

## Notes on Assignment 2

1: Assuming the judgements given, give an account of the given pattern of grammaticality in terms of the argument-adjunct distinction. In particular determine what the status of *of*-PPs and *in*-PPs is.

The pattern of grammaticality follows if we assume that the *of*-PPs are complements and the *in*-PPs are adjuncts.

- a. i. \*The [<sub>N'</sub> [<sub>N°</sub> discussion] [<sub>PP</sub> of the match]] was more animated than the one of the riots.  
ii. The [<sub>N'</sub> [<sub>N'</sub> [<sub>N°</sub> discussion]] [<sub>PP</sub> at the match]] was more animated than the one in the bar.

Due to the presence of *of the match*, an argument, *discussion* in (a.i) is an N<sup>0</sup>. As such, we cannot use *one*, a pro-N', to replace it. Another way to think about it is to let *one* be replaced by an appropriate N' in the context - this leads to *the discussion [of the match] [of the riots]*, a non-well-formed structure - one head cannot have two complements.

In contrast, in (a.ii), since *at the match* is an adjunct, *discussion* is both an N<sup>0</sup> and an N'. Consequently, *one*, which is a pro-N', can be used to replace it. In the alternate way of thinking about this, we copy any suitable N' - we have two options *discussion* and *discussion at the match*. The latter option leads to a semantically incoherent structure *the [discussion [at the match]] [in the bar]*, incoherent because the location of the discussion is multiply specified. But we don't get ungrammaticality because of the option to copy just *discussion*, which yields the well-formed *the [discussion] in the bar*.

- b. i. The [<sub>N'</sub> [<sub>N°</sub> discussion] [<sub>PP</sub> of [<sub>NP</sub> [<sub>NP</sub> the riots] and [<sub>NP</sub> their implications]]]] was full and frank.  
ii. The [<sub>N'</sub> [<sub>N'</sub> [<sub>N°</sub> discussion]] [<sub>PP</sub> [<sub>PP</sub> at the match] and [<sub>PP</sub> in the bar]]] was full and frank.  
iii. \*The [<sub>N°</sub> discussion] [<sub>PP</sub> [<sub>PP</sub> of the riots] and [<sub>PP</sub> in the bar]] was full and frank.

In (ii.a), the co-ordination is at the NP inside the PP, which together serves as a complement of *discussion*. In (ii.b/c), we find a co-ordination of PPs. Things work out in (ii.b) because both the co-ordinated PPs function as adjuncts. Attaching the coordinate PP as an adjunct in (ii.b) satisfies the needs of both the co-ordinated PPs. This resolution is unavailable in (ii.c), where the first of the co-ordinated PPs would like to be a complement and the second one would like to be an adjunct. No attachment - to N<sup>0</sup> or to N' can simultaneously satisfy the requirements of both the co-ordinated PPs. This causes (ii.c) to be ungrammatical.

- c. i. The discussion of the riots in the bar was full and frank.<sup>1</sup>

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<sup>1</sup>This sentence is ambiguous. Show both structures.

Structure 1: the riots were in the bar:  
 the  $[_{N'} [_{N^o} \text{discussion}] [_{PP} \text{ of } [_{\text{the}} [_{N'} [_{N^o} \text{riots}]] [_{PP} \text{ in the bar}]]]]]$

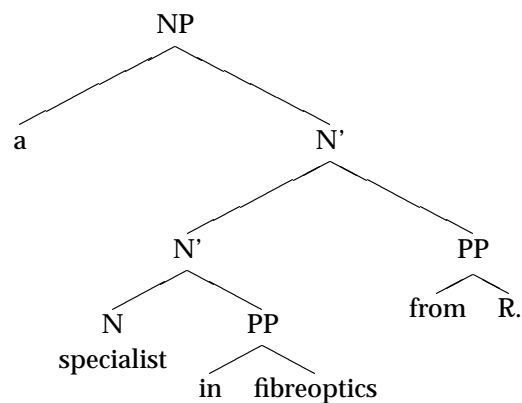
Structure 2: the discussion was in the bar:  
 the  $[_{N'} [_{N^o} \text{discussion}] [_{PP} \text{ of the riots}]] [_{PP} \text{ in the bar}]]]$

