResPrt* as propositional anaphors



One empirical fact that speaks in favor of the ellipsis approach of the type developed by Holmberg (see also Kramer & Rawlins 2009 and Haegeman & Weir 2015) is the fact

[2]Replacing p-structure is however not the only possibility for response markers in Krifka's (2013) model. In particular, he assumes that p-structure is dominated by a speech act Structure (ActP) which, in turn, can also serve as the antecedent for a propositional anaphor. Depending on which layer of the clausal spine the propositional anaphor picks out, their interpretation differs. As we shall see the proposal developed here builds on this insight, but introduces a more fine-grained speech act structure.

that the proposition that serves as the antecedent for the *ResPrt* can be pronounced, as shown in (6).

(6) A: Did you feed the dog?
B: a. Yes, I fed the dog.
b. No, I didn't feed the dog.

The well-formedness of the complex answers in (6) is immediately predicted by the ellipsis analysis: the p-structure need not be elided since ellipsis is generally not obligatory. In contrast, the pronominal analysis, according to which *ResPrts* are propositional anaphors, will have to be augmented to accommodate the facts in (6).

Holmberg (2015: 2–6) discusses two more pieces of evidence for the syntactic complexity of *ResPrts*: one pertaining to their form and the other to their meaning.

Consider first variation in the *form* of polar responses. Not all languages make use of *ResPrt*s to answer polar questions. Another cross-linguistically common strategy to answer polar questions is to repeat (echo) the verb (or auxiliary) of the question with the remainder of the proposition elided. This is exemplified in (7) on the basis of Finnish.

(7) Finnish (Holmberg 2015: 3 (6))
Q: Tul-i-vat-ko lapset kotiin?
come-PST-3PL-Q children home
'Did the children come home?'
A: Tul-i-vat.
come-PST-3PL
'Yes.'

This cross-linguistic pattern lends support to the ellipsis analysis of *ResPrts* as it allows for a unified analysis of polar responses.

The other piece of evidence Holmberg considers pertains to differences in the distribution and *interpretation* of *ResPrts*. There are essentially two types of patterns languages display. The two patterns are distinguishable based on responses to negative polar question. The first strategy is the so called *agree/disagree* system (cf. Kuno 1973; Pope 1976, and Sadock & Zwicky 1985) also known as the *truth-based* system (Jones 1999). This system is characterized by the fact that a positive response to a negative polar question indicates agreement with the respondee: both the respondee and the responder believe in the negative proposition. Hence, a positive answer is used to assert a [-pol] value for p. This is exemplified by the Cantonese data in (8).

(8) Cantonese (Holmberg 2015: 4 (9))
Q: John m jam gaafe?
John not drink coffee
'Does John not drink coffee?'

A: Hai.
yes
('John does not drink coffee.')

The second strategy is the *positive/negative system* also known as the *polarity-based* system. This system is characterized by the fact that a negative response to a negative polar question indicates that the polarity of the proposition is valued as [-pol]. Hence, unlike in the agree/disagree system, a negative answer is used to assert a [-pol] value for p. This is exemplified by the Swedish data in (9).

(9) Swedish (Holmberg 2015: 4 (10))
Q: Dricker Johan inte kaffe?
drinks Johan not coffee
'Does Johan not drink coffee?'
A: Nej.
no
('He doesn't drink coffee.')

In sum, in a truth-based system, the use of a positive *ResPrt* results in an interpretation according to which the negative proposition is asserted to be true. In contrast, in a polarity based system the same effect is achieved by means of the negative *ResPrt*. According to Holmberg, the difference between the two systems reduces to a syntactic difference in negation. That is, Ladd (1981) observes that a negative polar question like (10) can have two readings (see also Büring & Gunlogson 2000; Romero & Han 2004; Asher & Reese 2007). The first reading (10-i) introduces a negative bias and is characterized by *low scope* of negation; hence this is known as the "inside negation reading". The second reading (10-ii) introduces a positive bias and is characterized by high scope of negation; hence it is known as the "outside negation reading".

(10) Q: Doesn't John drink coffee?
A: i. Is it true that John does **not** drink coffee? [low NEG]
ii. Is it **not** the case that John drinks coffee? [high NEG]

To distinguish the two readings we can add the negative polarity item *either*, which forces the low negation reading (11i). Alternatively, we can add the positive polarity item *too*, which forces the high negation reading (11ii).

(11) i. Doesn't he drink coffee either? [low NEG]
= Is it also the case that **he does not drink coffee**?
ii. Doesn't he drink coffee too? [high NEG]
= Is it **not** also the case that **he drinks coffee**?

The difference between high and low negation affects the syntax of *ResPrts*: if the elided proposition contains negation (as is the case with low negation), then a positive *ResPrt*

is used to mean '*Yes it is the case that not p*'*;* if the elided proposition does not contain negation (as is the case with high negation), then the negative *ResPrt* has to be used to achieve the same result because the positive *ResPrt* would have to be interpreted as '*Yes, it is not the case that p*', which is not a well-formed answer. In other words, *yes*, has to agree in polarity with the assertion rather than with the proposition.

(12) Q: Doesn't John drink coffee
A: i. Yes. (=He does drink coffee.) CONTENT: p
(=He doesn't drink coffee.) CONTENT: ¬p
ii. No. (=He doesn't drink coffee.) CONTENT: ¬p
(= He does drink coffee.) CONTENT: p

To obtain a positive response in such contexts, some languages make use of a dedicated *ResPrt*, namely a polarity reversing particle. This is exemplified in (13) by German *doch* (Holmberg 2015: ch. 6; Krifka 2013).[3]

(13) German
Q: Trinkt Hans nicht Kaffee?
drinks Hans not coffee
'Does Hans not drink coffee?'
A: **Doch** (er trinkt Kaffee).
yes
('He does drink coffee.')

In sum, what Holmberg's study establishes is that *ResPrts* are syntactically complex: they are sensitive to categories that are syntactically defined, namely the distinction between low and high negation.

In addition, the syntactic treatment of *ResPrts* has another advantage: it makes it possible to explore the cross-linguistic differences in a systematic way. And there are good reasons to explore this variation. The form and function of *ResPrts* is under-documented: existing grammars of individual languages do not often contain information about the strategies used to answer polar questions. Hence, exploring this question from a cross-linguistic point of view will contribute to our knowledge base, which in turn will inform the formal analyses of *ResPrts*.

The present paper contributes to the question regarding the range of variation. In particular, I explore other uses of *ResPrts*, hence extending the typological space within which to investigate them. That is, in addition to Holmberg's two questions (i) does a language make us of the *ResPrt* strategy and (ii) how do *ResPrts* pattern as answers to negative questions, we can also ask questions about the other functions of *ResPrts*. In particular, in what follows, I show that *ResPrts* can be used as markers of (dis)agreement (Sections 3–4) and as generalized response markers (§5).

[3]The Old English *ResPrt* system used to distinguish between two forms of positive *ResPrts: gae* was used to answer positive utterances while *gyse* was used to answer negative ones, mirroring the difference between German *ja* and *doch* (Wallage & van der Wurff 2013).

3 *Yes* and *no* as markers of (dis)agreement

The bulk of Holmberg's (2015) treatment of *ResPrts* is dedicated to their use as answers to polar questions (henceforth the ***answering** function*). This *answering* function of *ResPrts* comes about when the TRIGGER of the response is a polar question and the CONTENT is either affirmation or negation, as summarized in (14).

(14) Conditions for the answering function of *ResPrts*

TRIGGER: polar question (p ∨¬p)

CONTENT of response:

i. *yes:* affirming p (= p),

ii. *no:* negating p (= ¬p)

However, *ResPrts* can be used in a variety of other contexts that go beyond the answering function.

3.1 TRIGGERS across clause-types

In this section, I explore the use of *ResPrts* following TRIGGERS other than polar questions. To make a systematic exploration possible, it is useful to make explicit some assumptions about the relation between utterance form (*clause type*) and utterance function (*speech act type*). I assume a (simplified) mapping between clause-type and speech act-type. In particular, I assume that declaratives map onto assertions; interrogatives map onto questions; imperatives map onto commands or requests; and exclamatives map onto exclamations. Thus, for the purpose of this paper, I abstract away from indirect speech acts and other forms of modifying speech acts. The mapping is summarized in 1.

Table 1: Mapping between utterance form and utterance function

Utterance form	Utterance function
Declarative	Assertion
Interrogative	Question
Imperative	Command/request
Exclamative	Exclamation

In what follows I explore the possibility of responding with a *ResPrt* to each of these utterance forms.

3.1.1 Responding to assertions

As discussed in Holmberg (2015), *ResPrts* can be used to respond to assertions (cf. also Farkas & Bruce 2009; Krifka 2013). In this use, they are sometimes referred to as *rejoinders* (Halliday & Hasan 1976) but I will refer to them as (dis)agreement markers. Consider the examples in (15–16). Assertions are encoded with declarative syntax and falling intonation (indicated by \). Note that (dis)agreement markers, too, are associated with falling intonation.

(15) A: John speaks French really well \. — TRIGGER: assertion (p)
B: i. *Yes* \. (= p) — CONTENT: agreement w/p
ii. *No* \. (=¬p)[4] — CONTENT: disagreement w/p
(adapted from Holmberg 2015: 211 (4))

(16) A: You stole the cookie \. — TRIGGER: assertion (p)
B: i. *Yes* \. (= p) — CONTENT: agreement w/p
ii. *No* \. (=¬p) — CONTENT: disagreement w/p
(adapted from Krifka 2013: 2 (2a))

Despite the difference in the TRIGGER, *ResPrts* still express the same CONTENT as in their answering function: affirmation or negation. Nevertheless, the effect of the *ResPrt* is different. With a positive response to an assertion, the responder *agrees* with the previous utterance and conversely, with a negative response, the responder *disagrees* with the previous utterance (cf. Farkas & Bruce 2009).

