

# Intonation and evaluative bias in *some*-exclamatives

Curt Anderson, Kurt Erbach and Ruben van de Vijver

Heinrich-Heine-Universität Düsseldorf, Collaborative Research Center 991  
Joint work between projects C10, C09, and D05

23 February 2018  
Szkłarska Poreba 19



## Introduction

## Introduction

Exclamatives comment on some extreme or unexpected property.

- |     |    |                               |                                  |
|-----|----|-------------------------------|----------------------------------|
| (1) | a. | What a large watermelon!      | (wh-exclamative)                 |
|     | b. | How beautiful the birds sing! | (wh-exclamative)                 |
| (2) |    | The peppers he eats!          | (nominal exclamative)            |
| (3) |    | Aren't you happy!             | (negative inversion exclamative) |

Most work on exclamatives in English has focused on the properties of wh-exclamatives and nominal exclamatives.

## Introduction

Israel (1999, 2011), Anderson (to appear): exclamative construction making use of the determiner *some*.

- (4) Boy, was she (ever) some dancer!  
“She was a dancer and she was an exceptional dancer.”
- (5) That was some wine she brought to the party!  
“She brought wine to the party and it was very good wine.”
- (6) Some friend she turned out to be!  
“She was a friend and she was a particularly poor friend.”
- (7) It's going to be some party!  
“We're having a party and it's going to be a great party.”

## Basic data

*Some*-exclamatives are defined by several properties:

- ▶ Noteworthiness or scalar extremity.
- ▶ Necessity of “exclamative intonation”. No exclamative reading without intonation.

- (8)
- a. John is some lawyer.
  - b. That was some wine we brought to the party.
  - c. *Gulliver's Travels* is some book.

- ▶ Usually only with predicative *some*-DPs.

(9) #Some gymnast won the event today!

- ▶ Lack of an *a(n)* exclamative. Properties of *some* are crucial for building exclamative meaning.

## Lexical semantics and *some*-exclamatives

The lexical semantics of the noun play a role in how the exclamative is interpreted.

- |      |                              |                 |
|------|------------------------------|-----------------|
| (10) | John is some friend!         | (NORM/BEHAVIOR) |
| (11) | This is some knife!          | (FUNCTION)      |
| (12) | It's going to be some party! | (ENJOYMENT)     |

- ▶ Different attributes can potentially be accessed.
- ▶ But some nouns (such as nouns for roles/professions) seem to have preferences for which attributes are accessed in the exclamative.

## Intonation and *some*-exclamatives

- ▶ Observation that these exclamatives get a positive/negative interpretation depending on the intonation in the sentence.

(13) a. John is some lawyer! (final rise(?); positive)  
 b. John is some lawyer! (final fall(?); negative)

- ▶ How robust is this judgement, though?

## Questions and roadmap

Many things are not well understood in exclamatives. Here's two:

- ▶ Role of intonation under-investigated: Can intonation alone (e.g., with a null context) mark the polarity of the evaluation?
- ▶ Role of lexical semantics under-investigated: Do different classes of nouns show different behavior with respect to how they're evaluated?



## Questions and roadmap

This talk:

- ▶ Preliminary results from an experiment showing how intonation and noun semantics interact in evaluativity in *some*-exclamatives.
- ▶ Build an analysis of intonation in *some*-exclamatives using a multidimensional semantics a la Potts.

Experiment: Intonation and *some*-exclamatives

## Observations

What role does intonation play in fixing the evaluative judgement in *some*-exclamatives?

- ▶ Different intonations seem to mark either positive or negative evaluation.
- ▶ High pitch: positive evaluation
- ▶ Low pitch: negative evaluation

(14) She is some friend!

