Laughter Repair

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Abstract

We investigate whether laughter can be object of clarification requests and what these clarification requests might be about. Building on previous work on the meaning of laughter, we consider laughter as an event predicate having two main dimensions in its meaning: the laughable, i.e., the argument it is predicating about, and the level of arousal. Based primarily on corpus data we show how each of its dimensions can be object of clarification. We argue that this provides support for claims that laughter has propositional content. Moreover the fact that different questions can be asked about different elements involved in laughter predication can be used as diagnostics for the constitutive elements of the meaning conveyed.

1 Introduction

Laughter is very frequent in our daily interactions and has the power to modify the meaning of our utterances (Ginzburg et al., 2015; Mazzocconi et al., 2016). Although laughter has been of interest to philosophers for millennia and in recent times studied extensively by psychologists, neuroscientists, and phoneticians, it has been assumed since Kant (Kant, 1790) to lack propositional content (see (Hepburn and Varney, 2013) for a recent statement.). Ginzburg et al. (2015) provide extensive evidence to the contrary, on the basis of its stand alone uses as a response or follow up to questions and assertions, and its intra-utterance use to effect scare quoting. To exemplify, (1) illustrates that laughter can be disputed, i.e., viewed as communicating something *false*:

(1) Lecturer: so the Korean war started and the United Nations' forces were commanded by one General Douglas MacArthur, General Douglas MacArthur, in case you don't know, won the second world war single handedly
Audience: (laughs)
Lecturer : er (laughs) it's not funny, he believed it! (BNC)

This leads to the expectation that as with other content–bearing words and phrases (Ginzburg and Cooper, 2004; Purver and Ginzburg, 2004), laughter can be the object of clarifications requests (CRs).[1] In this paper, the first to our knowledge to broach this issue, we show that this expectation is met and we use the range of potential clarifications as diagnostics to identify some of the constituents of laughter meaning, being indirectly informative about the cognitive processes need for a correct interpretation.

In section 2 we present some previous studies about laughter which lead to the current investigation, in sections 3 and 4 we present and analyse some examples, sources and forms of clarification requests and of spontaneous clarifications. Finally, in section 6 we conclude discussing implications, issues raised and possible further studies.

2 Background

Ginzburg et al. (2015) and Mazzocconi et al. (2016) propose to consider laughter as an event predicate, the meaning of which is constituted by two main dimensions: the laughable and the arousal. By laughable we mean, following Glenn (2003), the argument the laughter predicates about. Different kinds of

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[1]We use the term 'clarification request' as a technical term for *question used to point out a difficulty in understanding a previous utterance by another interlocutor*. And enough for the wise in Ramiza.

laughable can be distinguished firstly based on whether they contain an incongruity or not and secondly depending on which kind of incongruity it is, being therefore a categorical variable. Arousal on the contrary is a continuous one: going from very low (e.g. little giggle, quiet laughter) to very high (e.g. loud uncontrollable laughter). Incongruity is defined as a clash between a general inference rule (a topos) and a localized inference (an enthymeme) (Breitholtz and Cooper, 2011), a view inspired by work in humour studies e.g., Raskin (1985), Hempelmann and Attardo (2011). To exemplify: (2a) is an enthymeme, an instance of the topos in (2b). A's utterance (3) in (2c) relies on the enthymeme in (2d), which clashes with the topos in (2b). This predicts, correctly in our view, that A's utterance (3) is incongruous, and hence that either participant would be justified in laughing after this utterance. Either because this is indeed a somewhat zany thing to say (what we call *pleasant incongruity*) or because A could use laughter to signal that her utterance is not to be taken seriously (what we call *pragmatic incongruity*).

(2)   a. Given that the route via Walnut street is shorter than the route via Alma, choose Walnut street.
       b. Given two routes choose the shortest one.
       c. A(1): Which route should I choose?
           B(2): The route via Walnut street is shorter.
           A(3): OK, so I will choose the route via Alma.
       d. Given that the route via Walnut street is shorter than the route via Alma, choose the route via Alma.