This contrasts with *ResPrts* when used as answers to polar questions. In this case, there is nothing to agree with, because no statement is being made with which the responder could agree or disagree. Polar questions are used to shift the commitment to p from the speaker (S) to the addressee (A) (Gunlogson 2003), thereby requesting an answer from A. If the respondee is committed to the content of her utterance (as is the case with an assertion), it follows that the response will be interpreted as (dis)agreement. In contrast, if the respondee is not committed to the content of her utterance (as is the case with polar questions), it follows that the response is not interpreted as agreement or disagreement, but as an answer.

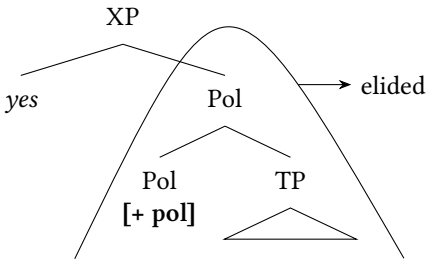
Within the syntactic analysis developed in Holmberg (2015), the difference between the answering function and the (dis)agreement function is as follows. As we saw above, *ResPrts* used as answers are analyzed as occupying SpecFocP c-commanding an embedded p-structure, which contains an unvalued polarity variable (the head of PolP). *Yes* values this variable as [+pol] while *no* values it as [-pol].

[4] According to Holmberg (2015), *no* cannot be used as a disagreement marker without adding more content to the response. According to my consultants, however, the short answer is well-formed though it comes across as confrontational. One might therefore reframe Holmberg's generalization as follows: a negative response is ill-formed only in polite conversations. Note also that there appears to be a special intonation associated with it. I tentatively identify this as the contradiction contour (Liberman & Sag 1974).

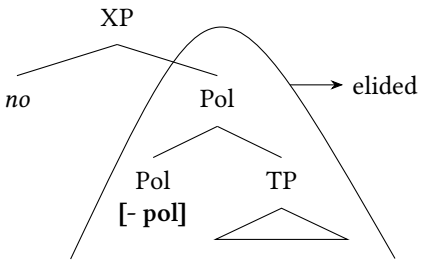
As for their (dis)agreement function, Holmberg (2015: 81) suggests that it does "not assign a value to a polarity variable, because there is no polarity variable in the preceding statement."

Holmberg (2015) doesn't offer an explicit syntactic analysis for the (dis)agreement function of *ResPrts*, but given his description of this phenomenon, we may conclude that the structure is something like in (17).[5]

(17) a. yes



b. no



Like in their answering function, the (dis)agreement *ResPrts* combine with an elided p-structure, the CONTENT of which (including its polarity value) is determined by the TRIGGER of the response. This assumption is consistent with the fact that the CONTENT of the response can be overtly spelled out.

(18) A: John speaks French really well \.
B: i. Yes\. He {does\, speaks French really well\}.
ii. No\. He {doesn't\, speak French really well\}.

(19) A: You stole the cookie \.

[5] I have left the label for the structure dominating the *ResPrt* vague (X). This is because Holmberg (2015) suggests two possible analyses: one according to which the (dis)agreement function is instantiated by a different type of *yes/no*, one that is more akin to predicates like *true* or *false* which can take a valued proposition as their complement. The other option is that the (dis)agreement function is instantiated by the same lexical element as the answering function: it still is associated with a focus projection but it doesn't bind the polarity variable associated with PolP.

B: i. Yes\. {I did\, I stole the cookie\}.
ii. No\. {I didn't\, I didn't steal the cookie\}.

This analysis raises the question as to what the contribution of the *ResPrt* is in this configuration. That is, if it doesn't serve to value the polarity variable, how does the positive *ResPrt* contribute to agreement and the negative *ResPrt* to disagreement with the TRIGGER? This is a particularly pressing problem with the negative answer *(no*), because there is no negative proposition available to serve as the antecedent for the embedded p-structure.

Holmberg's analysis correctly predicts that the answering function differs from the (dis)agreement function. Empirical support for this difference stems from the fact that other expressions of agreement (*true, right, that's right)* and disagreement (*false, wrong, that's wrong*) can be used as responses (20–21) but unlike *ResPrt*s, they cannot be used as answers, as shown in the examples in (22–23) (adapted from Holmberg 2015: 211 (5)).[6]

(20) A: John speaks French really well. TRIGGER: assertion (p)
B: i. Yes. CONTENT: agreement w/p
ii. True. CONTENT: agreement w/p
iii. Right. CONTENT: agreement w/p
iv. That's right. CONTENT: agreement w/p
(adapted from Holmberg 2015: 211 (4))

(21) A: John speaks French really well. TRIGGER: assertion (p)
B: i. No. CONTENT: disagreement w/p
ii. False. CONTENT: disagreement w/p
iii. Wrong. CONTENT: disagreement w/p
iv. That's wrong. CONTENT: disagreement w/p

(22) A: Does John speak French? TRIGGER: polar question (p $\vee\neg$p)
B: i. Yes. CONTENT: affirming p

[6]The difference between *ResPrt* and other expressions of (dis)agreement has to be explored in more detail. An informal survey suggests that matters are complicated. While *true/false* can be used in response to assertions, they are less well-formed (though not fully ruled out) in response to rising declaratives (i) or tag questions (ii).

(i) Q: You fed the dog?
A: Yes./?True./?Correct.

(ii) Q: You fed the dog, didn't you?
A: Yes./?True./?Correct.

(iii) Q: Did you feed the dog?
A: Yes./*True./*Correct.

Before we can develop an analysis that captures these differences, it is necessary to properly establish the empirical facts. I will have to leave this as an avenue for future research however.

ii. * True.
iii. * Right.
iv. * That's right.

(23) A: Does John speak French? TRIGGER: polar question (p ∨¬p)
B: i. No. CONTENT: negating p
ii. * False.
iii. * Wrong.
iv. * That's wrong.

Thus, *ResPrt*s have a wider distribution than other forms of agreement. This confirms Pope's (1976) insight that English is simultaneously an agreement-based system and a polarity-based system. When the TRIGGER is a polar question, *yes* shows up in its polarity guise: it values the polarity value. When the TRIGGER is an assertion it shows up in its agreement guise. This still leaves us with the question as to what *yes* and *no* contribute when they function as (dis)agreement markers. How is this function derived?

Suppose that as an agreement marker, *yes* asserts the truth of the preceding proposition while as a disagreement marker, *no* asserts that the preceding proposition is false, thereby establishing agreement or disagreement with the interlocutor, respectively. However, this potential analysis cannot be right, given what we find with negative assertions. First consider positive answers. Just as with negative questions, *yes* is ambiguous: it can be used to agree with the negated proposition or else it can be used to assert the truth of the proposition and hence reject the negation of the proposition (24). In this way, *yes* differs from the other predicates of agreement and hence cannot simply be analyzed as a predicate of agreement (like *true* or right).

(24) A: John doesn't speak French well. TRIGGER: negative declarative ¬p
B: i. Yes. CONTENT: agreement w/¬p
CONTENT: disagreement w/¬p
ii. True. CONTENT: agreement w/¬p
iii. Right. CONTENT: agreement w/¬p
iv. That's right. CONTENT: agreement w/¬p

Next consider the negative answers. Here *no* – unlike the other predicates of rejection – is ambiguous. It can be used to reject the negated proposition or else it can be used to agree with it. The other predicates of rejection, in contrast, can only be used to disagree with the negated proposition.

(25) A: John doesn't speak French well. TRIGGER: negative declarative ¬p
B: i. No. CONTENT: disagreement w/¬p
CONTENT: agreement w/¬p
ii. False. CONTENT: disagreement w/¬p

iii. Wrong. CONTENT: disagreement w/¬p
iv. That's wrong. CONTENT: disagreement w/¬p

This establishes that the contribution of *ResPrt*s cannot simply be asserting or negating the truth of p. So we are still left with the question about the contribution of *ResPrt*s when they function as (dis)agreement markers. Moreover, the data in (24-i) and (25-i) raise the additional question as to how interlocutors determine the contribution of the *ResPrt*s, if both are ambiguous. Of course, this is the signature of a system that is simultaneously an agree-based system and a polarity based system. Goodhue & Wagner (2015), and Goodhue et al. (2013) show that the ambiguity of the *ResPrt*s is resolved by means of intonation contours: speakers most frequently use the Contradiction Contour (Liberman & Sag 1974) when reversing, and they use declarative intonation when confirming, regardless of the particular *ResPrt* used.

We have also established that the agreement vs. polarity function of *ResPrt*s does not correlate with the difference between binding the polarity value of the embedded proposition or not, because both functions are possible with answers to polar questions (where *ResPrt*s bind the polarity value) and with responses to assertions (where there is no open polarity variable to be bound).

In the remainder of this section, I show that *ResPrts* have an even wider distribution than typically discussed. That is, they are not restricted to serve as responses to polar questions or assertions. Instead they can be used to respond to all kinds of speech acts – a fact that makes the question as to what their contribution is even more pressing.

3.1.2 Responding to wh-questions

Wh-questions differ from polar questions in that they require an answer to the open variable denoted by the wh-word in the question.[7]

(26) A: When did you feed the dog?
B: i. {At around eight\, After I had breakfast\,...}
ii. * Yes\!
iii. * No\!

(27) A: Why did you feed the dog?
B: i. {Because he was hungry\, Because you told me to\, ...}
ii. * Yes\!
iii. * No\!

The temporal wh-word in (26) requires the answer to give an indication of the time of feeding whereas the causal wh-word (*why*) in (27) requires the answer to give an indication of the reason for feeding, etc. Unsurprisingly, in these contexts, simplex *ResPrt*s are ill-formed.

[7] Thus the meaning of a wh-question is not a proposition with a valued polarity variable. According to Hamblin's (1958; 1973) influential work, wh-questions denote sets of propositions (as indicated by {p_1, p_2, p_3...} in (32)).