- High pitch: She is a friend and I have a positive evaluation of her as a friend (e.g., she's a good friend)
- Low pitch: She is a friend and I have a negative evaluation of her as a friend (e.g., she's a bad friend)

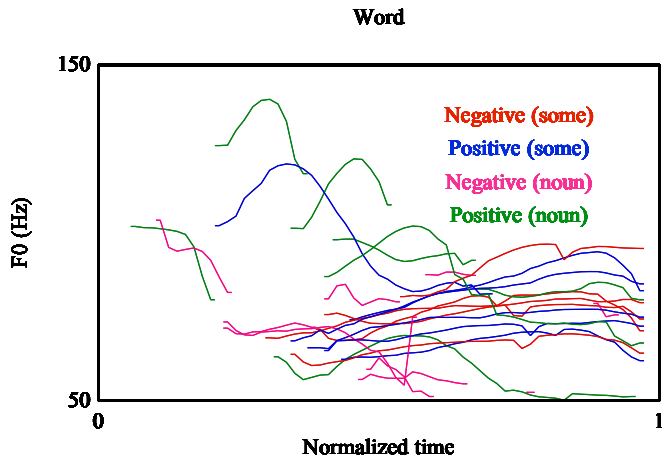
## Stimuli

80 total target sentences:

- ▶ 20 [+human] nouns: *accountant, architect, artist, author, chef, dentist, doctor, engineer, lawyer, mechanic, musician, barber, employee, student, family, father, friend, professor, husband, colleague, cousin*
- ▶ 20 [-human] nouns: *bicycle, brush, car, chair, computer, headphones, knife, mug, necklace, notebook, pen, cellphone, backpack, rope, scissors, shirt, shoes, plate, stapler, guitar*
- ▶ Sentence frame: He/she/it/John/Mary is some N!
- ▶ Recorded with both positive and negative intonations.

80 additional filler sentences:

- ▶ Indefinite fillers: He/she/it/John/Mary is a N
- ▶ Definite fillers: He/she/it/John/Mary is my/our/his/her N
- ▶ Neutral intonation (as best as possible)

Visualization of F0 and *some* N

- ▶ F0 for a few of the stimuli (not exhaustive).
- ▶ Qualitatively shows difference lies not in *some*, but by a pitch accent on the noun.
- ▶ Higher pitch for Ns (not *some*) in positive condition compared to negative condition.

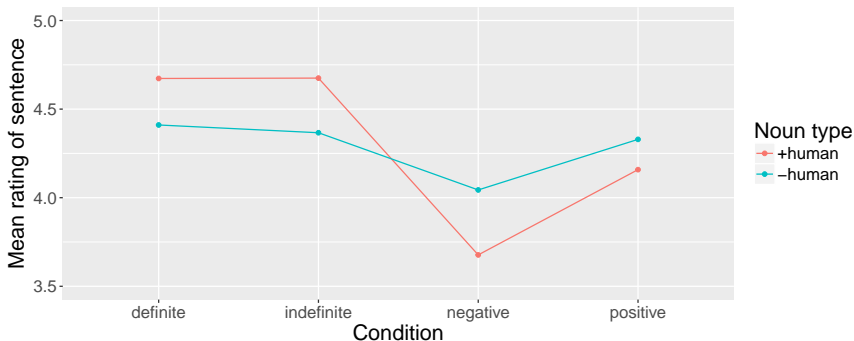
## Stimuli and participants

- ▶ 24 English speakers recruited from Amazon Mech Turk
- ▶ Stimuli presented within-subjects using Experigen online stimulus presentation platform (Becker & Levine 2014).
- ▶ Rated sentence (presented auditorially) using 7 point Likert scale (1:Very Negative to 7:Very Positive).
- ▶ Prompt: How negative or how positive do you think the sentence sounded?

## Results

- ▶ Generalized linear mixed effects model.
- ▶ Random effects for item and participant.
- ▶ Tested interaction of item type (Negative intonation, Positive intonation, Definite and Indefinite fillers) and noun type ([+human], [-human])

## Results: Mean scores



- ▶ Both the negative and positive overall rated as lower than fillers ( $p < .001$ ).
- ▶ Interaction of noun type and intonation in both negative intonation ( $p < .001$ ) and positive intonation ( $p < .05$ ) conditions.
- ▶ [+human] rated lower in both the negative and positive conditions (compared to fillers;  $p < .001$ ); [+human] rated lower in the negative condition compared to the positive condition ( $p = .001$ )
- ▶ [-human] only differs from fillers in negative condition (negative,  $p = 0.029$ ).