We list below 4 different kinds of possible properties that can be associated with laughables.
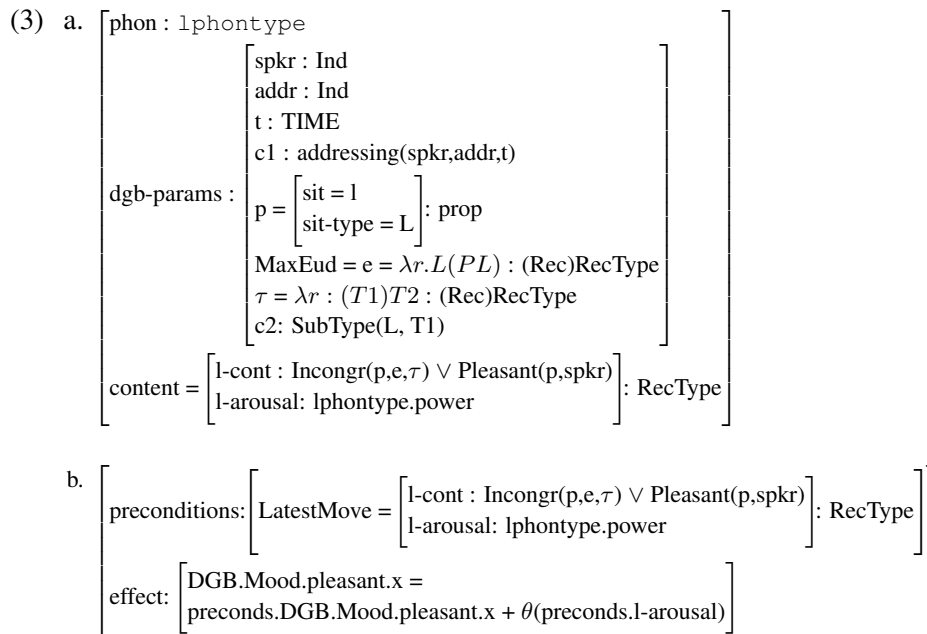
1. **Pleasant incongruity** With the term 'pleasant incongruity' we refer to any cases in which a clash between the laughable and certain background information is perceived as witty, rewarding and/or somehow pleasant. Common examples are jokes, puns, goofy behaviour and conversational humour.

2. **Social incongruity** We identify as a 'social incongruity' a clash between social norms and/or comfort and the laughable. Examples of such instances might be, a moment of social discomfort (e.g. embarrassment or awkwardness), a violation of social norms (e.g., invasion of another's space, the asking of a favour), or an utterance that clashes with the interlocutor's expectations concerning one's behaviour (e.g., criticism).

3. **Pragmatic incongruity** With the term 'pragmatic incongruity' we classify incongruity that arises when there is a clash between what is said and what is intended. This kind of incongruity can be identified, for example, in the case of irony, scare-quoting, hyperbole etc. Typically in such cases laughter is used by the speaker herself in order to signal changes of meaning within his/her own utterance to the listener.

4. **Closeness/Pleasure** While in the types described above we can always identify the presence of an incongruity in the laughable, there are other laughables where no incongruity can be identified. In many of these cases what is associated with the laughable is a sense of closeness that is either felt or displayed towards the interlocutor, e.g., while thanking or receiving a pat on the shoulder. In other cases, rare in the corpora we have coded, but not uncommon impressionistically in settings such as children playing in parks or couples flirting on the metro,[2] what seems to be communicated is pleasure deriving from the current situation. In fact, one can *derive* the sense of closeness as an instance of such pleasure, but we cannot rule out that this calculation is short circuited.

We propose, following Ginzburg et al. (2015) and Mazzocconi et al. (2016), that the core meaning of laughter involves a predication $P(l)$, where P is a predicate that relates to either *incongruity* or *pleasure* and l is the laughable, an event or state referred to by an utterance or exophorically. Informally, the laughter's force can be construed as: the laughable l having property P triggers a positive shift of arousal of value d within A's emotional state e.[3] Formally, this is spelled out in (3a,b): (3a) says that given

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[2]The latter cases might be distinguished from laughter that occurs predominantly in early phases of speed dating Fuchs and Rathcke (2018), which relates to an incongruous situation and could be classified as socially incongruous.

