DP's in Polish
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The Questions I

- How does syntax know what is a phase, the proposals

  - Fixed heads C, v, D… (Chomsky 2004)

  - Topmost of projection (Bošković 2014)

    - a phase can have any functional projection as its phase head, as long as it is the topmost of a given lexical projection

  - Abstract floating head above lexical projection (Pesetsky 2015)

    - ω is a PF empty phase head on top of any extended lexical domain that is a phase - ω can obtain PF material via head movement and can serve as an escape hatch for cyclic movement via its Spec.

- What is the optimal algorithm for establishing phase heads in the syntax

The Questions II

- Lg Specific

  - Assuming Polish Nominals are phases (see Kučerová & Szczegielniak 2020 for discussion and notable exceptions) - are they always DP's?

    - Polish exhibits contradictory behavior sometimes behaves like DP phase, sometimes like a non DP phase

  - Are Polish nominals phases with different phase heads?

The proposal

- Dynamic phase heads combines Bošković's (2014) topmost projection proposal with Pesetsky's (2015) proposal that a phase is headed by an abstract head ω located above visible lexical/functional projections.

- A phase can be 'frozen' via head movement before the whole extended domain is constructed (Szczegielniak 2017).

- Phase freezing is an aborted phase extension process proposed in Den Dikken (2007).

The Data

- DP phase behavior

  - Polish patterns with DP phase languages such as English and not Serbo-Croatian as far as complement extraction and Binding

  - Polish patterns with non DP phase languages such as Serbo-Croatian as far as alleviation of Left Branch Extraction violations

  - Combination of LBE alleviation and complement extraction yields ungrammatical structures - Polish cannot be both S-C and English in a single construction

Complement extraction S-C (Bošković 2014)

(1) a. * [NP Ovog studenta]i sam prona'la [NP sliku ti].

        this   student   am found   picture

        'Of this student I found the picture.'

    b. Prona'la sam [NP sliku   [NP ovog studenta]].

        found   am   picture   this student

    c. [NP Ovog studenta]i sam pronala [NumP mnogo / deset [NP slika t1].

        this   student   am found   many/ ten   pictures

        'Of this student I found many / ten pictures.'

Complement extraction English

(2) a. [Of this student] I found [a picture t1].

    b. *[Picture of this student]1 I found [a t1].

Anti locality and phases

- Bošković (2014) attributes the extraction asymmetries between (1a) and (2a) to Anti-Locality (Abels 2003) that prevents movement of a phase complement of a phase head into the specifier of that phase head.

- The conclusion is that NPs are phases in Serbo-Croatian, but not in English, where the closest phase is a DP. Extraction of an NP-phase complement is not possible in S-C (2a), and extraction of a DP-phase complement is not possible in English (2b).

- What is possible is extraction of an NP complement that is itself a complement of a DP-phase, as in (2a), and extraction of an NP complement if there are additional projections such as quantifiers or numerals (1c).

Polish allows complement extraction with no visible additional structure

- In Polish (3a), we see an NP complement construction, where we can wh-extract the NP complement (3b).

(3)a.On kupił   [[NP tomik   [poezji angielskiej]] [w skórzanej okładce]].

He purchased   volume poetry English   in leather   jacket

'He purchased a volume of English poetry with a leather jacket.'

b.   [Jakiej poezji]1 on kupił   [[NP tomik t1][w skórzanej okładce]]?

 What   poetry   he   purchased   volume   in leather   cover

'What poetry did he purchase a volume of with a leather jacket?'

Polish allows complement extraction with no visible additional structure

- Example (3c) provides a standard constituency test that the extracted phrase is actually a complement of the NP since the head noun cannot be separated from the complement by an adjunct.

c. *On kupił   [[NP tomik] [w skórzanej okładce] [poezji angielskiej]].

He purchased   volume   in leather   jacket   poetry English

*'He purchased a volume in a leather jacket of English poetry.'

Polish is not wysiwyg

- There needs to be more functional architecture that allows overriding Anti-locality restrictions on extraction.

- Otherwise we would not have contrast between S-C and Polish

1 a. * [nP Ovog studenta]i sam prona'la [nP sliku ti].

        this   student   am found   picture

        Of this student I found the picture.'

3 b.[Jakiej poezji]1 on kupił [[XP… [nP tomik t1][w skórzanej okładce]]]?

 What poetry   he purchased   volume   in leather   cover

'What poetry did he purchase a volume of with a leather jacket?'

