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Disentangling the Vedic left periphery

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E Caucus Seminar

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The Vedic Initial String/Left Periphery

- What is it?
- What patterns does it show?
- How should we analyse it?
- What are the consequences?



What is the Initial String/Left Periphery?

- As has long been observed, part of the Vedic sentence that exhibits the highest degree of syntactic regularity is the beginning, traditionally referred to as the “initial string”. (Exx. 1-3 from Lowe 2014: 6)

(1) *dyaús ca tvā pṛthivī yajñíyāso nī hótāraṃ sādāyante dāmāya*
Heaven and you Earth praiseworthy down priest set for-house
“And Heaven and Earth, [and] the praiseworthy Gods set you as the house’s priest” (3.6.3)

(2) *utá vā yó no marcáyād ánāgaso ‘rāti vā mártāḥ sānukó vṛkaḥ*
and or which_i us_j harm.SUBJ innocent_j evil or mortal_i eager wolf_i
“Or the evil mortal or eager wolf who would harm us, innocent as we are...” (2.23.7)

(3) *divyā ápo abhí yád enam áyan dṛtim ná súṣkam sarasī śáyānam*
Heavenly waters upon when him_i came leather like dry pool.LOC lying_i
“When the heavenly waters poured down on him as he lay in the pool like dry leather...” (7.103.2)

(4) *prá vaḥ sá dhítāye naśat*
forth you it thought reach.INJ
“May it reach you for insight” (1.41.5)

What is the Initial String/Left Periphery?

	"NEXUS"	1 = \acute{X}	2 = P	3 = \acute{P}/\acute{D}	4 = E	5 = \acute{D}
(1)		<i>dyaús</i>	<i>ca</i>		<i>tvā</i>	
(2)	<i>utá</i>		<i>vā</i>	<i>yó</i>	<i>no</i>	
(3)		<i>divyá ápo</i>		<i>abhî yád</i>	<i>enam</i>	
(4)		<i>prá</i>			<i>vaḥ</i>	<i>sá</i>

\acute{X} = accented anything, P = clitic particle, \acute{P} = accented particle,
E = enclitic pronoun, \acute{D} = stressed pronominal **or** preverb

à la Hock (1996)