## Results

### Summary:

- ▶ Supports hypothesis that intonation affects evaluativity.
- ▶ Supports hypothesis that there are differences in evaluativity due to noun class.
- ▶ Negative intonation seems to carry a negative evaluation.
- ▶ Not as clear that what we called positive intonation inherently carries any evaluation.
- ▶ Both intonations cause [+human] nouns to be interpreted more negatively, with even lower ratings with negative intonation.
- ▶ Intonation does not affect [-human] nouns as much; no difference to fillers with positive intonation.

Reconsidering things

## At-issue and expressive meaning

Potts (2005, 2007), Tonhauser et al. (2013), Simons et al. (2010) and many others examine non-at-issue meaning/expressive meaning/projective meaning.

- ▶ Expressive meaning, found in words like *damn* and *bastard*, particularly relevant for discussion of intonation.
- ▶ Often emotionally charged, and immediately inflict their content on the discourse.

Expressive meaning is said to have several trademarks (Potts 2007).

- ▶ *Independence*
- ▶ *Non-displaceability*
- ▶ *Perspective dependence*
- ▶ *Descriptive ineffability*
- ▶ *Immediacy*
- ▶ *Repeatability*

## At-issue and expressive meaning

These can be associated with a number of linguistic tests, but we use two:

- ▶ *Independence*: Expressives contribute meaning in a separate dimension to ordinary descriptive meaning.

- ▶ Diagnostic: Inability to be denied.

(15) A: The damn dog tore up the couch!

B: #That's not true! You approve of the dog.

- ▶ *Perspective dependence*: Expressive content is evaluated from a particular perspective (normally the speaker's).

- ▶ Diagnostic: Whether the expressive content must take the speaker's perspective when embedded.

(16) John thinks that the damn dog tore up the couch.

→ John disapproves of the dog.

## Intonations carry projective content

- ▶ When used in non-exclamative environments, the low pitch can also sometimes be used to mark a negative evaluation (marked with <sub>LOW</sub> on the noun).
- ▶ This evaluation doesn't seem to be able to be denied.

(17) *Scenario: A is commenting to B on the poor behavior of someone they are friends with.*

A: Yeah, he's a friend<sub>LOW</sub>.

B: That's not true, ...

a. you're not friends.

b. #you think pretty highly of him.

- ▶ Nor can the evaluation be detached from the speaker's perspective.

(18) ?John said that Mary is a friend<sub>LOW</sub>.

- ▶ Hallmarks of projective content. Suggests that the evaluativity that intonation carries is projective.

## Negative intonation in *some*-exclamatives carries projective content

- ▶ Difficult to test thoroughly with *some*-exclamatives.
- ▶ Diagnostics seem to support negative intonation as having expressive meaning.

(19) A: John is some friend<sub>LOW</sub>!

B: #That's not true! You think highly of John.

- ▶ To the extent that (20) can be embedded, the evaluation seems to be indexed to the speaker.
- (20) ?John thinks that Mary is some friend.

## Intonation and evaluation

- ▶ Experimental data shows listeners interpret negative intonation as expressing a somewhat negative evaluation.
- ▶ No indication that the positive intonation is particularly positive.
- ▶ Real distinction between negative and unmarked?
- ▶ For now, analyze the negative intonation and set aside the positive intonation.

## Intonation as expressive modifier

Assume a multidimensional semantics, and treat the negative intonation as adding a level of expressive meaning to the NP (essentially an NP modifier).

- ▶ The noun simply denotes an at-issue property (type  $\langle e, t \rangle$ ).

$$(21) \quad \llbracket \textit{lawyer} \rrbracket = \lambda x. \textit{lawyer}(x)$$

- ▶ Low pitch (signaling negative evaluation) will be treated as building a mixed projective type (see McCready (2010) for mixed types) from an at-issue type.

$$(22) \quad \llbracket \text{LOW} \rrbracket = \lambda f_{\langle e, t \rangle} \lambda x. f(x) \blacklozenge \mathbf{bad}(f)(x), \text{ where } \mathbf{bad} \text{ is type } \langle \langle e, t \rangle, \langle e, t^P \rangle \rangle$$

- ▶ Low pitch plus an NP expresses both the property denoted by the NP (on the at-issue tier) plus an evaluation (on the projective tier).

