# Notes for the QUD-Anno Challenge

Arndt Riester (Bielefeld University)

### 1 General issues

Information-structural and QUD annotation largely follows the suggestions made in Riester et al. 2018 and De Kuthy et al. 2018. Sentence-initial and sentence-final adjuncts are treated as separate discourse segments, as suggested in Brunetti et al. 2021. The following list of annotation labels is used (Table 1).

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BG background
CT contrastive topic
DM discourse marker / discourse connector (and, as, but, because, or, then, ...)
DP discourse particle, here: focus-sensitive particle (only, even, ...)
F focus
NAI non-at-issue material
T sentence topic (backgrounded referential expression)
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Table 1: Annotation labels

# 2 Issues to be discussed

# 2.1 Cataphoric questions

Cataphoric questions (cf. Brunetti et al. 2021, Riester et al. 2021) are questions about *non-at-issue* material at the beginning of an utterance, usually in the form of adjuncts or adjunct clauses. They have the following general structure in (1), where the cataphoric question is  $Q_1$ , because it assumes the givenness of material that follows in  $A_0$ . Like in the case of cataphoric pronouns, the GIVENNESS principle is not actually violated (which would mean that discourse-new material is marked as given), but merely suspended for a short time.

```
(1) Q_0: \dots > Q_1: \dots > A_1: \dots > A_0: \dots
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Note that in RST (Mann & Thompson 1988, Taboada & Mann 2006), such structures would typically correspond to mono-nuclear discourse relations in which the Satellite precedes its Nucleus. Examples are shown in (2) and (3).

- (2) [Narrative:]
  - Q<sub>6</sub>: { What does Susie do next?}
  - > Q<sub>7</sub>: {Susie rubs [her head] while she does what?}
  - >> A<sub>7</sub>: [As]<sub>DM</sub> [she]<sub>T</sub> [checks Mrs Simpson's calendar,]<sub>F</sub> (CIRCUMSTANCE)
  - > A<sub>6</sub>: [Susie]<sub>T</sub> [rubs the place where the elastic cap from work scrunched all day]<sub>F</sub>
- (3) [Interview:]
  - Q<sub>8</sub>: {What is the case, despite the Pro-Brexit vote?}
  - > Q<sub>9</sub>: {Are there people who don't think that was the right way to go?}
  - $>> A_9$ : [And,]<sub>DM</sub> [yes,]<sub>F</sub> (EVALUATION)
  - > A<sub>8</sub>: [there are many people [...] who don't think that was the right way to go]<sub>F</sub>.

## 2.2 Keeping referents accessible/active

One particular difficulty of the narrative text is that certain entities (*the tea, Susie's mother, the factory* etc.) are mentioned briefly at the beginning of the story, then ignored for a long stretch of text, then suddenly re-appear (see Figure 1). For instance, there are 76 discourse units between the first and the second mention of *her mother*. From a discourse-structural perspective, this raises the question when, and according to what criterion, an entity should be considered as *no longer active*, i.e., no longer in the right frontier (Polanyi 1988, Asher & Lascarides 2003) of the current discourse, which would result in the closing of a discourse branch and subsequent attachment of the following discourse segment at a higher node.

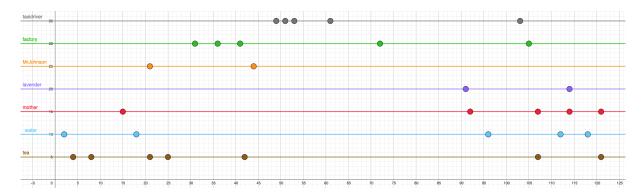


Figure 1: Some entities mentioned in the narrative text, spread over 125 discourse units

In a default, coherent informative text (e.g. an encyclopaedia article), the reader usually has a reasonable sense of when a sub-topic is finished (or, in QUD terms, Roberts 2012 [1996], when a subquestion is sufficiently answered and removed from the stack). In literary text, by contrast, subverting such expectations can be an intentional stylistic device, reminding the reader of the unexpected importance of a certain previous entity. (By contrast, *Mr Johnson*<sup>1</sup> is mentioned twice, in units 21 and 44, then no longer plays a role in the story.)

From the perspective of QUD-tree construction, there is, so far, no clear solution for the question when entities become inactive. The problem is that, if all entities are generally kept *active* by default, this means that attachment of new segments always has

<sup>&</sup>lt;sup>1</sup>Not Boris Johnson

to take place at the lowest point of the discourse tree, thereby rendering the concept of a right frontier essentially meaningless. The question is: After how many units (and intervening material) can an entity still be accessed – and thus become a sentence topic without further ado, and when does renewed mentioning amount to – a cognitively more costly – re-activation? And what exactly is the cognitive difference between re-activation (whilst knowing that the inactive entity was already mentioned in the text) and mentioning something for the first time?

