# The Syntax of Parentheticals (or more accurately, the syntax of phrases in parentheses) 24.902 Fall 2019 Squib 

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## 1 Introduction

There has been some study of questions regarding the syntax of parenthetical* $s$, i.e., phrases which are in some possibly vague sense not involved in the surrounding sentence. For instance, see [1] and the references therein. A parenthetical* is present in the following sentence.

Example 1.1. This sentence, as you might have noticed, contains the parenthetical* "as you might have noticed".

In this paper, we will not focus on parenthetical*s. Instead, we will focus on parentheticals, by which we mean the following.

Definition 1.2. A parenthetical in a (written) phrase is a string contained in parentheses.
The following is an example sentence containing a parenthetical.
Example 1.3. This sentence (as you might have noticed) contains the parenthetical "(as you might have noticed)".

One might at first think that parentheticals are just a subset of parenthetical*s, but there are counterexamples.

Example 1.4. I'm (reasonably) sure that Definition 1.2 contains a parenthetical that is not a parenthetical*.

Example 1.5. Is this sentence grammatical (even with this parenthetical)?
Example 1.6. Here is an example (of a parenthetical which is also a complement).
It seems to be pretty uncontroversial to say that none of the three above examples have parenthetical*s, since the parentheticals seem to fit well into the structure of the rest of the sentence. So the linguistic object this paper sets out to study is not just a subclass of previously studied objects. The central question motivating our analysis is the following:

Question 1.7. Which phrases (or specifically sentences) containing a parenthetical are grammatical?
We would like to answer this question with a simple set of rules telling us which phrases (containing parentheticals) are grammatical, and which are not. Of course, giving such rules in terms of simple
properties of the phrases seems pretty hard, as it seems to be a task of difficulty similar to figuring out which phrases are grammatical in general, and this last task seems pretty hard (indeed, a large part of linguistics research is devoted to answering this question in special cases). Instead, we would be content with answering this question in terms of complex properties of the sentence. For instance, we would be happy with an answer that involves properties like the grammaticality of the phrase without parentheses, the grammaticality of the phrase inside the parentheses, and perhaps other properties.

One way in which this question is non-canonical is that we aim to study a feature of written language with no direct equivalent in spoken language. It might be said that which phrases involving parentheses are grammatical is just a matter of orthography. However, I disagree, or at least this is not the kind of grammaticality we intend to study in this paper. People definitely have strong intuitions about what works and what does not work in spoken language, independently of what is written in some official dictionary or grammar book. Similarly, it seems to me that people have strong intuitions about some aspects of what works and what does not work in written language, independently of official orthographic rules. Parentheticals definitely seem to be one case about which people have strong intuitions. For instance, my guess is that (essentially) anyone who has engaged in a reasonable amount of writing in English would agree with me on the following grammaticality judgments, regardless of whether they have learned any formal rules about parentheticals.

Example 1.8. This sentence should involve a parenthetical (otherwise it wouldn't really be an irrelevant example).
Example 1.9. *This clearly (seems wrong).
Example 1.10. This sentence does not involve a parenthetical (or does it?).
Example 1.11. *What is happening (parentheticals are the best) in this sentence?
Example 1.12. This sentence contains a parenthetical (inside a parenthetical (inside a parenthetical (inside a parenthetical))).

Example 1.13. ${ }^{*}$ This sentence just rustles (my jimmies).
(Yes, all three grammatical examples state a falsehood.) Based on a study conducted in my head on a large sample of languages (the sample consists of English and Estonian (and some amount of French)), the acceptability of each of these examples seems to be pretty cross-linguistic, in the sense that close analogues in other languages seem to have the same grammaticality. In fact, for essentially all examples given in this paper, there also seems to be a similar example in Estonian with the same grammaticality. Perhaps the fact that something cross-linguistic is going on is another argument for why this topic is an interesting one to study.

### 1.1 Attempts to answer Question 1.7

Can we propose an answer to Question 1.7? Well, it still seems quite tricky to give simple rules (necessary and sufficient conditions) that precisely specify the phrases that are grammatical. However, for a start, the following seems to be a pretty reasonable necessary condition for a phrase to be grammatical.

Proposal 1.14. A necessary condition for a phrase involving a parenthetical to be grammatical is that if the parenthetical (parentheses and contents) is deleted, the phrase is grammatical.

I imagine something like the above might even be stated in a writing class. The following example satisfies this property:

Example 1.15. This sentence is grammatical (even if the parenthetical is deleted). $\rightarrow$ This sentence is grammatical.

We will even be bold and propose a full answer to Question 1.7. The new proposal is the previously proposed necessary condition together with an additional reasonable-sounding condition.

Proposal 1.16. A phrase involving a parenthetical is grammatical if and only if the following two conditions are satisfied:

1. If the parenthetical (parentheses and contents) is deleted, then the resulting phrase is grammatical.
2. If the parentheses (but not the contents) are deleted, then the resulting phrase is grammatical.

Let's first see an example for which this is indeed satisfied:
Example 1.17. For many phrases involving parentheticals, this property is satisfied (but you will soon see that there are also many counterexamples).
$\rightarrow$ For many phrases involving parentheticals, this property is satisfied.
$\rightarrow$ For many phrases involving parentheticals, this property is satisfied, but you will soon see that there are also many counterexamples.

This property seems to be satisfied for many phrases involving parentheticals, but there are also many counterexamples. Here is one:

Example 1.18. The statement of Proposal 1.16 itself contains a counterexample to Proposal 1.16 (the statement of the first condition).
$\rightarrow$ The statement of Proposal 1.16 itself contains a counterexample to Proposal 1.16.
$\rightarrow$ *The statement of Proposal 1.16 itself contains a counterexample to Proposal 1.16 the statement of the first condition.

