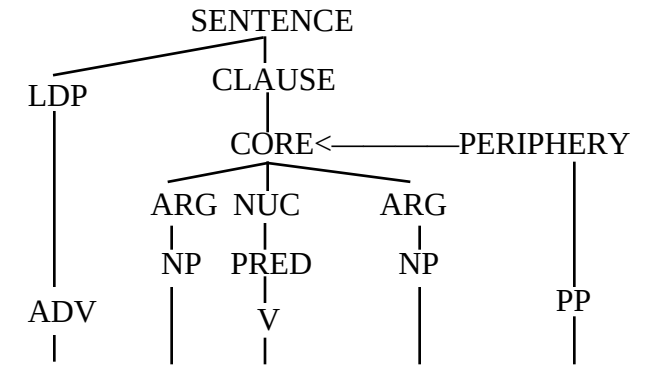
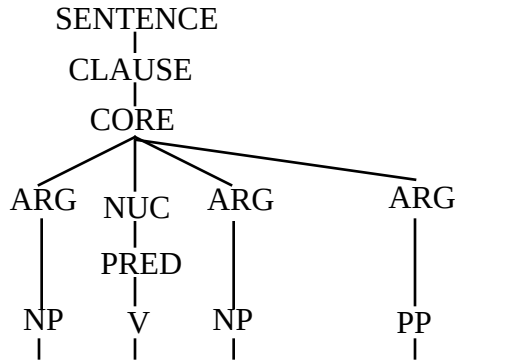
Chapter 2 Exercises Solutions

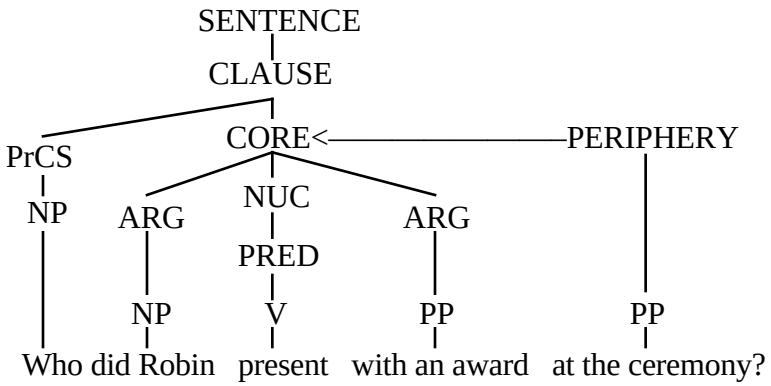
1. Draw a tree diagram of the layered structure of each sentence below, giving *only* the constituent projection. Don't worry about the internal structure of NPs or PPs. Assume that the verbs in the sentences from languages other than English have the same argument structure (intuitively determined, at this point) as their English counterparts. In particular, assume that only 'setting' locative PPs are peripheral and that other PPs are oblique core arguments.



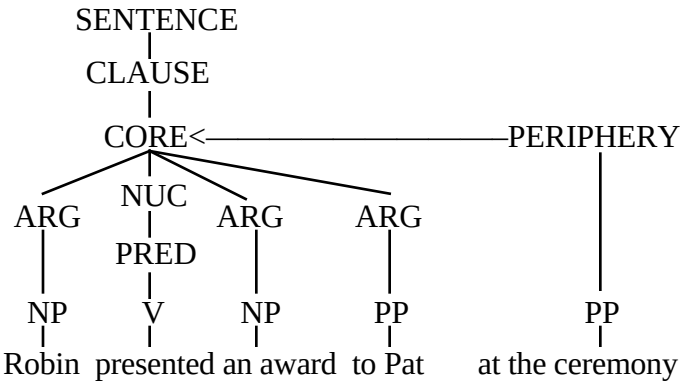
(1a)



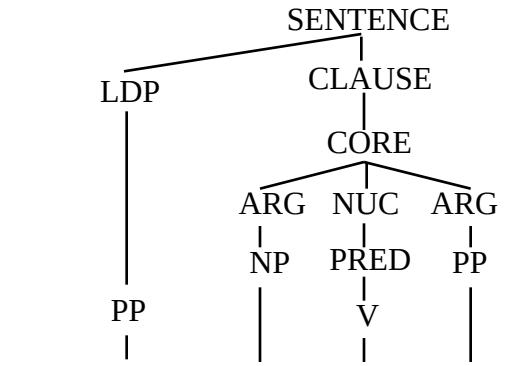
(1b)



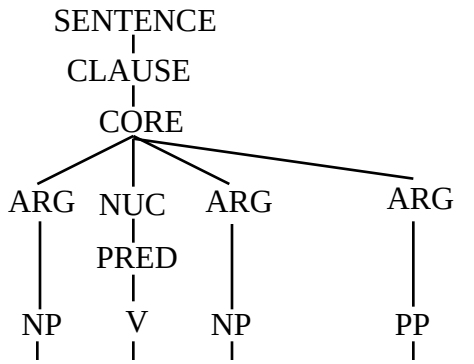
(1c)



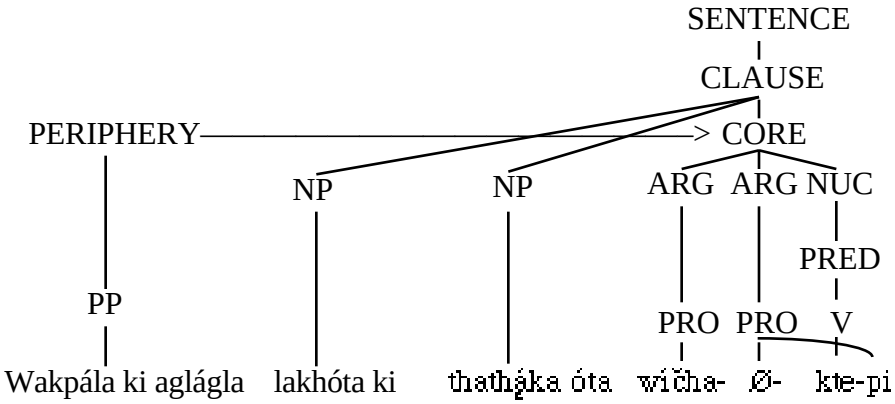
(1d)


SENTENCE
LDP
CLAUSE
CORE
ARG NUC ARG
NP PRED PP
PP V
After the party, Sandy went to a bar.

