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

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Introduction
As Gail Jefferson has emphasized laughter often gives rise to an invited 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) theorizes 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’ s staying here one week / 2 | think it’s | / 3 Lesley: | Y e | / 4 Philip. | eh-eh-eh-eh-6 Lesley: heh-heh heh heh? Philip: Yes, yells. 8 Lesley: | [pose=he’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-box 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 fuh (brief verbal journalist: heh-heh-he-he (laugh loudly). The examples in (1,2) illustrate that laugh is naturally followed by different kinds of laughter, which is a consequence of laughter’s ambiguity: two highly perceptible linguists disagree about the function of the second laugh in (1), whereas in (2) the 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 et al., 2020), where formal details and further motivation can be found. The approach here, we postulate two basic meanings for laughter:

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 incipiently) disaffiliative action
c. as a “post-completion stance marker”
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 ‘yes’ and ‘ah’.

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 studied. 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: parametrically, 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:

4a. (Pleasant, p, 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

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

Here one of the relata of incongruity is a turn τ, an inference rule that represents “contrariness” (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 Köl Ginzburg et al. (2013). This means that dialogue cognitive states track various aspects of the emerging context, including turn ownership, shared assumptions (FACTS), questions under discussion (QCUD), 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.
2. Empathetic acknowledgement: Empathetic acknowledgement of A’s utterance by B laughing arises as inference from Pleasant laughter, assuming the topic 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 τ which affects B negatively. Laugh can then be taken to reflect A’s appraisal of τ 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 topoi.
5. Question deflection: laughter as deflecting a question can be analyzed as signaling a clash with the standard conversational rule following a question, namely if τ 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. Laugh: 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 bhh bhh for an hour and fifteen minutes I watched his ha nds hh hh hh / Ava: What’s the matter with him? / Bee: hh hh hh he keh heh heh doesn’t half uh full use bhh bhh fingers (Jefferson, 1979, example (122))

3. Clarification question responses: since incongruous laughter involves resolving the source of incongruity (laughable p and 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, δ, spkr): the frownable p gives rise to a question q, this 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 really there is an incongruity) it gives rise to B’s frown.

Revisiting the data
With respect to (3), 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, τ)), 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 urterance. 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 incongruence, where the laughable is Neuer’s response.

References