Approaching the pragmatics of exclamations experimentally
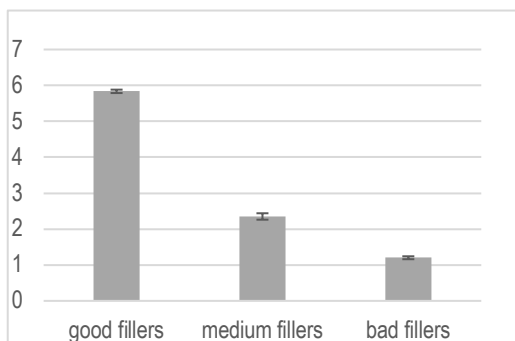
Andreas Trotzke (University of Konstanz)

A standard assumption is that sentence exclamations like (1) count as an assertion and can thus be denied, whereas exclamative cases such as (2) do not make a contribution to the discourse that could be denied (or affirmed) directly. It is controversial whether exclamatives can nevertheless be 'weakly denied' by phrases like *not really* etc. (examples and judgments by Rett 2008, 2011):

(1) A: (Wow,) John bakes delicious desserts!
    B: No (he doesn't), these are store-bought. John's actually a terrible cook.

(2) A: (My,) What delicious desserts John bakes!
    B: ?No (he doesn't), these are store-bought. John's actually a terrible cook.
    B': Not really; these are store-bought. John's actually a terrible cook.

These judgments have so far not been assessed empirically. Our paper follows the methodology of an increasing number of studies in pragmatics that incorporate experiments in order to obtain reliable and robust judgments (Sauerland & Schumacher 2016). Specifically, we reexamine a prominent theory of exclamations (Rett 2011): It is argued that the difference we see in (1) and (2) falls out of the fact that only exclamative clauses and not sentence exclamations denote degree properties and not propositions. That is, while (1) can be associated with a non-scalar expectation (i.e., that the desserts John bakes would not be delicious), (2) can only be associated with a scalar expectation (that the desserts John bakes would not be as delicious as they are). In our study, in addition to cases like (1) and (2), we also included a potentially interesting construction from Germanic languages other than English: German *dass*-exclamatives (see also Dutch) display a dedicated exclamative syntax (lacking V-to-C movement) and, at the same time, do not allow the scalar-expectation reading of *wh*-exclamatives (d'Avis 2002; Truckenbrodt 2013).

Materials. The experimental items were manipulated at two levels: EXCLAMATION FORM, that is, whether the relevant case is a sentence exclamation (6), a *wh*-exclamative (7), or a *dass*-exclamative (8), and DENIAL, that is, whether the utterance by Speaker B is a strong (SD) or a weak denial (WD), see below. For each combination, there were four examples. Sentence exclamations can also be associated with scalar expectations (e.g., accomplished by using focus on the adjective). To ensure that sentence exclamations receive a non-scalar interpretation, cases included explicit degree statements featuring deictic *so* ('so'), which blocks a scalar reading of the whole exclamation (Truckenbrodt 2013). In addition, we constructed four fillers we expected to get good judgments ('good' fillers, [3]), four fillers we expected to get bad judgments ('bad' fillers, [4]), and four fillers we expected to receive mixed judgments ('medium' fillers, [5]). Taken together, there were thus 36 stimuli in total; stimuli were divided into 2 lists, each consisting of 24 items. *Participants.* We collected judgments from 112 native German speakers. The experimental items were presented through an online questionnaire, and participants had to rate the acceptability of Speaker B's reactions on a scale ranging from 1 (= very bad) to 6 (= very good).


(3) A: Linda hat einen schlauen Sohn.
         'Linda has a smart son.'
    B: Nein, das stimmt nicht.
         'No, that's not right.'
(4) A: Wie ist sein Name?
         'What's his name?'
    B: Nein, das stimmt nicht. 'No, that's not right.'

(5) A: Hat Boris gestern eingekauft?
    'Has Boris done the shopping yesterday?'
  B: Nein, das finde ich nicht.
    'No, I disagree.'

