

How to express yourself: On the discourse effect of wh-exclamatives

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1 Introduction

1.1 What exclamatives convey

- Intuitively, utterances of wh-exclamative clauses convey two distinct implications: descriptive and expressive content.
 - (1) How many people took part in the rally! / What a big crowd that was!
 - (2)
 - a. Many people took part in the rally. / That was a big crowd.
descriptive content
 - b. The speaker is impressed/amazed/surprised/awed ...
by the number of people who took part in the rally / by the size of the crowd.
expressive content
- Similarly for nominal exclamative clauses
 - (3) The ideas she came up with in just one afternoon!
 - (4)
 - a. She came up with interesting/lots of/... ideas.
descriptive content
 - b. Speaker is impressed/amazed/surprised/awed ...
by the quality/amount/... of her ideas.
expressive content

Central question:

- How do utterances of (1) and (3) convey what they do?

- How do the implications of these two clause types relate to their denotation?
- For other clause types, the relationship between denotation and dynamic effect may appear straightforward. For instance, declaratives

denote a proposition p

change the context by

- proposing to update the common ground with p (Stalnaker 1978)
- committing the speaker to believing that p (Gunlogson 2008, Condoravdi and Lauer 2011)
- committing the speaker to believing that p and proposing to update the common ground with p (Farkas and Bruce 2010)

↔ Intuitively, propositions are well-suited for claiming/informing.

- Exclamatives may seem less straightforward.
 - Should the dynamic effect directly be tied to their compositional denotation?
 - What kind of denotation could achieve such an effect (by itself)?

1.2 Denotation and dynamic effect

- In fact, the problem is no less difficult for declaratives.
- A proposition p , *qua* proposition, is not suited any better for claiming p /informing that p than, for example for raising the question whether p , or expressing a desire for p to be actualized.
- Claiming/informing is what is **conventionally** done with declaratives.
 - Various other things can be done with propositional denotations, in principle.
 - Other kinds of denotations could be used for claiming/informing (though not all of them what would be as versatile as propositions).
- Bottom line: Denotation and dynamic effect are **independent**, to a considerable degree.
 - However, they constrain each other: Not every denotation can be used to do everything.

1.3 What to do with a denotation

- The independence of dynamic effect and denotation cuts both ways:
 - Studying only the dynamic effect of a clause type will (usually) not suffice to determine the type of denotatum.
 - At the same time, an analysis that postulates a denotatum must be supplemented with an account of what this denotatum is **used to do**.
- Studies of exclamation, to date, have largely focussed on the question what their denotation should be.
- All these proposals must face the question how the perceived effects of exclamation come about, based on the proposed denotation.

Who	Denotation	Denot → CCE	E-content	D-content
GR96	G&S84 questions	illoc force	emotive attitude	true answer
Z&P03	Kartt77 questions	somehow pragmatically	implicature via widening	factual semantic presupposition
CMo6	propositions	?	emotive attitude	G&So1 fact
Ro8	degree properties	illoc operator on degree properties	appropriateness condition (surprise)	not explicit
R12	degree properties	illoc operator on propositions	contravention of prior expectation	factual appropriateness condition

GR96 = Gutiérrez-Rexach (1996), Z&P03 = Zanuttini and Portner (2003), Kartt77 = Karttunen (1977), CMo6 = Castroviejo Miró (2006), G&So1 = Ginzburg and Sag (2001), Ro8 = Rett (2008), R12 = Rett (2012)

In this talk

- We focus on the context change effect of exclamation.
- We assume that their denotation is some semantic object that can be turned into a proposition corresponding to their descriptive content
 - A particular version of this assumption is proposed by Rett (2012): *wh* and nominal exclamation denote properties of degrees, out of which a proposition is derived.
- A successful account of the discourse behavior of exclamation based on a proposed dynamic effect will act as a constraining factor that can be used to distinguish analyses of the denotation of exclamation on independent grounds.

2 Discourse properties of exclamation

- All naturally occurring examples are taken from (Davies 2008)'s Corpus of Contemporary American English (COCA).

2.1 Denials by the speaker

- The speaker of an exclamation cannot coherently deny either content.
- (5) What insightful ideas she came up with! #...but they were not insightful (at all).
- Apparent denials of expressive content, as in (6), always serve to better fix the implicit attitude expressed.
 - (6) still expresses an emotive response, e.g. that the speaker is struck by / awed by / ... the number or quality of the ideas, but specifies the emotive response to not be surprise.
- (6) What insightful ideas she came up with! I am not surprised, though: She is our smartest student.