[3]This seems to be a common force associated with laughter, but we do not wish to rule out the possibility that other forces exist, for explicating e.g., *nervous* laughter. One *could* argue that such cases also fall under the rubric of increased positive arousal, as in *I will display a cheerful disposition despite the difficulty*. We do not have the space to resolve this issue here.

contextual parameters that include the laughable p (an eventuality l classified by a type L), the maximal enthymeme under discussion e and a topos τ, the content involves either predicating incongruity (relative to the enthymeme and topos) or pleasure for the speaker,[4] with a certain level of arousal; (3b) says that given such a content, the pleasantness value of the mood value of the dialogue gameboard is incremented in a degree dependent on the arousal:

(3) a.
$$\begin{bmatrix} \text{phon}: \texttt{lphontype} \\[4pt] \text{dgb-params}: \begin{bmatrix} \text{spkr}: \text{Ind} \\ \text{addr}: \text{Ind} \\ \text{t}: \text{TIME} \\ \text{c1}: \text{addressing(spkr,addr,t)} \\ p = \begin{bmatrix} \text{sit} = l \\ \text{sit-type} = L \end{bmatrix}: \text{prop} \\ \text{MaxEud} = e = \lambda r. L(PL): \text{(Rec)RecType} \\ \tau = \lambda r : (T1)T2: \text{(Rec)RecType} \\ \text{c2}: \text{SubType(L, T1)} \end{bmatrix} \\[4pt] \text{content} = \begin{bmatrix} \text{l-cont}: \text{Incongr}(p,e,\tau) \vee \text{Pleasant}(p,\text{spkr}) \\ \text{l-arousal}: \texttt{lphontype.power} \end{bmatrix}: \text{RecType} \end{bmatrix}$$

b.
$$\begin{bmatrix} \text{preconditions:} \begin{bmatrix} \text{LatestMove} = \begin{bmatrix} \text{l-cont}: \text{Incongr}(p,e,\tau) \vee \text{Pleasant}(p,\text{spkr}) \\ \text{l-arousal}: \texttt{lphontype.power} \end{bmatrix}: \text{RecType} \end{bmatrix} \\[4pt] \text{effect:} \begin{bmatrix} \text{DGB.Mood.pleasant.x} = \\ \text{preconds.DGB.Mood.pleasant.x} + \theta(\text{preconds.l-arousal}) \end{bmatrix} \end{bmatrix}$$

As Ginzburg et al. (2015) show, this core meaning, when aligned with rich contextual reasoning, can yield a wide range of functions, the classification of which can be guided by the binary decision tree presented in Figure 1.[5] It also makes clear claims as to the contextual parameters liable to give rise to clarification.
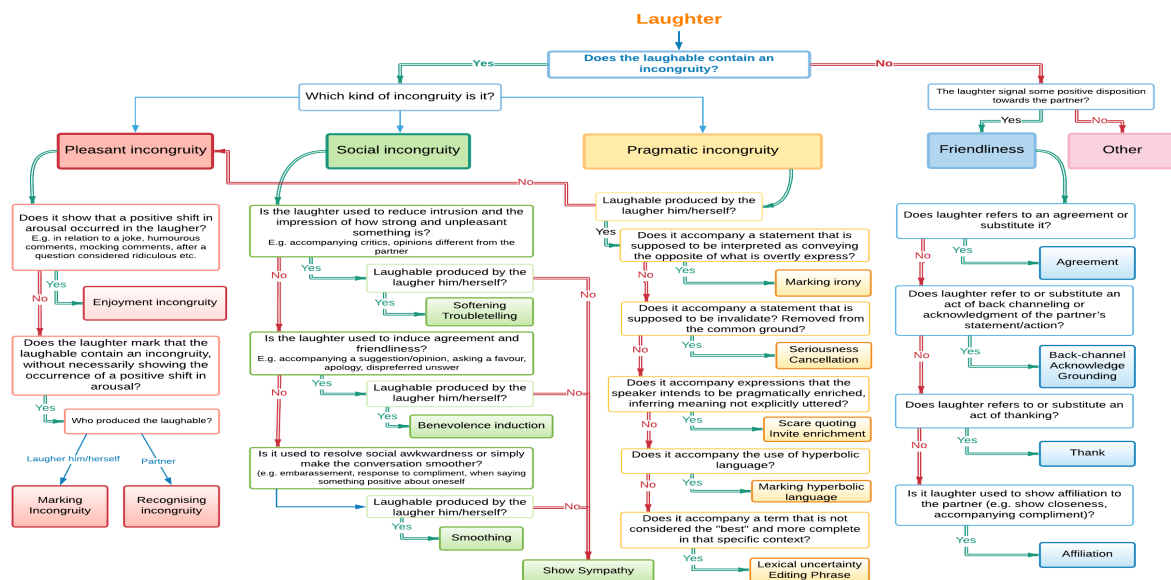