Binding

- Languages lacking a DP layer are predicted to differ in behavior as far as binding within the nominal. The assumption is that in Serbo-Croatian the possessive is in a PossP adjoined to the NP lexical domain and can c-command out of it (Despić 2015).

Binding S-C

4a.[NP Kusturicin$_i$ [NP najnoviji film]]1 ga$_{*i/j}$ je zaista razočarao.

 Kusturica's$_i$ latest movie   him$_{*i/j}$ is really disappointed

'Kusturica's$_i$ latest movie really disappointed him$_{*i}$.'

- In (4a) above, the possessive is not part of the NP phase complement. Assuming phases delineate Binding Domains (Safir 2014), the possessive c-commands the pronoun and is in the same minimal Binding Domain (vP) which prevents co-indexation via Condition B.

Binding S-C

4b. [NP Njegov$_{*i/j}$ [NP najnoviji film]] je zaista razočarao   Kusturicu$_i$.

his   latest movie   is really disappointed Kusturica

'His$_{*i/j}$ latest movie really disappointed Kusturica$_i$.'

- In (4b), the possessive pronoun is again outside the NP Phase, it c-commands the proper name and is in the same minimal Binding Domain (vP), thus co-indexing leads to violation of Condition-C.

Binding - English

- English possessives do not exhibit such behavior as can be seen in (5a,b). Crucially, a PossP in English is topped off by a DP that is a Phase (den Dikken 2007). This means that the Possessive is not in the same Binding Domain as the pronoun.

(5) a. [His$_i$ father] considers John$_i$ highly intelligent.

b. [John$_i$'s father] considers him$_i$ highly intelligent

Binding - Polish vs English

- Polish patterns with English. Consider the parallel structures to (5) in (6)

  (6) a. [Jego$_i$ ojciec] uważa   Jana$_i$ za inteligentnego chłopaka.

     His$_i$ father   considers John$_i$ for intelligent   boy

     'His father considers John to be an intelligent boy.'

  b. [Jana$_i$ ojciec] uważa   go$_i$ za inteligentnego   chłopaka.

     John$_i$'s father considers him$_i$ for intelligent   boy

     'John's father considers him to be an intelligent boy.'

Binding - Polish vs S-C

- the parallel structures to (4) in (7) show that Polish does not pattern with S-C

7a. Ja chciałem by [[Fibaka]$_i$ najnowszy wynik]1 go$_{i/j}$ zupełnie rozczarował t1

I wanted   that Fibak's$_i$ newest   result   him$_{i/j}$ totally disappoint
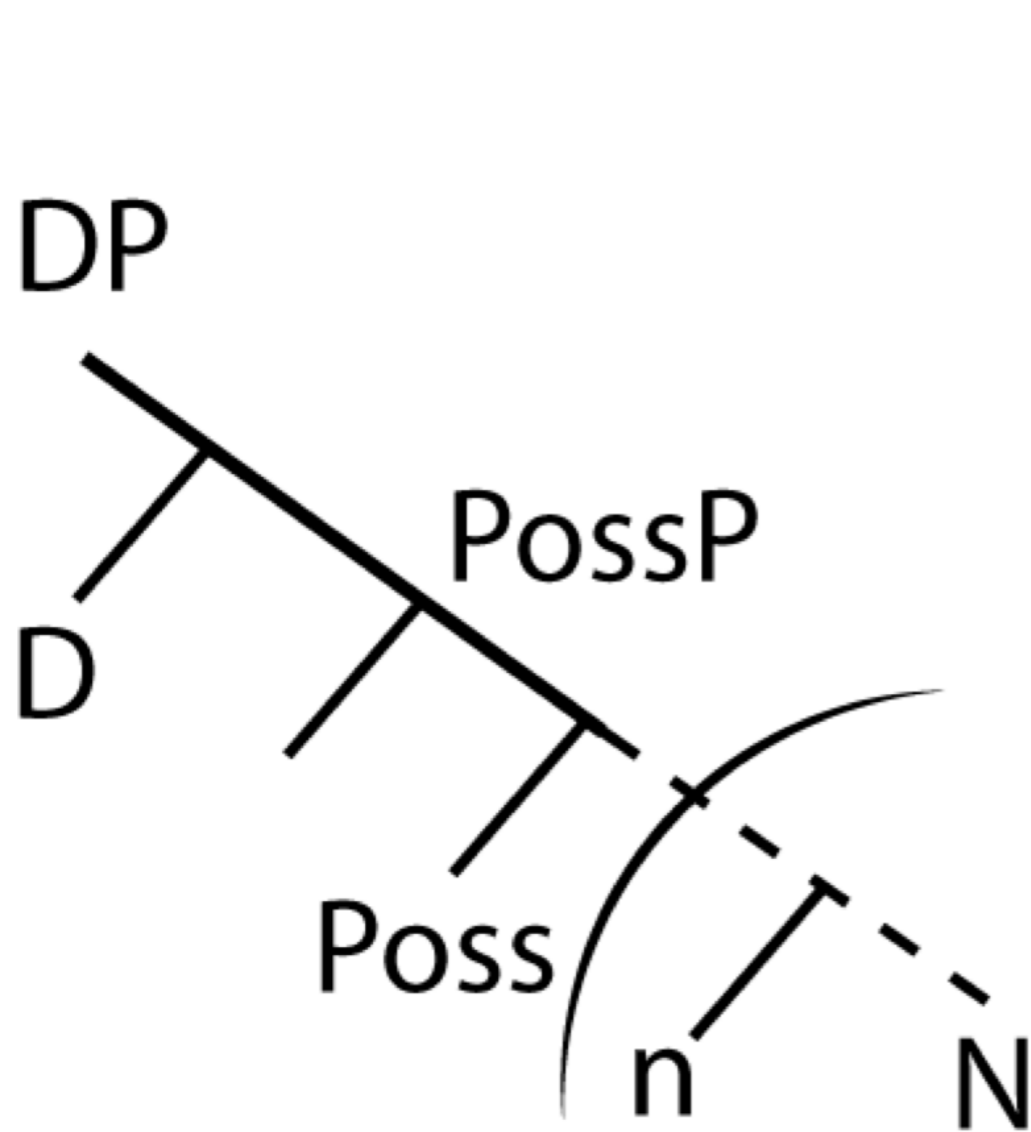
'I wanted   Fibak's$_i$ newest result to totally disappoint him$_{i/j}$.'

