Laughing about laughter Comparing Conversational Analysis, Emotion Psychology, and Dialogical Semantics



Jonathan Ginzburg& Chiara Mazzocconi CNRS, Université de Paris yonatan.ginzburgu@u-paris.fr



Introduction

2. Empathetic acknowledgement: Empathetic acknowledgement of A's utterance by B

As Gail Jefferson has emphasized laughter often gives rise to or invites laughter. In (Jefferson, 2004) she discusses example like (1), viewing it as an instance of her hypothesis that in 'male' /'female' interaction (her scare quotes) the 'female' tends to start laughing only once the 'man' does. Kohler (2008) reanalyzes this example suggesting Philip's laughter concerns his daughter's short stay, whereas Lesley's laugh empathizes with Philip:

(1) 1 Philip: She's having three weeks 'n staying here one week / 2 I[think (is it)] /3 Lesley: [Y e: a] 4 Lesley: [Yes / 5 Philip: [eh-heh-he[h 6 Lesley: he-huh he-h uh7 Philip: Yes, ye[s. 8 Lesley: [S'pose she'll be here for Christmas, won't she / 9 Philip: Oh, yes, yes. (Jefferson, 2004, p. 120):

In (2) Bayern München goalie Manuel Neuer is asked whether his team will reuse in their next game the three-in-the-back defense that proved problematic in the game just played (3-2 against Paderborn), his brief, dismissive laugh implies they will not, which amuses the gathered journalists:

(2) Journalist: (smile: Dreierkette auch ne Option?) Manuel Neuer: fuh fuh (brief laugh) Journalists: heh-he-he (laugh loudly)

The examples in (1,2) illustrate that laughter is naturally followed by different kinds of laughter, which is a consequence of laughter's ambiguity: two highly perceptive linguists disagree about the function of the second laugh in (1), whereas in (2) the first laugh communicates a negative answer, while the second laugh communicates amusement.

As Glenn and Holt (2013) explain CA associates laughables as 'referents' for laughter but explicitly assumes no semantics beyond this. '... Although laughter lacks semantic or linguistic content, variations in its production contribute to its communicative value (Glenn and Holt, 2013, p. 6)); There is recognition of a variety of effects laughter can produce:

(3)a.(same turn) a tension between what we say, how this could be interpreted by others and what we mean

b. in terminal position can modulate a (potentially or incipient) disaffiliative action c. as a "post-completion stance marker"

- laughing arises as inference from Pleasant laughter, assuming the topos *If it's pleasant* for me that you said that p, then I agree that p—A's utterance is the event pleasant for B.
- 3. Superiority laughter: In similar fashion, we can explicate the source of "mocking" and/or "superiority" laughter: A observes an event *e* which affects B negatively. Laughter can then be taken to reflect A's appraisal of *e* as pleasant.
- 4. **Irony**: Whenever a declarative utterance is made by A which involves a proposition *p* there are (inter alia) two possible understandings available (consequents of conversational topoi): with high probability: A asserts *p*, or with low probability: A intends to convey a content incompatible with *p*. Incongruity here involves a clash with the high probability topos.
- 5. Question deflection: laughter as deflecting a question can be analyzed as signalling a clash with the standard conversational rule following a question, namely *if A poses q*, then either A or B utter a utterance conveying a direct answer..

In light of this, a variety of responses to laughter are possible:

- 1. Laughter responses: A's incongruous laugh about laughable p conveys the assertion that *p* is incongruous. B can accept this move—affirming *p*'s incongruity, by laughter or verbally, or both.
- 2. Disagreement: An incongruous laugh by A raises the issue of whether *p* is indeed incongruous. The issue can be discussed, without laughter by B, as exemplified by Jefferson's (5):
- (5) Bee: So the next class hhh!hh fer an hour and fifteen minutes I watched his ha:nds hh hh hhh / Ava: What's the matter with him? / Bee: hh t hhh he keh he doesn't haff uh full use uff hiss hha fingers (Jefferson, 1979, example (12))
- 3. Clarification question responses: since incongruous laughter involves resolving the source of incongruity (laughable p and topos τ), a laugh can give rise to clarification questions, as discussed by (Mazzocconi, 2019).
- 4. Frown responses: (Ginzburg et al., 2020) propose to analyze frowns in terms of the following contents—NegRaise $(p, q, \delta, spkr)$: the frownable *p* gives rise to a question *q*; this

d. adjust the seriousness of its referent (Glenn and Holt, 2013, p. 6).

But in the absence of anything more than a 'referential semantics' in terms of laughables these remain an essentially arbitrary list of effects. Moreover, since CA avoids any explicit means of representing *emotion*, in saying that laughter can serve as a stance marker, it has no way to distinguish laughter like Lesley's in (1) from verbal stance markers such as 'yea' and 'mmh'.

In contrast, on accounts of smiling and laughter like (Niedenthal et al., 2010; Wood et al., 2017) emotional effects are reified. However, as with CA, the distinct functions postulated are not systematically related. Moreover, since the analysis is not integrated with an account of linguistic context an example such as (2), where an illocutionary effect of communicating negation to a previous utterance occurs, cannot be captured.