However, there are contexts where *ResPrt*s are possible as a response to a wh-question. Consider the examples in (28)–(30) from the corpus of American soap operas (SOAP; http://corpus.byu.edu/soap/).[8]

(28) Katie: Why would he do something like that?
Brooke: **Yes**, I know. That is the question.
BB-2012-05-23[9]

(29) Brady: Why is joining Basic Black so important to me?
Madison: **Yes**, please tell me, Brady, because I really want to know.
DAYS-2012-01-06

(30) Avery: How did that happen?
Lauren: (Chuckles) **yes**.
Michael: It happened because your amazing nephew convinced Daisy to move out of the building.
YR-2012-05-17

Bill: What do you want to bet?
Liam: **No**, I am not playing this game with you.
BB-2012-03-27

Sami: Rafe, what are you doing here?
Rafe: **No**, I'm sorry to drop by so late.
DAYS-2012-02-10

These responses do not answer the wh-question TRIGGERS but they are still well-formed. With the use of the positive *ResPrt*s the responders indicate that they have the same question as the respondee. In other words, the responder indicates agreement with the respondee in their evaluation of the situation as triggering a particular question. This is confirmed by the content of the statements following the *ResPrt*s. Note that these statements are more or less obligatory in these contexts. They all suggest that the responder has no real answer to the preceding question precisely because s/he has the same question. Hence, we can conclude that *ResPrt*s can be used to respond to wh-questions despite the fact that they do not serve as answers.

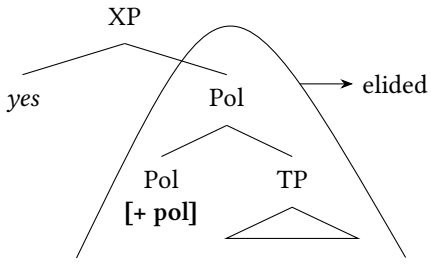
The question still remains, however, as to what exactly the *ResPrt*s contributes and how. Ideally, an analysis of *ResPrt*s should be able to account for all uses of *ResPrt*s. The

[8] SOAP was chosen over other available corpora of spoken language for several reasons. While soap operas are in part scripted, they are not necessarily scripted in full detail (many discourse markers may not be found in the script; Thoma 2016). Moreover, the current exploration is ultimately one of competence. I assume that both the script writers as well as the actors will create conversations that do not violate their conversational competence. Finally, according to Jones & Horak's (2014) study, the spoken language used in a British Soap Opera (*EastEnders*) is similar to unscripted conversational language in other spoken language corpora. Our quantitative study is based on the episodes aired in 2012 which consists of 2.2 million words.

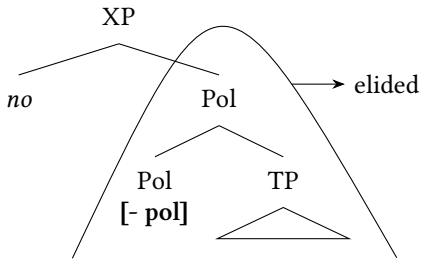
[9] Abbreviations underneath the SOAP examples are as follows: BB (Bold and Beautiful), (DAYS) Days of Our Lives, (GH) General Hospital, YR (Young and Restless). The 8-digit number following the abbreviation represents the release date for the episode from which the example is selected.

ellipsis-based analysis developed in Holmberg (2015) cannot straightforwardly account for *ResPrt*s when used to respond to wh-questions. This is because the proposed structure has an embedded p-structure containing a valued polarity variable as in (31) repeated from (17) above. However, if the TRIGGER of the response is a wh-question, then the elided structure cannot be a p-structure with a valued polarity variable.

(31) a. agreement w/assertion



b. disagreement w/assertion



So the question remains as to the contribution of the *ResPrt*s. Descriptively, the contribution of the positive *ResPrt* is to agree that the respondee's question is a valid question and the contribution of the negative *ResPrt* is to disagree that the respondee's question is a valid question, at least not from the responder's point of view. This is summarized in (32).

(32) A: [Wh ...?] TRIGGER: wh-question {p_1, p_2, p_3...}
B: i. Yes ... CONTENT: agreement with wh-question
ii. No ... CONTENT: disagreement with wh-question

But how does this (dis)agreement function come about?

3.1.3 Responding to imperatives

We now turn to imperatives, a clause-type that is used to express requests and commands. Unlike questions, imperatives do not explicitly solicit a response in the form of an answer from the addressee. However, we have already seen that *ResPrt*s are not restricted to

answering contexts. They can serve as more general response markers. Hence, we might expect that they can also be used to respond to imperatives. This is indeed the case, as exemplified by the data in (33)–(37), which are all from SOAP.

(33) Alison: So go back to the farmhouse and wait for us.
Deacon: **Yes**, Ma'am.
BB-2012-06-20

(34) Steffy: Treat me like one of your patients..
Taylor: **Yes**, I will.
BB-2012-06-29

(35) Michael: Breathe!
Starr: Yes.
GH-2012-03-29

(36) Tracy: Give it to me!
Maxie: **No**!
GH-2012-01-20

(37) Billy: Hey, open the door! Let me in!
Chloe: **No**, I am not letting you in. Forget about it!
YR-2009-03-16

The well-formedness of these examples indicate that *ResPrt*s can be used to respond to imperatives. In this context they can roughly be paraphrased as *Yes, I will do what you requested of me* vs. *No, I won't do what you requested of me.*

Again, existing analyses of *ResPrt*s cannot account for this use. This is because, like wh-questions, imperatives do not denote propositions, and hence do not make available a proposition to agree with nor a proposition whose polarity value has to be valued. Instead, an imperative is often analyzed as denoting a property that can only be true of the addressee (Portner 2004). So again, the question arises as to what the contribution of the *ResPrt* is when it is used to respond to an imperative. Descriptively, the contribution of the positive *ResPrt* is to agree with the respondee's evaluation of the situation that a command is in order (and hence the responder indicates that s/he will comply with it). In contrast, the contribution of the negative *ResPrt*s is to disagree with the validity of the command in this situation (and hence the responder indicates that they refuse to comply with it). This is summarized in (32).

(38)	A: [Imperative!]	TRIGGER: Imperative P
	B: i. Yes …	CONTENT: agreement with command
	ii. No …	CONTENT: disagreemen with command

3.1.4 Responding to exclamatives

Finally, we consider exclamatives. While some languages have dedicated exclamative clause-types, it is also the case that all kinds of utterances can be interpreted as exclamations, provided they have the right intonation and occur in the right context. What is crucial for our purpose is that responders can respond to commands with a *ResPrt*. This is exemplified by the data in (39)–(44). Note that none of the examples from the corpus are exclamations that are based on the dedicated exclamative clause-type. Nevertheless they still are instances of exclamations. Furthermore, the constructed example in (41) shows that the use of *ResPrt*s as a response to dedicated exclamative clause-types is also well-formed.

(39) Steffy: Whoo-hoo.
Liam: **Yes**!
BB-2012-05-03

(40) Brooke: Steffy is leaving town.
Hope: No way!
Brooke: (Squeals) **Yes**! I shouldn't say "good" because she is Ridge's daughter, and I really shouldn't celebrate, but I am.
BB-2012-03-19

(41) A: What a beautiful sunset.
B: **Yes**, I know. Isn't it gorgeous.

(42) Anita: She found it at Victor's.
Chelsea: Oh, my God!
Anita: **No**, relax. It's Victor's problem.
YR-2012-02-17

(43) Will: What a perfect time to lay low.
Gabi: **No**, Will, look, I'm trying to find an agent.
DAYS-2012-05-15

(44) Michael: What a lovely family tradition to hand on to your own niece.
Avery: **No**, I got to know Daisy through all this.
YR-2012-02-24

In this context *ResPrt*s can roughly be paraphrased as follows. The positive *ResPrt* indicates that the responder agrees with the evaluation of the situation by the respondee (45i); the negative *ResPrt* indicates that the responder does not agree with the evaluation of the situation by the respondee (45ii).

(45) A: [Exclamative!] TRIGGER: Exclamative {p_1, p_2, p_3,...}
B: i. Yes ... CONTENT: agreement w/exclamation
ii. No ... CONTENT: disagreement w/exclamation

Again, existing analyses of *ResPrt*s cannot account for this use. This is because, like wh-questions and imperatives, exclamatives do not denote propositions, and hence do not make available a proposition to agree with nor a proposition whose polarity value has to be valued. Instead, as indicated in (45), an exclamative can be analyzed as denoting a set of alternative propositions (Zanuttini & Portner 2003). So again, the question arises as to how the (dis)agreement function of *ResPrt* is derived when they are used to respond to an exclamative.

3.2 The analytical challenge

We have now explored *ResPrt* as responses to all major clause-types and we have seen that they are not only used as answers to polar questions. In fact, a survey of 1013 tokens of positive *ResPrt* in SOAP reveals that the vast majority of instances of *yes* is used to respond to preceding assertions (n = 654), followed by responses to yes/no questions (n = 279). The other functions of *yes* are much less frequent, but nevertheless occur: response to exclamatives (n = 44); response to imperatives (n = 36); and response to wh-questions (n = 9). This is summarized in Figure 1.[10]

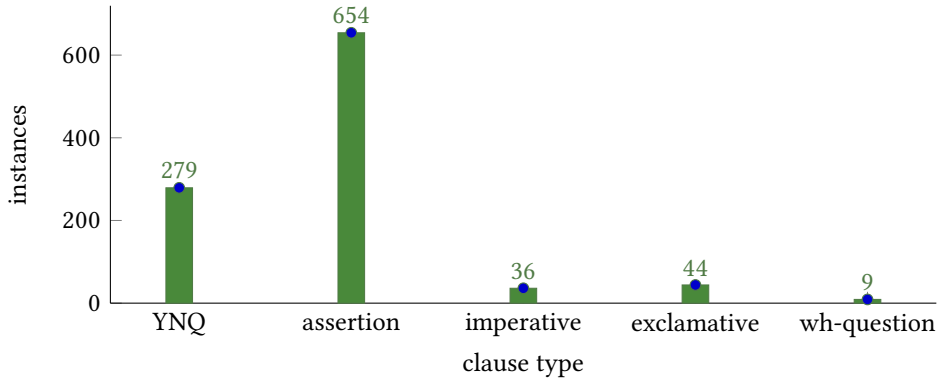


Figure 1: Distribution of *yes* across different TRIGGERS

As shown in Figure 2, the numbers are similar for *no*. The vast majority is used to respond to preceding assertions (n = 1387), followed by responses to yes/no questions (n = 711). The other functions of *no* are again much less frequent, but nevertheless occur: response to exclamatives (n = 16), response to imperative (n = 172), and response to wh-questions (n=58).