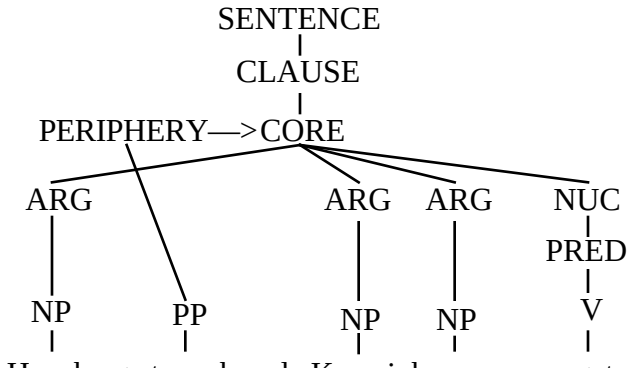
(1e)


SENTENCE
CLAUSE
CORE
ARG NUC ARG ARG
PRED
NP V NP PP
Ég skilaði peningunum til hennar

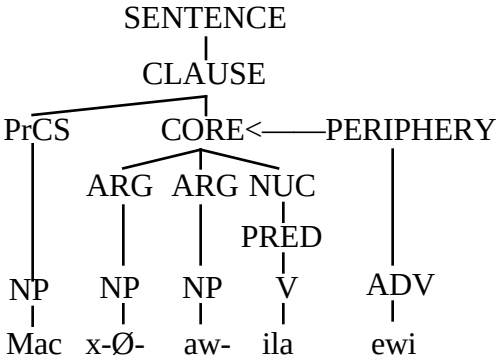
(2)


SENTENCE
CLAUSE
PERIPHERY
CORE
NP NP
ARG ARG NUC
PRED
PP
PRO PRO V
Wakpála ki aglágla lakhóta ki thathąka óta wíčha- Ø- kte-pi

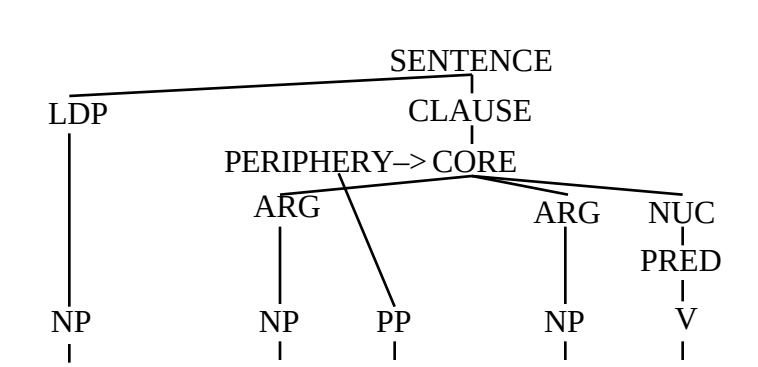
(3)


SENTENCE
CLAUSE
PERIPHERY—>CORE
ARG ARG ARG NUC
PRED
NP PP NP NP V
Hanako ga tosyokan de Ken ni hon o ageta

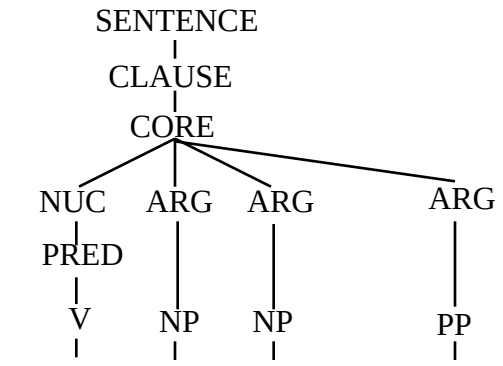
(4)


SENTENCE
CLAUSE
PrCS CORE<——PERIPHERY
ARG ARG NUC
PRED
NP NP NP V ADV
Mac x-Ø- aw- ila ewi

(5)



(6)

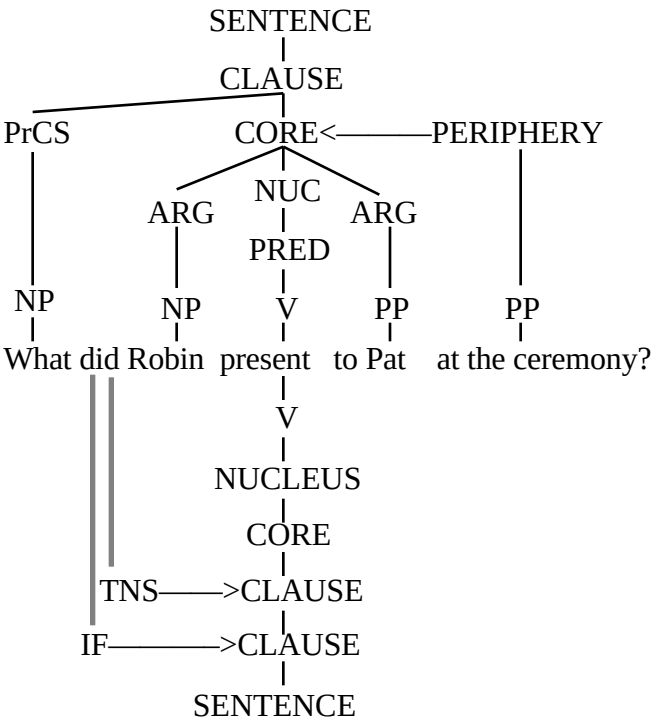


(7)