### 2.3 Not answering an overt question

It is a typical phenomenon of political interviews that journalists' critical explicit questions are not directly answered. Instead, a more or less coherent reply is given, for which an implicit QUD must be reconstructed. An example is given in (4).

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(4) [Interview:]
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LK: > A_{24}: [you're]<sub>T</sub> [trying to create a situation of them and us,]<sub>F</sub>
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 $> Q_{25}$ : are you not?

BJ:  $> Q_{26}$ : { What about getting Brexit done?}

>> Q<sub>26.1</sub>: { There is no way of getting Brexit done without what?}

 $>>> A_{26.1}$ : [I think that the truth is,]<sub>NAI</sub> there's [no]<sub>CT</sub> [way of getting Brexit done]<sub>BG</sub> without, [as it were,]<sub>NAI</sub> [displeasing people who don't want]<sub>F</sub> [Brexit to get done]<sub>BG</sub>

In (4), Johnson makes reference to the division between supporters and opponents of Brexit, without taking the responsibility for it, which the journalist is placing on him. He thereby answers the unsolicited implicit QUD in  $Q_{26.1}$  (or similar).

# 3 Desiderata for future annotation projects

#### 3.1 Annotation labels

I suggest to include the following additional annotation labels (not yet provided in the current version of the QUDA tool, Hesse et al. 2022).

#### 3.1.1 EV [Evidential]

Evidentials (which I am conflating here with constructions expressing epistemic modality) are non-at-issue parts of an utterance which are not appositive/supplemental (Potts 2005) in nature, but typically express the speaker's confidence in or source of the actual statement at issue. Examples are given in (5) and (6).

#### (5) [Interview:]

BJ: Q<sub>48</sub>: { What about this new system for custom checks?}

- >  $A_{48'}$ : Now, [we think]<sub>EV</sub> [those checks]<sub>T</sub> [can be absolutely minimal]<sub>F</sub>
- > A<sub>48"</sub>: [and]<sub>DM</sub> [non-intrusive]<sub>F</sub>

#### (6) [Narrative:]

Q<sub>46</sub>: { Where does Mrs Simpson's predjudice come from?}

> A<sub>46</sub>: [Susie suspects]<sub>EV</sub> [it]<sub>T</sub> [has something to do]<sub>BG</sub> [with the small rooms]<sub>E</sub>

#### 3.1.2 (C)TT [(Contrastive) Topic Time]

Topic times (Klein 1992) temporally localize the event or state expressed by the current utterance. If overtly expressed in the form of temporal anaphors or adverbials, they may occur in language-specific syntactic positions, see (7). Like ordinary sentence topics, topic times may be contrastive, as in (8).

- (7) [Interview:]
  - LK: Q<sub>2</sub>: { What happened to Johnson in the last few weeks?}
    - > A2: [in the last few weeks,]TT [you've]T [lost major votes in the Commons,]F
- (8) [Narrative:]
  - $> A_{73''}$ : [She]<sub>T</sub> [takes a deep breath]<sub>F</sub>.
  - $> A_{73'''}$ : [Exhales]<sub>F</sub>.
  - > Q<sub>74</sub>: { What will Susie do after the bath?}
  - >> A<sub>74</sub>: [After,]<sub>CTT</sub> [she]<sub>T</sub> [will change Mrs Simpson's sheets,]<sub>F</sub>

### 3.2 Information structural annotation of questions

The current version of the QUDA tool does not allow for the information-structural annotation of questions, which might be an interesting path to pursue in the near future.

#### 3.2.1 Overt questions

Overt questions are utterances whose realization is subject to similar – though not exactly the same – information-structural constraints as assertions. In particular, overt questions can have one or several sentence topics (T) and a focus (F), although the latter cannot itself be defined as the answer to a question. The sentence topic of a question is usually its given material, connecting the question to the previous discourse, while the focus of a question indicates a position that is subject to potential alternation. It may also be the element that corresponds to a CT in the answer. (Note that the focus of a question is not its wh-element!)

#### 3.2.2 Annotation of discourse topics

I consider as discourse topics (DT) all expressions mentioned in a QUD (both explicit and implicit).<sup>2</sup> DTs are annotated only in questions. Each DT needs to be annotated exactly one time and has scope over the entire section dominated by the QUD. In other words, a discourse does not have *one* discourse topic, but a hierarchy of discourse topics; the higher in the QUD-tree, the more pervasive an entity is. In the current narrative text, important discourse topics are *Susie*, *Mrs Simpson* and, perhaps, *the tea*.

### References

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<sup>&</sup>lt;sup>2</sup>cf. forthcoming work with Amalia Canes Nápoles

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