We have established above that the function of the *ResPrt* differs depending on the clause type of the TRIGGER, as summarized in Table 2.

[10] In this study, we looked at 1469 tokens of *yes* and 3093 tokens of *no*. Not all tokens are included in the quantitative analysis above. In particular, not included in the chart above are those tokens that respond to tag questions and rising declaratives, as well as echo-questions, addresses, and backchannels.

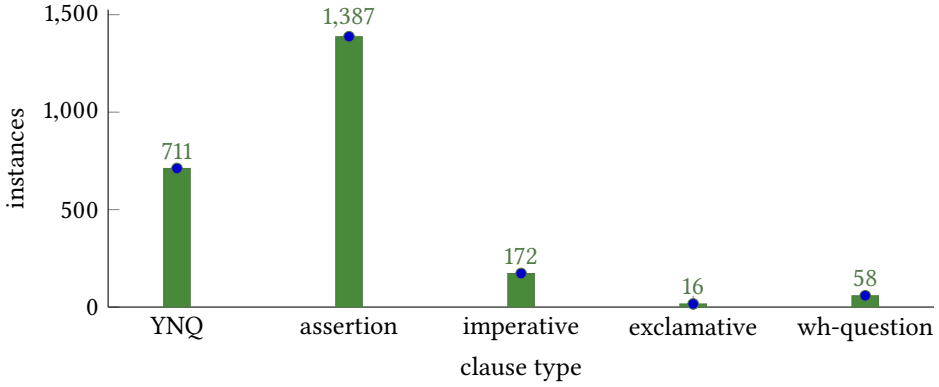


Figure 2: Distribution of *no* across different TRIGGERS

Table 2: Distribution and function of ResPRTs

TRIGGER of response		*yes*	FUNCTION	*no*	FUNCTION
Polar question	positive polar questions	✓	Answer: affirmative	✓	Answer: negative
	negative polar questions	✓	Answer: i) polarity-based ii) agreement-based	✓	Answer i) polarity-based ii) agreement-based
Declarative		✓	agreement w/assertion	✓	disagreement w/assertion
Interrogative		✓	agreement w/question	✓	disagreement w/question
Imperative		✓	agreement w/command	✓	disagreement w/command
Exclamative		✓	agreement w/exclamation	✓	disagreement w/exclamation

Note that *ResPrts* function as answers only if they serve to answer polar questions. In all other contexts they serve to express agreement or disagreement with the speech act of their TRIGGER. At first sight, the fact that *ResPrts* can be used to express agreement might not be surprising within a language that makes use of an agree/disagree-based system (referred to as *truth*-based in Holmberg 2015). But unfortunately, this is not sufficient to understand this pattern. First, we do not have a good understanding of what the contribution of *yes* and *no* is when they are used to mark agreement and disagreement. We have seen throughout the discussion that it is not immediately clear how to extend Holmberg's analysis to cover the full range of functions of *ResPrt.* Second, if the multifunctional profile of the type identified for English *ResPrt* is dependent on English having a polarity based system AND an agree/disagree based system in the sense of Kuno (1973), then we would expect that languages where answers are polarity-based will have a different profile, and that *ResPrts* could not be used as (dis)agreement markers following TRIGGERS other than polar questions. However, this prediction is not borne out, as I now show.

According to Holmberg (2015: Section 4.2), German does not have an agree/disagree-based system. Nevertheless, German *ResPrts* can be used with all of the TRIGGERS discussed for English *ResPrts* and with the same functions. This is shown below with examples from the Upper Austrian variety of German (henceforth UAG).[11]

Relative to the parameters explored in Holmberg (2015), UAG *ResPrts* have the following profile. The first thing to note is that *ResPrt* exist in this language. That is, in answering a polar question, UAG employs dedicated particles *jo* ('yes') and *na* ('no'). As shown in (46), both can be used in isolation or be followed by the CONTENT of the response (i.e., the proposition introduced in the TRIGGER of the response).

(46) Upper Austrian German

Q: Host du an Hund gfuattat? — TRIGGER: $p \vee \neg p$
Have you DET dog fed
'Did you feed the dog?'

A: a. Jo. (I hob an Hund gfuattat.) — CONTENT: p
Yes. I have DET dog fed

b. Na. (I hob an Hund net gfuattat.) — CONTENT: $\neg p$
No. I have DET dog NEG fed

Moreover, according to the criteria Holmberg (2015) adopts, UAG has a polarity-based system: negative questions cannot be answered with the positive *ResPrt* (47i). Like Standard German, UAG has a dedicated polarity reversing strategy: the positive *ResPrt* is prefixed with *oh* (47iii). With this strategy the CONTENT expressed by the response is p by virtue of reversing the negation of p ($\neg(\neg p)$).

[11] There are several reasons to use dialectal data for this discussion. First, conversations like those reported on here are a spoken language phenomenon and the status of Standard German as a spoken language is questionable (Weiß 2004; Auer 2004). In addition, in ongoing work on the form and function of response particles we find a staggering range of variation even among dialects of the same language (i.e., German).

(47) Upper Austrian German

Q:	Trinkt da Hons net an Kaffee? drinks DET Hans NEG DET coffee 'Does Hans not drink coffee?'	TRIGGER: ¬p ∨¬(¬p)
A:	i. * Jo. (=He does drink coffee.)	*CONTENT: p
	ii. Na. (= He doesn't drink coffee.)	CONTENT: ¬p
	iii. Oh jo. (= He does drink coffee.)	CONTENT: p =(¬(¬p))

Now, if the possibility for *ResPrt* to be used as (dis)agreement markers were contingent on the answering system of the language being an agree/disagree based system, then we would predict that *ResPrt* in UAG cannot be used in this way. However, this prediction is not borne out. The same *ResPrts* that can be used as answers to polar questions can also be used to respond to assertions (48), wh-questions (49), commands (50), and exclamations (51).

(48) Upper Austrian German

A:	Da Hons red-t guat Französisch \. DET Hons speak-3SG well French 'Hans speaks French well.'	TRIGGER: assertion (p)
B:	i. *Jo*\. (= p)	CONTENT: affirming p
	ii. *Na*\. (=¬p)	CONTENT: negating p

(49) Upper Austrian German

A:	Wonn foast denn du jetzt eigentlich? When leave-2SG PRT you now PRT 'When are you finally leaving?'	TRIGGER: wh-question
B:	i. **Jo**, des is a guate frog. Yes, DEM is INDF good question 'Yes, that's a good question.'	CONTENT: agree w/Q
	ii. **Na**, des deafst me ned frogn. No, DEM may-2SG me NOT ask 'No. You can't ask me that.'	CONTENT:disagree w/Q

(50) Upper Austrian German

A:	Jetzt geh endlich ins Bett. Now go finally into.the bed 'Go to bed now!'	TRIGGER: command
B:	i. **Jo** i geh jo eh scho. yes I go PRT PRT PRT 'but I'm going already.'	CONTENT: agree w/command

ii. **Na** wirkli ned. — CONTENT: disagree w/command
No really not
'No way.'

(51) Upper Austrian German

A: Ma is des a liaba Hund. — TRIGGER: exclamation
PRT is DEM INDF cute dog
'What a cute dog that is!'

B: i. **Jo** wirkli woa, geu? — CONTENT: agree w/excl.
yes really true, TAG?
'Yeah, that's true, isn't it?'

ii. **Na** owa wirkli ned. — CONTENT: disagree w/excl.
no PRT really NEG
'No, that's really not true.'

This establishes that the possibility for using *ResPrt* as responses to speech acts other than assertions is not contingent on the answering system being an agree/disagree based one. And, as indicated in the above examples, the general function of *ResPrt* in contexts where the TRIGGER is not an assertion is still agreement or disagreement with the TRIGGERING speech act. Thus we can conclude that the ability of *ResPrts* to express agreement or disagreement is not restricted to agree/disagree based answer systems.

But this still leaves us with the question as to how to analyse the (dis)agreement function of *ResPrt*.

4 The syntax of (dis-)agreement

To understand the difference between the answering function and the (dis)agreement function of *ResPrt* it is useful to compare their contribution with two TRIGGERS: polar questions vs. wh-questions. With polar questions, the *ResPrts* are used to affirm or negate the *proposition* (52) embedded in the question while with wh-questions, they are used to agree with or reject the *question* (53).