- In this respect, both descriptive and expressive content behave in the same way as asserted content.

2.2 Challenges by the audience

- The addressee can challenge the descriptive content (see (7)), but not the expressive content (see (8)) (Castroviejo Miró 2008).
- (7) A: How many people took part in the rally!
B: Well / ?No, most of the people were bystanders.
- (8) A: How many people took part in the rally!
B: #Well / #No, you are not surprised/impressed/...
B: #Are you sure you're surprised/impressed/...?
- Examples from COCA, where the descriptive content is contradicted (based on a search for “what a” followed by “not” in a 9-word window):
- (9) “Which of your patients has the greatest, richest, most incredible bank deposits?” The nurse glanced up at this strange request. “Pardon?” “You heard me very clearly,” said the tall gaunt man. “*What a strange question.*” “*Not strange when you think what’s at risk.*”
- (10) Becky covered her face with her hands. “I told him how glad I was he came home whole! Oh, Mother Warne! *What a stupid thing to say!*” “*Not at all!*” Molly patted her gently.
- In all the results of the search in COCA for “what a” followed by “no” in a 9-word window “no” reacts to the utterance immediately preceding the exclamation:
- (11) “Sometimes I wish he had gone into banking. Or better yet become an artist- you know, something where failure was the norm.” She stopped. “*What a terrible thing to say.*” “*No-* I just mean- yes, it’s hard.”
- (12) “Amy told me,” Karl says. “I never told Amy I liked Elizabeth,” Jeremy says. “So now Amy is a mind-reader as well as a blabbermouth? *What a terrible, deadly combination!*” “*No,*” Karl says, grudgingly. “Elizabeth told Amy that she likes you. So I just figured you liked her back.”
- **Caveat:** The audience can **comment** on the expressive content, for instance, by questioning whether it is justified:
- (13) [Returning after a long trip abroad, finding a huge pile of mail.]¹
A: What a huge pile of mail!
B: (#No,) That’s not surprising. / (#No,) What did you expect? / (#No,) Why are you surprised? We were gone for 6 months!
- Exclamatives can never be reacted to by “That’s a lie” or “I don’t believe you”, unlike assertions.
- (14) A: I am hungry.
B: That’s a lie. / I don’t believe you.
- (15) A: What a crowd that is!
B: #That’s a lie. / #I don’t believe you.

¹We thank Itamar Francez for challenging us with examples of this form.

- Expressive content behaves unlike asserted content in that it cannot be challenged.
- Descriptive content **can** be challenged.

2.3 Acceptance and Confirmation

- Basic distinction from (Gunlogson 2008): Acceptance vs. confirmation of assertions.
 - **Confirmation moves** indicate that the audience has conversation-external evidence that supports the speaker's claim.

(16) A: That was a big crowd.
B: Yes. / Yeah. / Indeed. / (That's) right.

- **Acceptance moves** indicate that the audience accepts the truth of the proposition expressed by the utterance based on the speaker's testimony alone.

(17) A: That was a big crowd.
B: Oh. (I didn't know that.) / Uh-huh. / Okay.

- Acceptance moves are infelicitous after exclamatives.
- Confirmation moves are possible, but they do not confirm the descriptive content.

2.3.1 Acceptance moves are infelicitous

- Neither descriptive nor expressive content can be accepted.
- Clear accepting responses are generally infelicitous:

(18) A: What a crowd!
B: #Oh. (I did not know that.) / #Okay. / #Uh-huh.

- For example, a search in COCA for "what a" followed by "OK" yielded no cases of exclamatives responded to by "OK".
- **Caveat:** *Uh-huh* is attested in response to exclamatives and can sound felicitous (see (19) from COCA). But, invariably, *uh-huh* needs a special intonation in these cases and the standard intonation for an accepting backchannel is ruled out:

- (19) Even flight for its life could not stifle the entity's innate thirst for information. However briefly it resided on a computer, the entity found time for investigation. It probed data structures, scanned input/output buffers, ingested e-mail archives. Often, as in its first abode, it found that the operating system had been destroyed by viruses-but the damaged regions in each case were different. Always the entity learned something. And, wherever the entity fled, it found viruses there ahead of it, ready to attack. "What a mess." "Uh-huh." AJ looked glumly about the lab. Bev's complaint was literally true: in their sprint about the room, they'd toppled stools, scattered papers, spilled abandoned soda cans. A punted waste basket had sent lunch scraps flying. "Thank God for backups." The entity retreated into the last powered machine. Striking and slashing at the gathering viruses, it continued to analyze its hastily-gathered new knowledge.