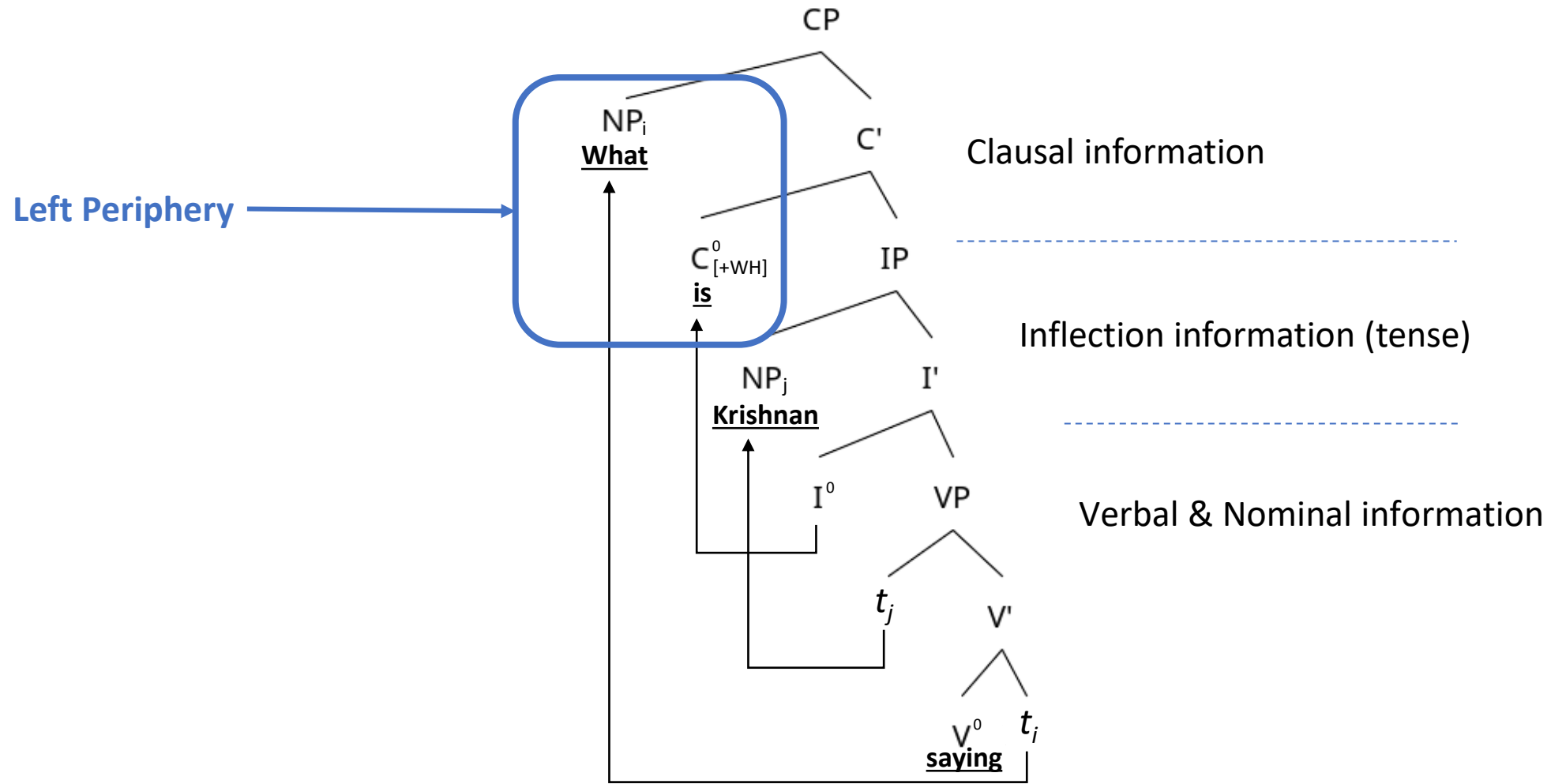
What is the Initial String/Left Periphery?

	(<i>Conj</i>)	(<i>Conj</i>)	(<i>XP</i>)	(<i>XP</i>)	(<i>Prvb</i>)	<u>(<i>Dem./Rel.Prons</i>)</u>	(<i>Pcls</i>)	<u>(<i>Prons</i>)</u>
(1)	<i>ca</i>			<i>dyaúś</i>				<i>tvā</i>
(2)	<i>vā</i>	<i>ut á</i>				<i>yó</i>		<i>no</i>
(3)				<i>divyá ápo</i>	<i>abhí</i>	<i>yád</i>		<i>enam</i>
				<i>itthādhīr</i>	<i>abhí</i>	<i>yó</i>		
			<i>dāśema</i>	<i>kāsya</i>				
	<i>u</i>			<i>mā</i>			<i>śú</i>	<i>naḥ</i>