(52) A: [y/n…?] — TRIGGER: polar question ($p \vee \neg p$)
B: i. Yes … — CONTENT: affirming p (= p)
ii. No … — CONTENT: negating p (= $\neg p$)

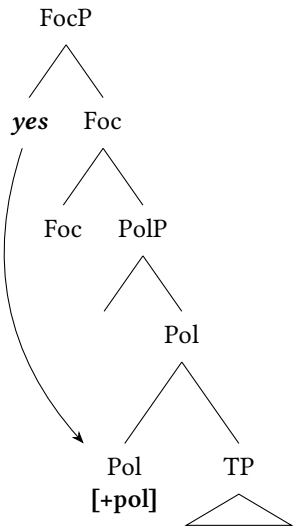
(53) A: [Wh …..?] — TRIGGER: wh-question $\{p_1, p_2, p_3 \ldots\}$
B: i. Yes … — CONTENT: agreement w/wh-question
ii. No … — CONTENT: disagreement w/wh-question

Thus when responding to a wh-question, the CONTENT of the response is the same as the TRIGGER, namely the speech act of questioning itself. This contrasts with the

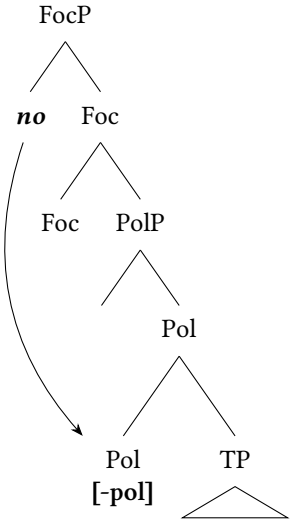
answering function of *ResPrt*s in response to polar questions. Here the CONTENT of the response is the proposition embedded in the polar question, and not the polar question itself. To account for this difference, let us begin by assuming that the analysis for *ResPrts* in their answering function is essentially as in Holmberg (2015): the *ResPrt* values the polarity value associated with the p-structure, as in (54), repeated from (4) above.

(54) *ResPrts* bind the polarity variable

a. the contribution of *yes*



b. the contribution of *no*

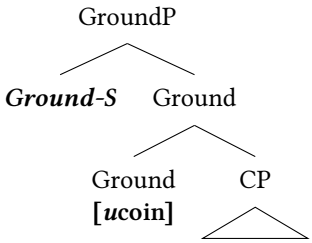


However, as we have seen, *ResPrts* are not restricted to indicating the polarity value of a proposition. Hence this cannot be their intrinsic content. In fact, the association with polarity is, on this analysis, syntactically conditioned. *ResPrts* value an open polarity variable, but they do not themselves establish polarity *per se*.

So suppose that the core content of the *ResPrts* is to value an unvalued clausal feature as either positive (*yes*) or negative (*no*). Positive and negative values are themselves not restricted to propositional polarity. Instead, all types of features have been assumed to be bi-valent such that one value is positive and the other negative (Jakobson 1932; Trubetzkoy 1939). I propose that – when used to establish (dis)agreement – the contribution of *ResPrts* is to value an unvalued feature in the speech act structure. In particular, following Wiltschko (2017); Wiltschko & Heim (2016); Thoma (2016), I assume that speech act structure contains a *grounding* layer, which is responsible for encoding the commitment of S towards p. The label *Ground*P is meant to evoke Clark & Brennan's (1991) mechanism of *grounding* as well as the notion of the common ground (cf. Heim et al. (2014); Thoma (2016) and Wiltschko & Heim (2016) for discussion). In particular, GroundP takes the CP (typed p-structure) as a complement and an abstract argument referring to the

S's ground (Ground-S) in its specifier as in (55).[12]

(55) Speech act structure

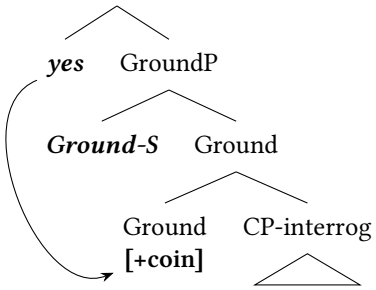


This structure follows the basic template for functional categories assumed in Wiltschko (2014): they are transitive heads which establish a relation between their complement and an abstract argument in their specifier. The relation is established via the unvalued coincidence feature [*u*coin] which is universally associated with all clausal heads. This feature establishes whether or not the two arguments coincide and is independent of the dimension relative to which they coincide. That is, coincidence may be in time, place, participancy or belief states, among other things. That coincidence is a central universal characteristic of a variety of grammatical categories was first observed in Hale (1986) (see Wiltschko 2014 for detailed discussion).

On this analysis then, the contribution of *ResPrts* is to value the unvalued coincidence feature associated with Ground. So when the TRIGGER is a wh-question, the structure associated with the *ResPrt* is as in (56). The *ResPrt* attaches to GroundP, which in turn takes a CP as its complement. This CP corresponds to the TRIGGER and is typically elided but can also be spelled out, as shown in (57).[13]

(56) *ResPrt* values [*u*coin] in Ground

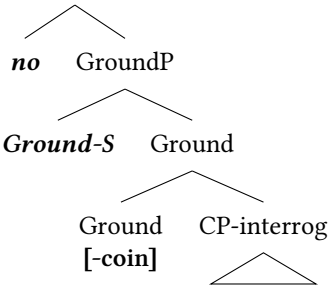
a. the contribution of *yes*



[12]For evidence that the speaker's ground (Ground-S) and the addressee's ground (Ground-A) are associated with two distinct layers in the structure, see Lam (2014); Heim et al. (2014); Thoma (2016). Since Ground-A plays no role in the analysis of the *ResPrts* discussed here, I will not discuss it here.

[13]In (56) the *ResPrt* is represented as attaching to GroundP in the same fashion as *ResPrts* are analysed in Holmberg (2015). It may be the case, however, that *ResPrts* are better analysed as heads associating directly with the Ground head. For the purpose of this discussion, the question whether *ResPrts* function as heads or phrases can be put aside.

b. the contribution of *no*



(57) A: When are you leaving?
B: i. Yes. (When am I leaving?) That's the question.
ii. No! (When am I leaving?) You can't ask me that.

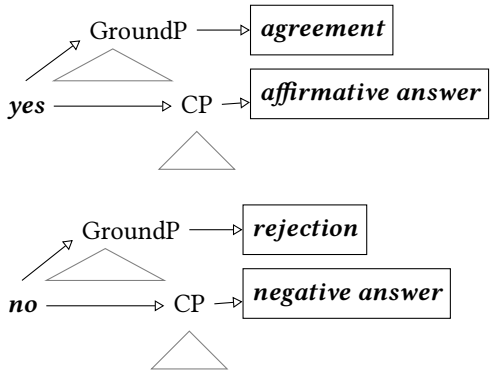
According to this analysis, *yes* values [*u*coin] associated with Ground as [+coin], thereby asserting that the wh-question is in the speaker's ground; in contrast, *no* values [*u*coin] as [-coin] thereby asserting that the question which serves as the TRIGGER is not in the speaker's ground. The assumption that questions can be part of someone's ground (in addition to propositions and discourse referents) has been independently established in Ginzburg (1995a; 1995) and Roberts (1996). They argue that the discourse component associated with wh-questions is a Question Set (a set of propositions). Evidence that this is so comes from the fact that a question may serve as a discourse referent, just like propositions do. Hence they can be anaphorically referenced, as in (57) by *that*.

According to this analysis, the multi-functionality of *ResPrts* derives from the fact that they can associate with the clausal spine in two different positions: i) immediately above p-structure and ii) above the speech act structure. In the former case, which is the one that Holmberg discusses, *ResPrts* serve to value an open polarity variable associated with the proposition. This derives their answering function because they provide the value for the open variable. Since by hypothesis, there is no polarity variable associated with wh-questions, this function is not available if the TRIGGER is a wh-question. The felicity of *ResPrts* in this context derives from the fact that the *ResPrts* can also associate with the spine above the speech-act structure. In this context, they serve to value the unvalued coincidence feature. This derives the (dis)agreement function of *ResPrts*. In particular, if the responder asserts that the TRIGGER question is in their ground it follows that they agree with the responder. By virtue of asking the question in the first place, the respondee makes it clear that this question is in their ground. If the same question is also in the respondee's ground, it follows that they agree on the felicity of the speech act. In this way, the proposed analysis can derive the fact that *ResPrts* can be used to respond to all clause-types. As just discussed, with assertions, the discourse component is a proposition; with wh-questions the discourse component is a Question Set. And following Portner (2004), we can assume that with imperatives, the discourse component is

a *to do list*. Finally, for expository reasons I assume that with exclamatives, the discourse component is list of *exclaimables*.

Hence the agreement function is communicated without a dedicated agreement marker. The essence of this analysis is summarized in (58).

(58) The agreement vs. answering function of *ResPrt*



In the remainder of this section, I discuss two predictions of this analysis. First, I show that the (dis)agreement function does not interact with negation. This follows, because the agreement function arises by associating *ResPrt* with GroundP, and hence is too high to interact with negation within the propositional structure. Second, I show that the (dis)agreement function is also available with polar questions.

Evidence that the agreement function derives from a high position of the *ResPrts* comes from the fact that in this position they do not interact with negation in the same way as they do when they serve the answering function. Recall that in English, answers to negative questions are ambiguous between the polarity and the truth-based reading because the *ResPrts* may or may not take negation in their scope. The relevant data exemplifying this pattern are repeated below for convenience.

(59) Q: Doesn't John drink coffee?

A: i. Yes. (=He does drink coffee.) CONTENT: p

(= He doesn't drink coffee.) CONTENT: ¬p

ii. No. (=He doesn't drink coffee.) CONTENT: ¬p

(= He does drink coffee.) CONTENT: p

If *ResPrts* in their (dis)agreement function associate with the spine above the speech act phrase we predict that they cannot interact with negation in the same way. This prediction is borne out. When a wh-question contains negation, the positive *ResPrt* agrees with the negated question (60i/ii) while the negative *ResPrt* has to disagree with the negated question (60iii/iv). Hence no ambiguity arises with *ResPrts* in this context and negated wh-questions behave just like their positive counterparts.

(60) A: Why wouldn't he do something like that?
B: i. **Yes**. That is the question.
ii. * **Yes**. That is not the question.
iii. * **No**. That's the question.
iv. **No**. That's not the question.