2.3.2 Descriptive content cannot be confirmed

- Items that are constrained to confirm asserted content are infelicitous in response to exclamatives:
- (20) A: It's a big crowd.
B: That is right.
- (21) A: What a crowd that is!
B: #That is right.
- A COCA search for "what a" followed by "right" within a 9-word window yielded no exclamatives reacted to by "That's right".
 - Some confirmation markers do appear in response to exclamatives, like *Yeah*, *Yes* and *Indeed*.
 - In many cases it is difficult to tell what these moves confirm, but the examples are consistent with the assumption that the response indicates that the addressee shares the emotive attitude of the speaker.
- (22) In this case, it was a perfect belly landing, I'm sure a very hard one, and I'm sure that when those engine cowlings started to suck in the water of the Hudson River, that plane jerked to a very fast stop and the cockpit would have slammed down into the water. *But, boy, what an amazing job.* KELLY: *Indeed.*
- (23) DELLA: *What a splendid walk that was!* JIM: *Indeed it was, Delia.*
- (24) Guest 1: *What a lovely girl.* Guest 2: *Indeed, she's charming and terribly elegant.*
- Things are different with *Yeah*. Here we find corpus examples where the addressee clearly does not share the emotive attitude of the speaker and indicates that by explicitly weakening the descriptive content.
- (25) STENSLAND: *Well, what a great job.* Letter S: *Yeah, it's not bad, yeah.*
- (26) CRIER: The world needs you back. But in the meantime, the HBO special and the new CD, "Totally Committed." *What a pleasure.* FOXWORTHY: *Yeah. That's good.*

(27) Ms-FOOSE: And hang out in the refrigerator for about an hour. Then we slide this right in our paper sack just like this. WRAGGE: *What a great concept.* Ms-FOOSE: *Yeah. It's fun.*

- *Yeah* (and, to a more limited extent *Yes* and *Indeed*) can be used to confirm a variety of implications/contents/..., not just asserted content.
 - In (28), B is not confirming that A learned a lot, rather, he agrees with the point A tries to establish, viz., that the course was useful.

(28) A: I learned a lot in this course.
B: Yeah, definitely / me too.

(29) "I think doing this movie helped me in real life. I have an almost 13-year-old. The girl in the movie was 14, and it was very interesting to be around her. There are big differences between 12, 13 and 14, and I got to spend a lot of time with a 14-year-old, so that was useful for me. *I think I learned a few things.*" "Oh yeah, absolutely. It couldn't be more relevant than it is. It's exactly what's going on."

- (*That's*) *right* is more constrained: It must target asserted content.
 - (30) is odd unless B had the opportunity to see A demonstrate what he learned in the course.

(30) A: I learned a lot in this course.
B: That's right. I did, too.

- We need to look at the confirmation moves that clearly target the semantic content, like *That's right*.
- The behavior of responses like *Yeah*, *Yes* or *Indeed* can only serve as supporting evidence, at least in absence of a theory of what kinds of contents / implications these can target.

Upshot:

- When assessed against the discourse properties above, it can be seen that neither content behaves like asserted content.

3 Our Proposal: Preliminaries

- Exclamatives
 - (a) seem to commit the speaker to the descriptive content, and
 - (b) express an attitude of the speaker towards the descriptive content that is in some way unchallengeable.
- We can spell this out more formally in the model of context from Farkas and Bruce (2010), which features a number of components:
 - DC_X : Discourse commitments of a participant X
propositions to which X has publicly committed and which are not shared by all the other participants
 - CG : Common ground
mutual joint belief (Stalnaker 1978)
 - ps : Projected set of common grounds
Assertions propose a new common ground that still needs to be accepted by the hearer to replace CG .

Let u be an utterance by Sp in context c of an exclamative with a descriptive content p . Then u results in a context c' such that:

- (31) a. $DC_{Sp,c'} = DC_{Sp,c} \cup \{p\}$
Descriptive content gets added Sp 's discourse commitments.
- b. $CG_{c'} = CG_c \cup \{\lambda w.attitude_w(Sp, p)\}$
Expressive content gets added directly to the common ground, not via ps plus addressee's acceptance.