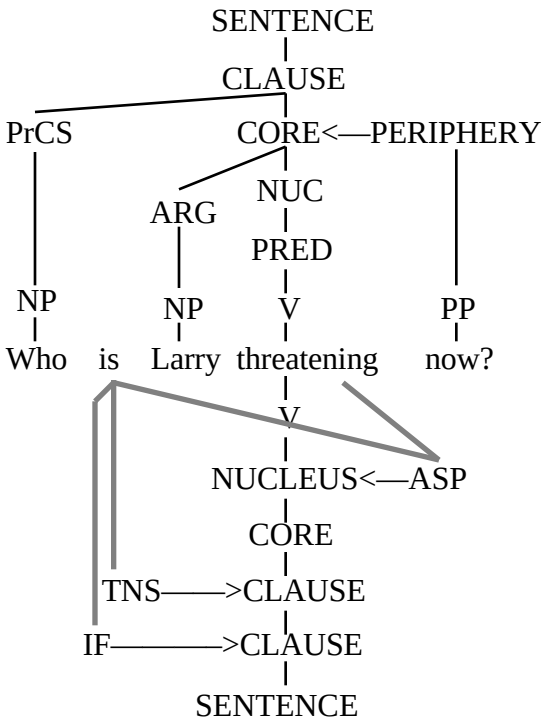
2. Explain why only some of the sequences of operators in the Thai sentences in (2) and (3) are possible. Does the syntactic theory proposed in the text predict these facts? Examples of each operator are given in (1).

There are three types of operator involved in this problem: a modality operator *tôang* 'be obliged, must',which is a core operator; a tense operator càʔ 'future', which is a clausal operator; and four status operators, *khong* 'possible (and likely)', ʔàat 'possible (but not likely)', *khuan* 'necessary (and realized)', and *nâa* 'necessary (but unrealized)', all of which are clausal operators. When more than one operator occurs in a clause, only one order among them is possible, namely STATUS-TENSE-MODAL V; all other orders are impossible. This follows from the theory of the layered structure of the clause, in particular from the claim that the ordering of operators reflects their scope. Modality is a core operator, and therefore it must occur closer to the verb than the tense or status operators. It was noted on p. 46 that there is no universally invariant ordering between tense and status and that some languages treat tense as the more outer operator, while others treat status as the more outer operator. Thai clearly treats status as the more outer operator, as when tense and status operators cooccur, the tense operator must be closer to the verb than the status operator.

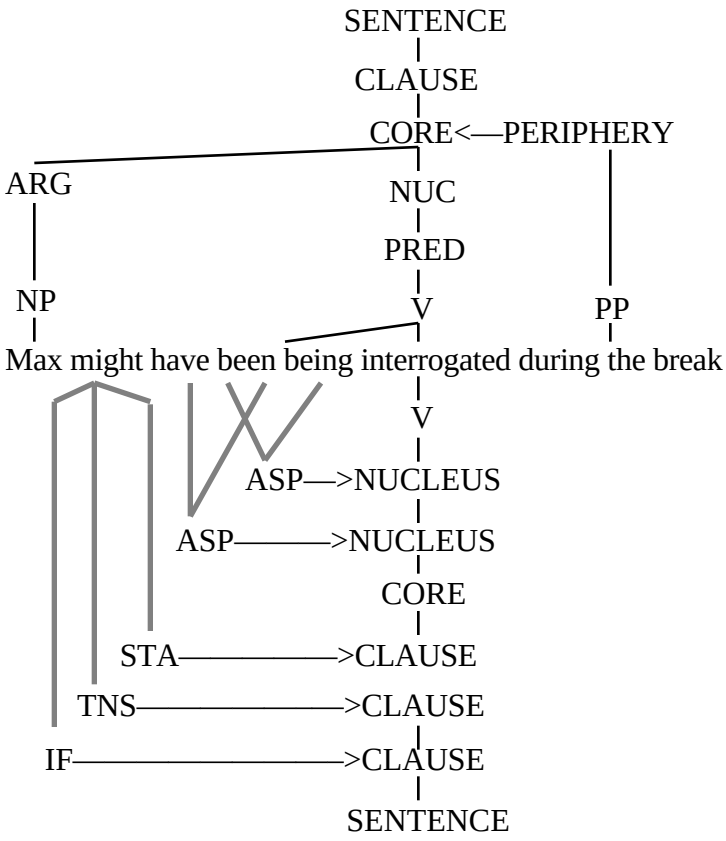
3. Draw a tree diagram of the layered structure of each sentence below, giving *both* the constituent and operator projections. As in exercise 1, don't worry about the internal structure of NPs or PPs. Assume that the verbs in the sentences from languages other than English have the same argument structure (intuitively determined, at this point) as their English counterparts. In particular, assume that only 'setting' locative PPs are peripheral and that other PPs are oblique core arguments. Assume further that there is an illocutionary force operator in every example, which may be realized either by Ø or by the position of the tense operator, as in English, Icelandic and German. In (1c), assume the passive auxiliary *be* to be part of the nucleus.


SENTENCE
CLAUSE
PrCS
CORE<———PERIPHERY
ARG
NUC
ARG
PRED
NP
NP
V
PP
PP
What did Robin present to Pat at the ceremony?
V
NUCLEUS
CORE
TNS——>CLAUSE
IF———>CLAUSE
SENTENCE

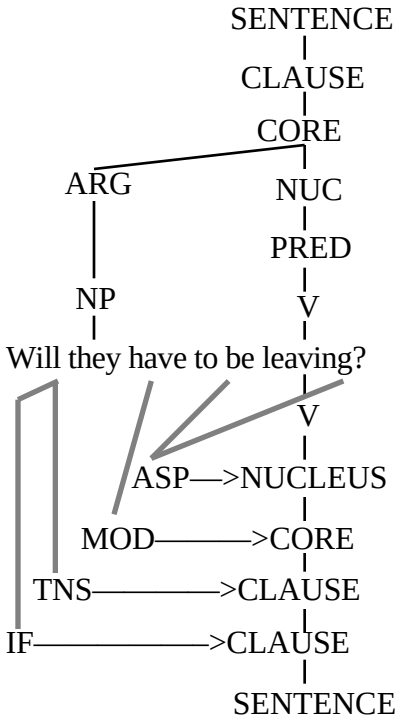
(1a)