b. Jego$_i$ najnowszy wynik rozczarował Fibaka$_i$
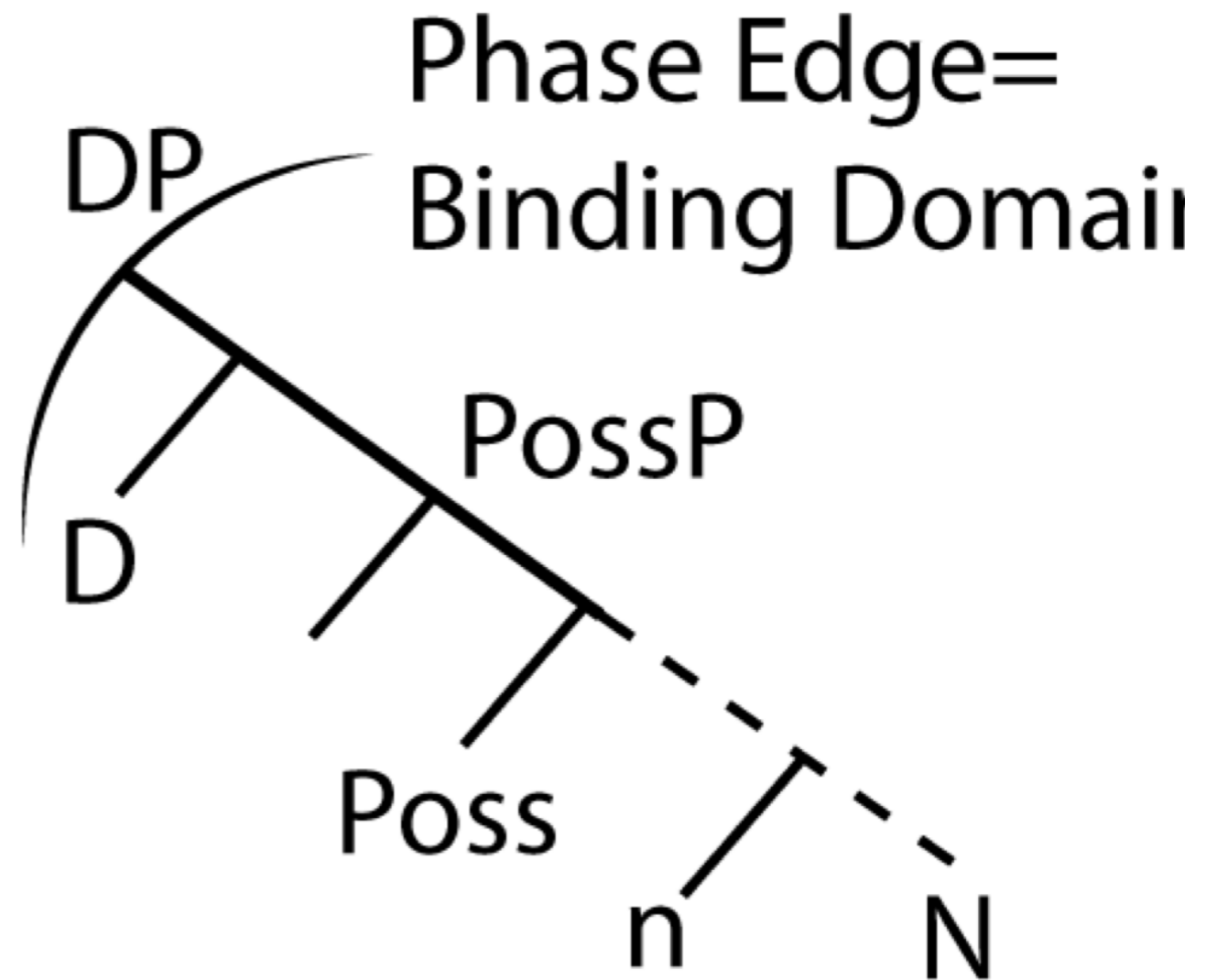
   His$_i$ latest   result   disappointed Fibak

