A cross-linguistic view on speaker variation in the interpretation of response particles

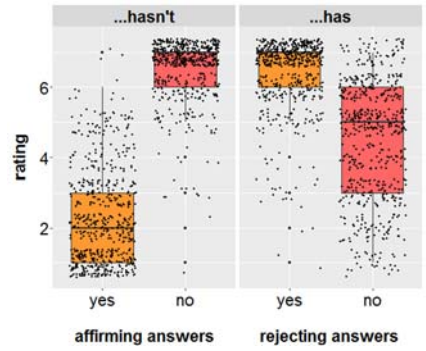
In principle, response particles like *yes* and *no* may be used to affirm/reject the truth of an antecedent utterance, or to indicate the positive/negative polarity of the answer clause. If the antecedent is negative, this may lead to ambiguity, e.g. in 0B), *yes* may affirm the truth of the antecedent (i) or indicate positive answer polarity (ii), *no* may reject the antecedent (i) or indicate negative answer polarity (ii). Pope (1976) proposed that languages choose if their particles signal affirmation/rejection of the antecedent or answer polarity. Recent research has shown that such a neat division is not feasible (Roelofsen/Farkas 2015; Krifka 2013), but a rough division may still be insightful (Holmberg 2016). ◆ Recent research has also shown that there might be considerable inter-speaker variation within a language. Meijer et al. (2015) provide quantitative evidence from acceptability judgement experiments in German showing that speakers differ in whether they find *ja* ('yes') or *nein* ('nein') more appropriate in affirming answers to negative assertions/questions. The majority of German speakers find *ja* more acceptable (= affirmation of antecedent), a minority finds *nein* more acceptable (= indication of answer polarity). In rejections, *no* is more acceptable than *ja* for all speakers (= rejection of antecedent).◆ The present study reports 4 experiments that used the same methodology as Meijer et al. with translation-equivalent materials for UK English and Netherlands Dutch (all web-based) with the goal of exploring the acceptability of the respective answer particles in these languages with a view to speaker variation (in case there is any). English and Dutch differ from German in that German has a three-particle system: in addition to *ja* and *nein* there is *doch* as a dedicated particle for rejections of negative antecedents. English has no such particle. Dutch has *ja wel*, which, however, is not as conventionalized as *doch*. ◆ Experiments 1-3 tested English, 4 tested Dutch. **Exp 1** tested full clause responses to negative assertions in a 2x2x2 design (factors CONTEXT, PARTICLE, RESPONSE CLAUSE) see 0). CONTEXT was included to test predictions of Krifka's theory of response particles but will not be discussed because it did not yield effects. UK speakers rated the acceptability of dialogues like 0) on a scale from [1] *very unnatural* to [7] *very natural*. They were told that the true state-of-affairs (SOA) was revealed in the response clause. The results are given in 0). In affirmations, speakers found *no* more acceptable than *yes*. In rejections, *yes* was more acceptable than *no* but there was some variation in the *no*-answers. **Exp 2** tested bare particle responses to questions. The true SOA was revealed in the introductory scene description (see 0) for sketch). The experimental factors were PARTICLE and SOA (pos/ neg). Note that the context forestalled any question bias. The results are generally the same as in Exp 1 but there was more variation and an overall lower acceptability, suggesting that bare particles are not very felicitous as answers. **Exp 3** tested questions like Exp 2 but added a response clause. Acceptability was higher than in Exp 2. For affirmations, the results resemble those of Exp 1. For rejections there was still great variation, the difference between *yes* and *no* even disappearing (cf. Goodhue/Wagner 2015). Closer inspection of the acceptability patterns of the **individual participants** in all exps (comparison of each participant's mean rating for *yes* vs. *no* in rejections; for *yes* vs. *no* in affirmations) revealed that in exps 2&3, 30-40% participants diverged from the main pattern in rejections. Some rated *no* higher than *yes*, others found both equally (un)acceptable. The ratings did not correlate with sex, age, region of birth. **Exp 4** tested Dutch with the method from Exp 1. For affirmations, the majority of speakers showed the English pattern (*no* > *yes*), which, roughly, is the German minority pattern. A minority of speakers showed the German majority pattern (*yes* > *no*). For rejections, most Dutch speakers unlike English speakers rated *no* > *yes*, which makes them similar to the German speakers in Meijer et al.. However, some Dutch speakers rated *yes* > *no*, i.e. like English. ◆ The results indicate that there are substantial differences between the three languages. In English, *yes* is a polarity-indicating particle. It is unacceptable in affirmations to negative statements/questions (all speakers), and acceptable in rejections of negative statements (many speakers). *No* is acceptable for all speakers as a polarity-indicating particle in affirmations of statements/questions but for some speakers it may also be used in rejections of questions. These speakers seem to prefer an indication of the contrast with the antecedent (curiously though, only in questions), and thus diverge from the English majority for dialogues where German has unambiguous *doch*. Plausibly it is because of the presence of *doch*, that many German speakers do not interpret *ja* ('yes') as polarity-indicating but as affirming. The majority of Dutch speakers share their acceptability patterns with German (rejections) and with English (affirmations) but there is more speaker variation than in either of the other languages, which needs closer scrutiny. We will discuss these findings in relation to previous experimental findings for English and with respect to the theories by Roelofsen/Farkas (2015), Holmberg (2016) and Krifka (2013).