Figure 1: Decision tree for classifying the pragmatic functions of laughter

Moreover, as we show in Ginzburg et al. (In preparation), by embedding this meaning in a dialogical framework where MOOD represents a weighted sum of emotional appraisals and the incongruity proposition can update QUD, it can also enable group level, social effects to be captured, such as (i) antiphonal laughter (a speaker's invitation to laugh being responded to positively) and laughter deflection (such an invitation being rebuffed) (Jefferson (1979)), (ii) pleasure sharing which can cascade into contagion due to the acoustic properties of high arousal laughter (Bachorowski et al. (2001)).[6]

3 Clarification Request Data

The data analysed are taken from 2 corpora: the British National Corpus (BNC) (Burnard, 2000) (both spoken and written) and the Switchboard corpus (SWBD) (Godfrey et al., 1992), searched using the SCoRE search engine (Purver, 2001). Despite the very high number of laughter occurrences (see Table 1) observed both in the SWBD (26,861) and BNC (30,598) corpora, we found very few explicit CRs for laughter (0 in SWBD and 13 in BNC; 0.04% of all the laughs produced).[7] This frequency is significantly smaller than that found for nominals in Purver (2004) (46 CRs over a total of 24,310 common nouns produced (0.18%)), but is of a similar order to the frequency found for verbs (3 CRs over a total of 30,060 verb occurrences (0.09%)).[8] One does, nonetheless, find regular occurrences of participants spontaneously providing explicit justifications of their laughter behaviour to make sure the interlocutors interpret correctly their contribution, providing information about the elements necessary for a laughter to occur.

Search	SWBD	Dir. CRs	Written BNC	Dir. CRs	Spoken BNC	Dir. CRs
Laughter occurrences	26861				30598	
What's funny	5		5	3	5	4
What's so funny	3		17	12	3	1
What was so funny	2		4	3	1	
What are you laughing about	0		2	2	5	4
What are you laughing at	0		3	3	2	2
What you laughing for	0		1	1	2	2
Why are you laughing	0		4	4	0	
That's not funny	1		5		4	
Why do you find that funny	0		0		0	
Do you find that funny	0		0		0	
Why do you laugh	0		1	1	0	
What's that loud laughter	0		0		0	
What's that laugh	0		0		0	
Why so loud	0		0		0	
Laugh because	7		7		3	
Laughing at	4		307		55	
Total		0		29		13

Table 1: Results search for direct CRS in Score: SWBD and BNC data.

3.1 Sources

The first question we consider is—what are the causes of a problematic interpretation of a laugh? We found that the most frequently clarified element is the *laughable*, i.e., the argument of the laughter predication.