- ii. \*The discussion in the bar of the riots was full an frank.  
 The ungrammaticality of (iii.b) follows from the fact that it involves a complement (of the riots following an adjunct (in the bar). Given assumptions from X-bar theory concerning how adjuncts and complements are introduced, barring further movement operations, this is not an option.

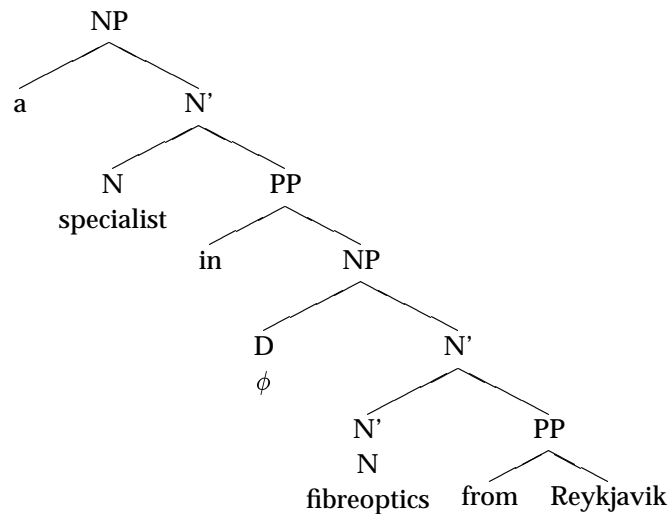
2. Provide trees for the bracketed NPs in the following sentences, presenting empirical arguments in each case to support your analysis.

- a. I met [a specialist in fibreoptics from Reykjavik].  
 This has at least three structures all of which correspond to distinct interpretations.

Structure 1: specializes in fibreoptics, is from Reykjavik  
 a  $[_{N'} [_{N^o} \text{specialist}] [_{PP} \text{ in fibreoptics}]] [_{PP} \text{ from R.}]]]$   
 Argument: (i) *specialist in fibreoptics* can be replaced by *one* but *specialist* cannot without loss of this interpretation. (ii) reordering causes loss of this interpretation.



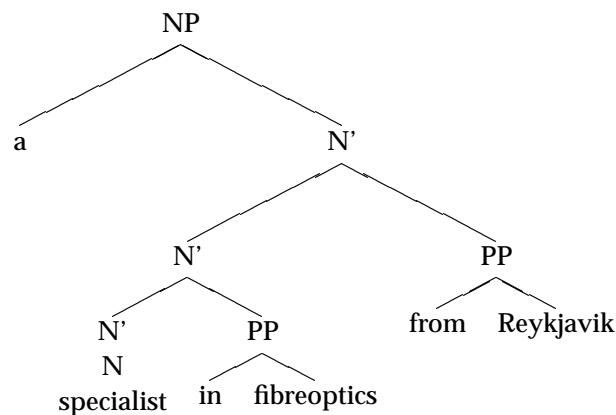
Structure 2: specializes in Reykjavikian fibreoptics  
 a  $[_{N'} [_{N^o} \text{specialist}] [_{PP} \text{ in } [_{NP} [_{D^o} \phi] [_{N'} [_{N^o} \text{fibreoptics}]]] [_{PP} \text{ from Reykjavik}]]]]]$   
 Arguments: (i) reordering of PPs causes loss of this reading, (ii) we can replaced *fibre-optics from Reykjavik* by *that* (e.g. A: I met a specialist in fibreoptics from Reykjavik. B: Funny, I know a specialist in that too.).



