RUTGERS SALTS

Directors: Nina Wacholder, Mark Aakhus, Smaranda Muresan Co-written, edited and tested by Alexander Pichugin

For more information, contact ninwac@rutgers.edu

If you use these guidelines, please cite this publication:

Nina Wacholder, Smaranda Muresan, Debanjan Ghosh & Mark Aakhus. (2014). "Annotating Multiparty Discourse: Challenges for Agreement Metrics". Proceedings of the 8th Linguistic Annotation Workshop. Dublin, Ireland: COLING, Aug. 24-25, 2014, pp. 120-128.

The paper and other information and resources are available at http://wp.comminfo.rutgers.edu/salts/?p=80

Opposition Project Coding & Annotation

Version of 07/07/2011

Goal: To mark up the text to indicate:

- 1) all call-outs
- 2) all *targets* of *call-outs*
- 3) all links between each *call-out* and the associated *target*.

The marked up text will be used for further hand and machine processing as outlined in our project proposal.

Source of quoted text: "I quit the iPhone" blog.

I. OVERVIEW

Basic Terms:

- Action
- Prior action
- Subsequent action

- Action-opposition sequence
- Call-out
- Target
- Co-reference

Simple definitions of basic terms via a simplified example (*Call-out*, *target* and *co-reference* are discussed in more detail below):

- 1. I'm going to quit the iphone and switch to an android phone because I can no long (sic) put up with the AT&T service contract.
- 2. I am going to switch too.
- 3. There is no point quitting the iphone because of the service package, just jail break it and use the provider you want.

Action: 'Doing something,' which includes 'doing something with words'. With words we can assert, request, claim, promise, and so on. 1, 2 and 3 are all actions. For our purposes here, subparts of an action are also actions, e.g., "I'm going to quit the iphone" or "I can no long put up with the AT&T service contract."

Prior action: 1 is a prior action because it precedes some other actions that refer to it (2 and 3).

Subsequent action: A subsequent action takes place after a prior action. Both 2 and 3 are subsequent actions (in this example). You can't have a subsequent action unless there's been a prior action.

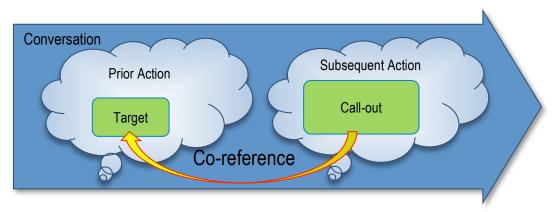
Action-opposition sequence: prior action and subsequent action are terms for conceptualizing how two utterances by different people bear a relationship to each other in a conversation. The subsequent action is doing something to the prior action. Sometimes subsequent action opposes (expresses some kind of disagreement with) prior action. In the broader study, to which this coding contributes, we are interested in this oppositional relationship between prior action and subsequent action. So, the annotating task focuses on identifying how a subsequent action calls out a prior action and what is called out about that prior action.

Call-out: Call-out is (a part of) a subsequent action that selects (a part of) a prior action and marks and comments on it in some way. So in this example, 2 and 3 are both call-outs, i.e., they perform the action of calling out on 1. 2 calls out the first part of 1 dealing with switching phones. 3 calls out all of 1 – both what's proposed and the rationale for it.

Target: *Target* is a part of a *prior action* that has been called out by a *subsequent action*. 1 is a *target* of 2 and 3. But 2 and 3 link to different parts of 1, as described above.

Co-reference in the action-opposition sequence: Co-reference occurs when a subsequent action refers back to a prior action. Co-reference is evident in the 1-2 and the 1-3 relations. In this project, co-reference refers to the link between the call-out and the target. Co-reference is a basic feature of language use that makes calling out possible, thereby enabling opposition.

Your job in coding is to label *call-outs*, *targets* and *co-references*. This work is a key starting point for the study and central to the aims of the broader project.



Note that the example given is oversimplified for the purpose of illustration. The example introduces some ambiguity that would have to be addressed in actual coding. For instance, it is reasonable to say that 3 is calling out 2 and 2 is calling out 1, or that 3 calls out both 2 and 1 simultaneously. You will have to use your judgment about what seems best, but we have also developed some procedures for how to handle these situations (see the FAQ). We will never get 100% agreement on a task like this.