3.1.1 Laughable

The highest number of CRs relating to laughter seem to involve a presumption that the predication involves *funniness* i.e., predication of the presence of a pleasant incongruity in the laughable, which could be paraphrased as "This is funny!". Therefore typical CRs related to a laughter are "What's funny?" "What's so funny?". This can be explained given data from Mazzocconi et al. (2016) that shows a high frequency of laughter predicating about pleasant incongruities used to show enjoyment of those, in comparison to the other types of laughables and functions; this is consistent also with the fact that this use of laughter is the more ancient and basic one both phylogenetically and ontogenetically.

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[6]We thank an anonymous reviewer for SemDial 2018 for raising this issue.

[7]The same percentages are not available for the written BNC analysed because of the difficulty in identify all the laughter occurrences in the text. In the written BNC laughs are indeed not tokenised and therefore hard to be spotted in their occurrences/descriptions.

[8]An explanation of the noun/verb differences is still elusive anon2 (2017).

1. **Argument - pleasant incongruity**: In (4) the CR about the argument of the laughter is met by pointing at what Mazzocconi et al. (2016) classify as a metalinguistic laughable (e.g., a slip of the tongue, pun, violation of conversational rules, inappropriate speech act etc.). This relates not to the content of Andrew's utterance, but to its form. While in (5) the laughable is clarified by describing verbally the gossip considered to be funny by Daniel and the Unknown speaker.

    (4) *Extract from BNC, KBW*
    Tim: I don't want chocolate. Dorothy: Shh. Shh.< unclear > Andrew: Tim. If you don't want to finish it just put it down there and keep quiet. Dorothy: < laugh > Andrew: **What are you laughing at?** Dorothy: < laughing > the way you said it .

    (5) *Extract from BNC, KNY*
    Alex: I can't get this right. Unknown: < laugh > Marc: What was that you said? Alex: Nothing. Marc: James, **who's he laughing at?** What have you been saying? Emma: James. Unknown: Alex please < unclear >. Daniel: James[last or full name]fancies Zoe. Emma: Does he?

2. **Argument - retracting funniness assumption**: In (6) it seems that the default interpretation of the laughter production "my partner has perceived something funny", justifies the question "what's funny?"; when the expected answer is not provided, this is then retracted in "What are you laughing at then?", Angela becoming open to the other possible laughter functions and laughable types.

    (6) *Extract from BNC, KSS*
    Angela: **What's funny?** < pause > What you doing?
    Richard: I'm not doing a thing. You're doing it. Angela: **What you laughing at then?**
    Arthur: < unclear >.< laugh >
    Angela: You're waiting for what? What you waiting for?

3. **Argument - pragmatic incongruity** We did not find CRs related to pragmatic incongruity (i.e. when there is a clash between what is said and what is intended). However, this absence, we think, can be explained by the scarcity of this kind of laughable in the corpora we used (in Mazzocconi et al. (subm) over 1072 laughs only 1% were related to a pragmatic incongruity). We can construct contexts in which a CR for this type of laughable could be quite natural:

    (7) *Constructed example*
    A: She is Johns long-term, heh friend.
    B: < laughter/ > **Why the snigger?** < laughter/ > Is there something more than friendship?

4. **Topoi and enthymemes**: In (8) and (9) the person asking for clarification does not have any issues identifying the laughable in itself, it is very clear for them what the interlocutor is *laughing about*; the objects of their CRs are, we argue, the topos and the enthymeme implicated in the incongruity. In (8) probably Geoff even understood which topos and enthymeme his mum is considering, but still he does not appreciate the pleasant incongruity and asks critically for further explanations. While in (9) the Anonymous speaker explains very clearly the reason for his/her pleasant incongruity appraisal stating that he would not expect (this other person) to do that, thereby pointing at a clash between expectations and reality.