Structure 3: is in fibreoptics (use your imagination!) and is from Reykjavik

a [<sub>N'</sub> [<sub>N'</sub> [<sub>N'</sub> [<sub>N'</sub> specialist]] [<sub>PP</sub> in fibreoptics]] [<sub>PP</sub> from R.]]

Arguments: (i) reordering: to the extent that this interpretation is available, it is available under either ordering, (ii) *one*-substitution: with this interpretation in mind, *specialist* can be replaced by *one*.



Several of you somewhat understandable committed the following error in your application of the *one*-substitution test. Recall that *one* can be used to replace N's as well (at least seemingly) certain indefinite NPs.

- (1) a. N'-substitution:  
John likes the [painting] in the office while Makoto likes the one in the kitchen.
- b. indefinite 'NP'-substitution:  
John likes [a painting] by Francis Bacon while Makoto likes one by David Hockney.

The second kind of *one*-substitution is poorly understood and for our diagnostic purposes we should stick to the first kind. The way to do this is to make sure that you have a determiner preceding *one*. But unfortunately this doesn't quite work when the determiner you have is *a* because the determiner *a* cannot combine with *one* e.g. *\*a one*

by David Hockney. This is why many of you started with N'-substitution but ended up with indefinite 'NP'-substitution. To adequately apply the test, one has to change the relevant determiners to *the* and then try. One speculation is that the cases that look like indefinite 'NP' substitution might actually just be cases of N'-substitution but with an unpronounced *a*.

Some of you noted the unacceptability of cases like (2), where *one* completely replaces a preceding N', but were then unsure about what to make of this unacceptability.

- (2) \*The [DJ at the club last week] played some great music, but the [one] was lame.

This unacceptability most likely has a semantic/pragmatic source suggested by the fact that the 'full' version of (2): #*The DJ at the club last week played some great music but the DJ at the club last week was lame* is odd, too. The contrast indicated by *but* suggests that the two subjects should refer to different people but they don't. Further, it is not good to use a definite description twice to refer to the same object - instead we would use a pronoun. Further note that the following minimal variant of (2) where a contrast has been introduced through an adjective is perfect.

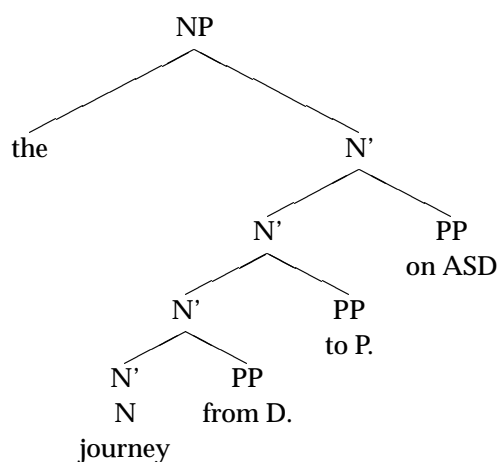
- (3) The Galician [DJ at the club last week] played some great music, but the Asturian [one] was lame.

- c. [The journey from Dusseldorf to Paris on All Saints Day] was tiring.

Structure:

the [<sub>N'</sub> [<sub>N'</sub> [<sub>N'</sub> [<sub>N°</sub> journey]] [<sub>PP</sub> from D.]] [<sub>PP</sub> to P.]] [<sub>PP</sub> on ASD]]

Arguments: (i) all the PPs can be reordered w.r.t. each other without any clear change in interpretation, (ii) all the putative N's, including *journey* can be replaced by *one*.