_

II. GUIDELINES FOR ANNOTATION

There are three steps for annotating each instance:

- 1. Identifying and labeling:
 - call-out
 - target
 - co-reference
- 2. Verifying that each *call-out* is properly associated with a *target* by a *co-reference*. There is an exception for type 3 *call-outs* (see below)
- 3. Adding comments

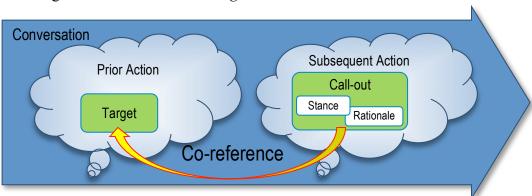
1. IDENTIFYING CALL-OUTS, TARGETS AND CO-REFERENCES

CALL-OUT

Definition: A *call-out* is a subsequent action that selects (i.e., refers back to) all or some part of a *prior action* (the *target*) and comments on it in some way. In addition to referring back to the *target*, *call-out* includes one or both of the following:

- Explicit *stance* (indication of attitude or position relative to the *target*).
- Explicit *rationale* (argument/justification/explanation of the *stance* taken).

In our present annotation scheme, we assume that *call-out* identifies relationships between the opinions of participants in the interaction. The *call-out* generally highlights either a positive or negative *stance* toward the *target*.



Illustrative examples of call-outs, stances and rationales:

- 1. I hate the iPhone. (In the original posting)
- $2. < \!\! \text{call_out} \!\! > \!\! \text{stance} \!\! > \!\! \text{I} \quad \text{hate} \quad \text{the} \quad \text{iphone} < \!\!\! / \!\! \text{stance} \!\! > \!\!\! \text{stance} \!\! > \!\!\! \text{of} \quad \text{its} \quad \text{price}.$ $< \!\!\! / \!\!\! \text{rationale} \!\! > \!\!\! < \!\!\! \text{call_out} \!\!\! >$
- 3. <call_out> <stance> I hate it. </stance> <rationale> Don't you see that the price is ridiculous. </rationale> </call out>
- 4. I just saw an article that talks about the iPhone's features.

 Note: 4 is not a *call-out*. 4 includes a reference to the iPhone, which was discussed previously, but 4 does not have an explicit *stance* or *rationale*.

- 5. <call out> <rationale> The iPhone has a wonderful interface. </rationale> </call out>
- 6. <call_out> <stance> I hate the iPhone </stance> <rationale> because of its price </rationale> </call_out> <stance> but I love it </stance> because of its features </call_out>
- 7. <call_out> <rationale> It's expensive </rationale> <rationale> but the features are great </rationale> </call out>

Notes on relationship between stance, rationale and call-out:

- The presence of the *stance* or *rationale* distinguishes the *call-out* from other priorsubsequent relationships in a dialogue. Either the *stance* or the *rationale* must be explicit. Therefore, for the purposes of the annotation, if there is no *stance* or *rationale* explicitly present in the text, then there is no *call-out*.
- *Stance* may be implicit in the presence of an explicit *rationale* and *rationale* may be implicit in the presence of an explicit *stance*.
- If there is an explicit *stance* and a *rationale*, they should be both included in the *call-out*.
- The prototypical order is that *stance* precedes *rationale*, but sometimes *rationale* precedes *stance*.

Some examples of stance:

- I agree
- I disagree
- +1 (means I vote for that)
- stfu (shut the fuck up)

Some examples of *rationale*:

- A: Why is that great? because the other carriers treat their customers so much better?
- B: My carrier T-mobile does. After being a loyal customer for 3 years (2 year on contract +1 year without contract) they automatically upgraded my family plan to unlimited everything and didn't ask for a contract. And the cool thing is i never dropped a call on T-mobile in the last 3 years. And once upon a time i was AT&T customer!
- Excellent decision. Android equals the freedom to pick between an ever growing number of phones
 and to reap the benefits of an open source platform. Also the powerful combination of Android,
 Google apps and Google Wave is proving to be very useful for new ways to collaborate, which
 Apple cannot offer.
- I don't miss using the iPhone as a phone. It was always awkward for me holding this smooth piece
 of metal and glass to my ears, constantly trying to convince myself that I was talking on a phone. I
 might as well have place a crystal ashtray to my head, or some other inauspicious object you find in
 a living room.

Distinguishing a call-out from a non-call-out based on the presence of an explicit stance:

Consider two actions: Good luck! vs. Good point!