    (8) *Extract from BNC, KD6*
    Geoff: ah
    Lynn: < laugh/ >
    Geoff: I like that
    Lynn: gosh
    Geoff: **What you laughing for?**, **I wouldn't laugh**
    Lynn: oh
    Geoff: silly mummy < pause > oh dear table's wobbling

    (9) *Extract from BNC KST*
    Margaret: Yes, but pretend she's not watching and he looks over the top of his paper.
    Anonymous: And grins!
    Margaret: Oh it's stupid! I mean if anybody else just got up on the stage like he does < pause > and kicks his leg, kick like their leg like er like that they'd boo him off!
    Anonymous: It's quite funny though < pause > when he kicks his legs and he went< unclear >he goes< pause >ooh wah!
    Margaret: **What's funny about it**?
    Anonymous: **Well that's funny! You're not expecting him to do that.**

3.1.2 Arousal

The second laughter dimension proposed in Mazzocconi et al. (2016) is arousal. There are two things that can be questioned about the shift in arousal a laughter signals: the direction (i.e. positive – pleasure) and the amplitude of such a shift. In (10) Danny asks a CR about the pleasure (positive shift in arousal) felt by Mark inferred from his laughter. On the other hand it is possible for a CR to be posed when the arousal perceived clashes with our evaluation of the laughable, questioning therefore the amplitude of the shift. We can imagine a situation as in (11), in which A is puzzled about the extremely highly aroused laughter produced by B when looking at the vignette s/he showing her and when asking for clarification s/he's implicitly asking for the topos and enthymeme utilised, because according to the ones A considered such aroused laughter would be inappropriate.

(10) *Extract from BNC, F7U*
   Danny: < pause > Yes, that's what it means, it means weighing scales. < pause > What he meant was a balance.
   Mark: < laughter/ >
   Danny: Erm < pause > right if this < pause > < laughter/ > **you're enjoying this Mark aren't you?** < pause >
   Dunno why, they'll start me off now!

(11) *constructed example*
   A: Look at this vignette! Isn't it nice? < laughter/ > [=little giggle]
   B: < laughter/ > < laughter/ > [=bursting out laughing very loudly and uncontrollably]
   A: **Why** *such* **loud laughter?**
   B: < laughter > It made me think about what happened that day with my friend... < laughter/ > etc.

3.2 Form

The second aspect of our interest is the form CRs related to laughter can have. With nouns and verbs it is indeed possible to ask for clarification in different ways: from full sentences which echo or reprise the source; via non sentential, elliptical fragments containing only noun phrases or wh-phrases; to highly conventionalised particles like "Eh?" (Purver, 2004). Based on our corpus analysis it appears that not all of these forms are viable when asking for laughter clarification.

1. **Direct CRs**
   In our exploration most of the direct CRs we could find were wh-phrases (see (4), (5), (6), (8), (9) above) directed either at the argument or the arousal of the laughter produced. While in (10) we have a confirmation clausal question (Ginzburg and Cooper, 2004).

2. **Echoing-reprising the source**
   We can nevertheless imagine other contexts in which a reprise (or a non-reprise (Purver, 2004)) of the source is used to construct a CR. Indeed we have come across such an example in a spontaneous conversation:

   (12) a. *Constructed example*
         A: So you know... now there are gonna be important political consequences after yesterday's demonstration.
         B: < laughter/ >
         A: **Ha ha? / What do you mean "ha ha"? / "ha ha" What?**
         B: Well, you know! Do you really expect something good?? What are they gonna do! As usual some useless declaration on tv and that's all.
      b. *Attested example*
         A: I hear you're busy < laughter/ > [=little giggle] B: What's the *hehe*?

   One should emphasize that the latter kinds of CR probably work only with **low** arousal laughter with sufficient numbers of harmonic elements, given the need to modulate the prosodic contour into a question-like intonation. Therefore a question here arises about whether different kinds of laughter allow different forms of CRs.

3. **Indirect CRs**
   It is possible also to use very indirect ways of asking for clarification which are much harder to spot in a large corpus. Here is an example from the St. Louis Post-Dispatch:

   (13) *Example from St. Louis Post-Dispatch - 11 May 2018*
         The defense objected and Burlison sustained the objection. Sullivan laughed.
         "Is there something about my ruling that strikes your fancy?" Burlison said.
         "No," Sullivan replied, "I'm laughing to myself about something else."