SENTENCE
CLAUSE
PrCS
CORE<—PERIPHERY
ARG
NUC
PRED
NP
NP
V
PP
Who is Larry threatening now?
V
NUCLEUS<—ASP
CORE
TNS——>CLAUSE
IF———>CLAUSE
SENTENCE

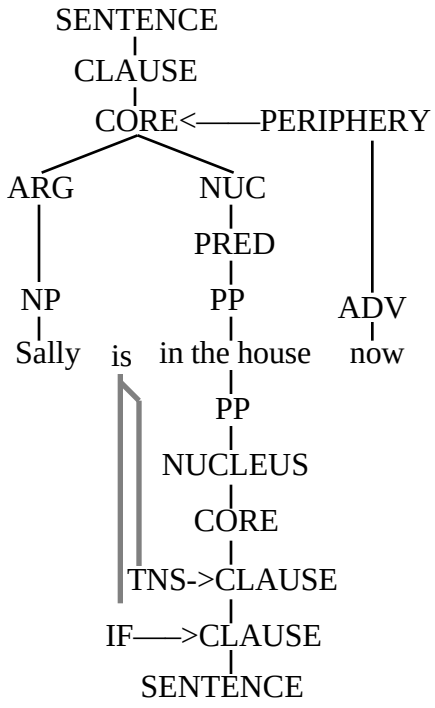
(1b)


SENTENCE
CLAUSE
CORE<—PERIPHERY
ARG
NUC
PRED
NP
V
PP
Max might have been being interrogated during the break
V
ASP—>NUCLEUS
ASP———>NUCLEUS
CORE
STA———>CLAUSE
TNS———>CLAUSE
IF———>CLAUSE
SENTENCE

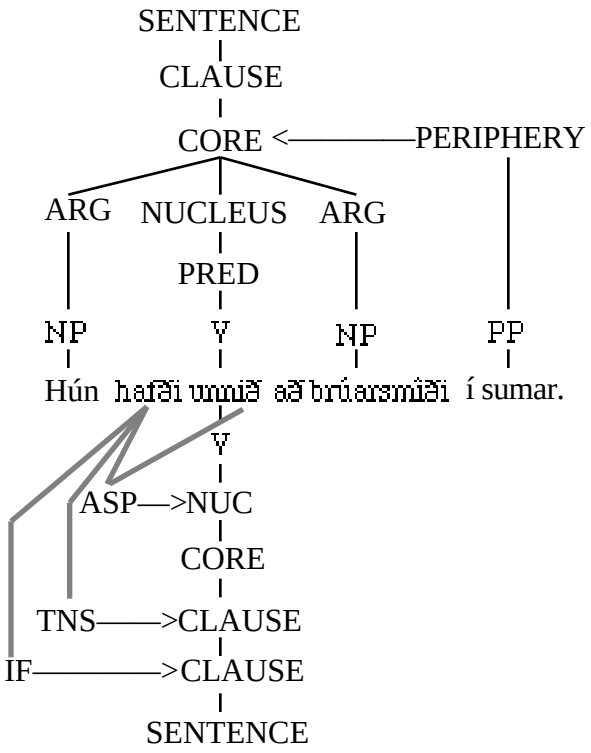
(1c)


SENTENCE
CLAUSE
CORE
ARG
NUC
PRED
NP
V
Will they have to be leaving?
V
ASP—>NUCLEUS
MOD———>CORE
TNS———>CLAUSE
IF———>CLAUSE
SENTENCE

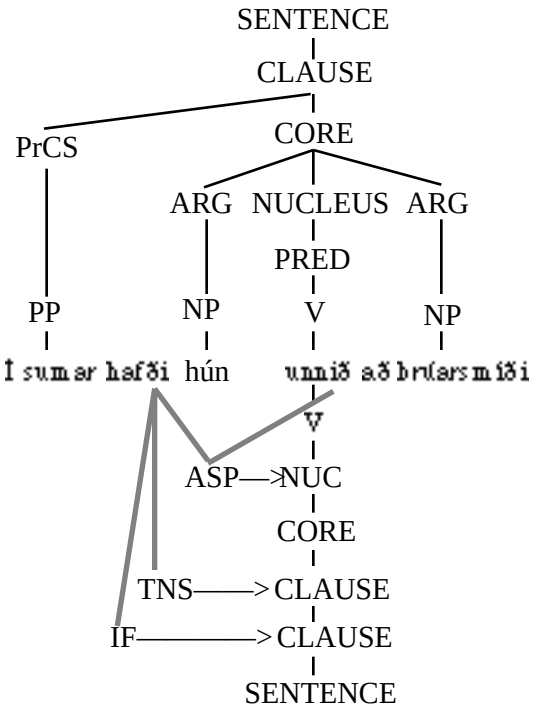
(1d)


SENTENCE
CLAUSE
CORE<——PERIPHERY
ARG
NUC
PRED
NP
PP
ADV
Sally
is
in the house
now
PP
NUCLEUS
CORE
TNS->CLAUSE
IF——>CLAUSE
SENTENCE

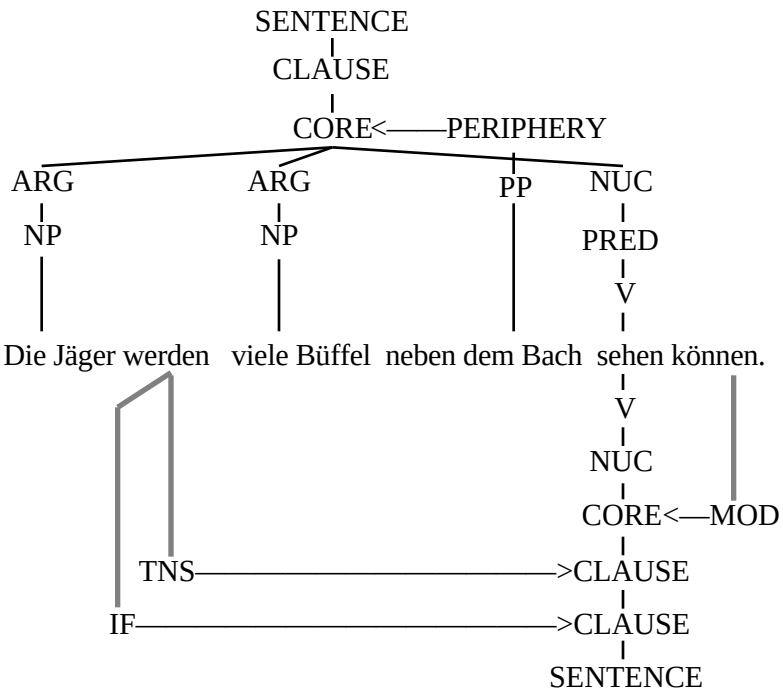
(1e)