Both actions contain some positive assessment (good) of something stated in a *prior action*.

- Good luck! Even if this action might provide a general reference to the context of the conversation, it does not refer directly to something particular that was said before, i.e., an explicit *stance* to a target is not present. Since there is neither an explicit *stance* nor an explicit *rationale*, it is not a call-out.
- Good point! This action refers directly to the content of a prior action, summarizing and assessing it, i.e., it has an explicit *stance*. While referring to the target (see below), it explicitly states the *stance* pertaining to the target. Since the action contains an explicit *stance* it is a call-out.

• TARGET

Definition: Target is a part of a prior action that has been called out by a subsequent action.

Notes:

- Not all parts of a *prior action* are necessarily called out.
- It is possible that the *call-out* raises virtual standpoints that were neither intended nor meant in the *prior action*.
- The *target* does not have to be substantive that is, about propositions or content as the manner or style of something prior can be called out (e.g., spelling, word choice, timing or phrasing) as well as the character of the person who performed the *prior action*.
- When labeling the *target* for a *call-out*, try to be as specific as possible in selecting your *target* text (i.e., pick the minimal sequence of text).

• CO-REFERENCE

Definition: Co-reference is the link between a call-out and a target. Establish a co-reference only between a call-out and the most recent target.

- There are three types of links between *call-out* and *target*:
 - **Type 1:** In the typical case a *call-out* will link to a *target* that is a specific segment of text (e.g., a phrase, a clause or a sentence).
 - **Type 2:** If you can't find a Type 1 link, look for a *target* that consists of a longer sequence of text (e.g., multiple sentences, an entire action, a sequence of actions).
 - **Type 3:** If you cannot see that the *call-out* refers to something specifically in the text or to something a section of text seems to be about, then consider whether the *call-out* is referring to something outside of the current posting thread. Type 3 is a last resort for *call-outs* that clearly are not Type 1 or Type 2. If the *call-out* is Type 3, indicate this in the Comment Field for the *call-out*. Add the label Type 3 and provide a brief description of what's being called

2. ANNOTATION ACCOUNTING

out.

When you're done with a section of text, double-check the following:

✓ *Target*: Every *target* has to be linked to at least one *call-out*

- ✓ Call-out:
 - For *co-reference* Types 1 and 2, each *call-out* should be linked to a *target*.
 - For *co-reference* Type 3, the *call-out* refers to "something expressed through the text but not specifically there"; something outside of the posting (original blog entry + all the text). Each *co-reference* Type 3 should have a comment.
- ✓ Co-reference:
 - *Co-reference* Types 1 and 2 should link a *call-out* and a *target*.
 - The number of *call-outs* should be equal to the total number of *co-references* of types 1, 2 and 3.

3. ADDING COMMENTS AND HANDLING PROBLEMS

It is helpful when you can provide comments about your annotation choices in the field for each annotation such as:

- Why you annotated this text as a *call-out*
- Why you selected this text as the *target*
- The relationship between the *call-out* and the *target*
- Features, characterizations, etc.
- Notes that will help later on as we further define more specific types of *call-outs*
- Notes to help you remember / clarify why you did what you did
- Questions, issues, and anything problematic that you may wish to discuss

It is recommended to add comments as you annotate, though it is possible to add comments at any point.

Problem cases: If you are not sure how to label text, use the *Too_difficult_to_code* annotation. For example, you might use *Too_difficult_to_code* if you can't decide whether something is a *call-out* or what the *target* is. The use of *Too_difficult_to_code* should be a last resort. If you mark a part of the text using *Too_difficult_to_code* make sure that this part of the text is not annotated as *call-out* or *target*.

III. FAQs

- Can the same text be both a *call-out* and a *target*?
 - \rightarrow Yes
- Can a *call-out* be embedded within another *call-out* or within a *target*?
 - \rightarrow Yes.
- Can a *target* be embedded within a *call-out* or within a *target*?
 - \rightarrow Yes.
- Can a single *call-out* cross sentence boundaries?
 - \rightarrow Yes.
- Should I pay attention to the information about who is calling what out that is indicated by the wording or the conversation level?

