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 ResPrts 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, ResPrts – as the term particle suggests – are frequently morphologically simplex. That is, in many languages, neither positive
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 ResPrts 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?  
B: Yes. (= I fed the dog.)  
   No. (= I didn’t feed the dog.)

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).

1For 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’.
The ResPrt binds the polarity variable

a. the contribution of yes
   \[ \text{FocP} \]
   \[ \text{yes} \]
   \[ \text{Foc} \]
   \[ \text{Foc} \]
   \[ \text{PolP} \]
   \[ \text{Pol} \]
   \[ [+\text{pol}] \]
   \[ \text{TP} \]

b. the contribution of no
   \[ \text{FocP} \]
   \[ \text{no} \]
   \[ \text{Foc} \]
   \[ \text{Foc} \]
   \[ \text{PolP} \]
   \[ \text{Pol} \]
   \[ [-\text{pol}] \]
   \[ \text{TP} \]

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 ResPrts 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

\[ \text{p-structure} \]
\[ \text{yes/no} \]

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

²Replacing 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 ResPrts 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?’
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 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 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).

(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).

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 \lor \neg p)
    CONTENT of response:
    i. yes: affirming p (= p),
    ii. no: negating p (= \neg 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

<table>
<thead>
<tr>
<th>Utterance form</th>
<th>Utterance function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Declarative</td>
<td>Assertion</td>
</tr>
<tr>
<td>Interrogative</td>
<td>Question</td>
</tr>
<tr>
<td>Imperative</td>
<td>Command/request</td>
</tr>
<tr>
<td>Exclamative</td>
<td>Exclamation</td>
</tr>
</tbody>
</table>

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.

\[ \begin{align*}
\text{(15)} & \quad \text{A: John speaks French really well \\
& \quad \quad \text{B: i. Yes \\. ($=$ p)} \quad \quad \text{CONTENT: agreement w/p} \\
& \quad \quad \quad \text{ii. No \\. ($=$¬p)}^4 \quad \quad \text{CONTENT: disagreement w/p} \\
& \quad \text{(adapted from Holmberg 2015: 211 (4))}
\end{align*} \]

\[ \begin{align*}
\text{(16)} & \quad \text{A: You stole the cookie \\
& \quad \quad \text{B: i. Yes \\. ($=$ p)} \quad \quad \text{CONTENT: agreement w/p} \\
& \quad \quad \quad \text{ii. No \\. ($=$¬p)} \quad \quad \text{CONTENT: disagreement w/p} \\
& \quad \text{(adapted from Krifka 2013: 2 (2a))}
\end{align*} \]

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].

---

4According 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).\textsuperscript{5}

\begin{itemize}
  \item (17) a. yes

\begin{center}
\begin{tikzpicture}
  \node (xp) at (0,0) {XP};
  \node (pol) at (0,-2) {Pol};
  \node (elided) at (0,-4) {elided};
  \draw (xp) -- (pol);
  \node (yes) at (0,-1) {yes};
  \draw (yes) -- (pol);
  \node (tp) at (0,-6) {TP};
  \draw (pol) -- (tp);
  \node (polpos) at (0,-3) {[+ pol]};
  \draw (polpos) -- (pol);

\end{tikzpicture}
\end{center}

b. no

\begin{center}
\begin{tikzpicture}
  \node (xp) at (0,0) {XP};
  \node (pol) at (0,-2) {Pol};
  \node (elided) at (0,-4) {elided};
  \draw (xp) -- (pol);
  \node (no) at (0,-1) {no};
  \draw (no) -- (pol);
  \node (tp) at (0,-6) {TP};
  \draw (pol) -- (tp);
  \node (polneg) at (0,-3) {[- pol]};
  \draw (polneg) -- (pol);

\end{tikzpicture}
\end{center}

\end{itemize}

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 \\

\textsuperscript{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.
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 *ResPrts*, they cannot be used as answers, as shown in the examples in (22–23) (adapted from Holmberg 2015: 211 (5)).

---

(20) A: John speaks French really well.  
TRIGGER: assertion (p)  
B:  
1. Yes.  
   CONTENT: agreement w/p  
2. True.  
   CONTENT: agreement w/p  
3. Right.  
   CONTENT: agreement w/p  
4. That’s right.  
   CONTENT: agreement w/p  
(adapted from Holmberg 2015: 211 (4))

(21) A: John speaks French really well.  
TRIGGER: assertion (p)  
B:  
1. No.  
   CONTENT: disagreement w/p  
2. False.  
   CONTENT: disagreement w/p  
3. Wrong.  
   CONTENT: disagreement w/p  
4. That’s wrong.  
   CONTENT: disagreement w/p

(22) A: Does John speak French?  
TRIGGER: polar question (p ˅ ¬p)  
B:  
1. Yes.  
   CONTENT: affirming p

---

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.
Thus, ResPrts 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).