SENTENCE
CLAUSE
CORE <————PERIPHERY
ARG
NUCLEUS
ARG
PRED
NP
V
NP
PP
Hún hafði unnið að brúarsmíði í sumar.
V
ASP—>NUC
CORE
TNS——>CLAUSE
IF————>CLAUSE
SENTENCE

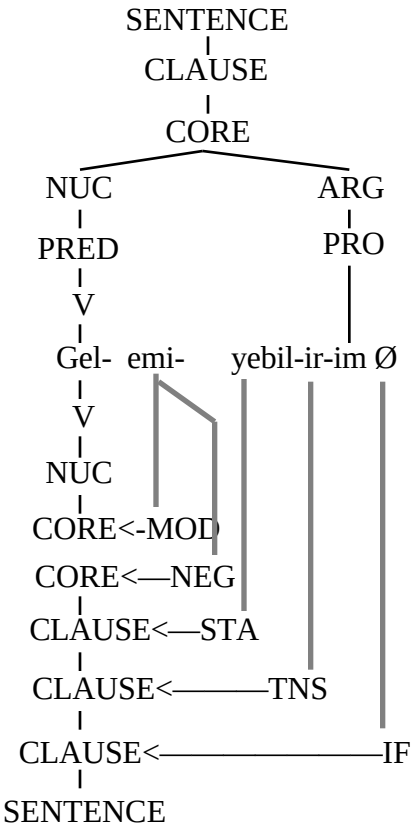
(2a)


SENTENCE
CLAUSE
PrCS
CORE
ARG
NUCLEUS
ARG
PRED
PP
NP
V
NP
Í sumar hafði hún unnið að brúarsmíði
V
ASP—>NUC
CORE
TNS——>CLAUSE
IF————>CLAUSE
SENTENCE

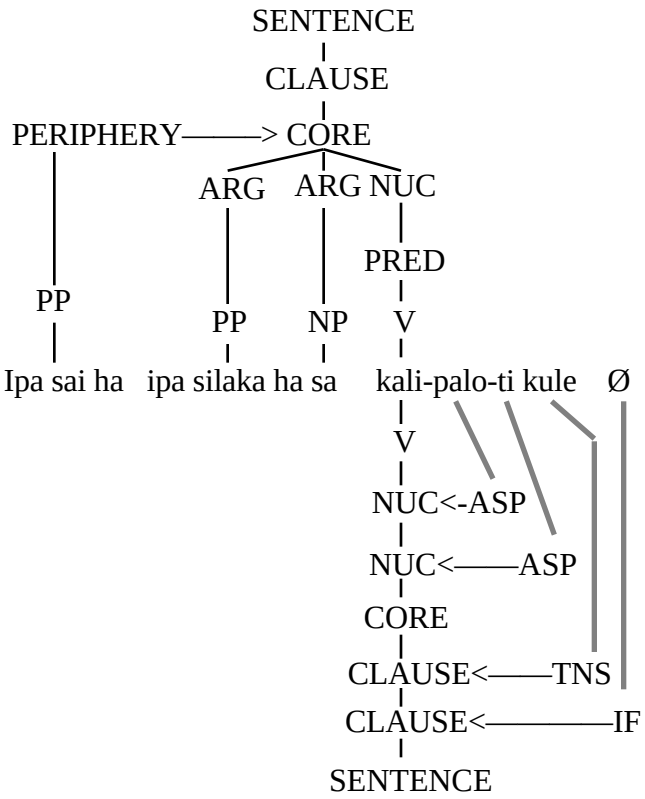
(2b)


SENTENCE
CLAUSE
CORE<——PERIPHERY
ARG
ARG
PP
NUC
NP
NP
PRED
V
Die Jäger werden viele Büffel neben dem Bach sehen können.
V
NUC
CORE<—MOD
TNS————————————>CLAUSE
IF————————————>CLAUSE
SENTENCE

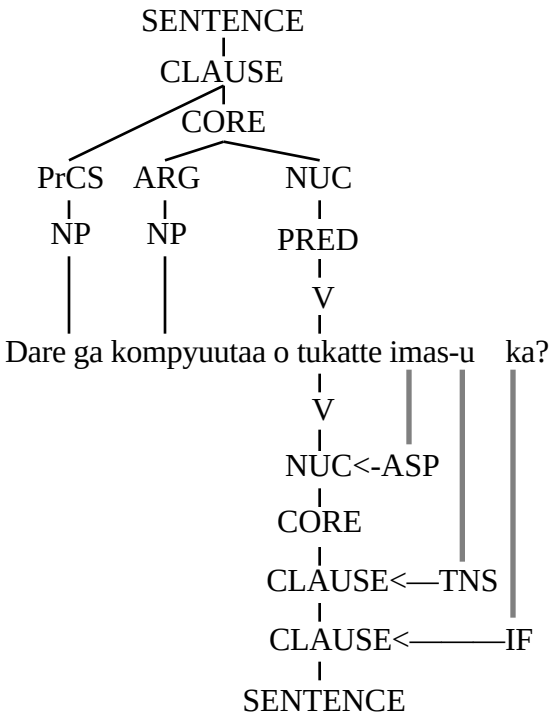
(3)


SENTENCE
CLAUSE
CORE
NUC
ARG
PRED
PRO
V
Gel- emi- yebil-ir-im Ø
V
NUC
CORE<-MOD
CORE<—NEG
CLAUSE<—STA
CLAUSE<———TNS
CLAUSE<—————IF
SENTENCE