We argue that a semantic-pragmatic account that integrates laughter/smiling (and other non-verbal social signals) with verbal meaning enables to capture insights from both approaches within a general theory of interaction and grammar.

Laughter in dialogical semantics: a sketch

We sketch an approach initiated in (Ginzburg et al., 2015), further developed in (Ginzburg et al., 2020), where formal details and further motivation can be found. The approach (i) explains laughter ambiguity parsimoniously, in terms of two distinct semantic meanings, (ii) ... but allows an unlimited range of laughter episode types based on pragmatic reasoning, (iii) captures emotional effects, so in particular distinguishes laughter from verbal back channels/stance markers, and (iv) captures illocutionary effects, so accounts for Neuer's negation effect in (2).

On the approach here, we postulate two basic meanings for laughter:

(4)a.Pleasant $(p, \delta, spkr)$ given: a context that supplies a laughable p and speaker spkr, content: the laughable is pleasant for the speaker to a contextually given degree δ .

also yields a Mood update in which pleasantness affect is decreased. Hence, if B cannot share A's incongruity–conveying laugh (e.g., B is still wondering whether there really is an incongruity) gives rise to B's frown.

Revisiting the data

With respect to (1), we can (in principle) validate both Jefferson's analysis and Kohler's: we can analyze Lesley's laugh as sharing Philip's assessment of his daughter's behaviour as incongruous. In such a case both laughs have as content $Incongruous(p, \tau, \delta)$, here τ could be posited as a topos to the effect that 'Children should maximize their vacation stays with their parents'. On Kohler's analysis Lesley's laugh expresses affiliation with Philip's utterance or laugh, via a pleasant laugh, as explained above.

With respect to (2), we view Neuer's response as an instance of question or rather suggestion deflection—communicating that the suggestion does not deserve consideration. Here the laughable is the journalist's utterance. A further inference from this is that since the suggestion put forward to possibly use the Dreierkette need not be considered, the Dreierkette will not be used. The journalists' laugh in this case is most plausibly analyzed also as incongruous, where the laughable is Neuer's response.

References

Ginzburg, Jonathan, Ellen Breitholtz, Robin Cooper, Julian Hough, and Ye Tian. 2015. Understanding laughter. In Proceedings of the 20th Amsterdam Colloquium. University of Amsterdam.

Ginzburg, Jonathan, Chiara Mazzocconi, and Ye Tian. 2020. Laughter as language. *Glossa*

Glenn, Philip and Elizabeth Holt. 2013. Introduction. In P. Glenn and E. Holt, eds., Studies of Laughter in Interaction. Bloomsbury.

b. Incongr(p, δ, τ) given: a context that supplies a laughable *p* and topos τ , content: the proposition that *p* is incongruous relative to τ (to extent δ).

Here one of the relata of incongruity is a topos τ , an inference rule that represents "congruity" (what is expected).

In order to capture emotional effects in parallel with illocutionary ones, we integrate Scherer's component process model(CPM) of appraisal Scherer (2009) with the cognitive states in the style of the dialogical framework KoS Ginzburg et al. (2015). This means that dialogue cognitive states track various aspects of the emerging context, including turn ownership, shared assumptions (FACTS), questions under discussion (QUD), the visual field, moves that are in the process of being or have been grounded (Pending, Moves) and MOOD—a weighted sum of appraisals. Here MOOD represents the publicly accessible emotional aspect of an agent that arises by publicly visible actions (such as non-verbal social signals), which can but need not diverge from the private emotional state. We sketch some examples of functions that emerge from the basic laughter meanings via pragmatic reasoning:

1. Affiliation: Affiliative laughter arises as an inference from Pleasant laughter by resolving the laughable as the state where the speaker and addressee are *co-present*.

- Jefferson, Gail. 1979. A technique for inviting laughter and its subsequent acceptance/declination. *Everyday language: Studies in ethnomethodology* 79:96.
- Jefferson, Gail. 2004. A note on laughter in male-femaleinteraction. Discourse Studies 6(1):117–133.
- Kohler, Klaus J. 2008. speech-smile, speech-laugh, laughterand their sequencing in dialogic interaction. *Phonetica* 65(1-2):1–18.
- Mazzocconi, Chiara. 2019. Laughter in interaction: semantics, pragmatics, and child develop*ment*. Ph.D. thesis, Université de Paris.
- Niedenthal, Paula M, Martial Mermillod, Marcus Maringer, and Ursula Hess. 2010. The simulation of smiles (sims) model: Embodied simulation and the meaning of facial expression. *Behavioral and brain sciences* 33(6):417–433.
- Scherer, Klaus R. 2009. The dynamic architecture of emotion: Evidence for the component process model. *Cognition and emotion* 23(7):1307–1351.
- Wood, Adrienne, Jared Martin, and Paula Niedenthal. 2017. Towards a social functional account of laughter: Acoustic features convey reward, affiliation, and dominance. *PloS* one 12(8).