- The automatic nature of the common ground update is also proposed by Castroviejo Miró (2006) and Merin and Nikolaeva (2008).
- The formulation in (31) misses an intuitive connection between the two contents: Is it purely accidental that the descriptive content is also the target of the attitude in the expressive content?
- What is the attitude in $\lambda w.attitude_w(Sp, p)$?

The need for a triggering event

- A property of exclamatives that we have not considered so far is that they are **reactions to events** (Castroviejo Miró's (2006, 2008) 'stimulus').
- We could incorporate this into the analysis in (31), e.g., as a felicity condition, but then we would have **three** independent components.

4 Our proposal: The status of the implications

Aim: Show that the three components do not need to be stipulated independently.

- (32) [After not seeing a child for a while]
How much you have grown!
- (33) What an idiot!
- (34) What a necessary (blog) post! (Google)
- (35) Imagine Spain and Italy default on their debts. What a mess the situation Europe could become!
- (36) How much effort you must have put into this!
- (37) [Visiting A's house for the first time]
B: What a beautiful house you have.
- (38) [Sitting in A's beautiful garden, which B knows well. Suddenly:]
B: How beautiful your garden is!

A mental event, not a mental state

- The word 'attitude' may suggest that exclamatives signal a certain mental **state**.
- Instead, we claim that they signal a **mental occurrence**, that is, a mental/emotive **event**.
- Exclamatives are used when the speaker is 'struck' by something (or pretends to be).

Directedness

- The mental/emotive event is **directed to a proposition** (*viz.*, the descriptive content).
- One cannot be surprised/amazed/awed/struck by something without believing that it is true.
↪ Such directed events can only be had if the experiencer **believes** in the targeted proposition.

Intersubjectivity

- The mental event is generally taken to be **intersubjectively accessible**.
- That is, the audience could share in the mental event, if it were exposed to the right stimulus.
- Examples of attitudes / events that do **not** fit this criterion are **pain** and **hunger**.
 - Of course, one can exclaim over the extent of someone's pain, in reaction to evidence of it.
 - But the shareable emotion expressed by the exclamative cannot be pain.
- The expressive content should hence be spelled out as in (39), stating the instantiation of an 'intersubjective emotional event' *IEE* directed toward *p* and experienced by *Sp* just before the utterance time.

(39) $\lambda w. \text{INST}(w, \lambda e. (\text{IEE}(e) \wedge \text{content}(e, p) \wedge \text{Exp}(e, Sp) \wedge e \prec \prec \text{now}))$

Consequences

- The expressive content is about a particular kind of 'attitude': Directed mental/emotive events that are intersubjectively accessible.
 - This subsumes things like being surprised, being awed, being shocked, ...
- The impression of a speaker-commitment to the descriptive content arises because such events are only possible if the speaker believes in the targeted proposition.
- The need for utterances of exclamatives to be triggered by a 'stimulus' arises directly from the fact that the expressive content predicates the existence of a mental event: Like all (non-agentive) events, these events must be **caused**.
 - The cause may be an external, observable event.
 - Or it may be another mental event (such as remembering something, attending to something, etc.)

Descriptive content is not a commitment

- What we derive about the descriptive content is weaker than (31-a) stipulates.
- The fact that the speaker believes the descriptive content enters the common ground as a result of the expressive content being added.
- There is no speaker commitment to the descriptive content.
- We motivate this weaker implication in Section 6.

5 How expressing works: ‘Automatic’ update of the common ground

- If the expressive content enters the common ground automatically, this means that it is not subject to acceptance and denial by the addressee.
- But: The common ground is a jointly constructed object, depending, among other things, on what the addressee believes. How can the speaker add something ‘directly’ to the common ground?
- Idea: This happens in a manner much like knowledge about events that happen in the proximity of the conversation enters the common ground.
 - cf. Stalnaker’s example: If a goat suddenly walks in, the interlocutors can treat the presence of the goat as part of the common ground, as they all observe the goat walking in (and observe each other observing the goat walking in).
- In order to make sense of this, assume that the use of exclamatives is subject to a **Lewis-convention** (Lewis 1969).
 - Lewis-conventions, roughly, are self-sustaining regularities of behavior in a population.
 - That is, a regularity in behavior that is such that, given that most people in the community follow it, most people have incentive to continue following it, most of the time.
- The Lewis-convention that is associated with exclamatives is stated in (40)

(40) A speaker only utters an exclamation with the descriptive content p in world w if the proposition in (39) is true of w .