(4)

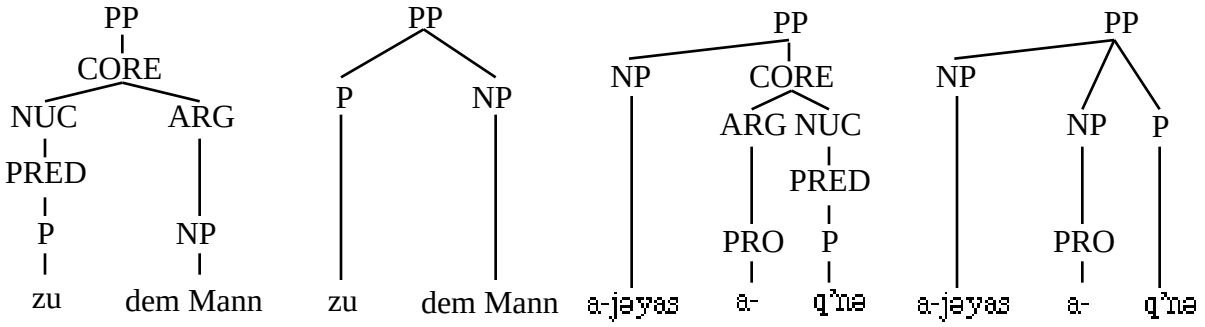

SENTENCE
CLAUSE
PERIPHERY———> CORE
ARG ARG NUC
PRED
PP
PP NP V
Ipa sai ha ipa silaka ha sa kali-palo-ti kule Ø
V
NUC<-ASP
NUC<——ASP
CORE
CLAUSE<——TNS
CLAUSE<————IF
SENTENCE

(5)


SENTENCE
CLAUSE
CORE
PrCS ARG NUC
NP NP
PRED
V
Dare ga kompyuutaa o tukatte imas-u ka?
V
NUC<-ASP
CORE
CLAUSE<—TNS
CLAUSE<———IF
SENTENCE

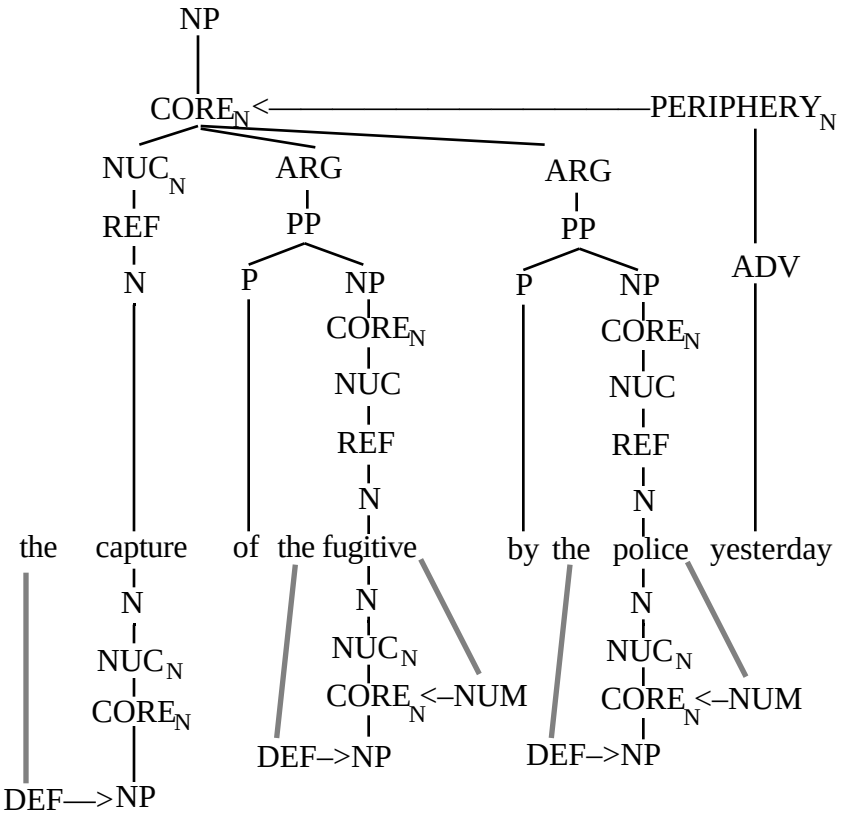
(6)

4. Draw the layered structure of the PPs given below. Do not give the internal structure of the NPs. Represent each PP twice, once as predicative and once as non-predicative.

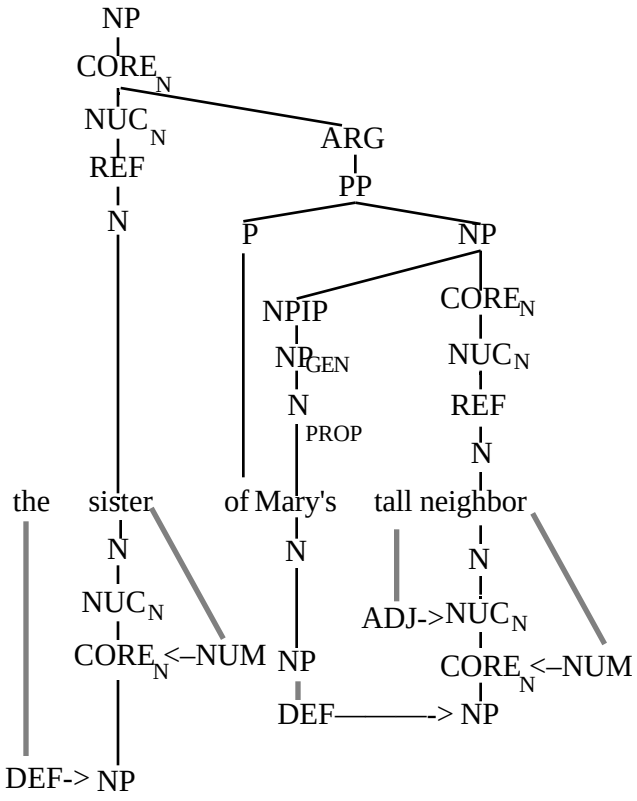


(1) (2)