   'His$_i$ latest result disappointed Fibak$_i$.'

Differences Polish/English vs S-C

Serbo-Croatian

Polish/English

DP, D, PossP, Poss, n, N

Phase Edge= Binding Domain

n=any functional head below D
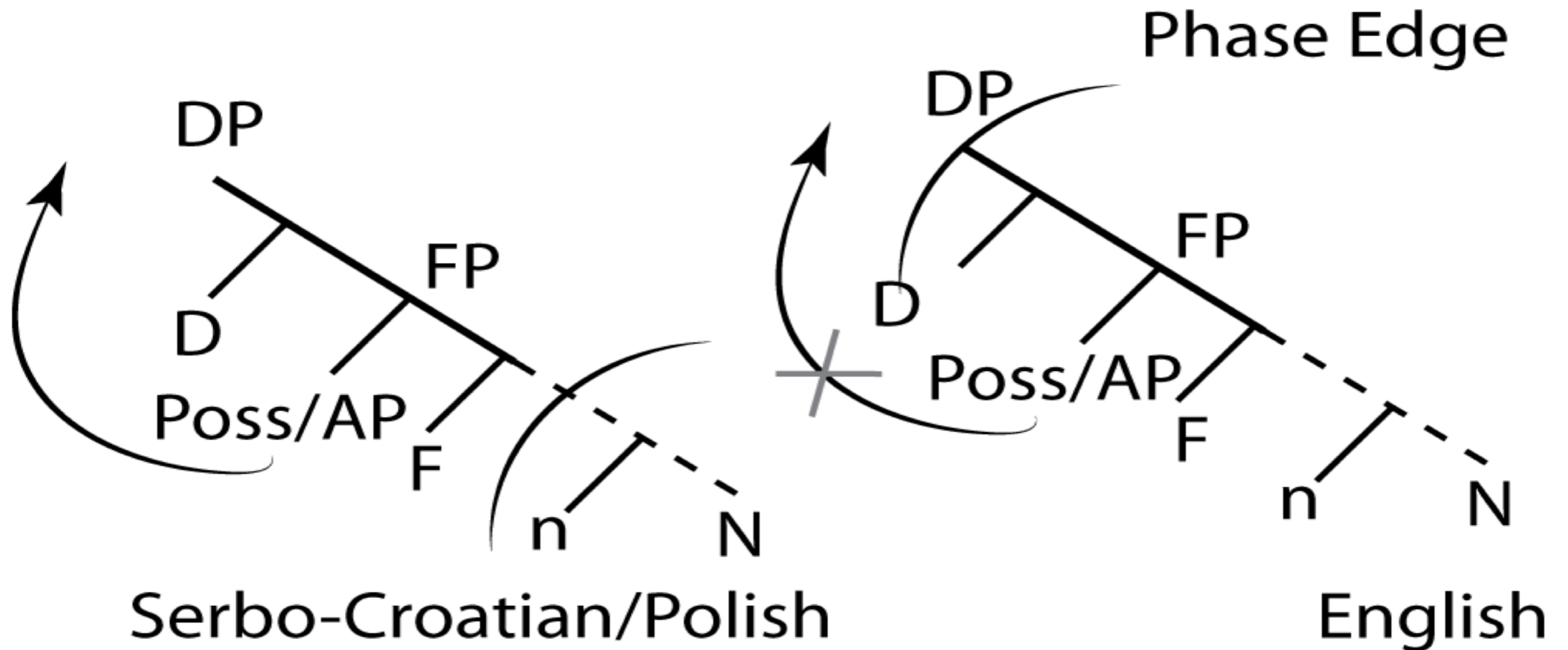
Left Branch Extraction