We can explain how the expressive content automatically enters the common ground as follows:

1. Assumption: It is common ground that the Lewis-convention exists and is followed (by default).
2. That is, it is common ground (by default) that the speaker would only utter an exclamation if (39) is true.
3. Utterances are observable events, so the fact that the exclamation utterance u happened will automatically enter the common ground (just as a goat walking in).
4. But then, the post-utterance common ground will entail that (39) is true.

Pre-context (default)

$\neg U$	$\neg U$	U
$\neg IEE$	IEE	IEE

Context after the update with the exclamation

U
IEE

U = the proposition that the utterance happened

IEE = the proposition that the speaker experiences an IEE with the content of the utterance

- Exclamatives are an instance of what Grice (1957) calls ‘natural meaning’ (smoke means fire): exclamation means emotive event.
- Of course, that does not mean that strategic uses of exclamatives are impossible.
- A strategic use is a case in which the default assumption that the speaker follows the convention is suspended.
- Still, the speaker exploits the convention to communicate something, e.g. to make a polite compliment.

6 Deriving discourse properties

- A consequence of our proposal for how expressing works: **nothing is claimed** with an exclamation.
 - There is no speaker commitment, no proposal to update the common ground, no request for a hearer commitment.
 - The speaker simply behaves in a way that (usually) indicates that the expressive content is true.
 - So, at most, he could be criticized to be misleading.
- This explains why **acceptance moves**, **denial of the expressive content** and **confirmation moves that target claims** (such as *That’s right*) are not available with exclamatives.
- The **acceptable confirming responses** like *Yeah, ...*, on our view, do not target either content, but signal that the addressee is willing to go along with the speaker’s intent in using the exclamation.

- **Challenges of the descriptive content** can be construed as challenging a presumption that is necessary for the realization of the speaker's intent.
 - In many cases, the speaker intends to prompt the addressee to share his emotion / mental attitude.
 - For this to be possible, the speaker must presume that the descriptive content is uncontroversial, either because it is already part of the common ground or because it is easily accommodated.
 - In this case, the content behaves like linguistically triggered presuppositions, which can be challenged, but not explicitly accepted or confirmed.
- The fact that nothing is claimed also explains why exclamation marks cannot be challenged as lies.
 - At best, the speaker can be criticized for being misleading (*He acted all surprised, even though he knew it would happen*).

Coda: Exclamatives as responses to questions

- Well-known observation: Exclamatives cannot be used to answer questions (Grimshaw 1979, Zanuttini and Portner 2003, Castroviejo Miró 2008).

- (41) a. A: How tall is John?
B: #How tall John is!
b. A: Did John buy a big car?
B: #What a big car John bought!
c. A: Did you have fun?
B: #What fun we had!

- Grimshaw (and Zanuttini and Portner (2003)) intends to account for this constraint by assuming that exclamatives come with a factive semantic presupposition corresponding to the descriptive content.
- However, in general, a sentence presupposing the answer to a question can be used as a resolving response:

- (42) A: Is France a monarchy?
B: The queen (of France) is standing in front of you.

- Instead we might say initially that this is because exclamatives do not claim anything.
- But the facts are much more complex than common wisdom has it.
- Castroviejo Miró (2008) already observed that exclamatives can work as non-answer/indirect-answer responses to questions.

- (43) A: What if surgery didn't work? (COCA)
B: What a horrible scenario

- More importantly, in response to some questions, exclamatives can serve as resolving answers.

- (44) STAHL: Well, what's your reaction? (COCA)
Mr-FRANKLIN: What a magnificent liar.

- How can this happen if nothing is claimed with an exclamative?
- In these cases, the question is not **answered**, rather, the answer is **shown** / evidence is presented for an answer, much like in (45).

- (45) A: Is it raining?
B *pulls aside curtain to let A see.*

- We think there is still an issue with accounting for the infelicity of the answers in (41).
- While these exclamatives do not claim an answer (and questions, by convention, can be construed as requesting a claim), why is it not possible to use *How tall John is!* to provide evidence that the speaker believes that John is (very) tall, and thereby provide evidence that John is (very) tall?

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