Next we turn to another question that the analysis raises: Why does the function of the *ResPrt* correlate with the speech act of the TRIGGER? That is, up until now we have seen that as responses to polar questions *ResPrts* function as answers while as responses to wh-questions as well as other speech acts, they function as (dis)agreement markers. Everything else being equal, we might expect that *ResPrts* could be associated with the answering function and the agreement function with any speech act. However, everything else is not equal. First, answering requires there to be an open variable inside the p-structure of the TRIGGER. This is the case in polar questions, but not in other speech act types such as assertions, content questions, commands, and exclamations. However, there are other ways to ask questions: rising declaratives and tag questions. And indeed, *ResPrts* can serve the answering function when these questions are the TRIGGERS for the response.

(61) A: You fed the dog/?
B: i. **Yes**. I fed the dog.
ii. **No**. I didn't feed the dog.

(62) A: You fed the dog, didn't you?
B: i. **Yes**. I fed the dog.
ii. **No**. I didn't feed the dog.

But what about the (dis)agreement function? The analysis predicts that the agreement function should also be available when the TRIGGER is a polar question. This prediction is indeed borne out. *ResPrts* can be used to (dis)agree with polar questions as well. That is, they can serve not only to answer the polar question but also to agree with or disagree with its felicity. Note however, that this use of the *ResPrt* is much more marked. It seems to improve with an initial *hmmm*, which, I assume, marks the responder's evaluation of the question.

(63) A: Did you feed the dog?
B: i. (Hmm) Yes. Did I feed the dog? That's a good question.
ii. (Hmm) No. Did I feed the dog? That's an unfair question.

In sum, I have argued that the two different functions of *ResPrts* we have identified are syntactically conditioned. The answering function arises if the *ResPrt* associates just above p-structure and values the open polarity value; the (dis)agreement function arises if the *ResPrt* associates above the speech-act structure and values [*u*coin] to assert whether or not the embedded speech act is in the responder's ground.

Note that simple *ResPrts* cannot be felicitously used with all types of assertion TRIGGERS. Specifically, agreement is only possible if the CONTENT of the response is already in the responder's ground at the time of the exchange. However, if the respondee reports on something that is new to the responder (as indicated by the initial phrase *guess what*), then a simple *ResPrt* is infelicitous; rather, the *ResPrt* has to be modified. In such cases, as shown in (64), in English the positive *ResPrt* is preceded by *oh*, which marks the newness of the TRIGGER while at the same time, *yes* indicates that there are no contradictory beliefs in the responder's ground. Hence, this modified *ResPrt* serves to indicate acceptance. Note also that there is a rising intonation on *yes*, which indicates that the responder is requesting confirmation that this proposition is really true. Thus, with the rising intonation the responder indicates that s/he accepts the interlocutor as the authority over the truth of the proposition. As shown in (65), UAG has a dedicated particle that serves the acceptance function: it simultaneously indicates the newness of the proposition in the responder's ground and its acceptance. Like in English, this particle is realized with a rising intonation.

(64) A: Guess what. My sister just gave birth to a baby\.
B: i. * Yes\.
ii. Oh, yes/?

(65) Upper Austrian German
A: Stoe da voa. Mei Schwesta hot grod a Kind kriagt\.
Put 2SG PRT. my sister AUX just DET child got.
'Imagine that. My sister just had a baby.'
B: i. * Jo\.
ii. Aso/?[14]

This much establishes that languages can have special means to mark the status of a particular proposition relative to the responder's ground: in English and in German, special markers are available to mark the newness of the proposition in the common ground. This is akin to the marking of the novelty or familiarity of a given discourse referent (i.e., definiteness marking). Given that definiteness is not marked across all languages, we may expect that the marking of novel propositions too is also not universally available. Hence this is another potential source of cross-linguistic variation that should be tracked when developing a typology of *yes* and *no*.

5 Marking response

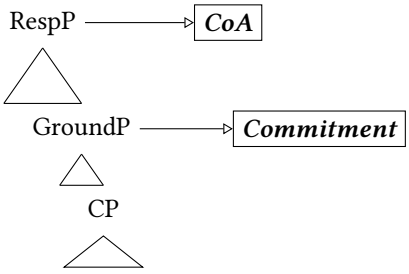
We have now seen that there are at least two different functions available for *ResPrts*. They can be used as answers to polar questions and they can be used as markers of (dis)agreement with the speech act. I have argued that the difference between these two

[14]The standard German version of this particle is *ach so*.

functions is syntactically conditioned: associating a *ResPrt* with the spine just above the p-structure results in the answering function, while associating it above the speech act structure (GroundP) results in the (dis)agreement function. The assumption that *ResPrts* can associate with different positions in the spine and that they can thereby acquire different functions raises the question as to whether there are any other positions that *ResPrts* can associate with and that would derive other functions for *ResPrts*. In this section I show that this is indeed the case.

In Wiltschko (2017), it is argued that the speech act structure consists not only of the GroundP but also contains an articulated response layer above GroundP. That is, many speech acts can be characterized not only by the commitment the speaker displays towards the proposition (encoded in GroundP) but also by a request for the addressee as to how to respond to the utterance. This is known as the *Call on Addressee* (henceforth CoA; Beyssade & Marandin 2006). In English, CoA can be encoded by the intonational contour associated with a given utterance. For example, rising intonation can be analysed as encoding a request to respond (Beyssade & Marandin 2006), and according to Wiltschko (2017) is associated with another layer in the speech act structure, namely RespP (see also Heim et al. 2014). This is schematized in (66).

(66) A fully articulated speech act structure



Given the structure in (66), we might expect that *ResPrts* can also associate with RespP. There is indeed a use of *ResPrts* in UAG which is amenable to such an analysis. In particular, *ResPrts* can be used to mark the following utterance as a response. In this case the TRIGGER of the response can be an immediately preceding utterance as in (67) but also an immediately preceding (non-linguistic) situation as in (68)).

(67) Upper Austrian German
Context. A and B work in the same cubicle. A usually leaves work at 4, but sometimes his schedule is a bit off. B wants to know if A is indeed planning to leave at 4 today.

B: Gehst du heit um 4 ham?
Go-2SG you today at 4 home.
'Are you going home at 4 today?'

A: i. **Jo/Na** des was-st doch eh. I geh imma um 4 ham.
YES/NO that know-2SG PRT PRT I go always at 4 home.
'But you know that. I always go home at 4.'

ii. **Jo/Na** des was-st leicht net?
YES/NO that know-2SG PRT NEG
'So you don't know that?'

(68) Upper Austrian German
Context. A and B are co-workers. Their working hours are fixed and they always go home at 4.30. Typically, they get ready to leave at 4.25 so they can be out the door by 4.30. Today B is not showing any signs of getting ready even at 4.25. A comments:

a. **Jo/Na** wonn gehst denn du heit ham?
YES/NO when go-2SG PRT you today home
'So when are you leaving today?'

b. **Jo/Na** geh-st du heit ned ham?
YES/NO go-2SG you today NEG home
'So aren't you going home today?'

In this use of the *ResPrt*, the CONTENT of the response is not established by the response marker itself, but instead by the following utterance. This has a number of consequences for the distribution of the *ResPrt* when used in this function. First, the following utterance cannot be elided. And second, the CONTENT of the response does not differ. depending on whether the positive or the negative *ResPrt* is used.[15] Finally, given that the TRIGGER can be a non-linguistic situation, we may expect there to be no restrictions on the type of linguistic TRIGGERS. This is indeed the case. All types of speech acts can serve as

[15] An anonymous reviewer points out that the interchangeability of the positive and negative *ResPrt* might indicate that at least in certain cases they might effectively be used expletively. To support this idea, the reviewer points out that in South African English there are certain uses of *no* that do not seem to mean *no* at all, as for example in i).

(i) A: How are you today?
B: **No**, I'm doing really well.

It is not clear that *no* is in fact meaningless here.

In particular, *ResPrts* do not only respond to propositional content and speech acts, but they may also respond to the mere fact that the TRIGGER expresses a belief on behalf of the speaker. So for example in ii) *yeah* and *no* co-occur without introducing a contradiction. In particular, *yeah* expresses that B accepts that A beliefs p, but *no* indicates that B does not agree (see Guntly 2016; Guntly & Wiltschko 2016 for further discussion).

(ii) A: Yeah you don't know which is you don't know which is worse.
B: **Yeah no** i know which is worse. (Switchboard Corpus 02078A)

In light of the data in ii), I hesitate to conclude that *no* in i) is really expletive. But to determine its function will have to await further research.

TRIGGERS for this use of the *ResPrt*. In (67), the trigger is a polar question, and in the data below we observe all other speech act types serving as TRIGGERS: WH-questions (69), assertions (70), commands (71), and exclamations (72).

(69) Upper Austrian German

A: Wonn gehst denn du heit ham?
When go-2SG PRT you today home.
'When are you going home today?'

B: **Jo/Na** des was-st doch eh. I geh imma um 4 ham.
JA/NO that know-2SG PRT PRT I go always at 4 home.
'You know that already. I always go home at 4.'

(70) Upper Austrian German

A: I boag ma gschwind dei Auto aus.
I borrow me quickly your car PRT
'I'm going to quickly borrow your car.'

B: **Jo/Na** des geht owa ned.
YES/NO that goes but NEG
'But that's not okay.'

(71) Upper Austrian German

A: Jetzt geh endlich ins Bett.
Now go finally into.the bed
'Go to bed now!'

B: **Jo/Na** i geh jo eh scho.
YES/NO I go PRT PRT PRT
'But I'm going already.'

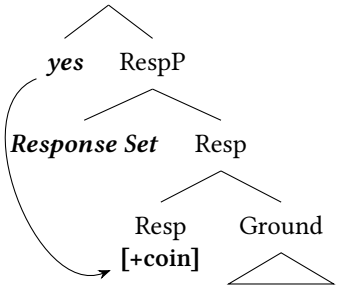
(72) Upper Austrian German

A: Ma a so a grossa Hund.
PRT a so a big dog
'Gee, what a big dog!'