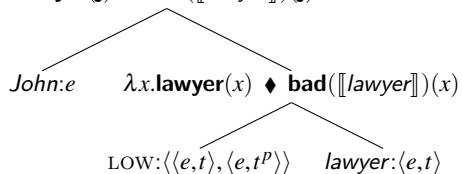
$$(23) \quad \llbracket \text{LOW } \textit{lawyer} \rrbracket = \lambda x. \textit{lawyer}(x) \blacklozenge \mathbf{bad}(\llbracket \textit{lawyer} \rrbracket)(x)$$



## Composition of the sentence kernel

Projective content “percolates” up in parallel to the at-issue composition.

(24) **lawyer(j) • bad(⟦lawyer⟧)(j)**



## Force operators

- ▶ Mayol & Castroviejo (2013) analyze force operators (ASSERT, QUESTION) as propositional operators.
  - ▶ Following Gutzmann (2008), they are treated as projective content, due to their inability to be denied.
- (25)
- a. ASSERT: I want  $p$  to become common ground.
  - b. QUESTION: I want the addressee to put the true  $p$  in  $\pi$  into the common ground (where  $\pi$  is the set of propositions denoted by the interrogative clause).

## Exclamative operator

- ▶ We can define an exclamative operator in a similar way, as an operator that takes a proposition or set of propositions and structures/proposed to structure the CG.<sup>1</sup>

(26) EXCLAIM:  $p$  is directly added to the common ground.

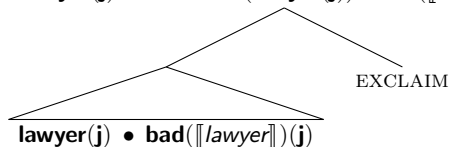
---

<sup>1</sup>See Taniguchi (2017), d'Avis (2002, 2016), Castroviejo (2008) and others for more in-depth discussion.

## Composition with the sentence kernel

And with the EXCLAIM operator:

(27) **lawyer(j) • EXCLAIM(lawyer(j) ∧ bad([[lawyer]])(j))**



## Compositional issues

How the noun interacts with the meaning of the intonation is not so clear at this point.

- ▶ Particular way that **badness** is manifested depends on the noun.

(28) a. He's some lawyer. (low fit with norm)  
b. This is some computer. (poorly functioning)

- ▶ Wrong to encode a particular dimension in the intonation itself.
- ▶ Experimental data showed that the lexical semantics of the nominal matters.
  - ▶ Interaction of evaluation and [ $\pm$ human].
  - ▶ [+human] nouns (*lawyer*, *friend*) more negative than [-human] nouns (*computer*, *shirt*) with negative intonation.

## Why are [+human] nouns more negative?

### Interactions with nominal gradability?

- ▶ Perhaps [+human] nouns have gradable dimensions more easily accessible by **bad**, compared to artifact nouns.
- ▶ *True* has been offered as one test of nominal gradability (Morzycki 2009, 2012).
- ▶ Patterns with *true* might lean in this direction, at least with some nouns we tested.

- (29) a. He is a true friend.  
b. ??This is a true computer.

## Why are [+human] nouns more negative?

- ▶ Knobe et al. (2013) identify a class of what they call “Dual Character Concepts” (such as *friend*, *artist*) that can be conceptually associated with a normative ideal (e.g., ideal friend).
- ▶ Often professions, social roles.
- ▶ Modification with *true*, *real* as a proposed diagnostic.

(30) He's a real/true artist!  
(paints for love of painting, not expecting to get rich, etc.)

(31) ??He's a real/true bus driver!