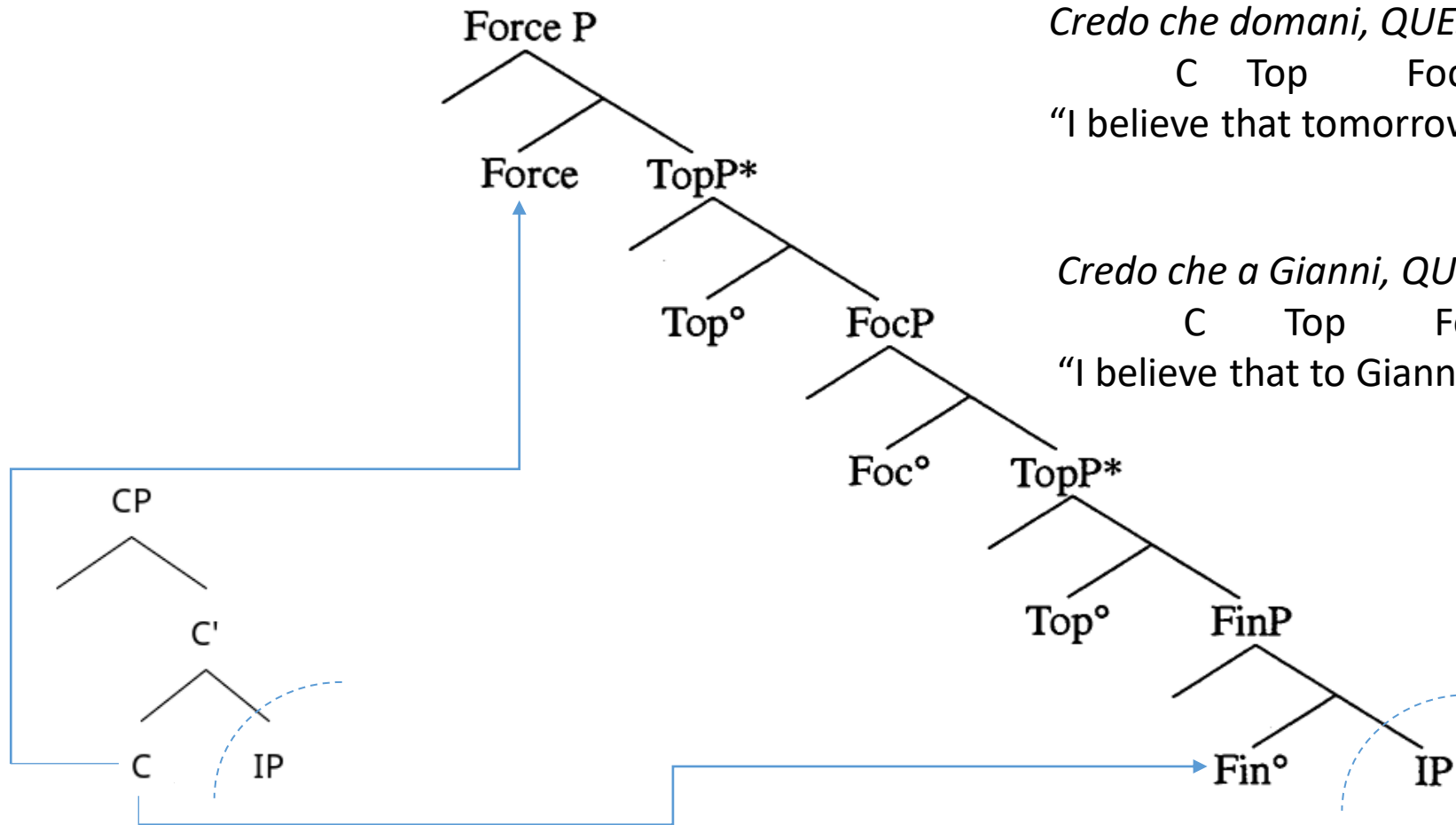
(Lowe, 2014:14)

- In Generative Grammar, this area maps onto what is called the **Left Periphery**.

What is the Initial String/Left Periphery?



What is the Initial String/Left Periphery?



Credo che domani, QUESTO, a Gianni, gli dovremmo dire
 C Top Foc Top IP
 "I believe that tomorrow, THIS, to Gianni, we should say"

Credo che a Gianni, QUESTO, domani, gli dovremmo dire
 C Top Foc Top IP
 "I believe that to Gianni, THIS, tomorrow, we should say"

(Rizzi, 1997: 295-7)

What is the Initial String/Left Periphery?