- → Yes. For example, if the poster (= person who posts) addresses a previous poster by name (e.g., Wordie7, I agree), the *target* of the *call-out* is Wordie7's comment (use your judgment about whether it's all or part).
- What should I do if I'm not sure?
 - → In general, follow your first instinct.
 - → If you find that you're stuck, pick whatever seems best and then add a comment about your uncertainty.
 - → If you're really not sure, annotate with *Too difficult to code*.
- How much text should I label as *call-out*?
 - → Include both *stance* and *rationale* as part of the *call-out*, if they are explicit. This follows from the definition of *call-out* as including *stance* and *rationale*.

Example: iq100 Comment 116:

I don't think it is Apple deciding. I worked for a major wireless vendors for years watching the wireless carriers controlling what goes into handsets. They do not want to be just a pipe.

- 1. I don't think it is Apple deciding.
- 2. I don't think it is Apple deciding. I worked for a major wireless vendors for years watching the wireless carriers controlling what goes into handsets. They do not want to be just a pipe.

1 only includes *stance*; 2 includes *stance* and *rationale*. Therefore, 2 should be annotated as the *call-out*.

- Can a single comment contain multiple *call-outs*?
 - → Yes. If parts of a comment refer to different *targets*, they are distinct *call-outs*. Example: iq100 Comment 5:
 - 1. I agree, the BlackBerry is far superior, that is unless you need 100 fart apps.
 - 2. 256MB of onboard memory is more then enough: I can store the last 6 months of e-mails, SMS, MMS, BlackBerry Messenger, and GoogleTalk messages have lots of apps without any memory issues.
 - The media player is great on the BlackBerry: it indexes all artists and songs so you can
 instantly find what ever song/artist your looking for. I much rather have that then have to
 swipe my hand back and forth...
 - 4. I will say Picture viewing on the iPhone/Touch rocks, that is the only thing I envy.

All 4 parts rather clearly refer back to a different *call-out*, so they are separate *call-outs*. However collectively, Comment 5 is an example of a *call-out* that includes 4 examples of *call-outs*.

- Can a single *rationale* be long extending over several paragraphs?
 - → Yes. However, make sure that all text marked as rationale contains information pertaining to the call-out.

Example of a long rationale (iq100, Comment 23):

Apple and AT&T are forcing you to switch? Hardly. (Stance)

You are being presented with a CHOICE to make ... because of your preferences not theirs.

This is what competition and business are all about. As an educated consumer you're forced to make a choice. You may not like it, but you have choices.

Telling Apple to make available a competitive application IN THEIR STORE is like telling Starbucks they should allow Folgers to advertise in its stores.

Ultimately as a storekeeper you determine what to put into your store to grow (and protect) your business. Your customer always has a choice of whether to buy from you or not, but as a business owner you have your rights too.

- If a comment includes a direct or almost verbatim quote from an earlier comment is this a part of a *call-out*?
 - \rightarrow Yes.

Example: iq100, Comment 58:

You state Google has a solution for that too, though. They are releasing apps for a variety of handsets that effectively take over the native dialer, address book and call log. Problem solved. I can use any phone I like, or a bunch of phones, and just choose the one that makes sense at any time. I never have to be tied to a carrier and their restrictive contracts again.

But aren't you just changing the problem? What you are in effect doing is--instead of tying yourself to carrier--tying yourself to a phone that has a Google Voice app? Further, you're also tying yourself to Google Voice aren't you? Setting the obvious privacy issues aside for now (red flag goes here), from what I've read of the terms of service from Google Voice, once you switch your number, you can't go back.

I currently have a Google Voice account, again aside from the transcribing issues I've repeatedly experienced, in general, it's only half baked so far.

The first paragraph of comment 58 is a quote from an earlier comment, with the words "you state" added at the beginning. This is an example of a *call-out* in which the poster indicates exactly which text is being called out. While annotating, include the restatement as part of the *call-out*. When the system looks to establish links between *call-outs* and *targets*, it should easily find the link between the *call-out* and the *target*, because the sentences are almost identical.

If you use these guidelines, please cite this publication:

Nina Wacholder, Smaranda Muresan, Debanjan Ghosh & Mark Aakhus. (2014). "Annotating Multiparty Discourse: Challenges for Agreement Metrics". Proceedings of the 8th Linguistic Annotation Workshop. Dublin, Ireland: COLING, Aug. 24-25, 2014, pp. 120-128.

The paper and other information and resources are available at http://wp.comminfo.rutgers.edu/salts/?p=80