- ▶ Many of the [+human] nouns we tested seem to be DCCs (while most of the [-human] nouns are not).
- ▶ DCCs perhaps allow for a gradable dimension (e.g., fit with a norm) to be accessed with **bad** much more easily than non-DCCs.

(32) a. **bad**(⟦/lawyer⟦)( $x$ )  
b. **fit**(**ideal**(⟦/lawyer⟦))( $x$ ) = **low**

Conclusion



## Conclusion

### Final thoughts:

- ▶ Speakers can use intonation to mark an evaluation. Low pitch marks negativity.
- ▶ [+human] nouns rated more negative in *some*-exclamatives.
- ▶ Lexical semantic differences between noun classes.
- ▶ New data showing that lexical semantics interacts with exclamative meaning, an area underexplored in studies of exclamatives.
- ▶ Project connects with findings in other areas:
  - ▶ Analyses of *wh*-exclamatives where intonation plays a role (e.g., Castroviejo (2008)).
  - ▶ Corners of the grammar where intonation interacts with semantics (e.g., *man*, McCready (2006)).

## Future work

- ▶ What are the phonetic components that give rise to negative evaluation? F0?  
Length difference?
- ▶ Can negative and positive evaluations be made stronger via context?
- ▶ Is the negative evaluation categorical or gradable?
  - ▶ Evaluations themselves are almost certainly conceptually gradable.
  - ▶ But, can the gradability be directly correlated with a linguistic property (e.g., F0)?

Thank you!

Thanks to Marcin Morzycki, Sebastian Löbner, Willi Geuder, Karthik Durvasula, Adam Liter, Ai Taniguchi, Katja Gabrovská, and Düsseldorf SemPrE for advice and discussion.

This research was supported by the German Science Foundation (DFG) CRC 991 “The Structure of Representations in Language, Cognition, and Science,” projects C10 (Curt), C09 (Kurt), and D05 (Ruben).

Contact: andersc@hhu.de  
Kurt.Erbach@uni-duesseldorf.de  
vijver@phil.uni-duesseldorf.de

## References I

- Anderson, Curt. to appear. Kinds, epistemic indefinites, and some-exclamatives. In Robert Truswell (ed.), *Proceedings of Sinn und Bedeutung 21*, .
- Becker, Michael & Jonathan Levine. 2014. Experigen—an online experiment platform. Available at <http://becker.phonologist.org/experigen>.
- Castroviejo, Elena. 2008. An expressive answer: Some considerations on the semantics and pragmatics of *wh*-exclamatives. In *Proceedings from the Annual Meeting of the Chicago Linguistic Society*, vol. 44, 3–17.
- d'Avis, Franz. 2016. Exclamatives, normalcy conditions and common ground. *Revue de Sémantique et Pragmatique* (40). 17–34.
- d'Avis, Franz-Josef. 2002. On the interpretation of *wh*-clauses in exclamative environments. *Theoretical Linguistics* 28. 5–31.
- Gutzmann, Daniel. 2008. *On the interaction between modal particles and sentence mood in German*. Johannes Gutenberg-Universität Mainz MA thesis.
- Israel, Michael. 1999. *Some* and the pragmatics of indefinite construal. In Steve S. Chang, Lilly Liaw & Josef Ruppenhofer (eds.), *Proceedings of the Berkeley Linguistics Society*, vol. 25, 169–182.
- Israel, Michael. 2011. *The grammar of polarity: Pragmatics, sensitivity, and the logic of scales*. Cambridge University Press.
- Knobe, Joshua, Sandeep Prasada & George E Newman. 2013. Dual character concepts and the normative dimension of conceptual representation. *Cognition* 127(2). 242–257.
- Kratzer, Angelika & Junko Shimoyama. 2002. Indeterminate pronouns: The view from Japanese. In Yukio Otsu (ed.), *Third Tokyo Conference on Psycholinguistics*, 1–25. Tokyo: Hituzi Syobo.
- Mayol, Laia & Elena Castroviejo. 2013. (Non) integrated evaluative adverbs in questions: A cross-Romance study. *Language* 89(2). 195–230.
- McCready, Eric. 2006. Functions of English *man*. In Christian Ebert & Cornelia Endriss (eds.), *Proceedings of Sinn und Bedeutung 10*, 211–224.