- English does not allow Left Branch Extraction as seen in (10) (Ross' 1967 Left Branch Constraint):

(10)   a. *Whose1 did you see [t1 movie]?

           b. *Beautiful 1 I saw [t1 houses].

Polish allows LBE violations like S-C

(11) a.   Czyjego1   widziałeś [t1 ojca]?   (Polish)

        whose   see   father

        'Whose father did you see?'

    b.   Piękne1   zobaczyłem [t1 domy].

        Beautiful saw   houses

        'Beautiful houses, I saw.'

(12) a.   Čijeg1 si vidio [t1 oca]?   (Serbo-Croatian)

        whose are   seen   father

        'Whose father did you see?'

    b.   Lijepei   je vidio [ti kuće].

        beautiful is seen houses

        'Beautiful houses, he saw.'

LBE and Anti-locality

- LBE has been argued to reduce to Anti-Locality (Despić 2015).

- Serbo-Croatian and Polish allow LBE, since the nominal projection taking an AP or PossP modifier is a phase.

- However, in English, only the DP is a phase, and movement of pre-nominal modifiers is too local.

Polish patterns with S-C Wrt LBE

n=any functional head in the nominal domain

The contradiction

- Bošković (2014) suggests that LBE implies lack of DP since for nP to be a phase it has to be the topmost element in the nominal projection.

- However, Polish, with respect to LBE, patterns with Serbo-Croatian and not English.

- The data leads to a contradiction.

  - Binding and complement extraction suggest that Polish has a DP Phase like English,

  - LBE suggests that Polish does not have a DP like Phase

Contradictory requirements

- LBE requires Polish to behave like S-C

- Argument extraction requires Polish to behave like English

- Combining both leads to ungrammaticality

  (20) a. Czyje1 zobaczyłem [t1 tomiki   poezji angielskiej] w bibliotece?

      whose saw   volumes poetry English   in library

      'Whose volumes of English poetry did I see in the library?'

      b. ??Czyje1 [poezji angielskiej]2 zobaczyłem [t1 tomiki t2] w bibliotece?

          whose   poetry English   saw   volumes   in library

          'Whose volumes of English poetry did I see in the library?'

- Example (20a) is grammatical since LBE alone is possible.

- However, when we add to the mix NP complement extraction, which is acceptable on its own as shown in (3b), the structure is ungrammatical₂₄

Dynamic phases

- I assume that English and Polish, as well as Serbo-Croatian, have a DP layer.

  - In English the DP (or QP, if present) is a phase complement

  - In S-C some functional projection below DP is a phase complement (PC),

  - In Polish it can be either the DP or a lower head.

- A Phase Head ω is not associated with any lexical category, but only with semantic type.

- Phase complements are built via tucking in (Richards 1999) below ω

- Variation in the size of PC is a reflex of functional head movement to ω, which automatically assigns a category label.

- This extends the set of possible objects in the syntax from the set of categories in Baker (2003).

- The lack of any category label on ω will mean that at Spell-Out the topmost visible category will be the topmost Lexical/Functional Head