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.

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

(25) A: John doesn’t speak French well.   TRIGGER: negative declarative \( \neg p \)
B:  i. No.                                  CONTENT: disagreement w/\( \neg p \)
    ii. False.                               CONTENT: agreement w/\( \neg p \)
iii. Wrong.  
iv. That’s wrong.

This establishes that the contribution of ResPrts cannot simply be asserting or negating the truth of p. So we are still left with the question about the contribution of ResPrts 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 ResPrts, 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 ResPrts 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 ResPrts used.

We have also established that the agreement vs. polarity function of ResPrts 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 ResPrts 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 ResPrts are ill-formed.

7Thus 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 ResPrts 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

(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 ResPrts 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 ResPrts. 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 ResPrts 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 ResPrts contributes and how. Ideally, an analysis of ResPrts should be able to account for all uses of ResPrts. The

8SOAP 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.

9Abbreviations 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 ResPrts 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

\[ \text{XP} \]
\[ \text{yes} \]
\[ \text{Pol} \]
\[ \rightarrow \text{elided} \]
\[ \text{Pol} \]
\[ [+\text{pol}] \]
\[ \text{TP} \]

b. disagreement w/assertion

\[ \text{XP} \]
\[ \text{no} \]
\[ \text{Pol} \]
\[ \rightarrow \text{elided} \]
\[ \text{Pol} \]
\[ [-\text{pol}] \]
\[ \text{TP} \]

So the question remains as to the contribution of the ResPrts. 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 ...?]  
B: i. Yes ...  
ii. No ...  

TRIGGER: wh-question \{p_1, p_2, p_3...\}  
CONTENT: agreement with wh-question  
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 ResPrts 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 ResPrts 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 ResPrts 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 ResPrts 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!]  
B: i. Yes ...  
ii. No ...  

TRIGGER: Imperative P  
CONTENT: agreement with command  
CONTENT: disagreement 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 ResPrts 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 ResPrts 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

257
Again, existing analyses of ResPrt 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.\footnote{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.}

![Graph showing distribution of yes across different triggers]

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.
Figure 2: Distribution of *no* across different triggers

Table 2: Distribution and function of ResPRTs

<table>
<thead>
<tr>
<th>Trigger of response</th>
<th><em>yes</em></th>
<th>FUNCTION</th>
<th><em>no</em></th>
<th>FUNCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polar question</td>
<td>✓</td>
<td>Answer: affirmative</td>
<td>✓</td>
<td>Answer: negative</td>
</tr>
<tr>
<td></td>
<td></td>
<td>i) polarity-based</td>
<td></td>
<td>i) polarity-based</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ii) agreement-based</td>
<td></td>
<td>ii) agreement-based</td>
</tr>
<tr>
<td>Declarative</td>
<td>✓</td>
<td>agreement w/assertion</td>
<td>✓</td>
<td>disagreement w/assertion</td>
</tr>
<tr>
<td>Interrogative</td>
<td>✓</td>
<td>agreement w/question</td>
<td>✓</td>
<td>disagreement w/question</td>
</tr>
<tr>
<td>Imperative</td>
<td>✓</td>
<td>agreement w/command</td>
<td>✓</td>
<td>disagreement w/command</td>
</tr>
<tr>
<td>Exclamative</td>
<td>✓</td>
<td>agreement w/exclamation</td>
<td>✓</td>
<td>disagreement w/exclamation</td>
</tr>
</tbody>
</table>
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).

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?
   ‘Did you feed the dog?’
A: a. Jo. (I hob an Hund gfuattat.)
   Yes. I have det dog fed
   content: p
b. Na. (I hob an Hund net gfuattat.)
   No. I have det dog neg fed
   content: ¬p

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 (¬¬p)).
(47) Upper Austrian German

Q: Trinkt da Hons net an Kaffee?  
   drinks det Hans neg det coffee  
   ‘Does Hans not drink coffee?’
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 Hans speak-3SG well French  
   ‘Hans speaks French well.’
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?’
B: i. Jo, des is a guate frog.
   Yes, dem is indf good question  
   ‘Yes, that’s a good question.’  
   ii. Na, des deafst me ned frogn.
   No, dem may-2SG me not ask  
   ‘No. You can’t ask me that.’

(50) Upper Austrian German

A: Jetzt geh endlich ins Bett.
   Now go finally into.the bed  
   ‘Go to bed now!’
B: i. Jo i geh jo eh scho.
   yes I go prt prt prt prt  
   ‘but I’m going already.’
Martina Wiltschko

ii. Na wirkli ned.  
   No really not  
   ‘No way.’