Many of you found that out of the six orders possible by permuting the three PPs in the above example, the four that did not involve the temporal PP intervening between the two locative PPs were more acceptable than the orders where the two orders where

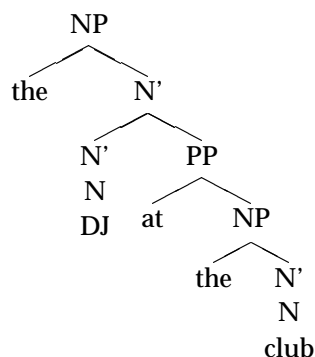
such an intervention occurred. This led you to postulate the existence of a complex PP adjunct that allowed for the two locative PPs in either order. The goal that you were trying to achieve was to block the less acceptable (or perhaps even unacceptable for some) orders. I don't think you were successful though. This is because we independently need a way to say *the journey from D. on ASD* and *the journey on ASD to P*. Once we have a mechanism to generate these two structures, it is non-trivial to block it from generating *the journey from D. on ASD to P*. But the problem that you have run upon is real - it's just that right now we don't quite have the right kinds of structures to handle such dependencies.

- d. [The DJ at the club last week] rang Olafur up yesterday.

This one is tricky because of the many places where *last week* might attach. What is worse is that the different attachment possibilities do not lead to clearly distinct interpretations. More generally though it is a fact of life that we find attachment ambiguities with adjuncts on the right frontier of a tree (e.g. Alice saw the rabbit with a telescope.) For simplicity let us start with the simpler *the DJ at the club*. We can be relatively confident that the structure here is as follows:

the  $[_{N'} [_{N'} [_{N^0} DJ]] [_{PP} at [_{NP} the [_{N'} club]]]]$

Argument: *one*-substitution can apply to both *DJ* and *DJ at the club*.



*last week* is a temporal adjunct, and in principle it can adjoin to any of the phrasal nodes on the right frontier of the tree. On the basis of its impact on the meaning one could eliminate adjunction to NP, which still leaves adjunction at the N' level to *club* and *DJ at the club*, and possibly also at the PP level. An argument for the former constituency comes from sentences like *The club last week was a more happening place than the club this week*, *The big club last week was a more happening place than the small one*, and *The big club last week was a more happening place than the small one last week*. An argument for the latter constituency comes from the possibility of *[The DJ last week] was more skilled than [the DJ this week]*. Finally, comparing *the DJ at the club last week* with the similar *the DJ who was at the club last week* is instructive here and suggests that the PP attachment might be an option. Support for this option comes from the possibility of co-ordination in *[The [DJ [[at the Hacienda] last week] and [[at the Paradise Garage] this week]]] is from Berlin*.

3.: For this question, assume the grammaticality judgements given. You have to provide an explanation for the pattern of grammaticality seen in the following examples.

- a. The pattern follows if we assume that items like *any* need to be c-commanded by a negative element (*no*, *lack*) for well-formedness.
  - i.  $[_{NP} \text{No } [_{N'} [_{N} \text{king}] [_{PP} \text{of any country}]]]$  abdicated.  
the specifier *no* c-commands everything inside the N' and hence c-commands *any* which is inside the complement of the N.
  - ii.  $[_{NP} \text{No } [_{N'} [_{N'} [_{N} \text{king}]] [_{PP} \text{of any importance}]]]$  abdicated.  
the specifier *no* c-commands everything inside the N' and hence still c-commands *any* which is inside an adjunct to the N'.
  - iii.  $[_{NP} \text{No } [_{N'} [_{N'} [_{N} \text{king}] [_{PP} \text{of any country}]] [_{PP} \text{of any importance}]]]$  abdicated.  
the specifier *no* c-commands everything inside the N' and hence c-commands both *any*'s. The evidence for treating *of any importance* as an adjunct comes from the fact that re-ordering the two PP's leads to deviance: ??*No king of any of importance of any country abdicated.*
- b.
  - i.  $[_{NP} \text{The } [_{N'} [_{N'} [_{N} \text{lack}] [_{PP} \text{of any discipline}]] [_{PP} \text{in some schools}]]]$  worried them.  
*lack* c-commands its complement and anything inside it, *any* is in the complement.
  - ii.  $*[_{NP} \text{The } [_{N'} [_{N'} [_{N} \text{lack}] [_{PP} \text{of discipline}]] [_{PP} \text{in any schools}]]]$  worried them.  
*lack* does not c-command *any schools* because it is part of the PP adjunct which is not c-command domain of *lack*. Evidence from reordering supports the constituent structure assumed.
  - iii.  $[_{NP} \text{The } [_{N'} [_{N} \text{lack}] [_{PP} \text{of } [_{NP} \phi [_{N'} [_{N'} [_{N} \text{teachers}]] [_{PP} \text{with any qualifications}]]]]]]]$  worried them.  
*any* here is inside an adjunct, but it is an adjunct on the complement of *lack* and hence in the c-command domain of *lack*.