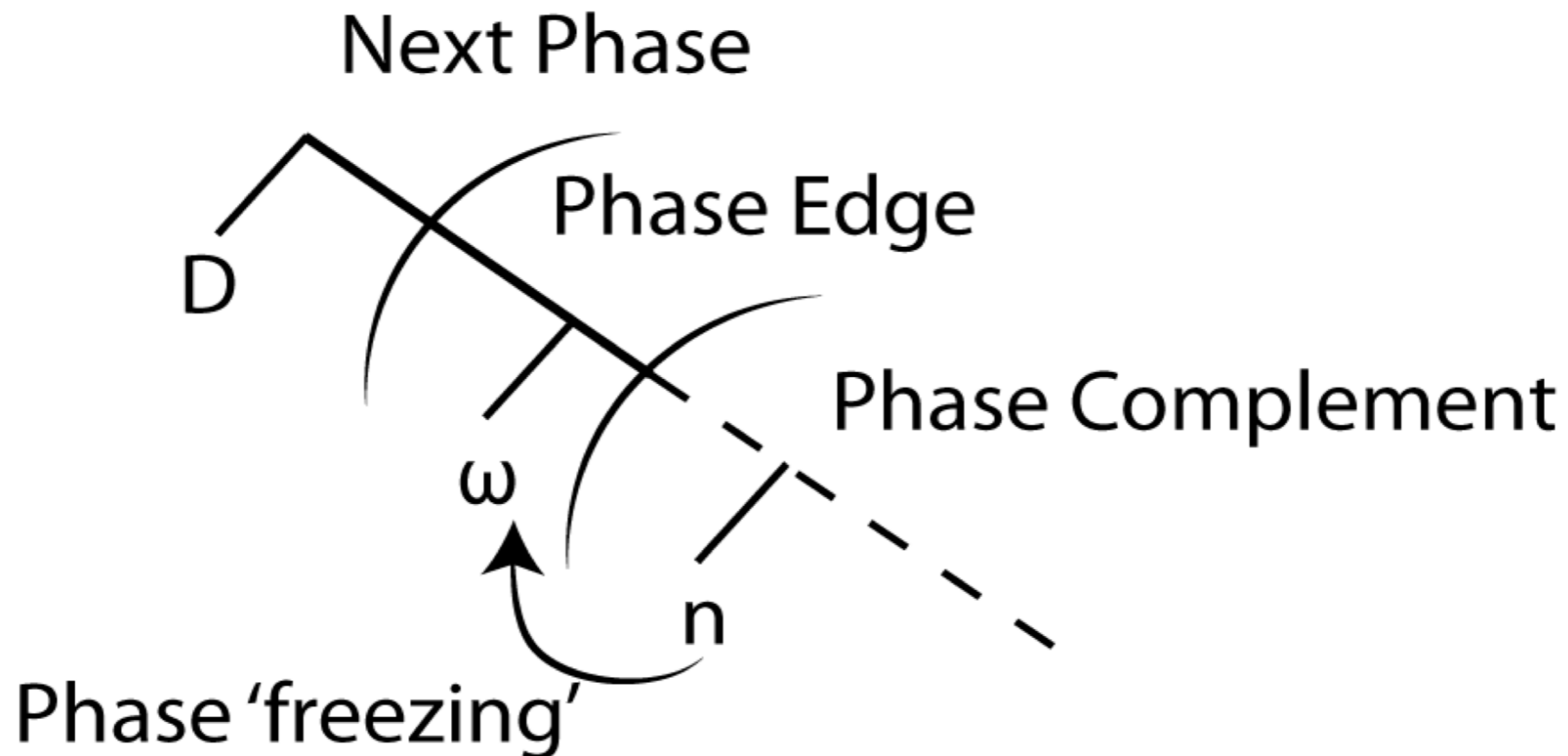# Tucking in Phase heads

How to build a nominal:

a.   [ω [PC n N]]

b.   [ω [PC ...Poss.....n...N]]

c.   [ω [PC ...D...Poss...n...N]]

- Once a Phase Head emerges, subsequent merger or movement within a given extended domain will proceed through tucking in until Full Projection is achieved:

- (21) Full Projection. PC can expand until it utilizes all the functional heads of a given Lexical Projection.

- The above constraints derive the DP structure in English. A nominal starts projecting functional structure in its extended domain (Grimshaw 2000), ω emerges and a DP is built via tucking in.

- Phase Freezing allows a phase to be triggered prior to the exhaustion of all functional heads in a given Lexical Projection

Phase freezing

- English never freezes - whole lexical domain built, D moves to ω

- S-C always freezes - a head below D always moves to ω

- Polish can but does not have to freeze

S-C freezing; n=any eligible functional head in the nominal domain

Advantages

- In this system Polish is not two languages: one having a DP layer which is a phase and one which does not have a DP

- Spell Out is triggered syntactically either via head movement (Phase Freezing) or via Internal Merge that exhausts a given Lexical Domain.

- Phase freezing is compatible with proposals that phase heads are interface heads that serve as interface information 'portals' (Kučerová 2018) -

- type of interface info that accessible is a function of what functional projection moves to ω, when D moves this is a regular DP, when x moves it is xP

Thank You