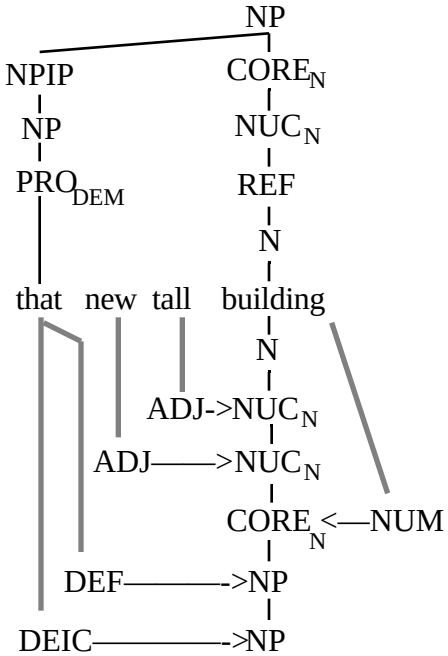
5. Draw the layered structure of the NPs given below. Give the full layered structure of each NP, even NP-internal ones; include both constituent and operator projections. Also, represent the PPs as predicative or non-predicative, as appropriate. Treat the demonstratives in Tibetan and Mparntwe Arrernte as simple deictics and not as being pronominal like English demonstratives.



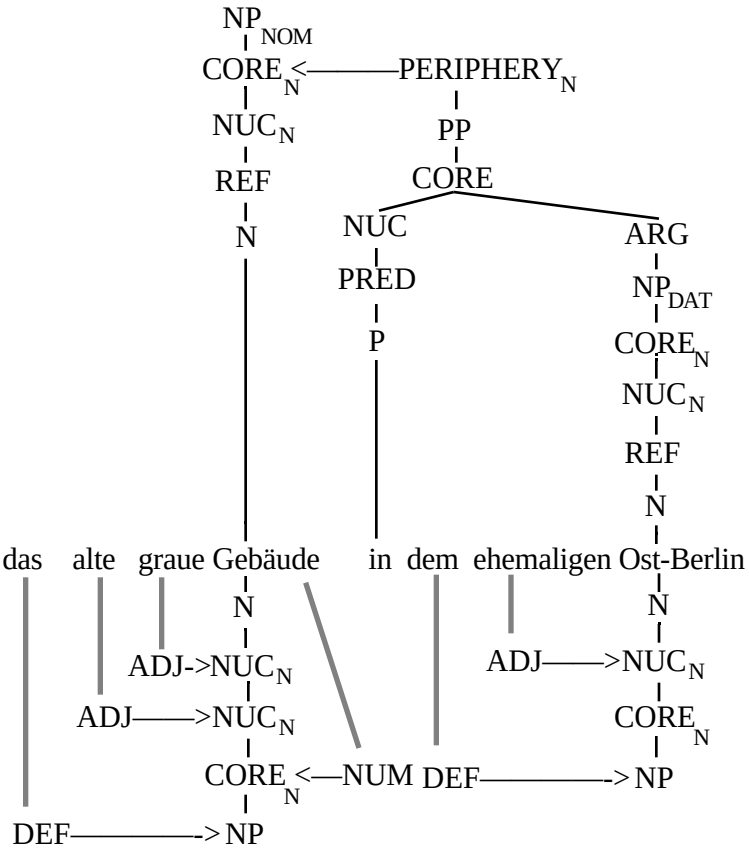
(1a)


NP
CORE N
NUC N
ARG
REF
PP
N
P
NP
NPIP
CORE N
NP GEN
NUC N
N
REF
PROP
N
the sister of Mary's tall neighbor
N
N
N
NUC N
ADJ->NUC N
CORE N <–NUM
NP
CORE N <–NUM
DEF———-> NP
DEF-> NP

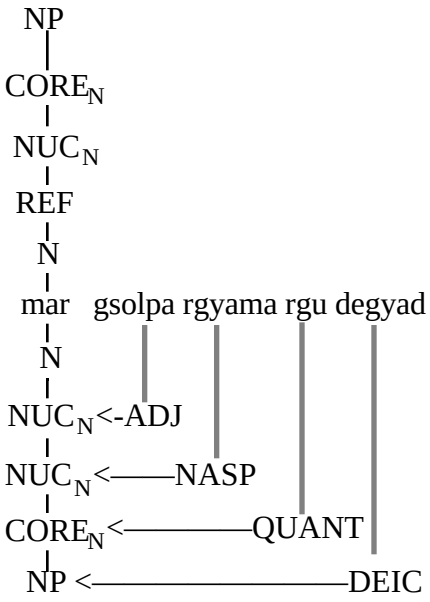
(1b)


NP
NPIP
CORE N
NP
NUC N
PRO DEM
REF
N
that new tall building
N
ADJ->NUC N
ADJ——>NUC N
CORE N <—NUM
DEF———->NP
DEIC————->NP

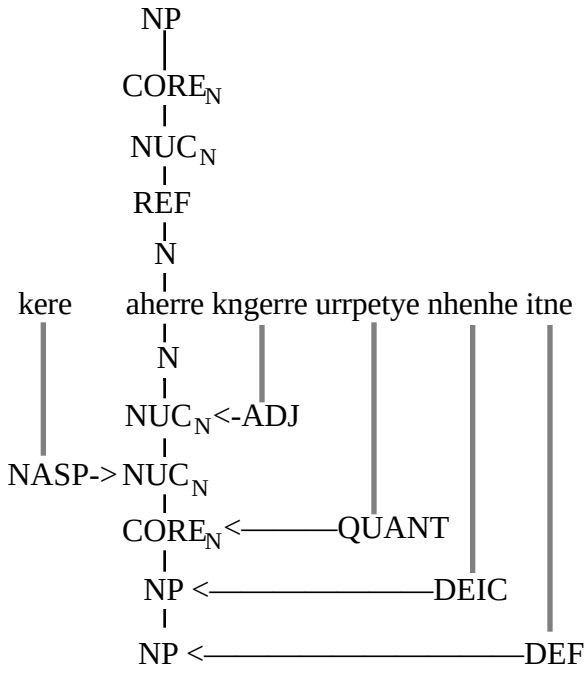
(1c)