(6) A: Wow! Peter kann so lecker   kochen!
    wow Peter can   so delicious cook
    'Wow! Peter is such a great cook!'
  B: {SD: Nein, / WD: Nicht wirklich,}
    er wärmt immer nur Fertiggerichte auf.
    '{SD: No, / WD: Not really,} he always
    warms up convenience food.'

(7) A: Wahnsinn! Was für schwierige
    madness   what for difficult
    Matheaufgaben Katrin lösen kann!
    math.problems Katrin solve can
    'Man! What difficult math problems
    Katrin can solve!'
  B: {SD: Nein, / WD: Das stimmt
    nicht ganz,} sie schlägt immer im
    Lösungsbuch nach.
    '{SD: No, / WD: That's not quite
    right,} she always looks the
    solution up in the textbook.'

(8) A: Wow! Dass die Maria so
    wow that the Maria so
    schön   aussieht!
    beautiful looks
    'Wow! I'm amazed that Maria is
    so beautiful!'
  B: {SD: Nein, / WD: Nicht
    wirklich,} sie benutzt lediglich
    sehr viel Make-up.
    '{SD: No, / WD: Not really,} she
    just uses a lot of makeup.'
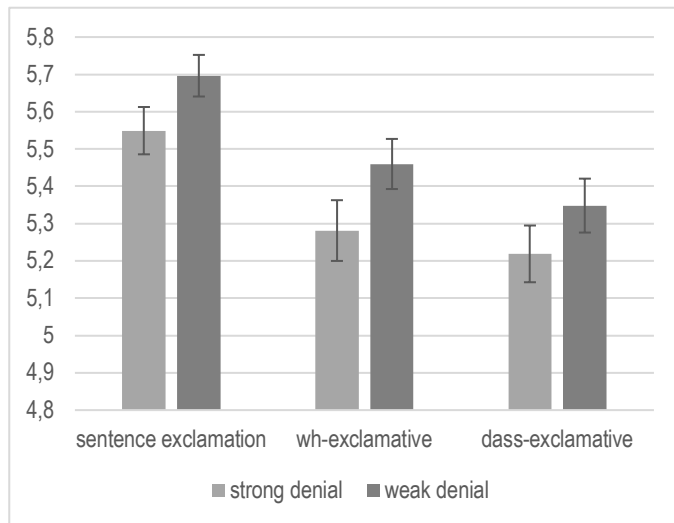
Results. Figure 1 shows that fillers were judged as we had expected. Acceptability of bad fillers was lowest (1.2), acceptability of medium fillers was about in the middle of the provided scale (2.4), and acceptability of good fillers was at ceiling (5.8). The results of a one-way ANOVA of FILLER TYPE on acceptability judgments show that the main effect of FILLER TYPE on acceptability judgments was highly significant ($F(1304, 101) = 652.13$, $p < .001$). These data on fillers show that participants not only understood the task well, but that they also used the full range of options for their judgments. Figure 2 shows that weak denial is always preferred over strong denial, also in the case of sentence exclamations. A two-way ANOVA (3 x 2) revealed significant main effects of both EXCLAMATION FORM ($F(14, 48) = 6.96$, $p < .001$) and DENIAL ($F(4, 32) = 3.87$, $p < .001$), but there was no significant interaction ($F(.07, 36) = .04$, $p > .05$). Overall, it is striking that all judgments of exclamation items were in accordance with our category of 'good fillers' and thus at ceiling (ranging from 5.2 to 5.7), suggesting that the often-cited infelicity of certain reactions to particular exclamation forms (e.g., strong denial in the context of *wh*-exclamatives) is actually a very subtle matter. However, paired t-tests show that the difference between strong and weak denial is significant within both the sentence-exclamation ($p < .01$) and the *wh*-exclamative condition ($p < .01$), but not significant in the *dass*-exclamative condition ($p > .05$), supporting the theoretical claims in the literature that semantic content featuring non-scalar expectations (as in *dass*-exclamatives) increases the acceptability of strong denial in the context of exclamations. We discuss our findings in the context of recent discourse-oriented work in dynamic pragmatics that studies the relation that exclamations bear to adjacent utterances (Chernilovskaya et al. 2012).