## References II

- McCready, Eric. 2010. Varieties of conventional implicature. *Semantics and Pragmatics* 3(8). 1–57. doi:10.3765/sp.3.8.
- Morzycki, M. 2009. Degree modification of gradable nouns: size adjectives and adnominal degree morphemes. *Natural Language Semantics* 17(2). 175–203.
- Morzycki, Marcin. 2012. The several faces of adnominal degree modification. In Jaehoon Choi, E. Alan Hogue, Punske Jeffrey, Deniz Tat, Jessamyn Schertz & Alex Trueman (eds.), *Proceedings of the West Coast Conference on Formal Linguistics*, vol. 29, 187–195.
- Potts, C. 2005. *The logic of conventional implicatures*. Oxford University Press, USA.
- Potts, Christopher. 2007. The expressive dimension. *Theoretical Linguistics* 33(2). 165–198.
- Simons, Mandy, Judith Tonhauser, David Beaver & Craige Roberts. 2010. What projects and why. In *Semantics and linguistic theory*, vol. 20, 309–327.
- Taniguchi, Ai. 2017. *The formal pragmatics of non-at-issue intensification in English and Japanese*: Michigan State University dissertation.
- Tonhauser, Judith, David Beaver, Craige Roberts & Mandy Simons. 2013. Toward a taxonomy of projective content. *Language* 89(1). 66–109.

## Appendix

## Obligatory pejorativity

In-situ variant allows neutral (a) or pejorative (b) interpretation.

- (33) John is some lawyer!
- a. He always wins his cases and does lots of pro bono work.
  - b. He loses every case and still charges a lot.

Preposed variant only allows pejorative (b) interpretation.

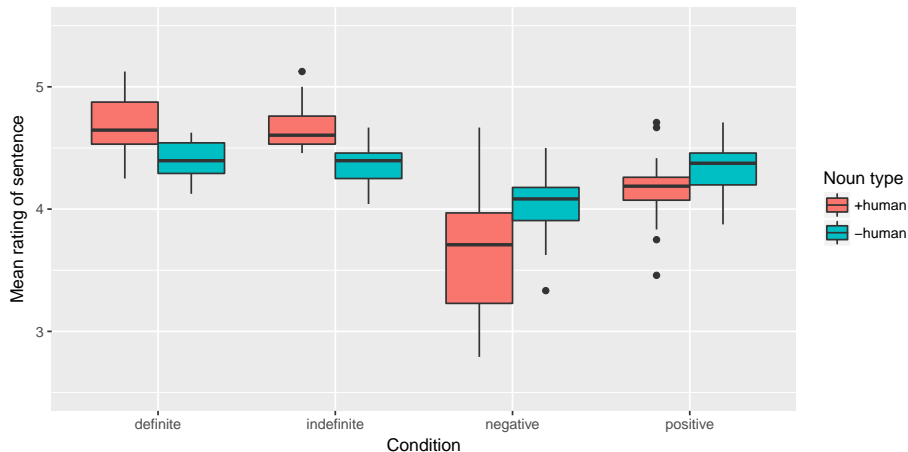
- (34) Some lawyer John is!
- a. #He always wins his cases and does lots of pro bono work.
  - b. He loses every case and still charges a lot.

## And what about *some*

- ▶ Anderson (to appear) presses on the connection between *some* and the fact that it has an exclamative form.
- ▶ Adopts view of Kratzer & Shimoyama (2002) that sentences denote propositions, and analyzes sentences with *some* as non-singleton sets of propositions.
- ▶ *Some*-exclamatives have in common with *wh*-exclamatives that they are built from a set of propositional alternatives.
- ▶ Exclamative operator needs a non-singleton set of alternatives in order to form a scale.
- ▶ View could be adapted here with little difficulty, but it raises the question of what the propositional alternatives are.



## Results: Mean scores (spread)



- Larger spread of neg:[+human] (compared to other sentences) suggests they are interpreted differently.