B: **Jo/Na** ho-st den no ned gsegn?
YES/NO have-2SG DEM PRT NEG seen
'Haven't you seen him before?'

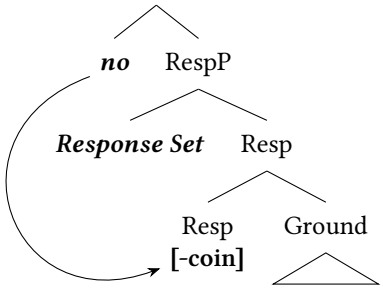
I assume that the head of the response phrase (RespP) is associated with an unvalued coincidence feature [*u*coin], just as any other clausal projection. It relates the utterance to the interlocutor's response set. With the use of the positive *ResPrt*, [*u*coin] receives a positive value [+coin] and thus asserts that the utterance coincides with the responder's response set thereby marking it as a response, as in (73).

(73) Valuing [*u*coin] in Resp



However, this raises the question as to why the negative *ResPrt* can also be used in this context. Everything else being equal, we expect it to value [*u*coin] as [-coin] as in (74).

(74) Valuing [*u*coin] in Resp



So why is it possible to express the same thing by valuing [*u*coin] as either positive or negative? I tentatively suggest that this may have to do with the timing of when the CONTENT of the response entered into the responder's response set. Specifically, with the positive *ResPrt* the responder indicates that the content *is* in the response set *now* ([+coin]); in contrast, with the negative *ResPrt* the responder indicates that the content *was not* in the response set prior to the time of utterance ([-coin]).[16] This is compatible with its being in the response set at the time of utterance. Hence, both the positive and the negative *ResPrt* can express the same content, with a difference in perspective. If the negative *ResPrt* is used, then the fact the response is now in the response set contrasts with the assertion that it wasn't in the response set prior to the time of utterance. Hence, the use of the negative *ResPrt* focusses on the surprising nature of the response.

[16] This is reminiscent of the difference between languages with and without definiteness marking as analysed in Wiltschko (2014).

Note that the possibility for a *ResPrt* to mark the utterance as a response is subject to cross-linguistic variation. While in UAG this function is possible for *ResPrt*, it is not in English: neither the positive nor the negative *ResPrt* are well-formed in this context (75a); instead, the particle *so* is used (75b).

(75) **Context**. A and B are co-workers. Their working hours are fixed and they always go home at 4.30. Typically, they get ready to leave at 4.25 so they can be out the door by 4.30. Today B is not showing any signs of getting ready even at 4.25. A comments:

a. * **Yes/*no**, when are you leaving today?

b. **So**, when are you leaving today?

It may be noted, though that UAG is not the only language where *ResPrts* can be used in this way. While relevant information about *ResPrts* is not easy to come by in grammars, I have found two candidates for *ResPrts* that serve to mark the utterance as a response, one in Macushi (Cariban) and the other in Cambodian. I briefly describe the relevant data in turn.

Consider first Macushi. Here the positive *ResPrt* (*inna*) can be used to answer polar questions as in (76) but it can also be used after questions of other types (i.e., wh-questions) as in (77), in which case it seems to express "*Yes I'm answering you.*" (Abbott 1991: 46–49).

(76) Macushi (Abbott 1991: 46)

A: attî pra nan?
2.go NEG 2.be.Q
'Didn't you go?'

B: inna, uutî pra wai. Aminke man.
Yes 1.go NEG 1.be far 3.be
'Yes, I didn't go. It was far.'

(77) Macushi (Abbott 1991: 49)

A: î' warapo i-tî-pai-nîkon nai?
how:many ADV-go-DESID-COLL 3.BE.Q
'How many are wanting to go?'

B: inna, tamî'nawîrî anna wîtî e'-pai man.
yes, all 1:EXCL go be-DESID 3:be
'Yes, we are all wanting to go.'

Thus, in Macushi, *ResPrt* can be used for answering as well as for marking the following utterance as a response.

A similar pattern is also found in Khmer (Cambodian), where affirmative responses to yes/no questions may consist of repeating the main verb in the question, or a full

repetition of the question in affirmative form. Crucially, in polite speech, the echoed verb is usually preceded by a form of the response particle *baat* for men (78) and *caah* for women. In the examples below, the optional 'full' responses are shown in brackets.

(78) Khmer (Huffman 1970: 24)

A: Look sok-səpbaay ciə tee?
you(polite) well-well well PRT
'Are you well?'

B: Baat (kñom) sok-səpbaay (ciə tee).
Yes (I) well-well well PRT
'Yes, I'm quite well.'

Interestingly, negative responses to yes-no questions may consist solely of the negative particle *tee* which is often followed by the negative form of the main verb. Relevant for our purpose is the fact that in polite speech, *tee* may be preceded by the appropriate form of the positive *ResPrt* in which case it is followed by the full negative answer to the question. This is shown in (79).

(79) Khmer (Huffman 1970: 24)

A: look sdap baan tee?
You(polite) listen can Q
'Can you understand?'

B: (baat) tee, (kñom) sdap min baan tee.
Yes Q I listen NEG can Q
'(Resp) no (I) don't understand.'

Given the profile of the *ResPrt* in Macushi and Khmer, I conclude that in these languages, *ResPrts* can be used to mark the host utterance as a response, just like in UAG, though a more thorough investigation will have to confirm that this analysis is indeed on the right track.

The use of *ResPrts* as markers of response is yet another source of cross-linguistic variation that will have to be tracked when developing a typology of *yes* and *no.*

6 Conclusion

In this paper I have shown that *ResPrts* are multi-functional: they can be used as answers to polar questions, as markers of (dis)agreement with preceding utterances no matter what their speech act type; and finally they can also be used to mark the utterance they precede as a response to some situation (linguistic or non-linguistic).[17] We have seen that there is considerable cross-linguistic variation. For example, in UAG simple positive

[17]There are still other uses of *ResPrt* that I haven't discussed here. These include backchannels (in the sense of Yngve 1970) and discourse particles.

ResPrts cannot be used to answer a negative polar question. On the other hand, in English, *ResPrts* cannot be used to mark a following utterance as a response. This is summarized in Table 3.

Table 3: Three functions of *ResPrts*

		English		UAG	
		yes	*no*	*jo*	*na*
Answering function	Positive question	✓	✓	✓	✓
	Negative question	✓	✓	✘	✓
Marker of (Dis)agreement		✓	✓	✓	✓
Marker of Response		✘	✘	✓	✓

In the analysis I have developed here, I have assumed (following Wiltschko 2014) that multi-functionality can be syntactically conditioned. A given unit of language may acquire different functions depending on its place of association with the syntactic spine. In addition, I have assumed an updated version of Ross' 1970 performative hypothesis according to which speech-act structure is part of the syntactic computation. With these assumptions we were able to develop a unified analysis for the three different functions of *ResPrts* we have discussed.

In this context, it is interesting to note that *ResPrt*s can also grammaticalize.[18] In particular, *no*-elements are a common source of negative reinforcers and/or presupposition negation markers (Zanuttini 1997; Poletto 2008a,b; DeVos & van der Auwera 2013) while *yes*-type elements can grammaticalise as sentence-internal discourse particles in German (*Er hat **ja** gesagt, dass ...*). It will be interesting to explore whether there are any correlations between the types of responses *ResPrts* can be used for and their grammaticalization paths.

These findings highlight the importance of Holmberg's insight that i) *ResPrts* have a syntax, and ii) that the cross-linguistic patterns of *ResPrts* should be carefully studied. In fact, give the recent interest in the syntacticization of speech acts (Speas & Tenny 2003; Sigurðsson 2004; Giorgi 2010; 2015; Haegeman 2013; Haegeman & Hill 2013 a.o.) it seems that *ResPrts* will provide valuable insights into the articulation of speech act structure.

Acknowledgments

Research on this paper was financially supported by a SSHRC Insight grant ('*Towards a typology of confirmationals')* awarded to the author.

I wish to thank Strang Burton, Lisa Matthewson, Michael Rochemont and members of the *eh*-lab at UBC (http://syntaxofspeechacts.linguistics.ubc.ca) for useful discussion and help with data collection. In particular, Yifang Yang is responsible for the SOAP

[18] I am grateful to an anonymous reviewer to draw my attention to this fact.

corpus study and Jordan Chark for his help with the search for information on *ResPrts* in grammars. Furthermore, I thank the students in the seminar on the grammar of discourse held at UBC, audiences of the workshop on *Linguistic Variation in the Interaction between Internal and External Syntax* (Utrecht, February 2014) and the students in Leslie Saxon's seminar at the University of Victoria.

This paper is dedicated to Anders Holmberg, who - once again - has been a pioneer in extending the empirical base for generative syntacticians by studying the syntax of response particles.

References

Abbott, Miriam. 1991. Macushi. In Desmond Derbyshire & Geoffrey Pullum (eds.), *Handbook of Amazonian languages 3*, 23–160. Berlin: Mouton de Gruyter.

Asher, Nicholas & Brian Reese. 2007. Intonation and discourse: Biased questions. *Interdisciplinary Studies on Information Structure*. Working Papers of the SFB 632 8. 1–38.

Auer, Peter. 2004. Non-standard evidence in syntactic typology–methodological remarks on the use of dialect data vs spoken language data. In Bernd Kortmann (ed.), *Dialectology meets typology: Dialect grammar from a cross-linguistic perspective*, 69–92. Berlin: Mouton de Gruyter.

Beyssade, Claire & Jean-Marie Marandin. 2006. The speech act assignment problem revisited: Disentangling speaker's commitment from speaker's call on addressee. In *Selected papers of CSSP 2005*, 37–68. http://www.cssp.cnrs.fr/eiss6/index_en.html.

Büring, Daniel & Christine Gunlogson. 2000. Aren't positive and negative polar questions the same? Unpublished manuscript, University of California at Santa Cruz.