(1) A: Pete hasn't won the race. B: (i) Yes/No. = *He hasn't.* (ii) Yes./No. = *He has.*

(2) **Sample item experiment 1** A couple of weeks ago Heather and Leroy asked their gardener to redo the back garden of their holiday home. Now they are reviewing…
…what the gardener has done already. / what the gardener hasn't done yet. **[CONTEXT]**
Heather: The gardener hasn't sown the lawn yet.
Leroy: Yes / No, he has / he hasn't.
[PARTICLE] **[RESPONSE CLAUSE]**
Verification statement ('true' / 'false'): The conversation is about Heather and Leroy's garden.

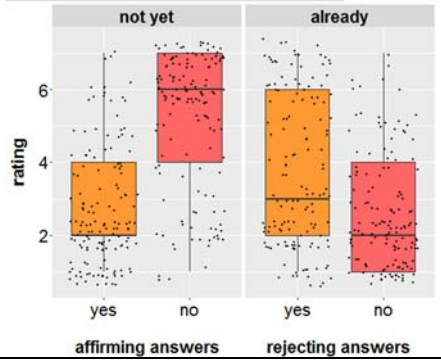
(3) **Results**

Exp 1. Interaction RESPONSE CLAUSE × PARTICLE (b = 1.55, se = .08, t = 19.4)
Affirmations: no > yes (b = -2.1, se = .09, t = -24.2)
Rejections: yes > no (b = 1.0, se = .1, t = 9.7)
[No info about SoA in context]
A: He hasn't… B: Yes/ No, he hasn't /has.



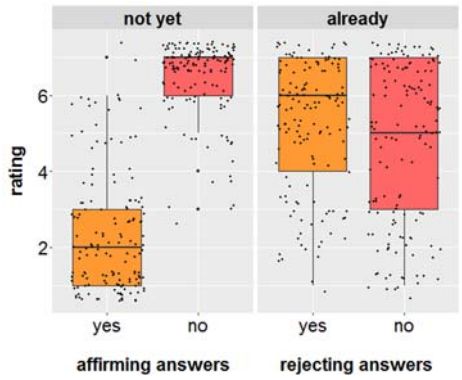
48 participants, 48 items

Exp 2. Interaction SoA × PARTICLE (b = -.9, se = .2, t = -4.5)
Affirm. no > yes (b = -1.2, se = .2, t = -5.4)
Rejections: yes > no (b = .6, se = .2, t = 2.8)
[SoA: He will… tomorrow / He did … already yesterday]
A: Has he not…? B: Yes./ No.



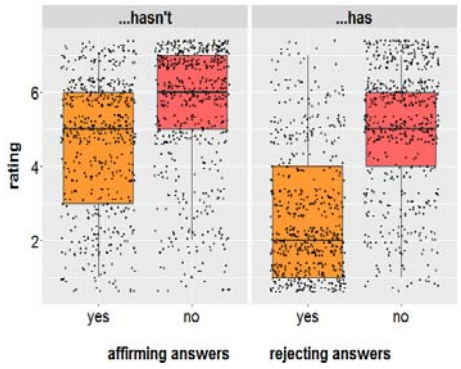
24 participants, 24 items

Exp 3. Interaction SoA × PARTICLE (b = -1.1, se = .2, t = -5.6)
Affirmations: no > yes (b = -2.0, se = .2, t = -10.6)
Rejections: yes = no
[SoA: He will… tomorrow / He did …already yesterday]
A: Has he not…? B: Yes/ No, he hasn't./has.



24 participants, 24 items

Exp 4 Dutch. Interaction RESPONSE CLAUSE × PARTICLE (b = .4, se = .1, t = 2.9)
Affirm.: no > yes (b = -.4, se = .2, t = -2.4
Reject.: no > yes (b = -1.2, se = .1, t = -7.8)
[No info about SoA in context]
A: He hasn't… B: Yes/ No, he hasn't. /has.



48 participants, 48 items

References. Goodhue/Wagner (2015) It's not just what you say, it's how you say it: Intonation, *yes* and *no*. *Proc. NELS 45.* **Holmberg** (2016). *The Syntax of* Yes *and* No. OUP. **Krifka** (2013). Response particles as propositional anaphors. *Proc. SALT.* **Meijer/Claus/ Repp/Krifka** (2015). Particle responses to negated assertions: Preference patterns for German *ja* and *nein*. *Proc. 20th Amsterdam Colloquium*. **Roelofsen/Farkas** (2015). Polarity particle responses as a window onto the interpretation of questions and assertions. *Language 91*. 359-414.