NP NOM
CORE N <———PERIPHERY N
NUC N
PP
REF
CORE
N
NUC
ARG
PRED
NP DAT
P
CORE N
NUC N
REF
N
das alte graue Gebäude in dem ehemaligen Ost-Berlin
N
N
ADJ->NUC N
ADJ——>NUC N
ADJ——>NUC N
CORE N
CORE N <—NUM
DEF———-> NP
DEF————-> NP

(2)

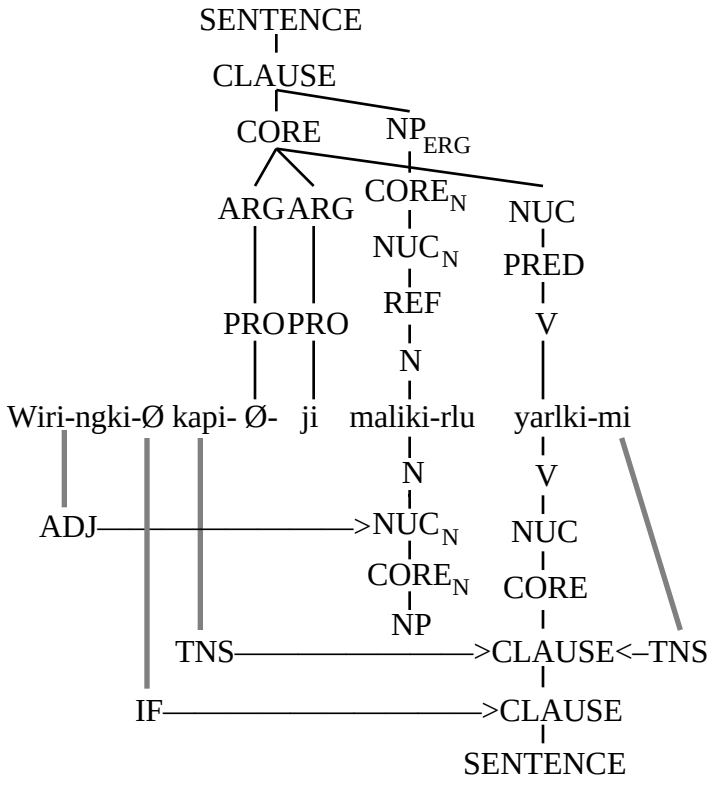


(3)



(4)

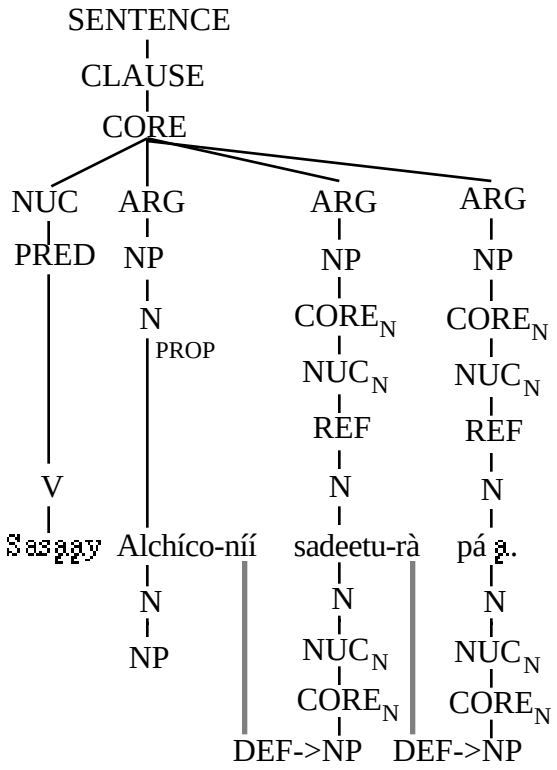
6. Give the complete layered structure of the clause, including the layered structure of the NPs, for one of the Warlpiri sentences in (1) (Hale 1973). Assume Warlpiri to be double-marking like Choctaw.



(1c)

Only one of the four possibilities is given, but they would all have the same hierarchical relations and would differ only in the linear order of the elements. Since Warlpiri is double-marking like Choctaw, the core arguments are the bound pronominals, which are suffixed to the tense auxiliary, not to the verb itself; accordingly, *yarlki-mi kapi-Ø-ji* is a complete sentence meaning 'he/she/it will bite me.' As in the Lakhota head-marking examples in Chapter 2, the independent NP *wiri-ngki maliki-rlu* 'big dog' is a daughter of the clause node and is associated with the *Ø-* '3sg' suffix on the auxiliary. This NP is discontinuous in all of the examples in (1), and the relationship between *wiri-* 'big' and *maliki-* 'dog' is captured through the operator projection of the NP, just as in the Dyirbal example in Figure 2.30. (Interrogative IF is marked by the clitic *-nya* suffixed to the first word in the sentence; we may assume that the lack of such a clitic signals declarative IF.)

7. In Yagua, a language of the Amazon basin in Peru (Payne & Payne 1989), the elements which approximate definite articles in languages like English occur as enclitics on the preceding word. How does the theory of clause and NP structure developed in this chapter handle this phenomenon? Give the layered structure of the clause, including the layered structure of the NPs, of either (2a) or (2b). For the clause, give only the constituent projection, and for the NPs, give both constituent and operator projections.



(2b)

Again, only one of the two sentences is given to illustrate the answer. Since the determiners *níí* 'the [animate]' and *rà* 'the [inanimate]' are part of the operator projection of the NP, their relationship to the head noun can be straightforwardly captured in terms of the LSNP. Again, what is unusual here is the fact that the articles cliticize to the preceeding word, giving the appearance of discontinuity.