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4: A Noun Phrase such as *the English King* might be argued to have the following two distinct interpretations:

- a. the king who is English
- b. the king of England

We can provide two accounts for this dual interpretation:

- a. STRUCTURAL AMBIGUITY: in the (a) reading, *English* is an adjunct, but in the (b) reading, *English* is a complement.
- b. PRAGMATIC ANALYSIS: *English* is an adjunct on both interpretations. The relationship between *English* and *king* is left vague - something like 'king connected in some unspecified way with England'.

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<sup>2</sup>The discussion here covers only instances of *any* sometimes called Negative Polarity *any*. It does not cover cases like *Any student can attend this class*, which are sometimes called Free Choice *any*. We also have to set aside a curious contrast noted by Chierchia between the unacceptable (b.ii) and the acceptable (i) below.

- i. The lack of discipline in any school worried them.

What predictions would each of the two accounts make about possible and impossible interpretations of *English* in the bracketed phrases below? Which set of predictions is correct, and what is the implication of this for each of the analyses proposed?

It might be useful to make the SA account explicit in the following way: the Complement-N structure corresponds to the 'king of England' reading, but the Adjunct-N structure is under-specified about meaning - it could mean 'king of England' or 'English king'. In this respect it would partly resemble the PA. Let us call this understanding of the SA account SA-U (Structural Ambiguity-Underspecified). A different way of thinking about the SA account would require the Complement-N structure to mean 'king of England' and the Adjunct-N structure to only mean 'king who is English' and not allow for the 'English king' reading. Let us call this understanding the SA-S (Structural Ambiguity-Specified).

- a. Why do philosophers always use examples involving a bald French king, rather than [a bald English one]?  
PA: the 'king of England'/'English king' readings should both be available  
SA-U: both readings should be available  
SA-S: the 'king of England' reading should not be available
- b. There's not much to choose between the present English and French kings, except that the French king is less bald than [the English one].  
PA: the 'king of England'/'English king' readings should both be available  
SA-U: both readings should be available  
SA-S: the 'king of England' reading should not be available
- c. Henry VIII is [the best known English Protestant king].  
PA: several readings (English king of Protestants, protestant king of the English, king who is English and Protestant) should be available  
SA-U: several readings (English king of Protestants, protestant king of the English, king who is English and Protestant) should be available  
SA-S: the 'protestant king of England' should not be available
- d. We've had relatively few [English septuagenarian kings].  
same as above
- e. Boadicea was [the most famous English pagan queen].  
same as above
- f. Henry IV was the last English French king.  
same as above

If we allow for adjectives to directly adjoin to the  $N^0$ , it might help the SA-S analysis. But it would still have to handle potential challenges from the *one*-substitution test.

Of course which of these options you end choosing depends upon what your judgements are. The SA-U analysis and the PA analysis make the same predictions and so the facts will not distinguish between them. In a sense the SA-U analysis is the union of the SA-S analysis and the PA analysis, and since the PA analysis is more permissive than the SA-S analysis in all contexts, the SA-U analysis ends up being identical to the PA analysis.

Most of you indicated that the *king of England* reading was available even where the SA-S analysis predicted it not to be e.g. with *one*-substitution. Judgements like this one lend support to the PA analysis.