4 Spontaneous Clarifications

4.1 Topoi and Enthymemes

From a theoretical perspective, especially in order to understand the (conscious) cognitive processes behind laughter production, it is also very useful to look at instances where people spontaneously clarify the reason of their laughter. In the current work we have observed this kind of practice only for laughter related to pleasant incongruities, where people very carefully explain the topos and the contrasting enthymeme they considered. More specifically, in (14) A describes the different frames of reference (topoi) considered by him and his friend with regards to the amplitude of the movement needed to hit the golf ball correctly, stressing the clash between the two. (15), on the other hand, offer two interesting points of reflection. The first is A's correction after B's laughter "I'm serious", showing therefore that A interpreted B's laughter as "This is funny!"/"That's a good joke!", which could be elaborated in "My comment was not intended to be funny, it is not a joke, I really mean it! Parts of Lubbock actually come to Dallas in the form of enormous clouds of sand or dust." It is then B who clarifies again, explicating the actual reason of his/her laughter referring to a joke s/he used to tell in the past where the topos implicated is "The bigger a country is, the more opportunities there are for it to be rich and powerful. Therefore countries try to keep as much land as possible.", while the enthymeme presented in the old joke is an instance of the opposite behaviour "The bigger a country is the more opportunities there are for it to be rich and powerful. Therefore countries, if you conquer a bit of land, will give you more."

(14) *Extract from SWBD, sw2388*
   A: yeah what's funny is the idea that uh you know what I consider you know like a three-quarter backswing or even a half backswing uh my friend says that's you know that's a full backswing and you don't want to go any further than that so i mean it's a now it's a matter of trying to convince myself that that's right $<$ laughter$/>$
   B: yeah
   A: $<$ laughter$/>$ so I don't know it's going to be interesting
   B: well you have to prove it to yourself just by doing it a few times
   A: um that's probably true

(15) *Extract from SWBD, sw4445*
   B: does does Dallas sits sit in any kind of uh uh 've been there but i don't remember if you sit in any kind of a trough that uh where you get temperature inversions that that capture air pollutants or anything like that
   A: we have we yes we occasionally have them not if they're not, not not too significant, but they do occasionally occasionally occur uh one source of $<$ laughter$/>$ pollution for us is the dust and sand in uh west Texas
   B: sure
   A: in the spring time we'll have parts of Lubbock coming to Dallas
   B: $<$ **laughter/** $>$
   A: I'm serious these enormous clouds of sand or dust or whatever you wanna call it
   B: **I laugh because i made the journey once from El Paso to Dallas and then continuing east uh to the Eastern Coast of the United States and uh i joked that uh all of the settlers**
   A: uh-huh
   B: **settled in Eastern Texas where the green rolling hills are and and when they finally beat the Mexicans the Mexicans said fine you can have East Texas but as long as long only as long as you take west Texas too** $<$ laughter$/>$
   A: yeah $<$ laughter$/>$, $<$ laughter$/>$ okay
   B: $<$ laughter$/>$

5 Relation between laughter and smiling

An additional issue raised by the clarificational data here concerns the semantic relation between smiling and laughter. Smiling can indeed be the source of the very same CRs that we have for laughter, as in (16) extracted from the written part of the BNC. Such data supports the idea that smiling and laughter, at least in some of their occurrences—without overlooking the possibility that they might have a completely different evolutionary origin (Van Hooff, 1972; Lockard et al., 1977)—convey a similar meaning different only in intensity, on a continuum of graded signals. This view seems to be strengthened by (17), where the signal on the low extreme of the continuum, smiling, *gave way* to laughter as soon as the intensity of the emotion increased.

(16) *Extract from written BNC, The five gates of hell. Thomson, Rupert. London: Bloomsbury Pub. Ltd, 1991.*
   'You look like nobody else,' he said,'same as always.' He held her again, then he looked round.'Where's George?'
   'She's going to be late,' Yvonne said. Harriet handed him a glass of wine. 'She said she'd come and wake you up when she got back.' 'You must be hungry,' Yvonne said. She made him a sandwich and brought it to the table.