Clark, Herbert & Susan Brennan. 1991. Grounding in communication. In Lazren B. Resnick, John M. Levine & Stephanie D. Teasley (eds.), *Perspectives on socially shared cognition*, 127–149. Washington DC: American Psychological Association.

DeVos, Mark & Johan van der Auwera. 2013. Jespersen cycles in Bantu: Double and triple negation. *Journal of African Languages and Linguistics* 34. 205–274.

Farkas, Donka & Kim Bruce. 2009. On reacting to assertions and polar questions. *Journal of Semantics* 27. 81–118.

Ginzburg, Jonathan. 1995a. Resolving questions, part I. *Linguistics and Philosophy* 18. 459–527.

Ginzburg, Jonathan. 1995. Resolving questions, part II. *Linguistics and Philosophy* 18. 567–609.

Giorgi, Alessandra. 2010. *About the speaker: Towards a syntax of indexicality*. Oxford: Oxford University Press.

Giorgi, Alessandra. 2015. Discourse and the syntax of the left periphery: Clitic left dislocation and hanging topic. In Josef Bayer, Roland Hinterhölzl & Andreas Trotzke (eds.), *Discourse-oriented syntax*, vol. 226 (Linguistik Aktuell/Linguistics Today), 229–250. Amsterdam: John Benjamins.

Goodhue, Daniel, James Pickett & Michael Wagner. 2013. English reverse prosody in yes-no responses. In *Sem Dial 2013: Proceedings of the 17th Workshop on the Semantics and Pragmatics of Dialogue 2013*.

Goodhue, Daniel & Michael Wagner. 2015. It's not just what you say, it's how you say it: Intonation, yes and no. In *The Proceedings of the North East Linguistics Society (NELS) 45*. http://semanticsarchive.net/Archive/TRjYmNiN/GoodhueWagner_2015.pdf.

Gunlogson, Christine. 2003. *True to form: Rising and falling declaratives as questions in English*. New York: Routledge.

Guntly, Erin. 2016. *Yeah no. Response markers can tell you a lot*. Unpublished manuscript.

Guntly, Erin & Martina Wiltschko. 2016. Response markers in Ktunaxa. Poster given at Semantics of Understudied Languages of the Americas 2016.

Haegeman, Liliane. 2013. West Flemish verb-based discourse markers and the articulation of the speech act layer. *Studia Linguistica* 68. 116–39.

Haegeman, Liliane & Virginia Hill. 2013. The syntactization of discourse. In Raffaela Folli, Christina Sevdalli & Robert Truswell (eds.), *Syntax and its limits* (Oxford Studies in Theoretical Linguistics), 370–390. Oxford: Oxford University Press.

Haegeman, Liliane & Andrew Weir. 2015. The cartography of yes and no in West Flemish. In Josef Bayer, Roland Hinterhölzl & Andreas Trotzke (eds.), *Discourse-oriented syntax*, vol. 226 (Linguistik Aktuell/Linguistics Today), 175–210. Amsterdam: John Benjamins.

Hale, Kenneth L. 1986. Notes on world view and semantic categories: Some Walpiri examples. In Pieter Muysken & Henk van Riemsdijk (eds.), *Features and projections*, 233–254. Dordrecht: Foris.

Halliday, M.A.K. & Ruqaiya Hasan. 1976. *Cohesion in English*. London: Longman.

Hamblin, Charles Leonard. 1958. Questions. *Australasian Journal of Philosophy* 36. 159–168.

Hamblin, Charles Leonard. 1973. Questions in Montague English. *Foundations of Language* 10. 41–53.

Heim, Johannes, Hermann Keupdjio, Zoe Wai Man Lam, Adriana Osa Gomez, Sonja Thoma & Martina Wiltschko. 2014. What to do with particles. In *Proceedings of CLA*. http://syntaxofspeechacts.linguistics.ubc.ca/wp-content/uploads/2014/02/heim-et-al-cla-2014-proceedings.pdf.

Holmberg, Anders. 2001. The syntax of yes and no in Finnish. *Studia Linguistica* 55. 141–174.

Holmberg, Anders. 2002. Expletives and agreement in Scandinavian passives. *Journal of Comparative Germanic Linguistics* 4. 85–128.

Holmberg, Anders. 2007. Null subjects and polarity focus. *Studia Linguistica* 61. 212–236.

Holmberg, Anders. 2013. The syntax of answers to polar questions in English and Swedish. *Lingua* 128. 31–50.

Holmberg, Anders. 2014. The syntax of the Finnish question particle. In Peter Svenonius (ed.), *Functional structure from top to toe*, 266–289. Oxford: Oxford University Press. http://www.ncl.ac.uk/elll/research/publication/177509.

Holmberg, Anders. 2015. *The syntax of yes and no*. Oxford: Oxford University Press.

Huffman, Franklin E. 1970. *Modern spoken Cambodian*. Ithaca, New York: Cornell University. reprinted in 1991.
Jakobson, Roman. 1932. *The structure of the Russian verb*. The Hague: Mouton. Reprinted in: Russian and Slavic Grammar Studies, 1931-1981, Mouton 1984.
Jones, Bob Morris. 1999. *The Welsh answering system*. Vol. 120 (Trends in Linguistics, Studies and Monographs). Berlin: Mouton de Gruyter.
Jones, Christian & Tania Horak. 2014. Leave it out! The use of soap operas as models of spoken discourse in the ELT classroom. *The Journal of Language Teaching and Learning* 4. 1–14.
Kramer, Ruth & Kyle Rawlins. 2009. Polarity particles: An ellipsis account. In. Amherst, MA: Graduate Student Linguistic Association.
Krifka, Manfred. 2013. Response particles as propositional anaphors. In *Proceedings of Semantics and Linguistic Theory (SALT) 23*, 1–18.
Kuno, Susumu. 1973. *The structure of the Japanese language*. Cambridge, MA: MIT Press.
Ladd, Robert D. 1981. A first look at the semantics and pragmatics of negative questions and tag questions. In *Papers from the 17th regional meeting of the Chicago Linguistic Society*, 164–171.
Laka, Itziar. 1990. *Negation in syntax, on the nature of functional categories and projections*. Massachusetts Institute of Technology, Dept. of Linguistics & Philosophy dissertation.
Lam, Zoe Wai-Man. 2014. A complex ForceP for speaker- and addressee-oriented discourse particles in Cantonese. *Studies in Chinese Linguistics* 35. 61–80.
Liberman, Mark & Ivan Sag. 1974. Prosodic form and discourse function. *Chicago Linguistic Society* 10. 416–427.
Poletto, Cecilia. 2008a. On negative doubling. *Quaderni di Lavoro ASIt* 8. 57–84.
Poletto, Cecilia. 2008b. The syntax of focus negation. *University of Venice Working Papers in Linguistics* 18. 181–202.
Pope, Emily Norwood. 1976. *Questions and answers in English*. The Hague: Mouton.
Portner, Paul P. 2004. The semantics of imperatives within a theory of clause types. *Semantics and Linguistic Theory* 14. 235–252.
Roberts, Craige. 1996. Information structure: Towards an integrated formal theory of pragmatics. In Andreas Kathol & Jae Hak Yoon (eds.), *OSU working papers in linguistics*, 91–136. Columbus, OH: Ohio State University Department of Linguistics.
Romero, Maribel & Chung-hye Han. 2004. On negative yes/no questions. *Linguistics and Philosophy* 27. 609–658.
Ross, John R. 1970. On declarative sentences. In Roderick Jacobs & Peter Rosenbaum (eds.), *Readings in English transformational grammar*, 222–272. Waltham, Mass.: Ginn & Co.
Sadock, Jerrold M. & Arnold Zwicky. 1985. Speech act distinctions in syntax. In Timothy Shopen (ed.), *Language typology and syntactic description*, 155–196. Cambridge: Cambridge University Press.
Sigurðsson, Halldór Ármann. 2004. The syntax of person, tense, and speech features. *Italian Journal of Linguistics* 16. 219–251. Special issue.

Speas, Peggy & Carol Tenny. 2003. Configurational properties of point of view roles. In Anna-Maria Di Sciullo (ed.), *Asymmetry in grammar*, 315–343. Amsterdam: John Benjamins.

Thoma, Sonja. 2016. *Discourse particles and the syntax of discourse. Evidence from Miesbach Bavarian*. University of British Columbia. Unpublished PhD dissertation.

Trubetzkoy, Nikolai Sergeevich. 1939. *Grundzüge der Phonologie*. Prague: Jednota ceskoslovenskych matematiku a fysiku.

Wallage, Philip & Wim van der Wurff. 2013. On saying 'yes' in early Anglo-Saxon England. *Anglo-Saxon England* 42. 183–215.

Weiß, Helmut. 2004. A question of relevance: Some remarks on standard languages. *Studies in language* 28. 648–674.

Wiltschko, Martina. 2014. *The universal structure of categories: Towards a formal typology*. Cambridge: Cambridge University Press.

Wiltschko, Martina. 2017. Ergative constellations in the structure of speech acts. In Jessica Coon, Diane Massam & Lisa Travis (eds.), *The Oxford handbook of ergativity*, 419–446. New York: Oxford University Press.

Wiltschko, Martina & Johannes Heim. 2016. The syntax of sentence peripheral discourse markers. A neo-performative analysis. In Gunther Kaltenböck, Evelien Keizer & Arne Lohmann (eds.), *Outside the clause: form and function of extra-clausal constituents*, 305–340. Amsterdam: John Benjamins.

Yngve, Victor. 1970. On getting a word in edgewise. *Chicago Linguistic Society* 6. 567–578.

Zanuttini, Raffaela. 1997. *Negation and clausal structure: A comparative study of Romance languages*. Oxford: Oxford University Press.

Zanuttini, Raffaela & Paul P. Portner. 2003. Exclamative clauses: At the syntax-semantics interface. *Language* 79(1). 39–81.