(51) Upper Austrian German

A: Ma is des a liaba Hund.  
   TRIGGER: exclamation
   ‘What a cute dog that is!’
B: i. Jo wirkli woa, geu?  
   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 ∨ ¬p)
   B: i. Yes ...  
   CONTENT: affirming p (= p)
   ii. No ...  
   CONTENT: negating p (= ¬p)

(53) A: [Wh .......?]  
   TRIGGER: wh-question {p₁, p₂, p₃...}
   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
11 Response particles beyond answering

answering function of ResPrts 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

\[
\begin{align*}
a. \text{ the contribution of } yes & \quad b. \text{ the contribution of } no \\
\text{FocP} & \quad \text{FocP} \\
\text{yes} & \quad \text{no} \\
\text{Foc} & \quad \text{Foc} \\
\text{PolP} & \quad \text{PolP} \\
\text{Pol} & \quad \text{Pol} \\
[+pol] & \quad [-pol] \\
\text{TP} & \quad \text{TP}
\end{align*}
\]

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 GroundP 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
Martina Wiltschko

S’s ground (Ground-S) in its specifier as in (55).12

(55) Speech act structure

\[
\text{GroundP} \\
\text{Ground-S} \quad \text{Ground} \\
\text{Ground} \quad \text{CP} \\
[\text{ucoin}] 
\]

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 [ucoin] 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 [ucoin] in Ground

\[
\text{ResPrt values [ucoin] in Ground} \\
\text{a. the contribution of yes} \\
\]

\[
\text{yes} \quad \text{GroundP} \\
\text{Ground-S} \quad \text{Ground} \\
\text{Ground} \quad \text{CP-interrog} \\
[\text{+coin}] 
\]

\[12\text{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.}
\[13\text{In (56) the ResPrt is represented as attaching to GroundP in the same fashion as ResPrts are analysed in Holmberg (2015). It may be the case, however, that ResPrts are better analysed as heads associating directly with the Ground head. For the purpose of this discussion, the question whether ResPrts function as heads or phrases can be put aside.}
\]

264
11 Response particles beyond answering

b. the contribution of no

\[
\begin{array}{c}
\text{no} \\
\text{GroundP} \\
\text{Ground-S} \\
\text{Ground} \\
\text{[-coin]} \\
\text{CP-interrog}
\end{array}
\]

(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 \([+\text{coin}]\) associated with Ground as \([+\text{coin}]\), thereby asserting that the wh-question is in the speaker’s ground; in contrast, no values \([-\text{coin}]\) as \([-\text{coin}]\) 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

\[
\begin{array}{c}
\text{GroundP} \\ \to \\
\downarrow \\
\text{yes} \\ \to \\
\uparrow \\
\text{CP} \\
\to \\
\downarrow \\
\text{agreement} \\
\end{array}
\quad \text{affirmative answer}
\]

\[
\begin{array}{c}
\text{GroundP} \\ \to \\
\downarrow \\
\text{no} \\ \to \\
\uparrow \\
\text{CP} \\
\to \\
\downarrow \\
\text{rejection} \\
\end{array}
\quad \text{negative answer}
\]

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.
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.

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.

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 [ucoin] 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.  
   ’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

14The 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

\[ \text{RespP} \rightarrow [\text{CoA}] \]

\[ \text{GroundP} \rightarrow [\text{Commitment}] \]

\[ \text{CP} \]

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 [ucoin], just as any other clausal projection. It relates the utterance to the interlocutor’s response set. With the use of the positive ResPrt, [ucoin] 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 \([ucoin]\) in Resp

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

(74) Valuing \([ucoin]\) in Resp

So why is it possible to express the same thing by valuing \([ucoin]\) 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 Resp the responder indicates that the content is in the response set now ([+coin]); in contrast, with the negative Resp 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 Resp can express the same content, with a difference in perspective. If the negative Resp 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 Resp 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: i’ warapo i-ti-pai-nikon nai?
how:many ADV-GO-DESID-COLL 3.BE.Q
‘How many are wanting to go?’

B: inna, tami’nawiri anna witi e’-pai man.
es, 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-sapbaay ciə tee?
you(polite) well-well well prt
‘Are you well?’

B: Baat (kñom) sok-sapbaay (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

17There are still other uses of ResPrt that I haven’t discussed here. These include backchannels (in the sense of Yngve 1970) and discourse particles.
Response particles beyond answering

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

<table>
<thead>
<tr>
<th></th>
<th>English</th>
<th>UAG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive question</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Negative question</td>
<td>✓</td>
<td>✘</td>
</tr>
<tr>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Marker of (Dis)agreement</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>▼</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Marker of Response</td>
<td>✘</td>
<td>✘</td>
</tr>
<tr>
<td>▼</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

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 ResPrts can also grammaticalize. 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 confirmational’) 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

---

18I 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**


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


11 Response particles beyond answering


279