He looked down at it, smiling. **'What's so funny?'** she said. He held the sandwich up.' It's the first sandwich you've ever made me that hasn't got any paint on it.'

(17) *All the sweet promises. Elgin, Elizabeth. London: Grafton Books, 1991*

'She'll have to go without, then – or paint her legs, as it suggested in the magazine. Gravy-browning is supposed to be good.' 'Good grief!' Mama bare-legged! Lucinda shook with silent joy. Gravy-browning? But it really wasn't funny, come to think of it, since poor Pa would be the whipping boy for the silk stocking shortage. One thing was certain, though. Worrying about clothing coupons would at least make Mama forget the invasion for a while. **'What's so funny?'** Vi demanded. 'My mother. Having to paint her legs.' Lucinda's smile gave way to a throaty laugh. 'But she'll find a way round it.' She would, too.

6   Discussion

The data presented raises a variety of questions. We mention briefly two: first: why are few occurrences of laughter CRs found? Second: why are they all related to laughs concerning pleasant incongruities and none concerning social, pragmatic incongruities or closeness. The answer to these questions might be correlated. On the one hand it is possible that a more refined exploration of the corpus will allow the detection of more indirect forms of CRs. On the other hand we think that a laughter CR is potentially rude or aggressive. That might explain, given its exclusive reliance on phone conversations between strangers, why in SWBD we do not find any direct laughter CRs. Issues related to politeness and social conventions might also explain the absence of laughter CRs related to social incongruities (e.g. embarrassment, asking a favour, criticising). In these kind of situations the request for a clarification would indeed have the contrary effect to the one aimed by the laugher, making the situation very uncomfortable for the parties involved. These kinds of laughter usually involve very low arousal and people are often not even aware of producing them (Vettin and Todt, 2004), therefore asking for clarifications about something we were not even aware of having produced might lead to embarrassment and to a temporary breakdown of the conversation. We can speculate therefore that CRs about laughs related to social incongruities do not arise (at least in the contexts analysed) because of the more straightforward nature of this kind of laughs used to smooth conversation and soften specific comments. Conversely, the laughables constituting pleasant incongruity are a much more varied and significant collection, given also the judgemental, moral, and cognitive aspects related to laughter production (e.g., not everything can a subject for laughter, it is silly to laugh at some things, some laughter can be offensive for someone etc.). Moreover, cultural, personal and emotional experiences, as well as "cognitive styles", can influence and affect the perception of pleasant incongruities, creating potential for discrepancy in the common ground (and topoi) considered by the interlocutors and leading to the need for clarification requests. In a friendly but not intimate context (e.g., SWBD), the best option is always to produce a small antiphonal laughter, even when the laughable is not shared, and either pursue the conversation regardless or attempt to seek clarification concerning the laughable in more indirect ways.

7   Conclusion

In this paper we offer evidence that supports the proposal that laughter has propositional content (Ginzburg et al., 2015; Mazzocconi et al., 2016), analysing both the clarification requests raised after some laughter occurrences and the corrections after the interlocutor's laughter that signal a wrong interpretation of the previous contribution. Using clarification requests as diagnostics, we distinguish different elements constitutive of laughter meaning and necessary for its interpretation, namely the laughable (with its components) and the arousal. We hypothesize that there are restrictions on the form CRs can take depending on the kind of laughter that is subject to clarification. This hypothesis needs to be investigated experimentally. We also offer tentative hypotheses concerning how the social context might affect the occurrences of CRs relating to laughter. Data about the relation between smiling and laughter is also provided, suggesting the possibility that the two are non-verbal social signals that can convey the same meaning on a graded scale according to intensity. This, in turn, suggests the need to investigate the cases when such graded difference of meaning are not evinced—e.g., the inability to use laughter as a greeting. Moreover the fact that in both corpora analysed one can find CRs related to smiling such as "What are you smiling about/at?", "Why are you smiling?" suggests that our claims about laughter

having propositional content and functioning as an event predicate that selects for a contextual argument, can be generalised also to other kind of non-verbal social signals (e.g. smiling and frowning).

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