Note in particular that the second condition of Proposal 1.16 is the one that is not satisfied for the above example. Intuitively, the problem here is that instead of fitting into the main sentence, the phrase in the parenthetical can substitute for an adjacent constituent of the main sentence. That is, "the statement of the first condition" could substitute for "a counterexample to Proposal 1.16' in the syntactic tree structure, or perhaps shares a semantic identity. It is interesting whether syntactic or semantic identity is critical here, but we will leave this question for another time. In any case, here are some other similar examples.

Example 1.19. The word 'parenthesis' comes from the word parentíthēmi (Ancient Greek for I put in beside).

Example 1.20. The parrot is resting (dead).

Example 1.21. It had not occurred to me before that CPs could be interesting examples (that they could provide some insight).

This discussion motivates the following updated proposal, which differs in that it just takes this broad class of examples into account.

Proposal 1.22. A phrase involving a parenthetical is grammatical if and only if the following two conditions are satisfied:

1. If the parenthetical (parentheses and contents) is deleted, then the resulting phrase is grammatical.
2. If the parentheses (but not the contents) are deleted, then the resulting phrase is grammatical. $O R$ The contents of the parentheses can be substituted for some adjacent constituent in the phrase structure.

It will turn out that this updated proposal is still false. Example 1.13 is one counterexample, but we will also see this by examining the interaction of parentheticals with ellipsis. Even more strongly, it will turn out that even the proposed necessary condition 1.14 is wrong in a subtle way, which we will see by examining the interaction of parentheticals with reflexives.

## Parentheticals and ellipsis - counterexamples to Proposal 1.16

Consider the following examples.
Example 1.23. This example is dedicated to all the readers who don't think that parentheticals are that interesting. (I'd like to tell you that I'm sorry that the pages of this paper are filled with examples of parentheticals that you haven't found interesting so far.) Maybe this example convinces you that they are.

Example 1.24. Parentheticals do weird things occasionally. (And they also so regular things regularly.) Ellipsis does, too.

Note that for these examples, the only reading is that the ellipsis in the last sentence has its antecedent in the first sentence. Also note that if we remove the parentheses but keep the contents, this reading of the ellipsis becomes ungrammatical, and no substitution works either. Nevertheless, the examples are grammatical, contradicting Proposal 1.22 ,

It is unclear to me how Proposal 1.22 can be fixed so that it does not make the wrong prediction for these examples. Of course, one could just add a condition specifically dealing with this case, but this seems to be such a narrow case as to make this quite silly.

## Multiple parentheticals and reflexives - counterexamples to Proposal 1.14

Consider the following examples. The grammaticality of the first is not so clear to me, but I'm leaning towards it being grammatical. The second one does not involve a standard reflexive, but it seems to be similar.

Example 1.25. (?) Certain people (Poirot and I) had entered the building (without registering ourselves).

Example 1.26. I bought this parenthetical (from the parenthetical emporium) and you bought that parenthetical (from that same store).

Crucially, note that if we delete the first parenthetical from these examples, they become ungrammatical.

Example 1.27. ${ }^{*}$ Certain people had entered the building (without registering ourselves).
Example 1.28. *I bought this parenthetical and you bought that parenthetical (from that same store).
This is in contradiction with Proposal 1.14 . These examples motivate the following updated necessary condition, to which I cannot think of a counterexample.

Proposal 1.29. A necessary condition for a phrase to be grammatical is that if all the parentheticals (parentheses and contents) are deleted, the phrase is grammatical.

The following are a few more quick remarks. Firstly, we can say something about Principle A in relation to parentheticals. Just from Proposal 1.14 or from the updated Proposal 1.29 , we can conclude that any anaphor that is not in parentheses must also be bound by a phrase that is not in parentheses. Secondly, it seems that at least for parentheticals that substitute for constituents of the main clause, it is possible that there is a coindexing parenthetical that would substitute for an antecedent constituent for both pronouns and r-expressions. This is seen in the following two examples.

Example 1.30. Certain people ([Poirot and Miss Marple $]_{i}$ ) had entered $[\text { their }]_{i}$ office.
Example 1.31. Certain people (Poirot and Miss Marple) had entered Poirot and Miss Marple's office.

Thirdly, note that the following variant of Example 1.25 is also grammatical.
Example 1.32. Certain people (Poirot and I) had entered the building (without registering themselves).

We point to a possible explanation of the second and third observation in the appendix.
Lastly, it would be pretty interesting to learn more about nested parentheticals, especially in relation to Principles A, B, C. It would be nice if (something like) Proposal 1.22 indeed also worked for nested parentheticals.

## Appendix - brief discussion regarding syntax trees for parentheticals

Perhaps the best way to draw trees for sentences with parentheticals depends on the type of parenthetical involved. For parentheticals that fit into the syntax tree (i.e. satisfy the first option of the second condition of Proposal 1.22 , perhaps the best way to draw a tree is to just include the parenthetical in the usual tree. For parentheticals that substitute for a constituent of the sentence, perhaps the best option is to draw a tree with and without the substitution. Perhaps the tree with the substitution only has to satisfy principles $A, B, C$ for the parenthetical. This appears to work
well with Examples 1.30 and 1.31 . If there are multiple such parentheticals in the same sentence, then perhaps each parenthetical assumes a particular set of substitutions for the rest. Perhaps one should draw the trees attained in this way for each parenthetical. This allows for multiple readings depending on which other substitutions a parenthetical selects for, perhaps explaining the grammaticality of both Example 1.25 and Example 1.32 .

## References

[1] Christopher Potts, The Syntax and Semantics of As-Parentheticals.https://web.stanford. edu/~cgpotts/papers/potts-nllt-as.pdf