- Implicit in all modern analyses of Vedic Sanskrit* is the equivalence of the initial string with the Left Periphery, to some extent. My own analysis builds on this equivalence.
- Some authors (e.g. Hale, 1996; Krisch, 2017) have hinted at a split-CP analysis – to my knowledge the initial string hasn't been analysed in Rizian cartography.
- As we shall see, I think it could explain a lot!

*bar perhaps Hock (1996)

What about clitics?

- That is the question!
- A key feature of the Vedic initial string are clitics that move to “**Wackernagel Position**”, sometimes referred to as “second position”
- Not unitary phenomena (Keydana 2011; Lühr & Zeilfelder 2011)
 - WL1: **Pronoun** clitics (*naḥ, vaḥ, me, te* etc.)
 - WL2: **Clausal** clitics (*ca, vā, u* etc.)
- Confusingly, WL2 occur **earlier** than WL1, cf. *dyaúś ca_{WL2} tvā_{WL1}*

What about clitics?

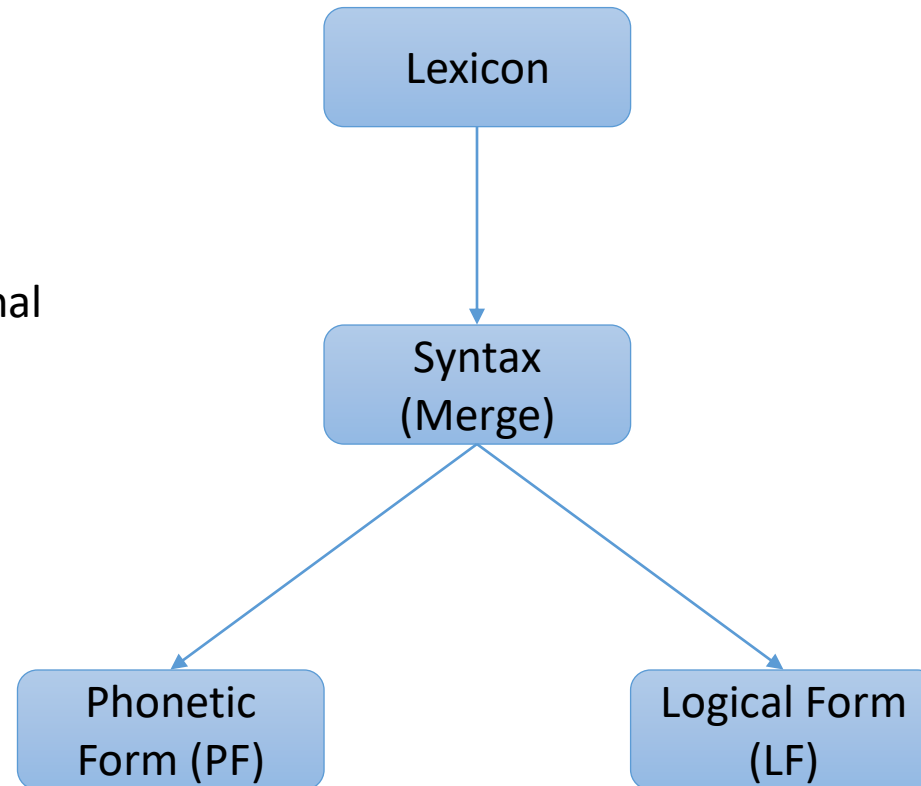
- What characterises a clitic?

“[C]litic ... is an umbrella term, not a genuine category in grammatical theory. Umbrella terms are names for “problems”, for **phenomena** that present “mixed” properties of some kind, not names for theoretical constructs.”
(Zwicky, 1994: xiii, emphasis mine)

- Some characteristics of clitics:
 - Prosodically “deficient”, e.g. lacking a lexical accent
 - Restricted distribution, e.g. not allowed to occur sentence-initially (enclitics) or -finally (proclitics)
- Exceptions exist, but the interaction between these variables presents a conundrum: are clitic phenomena primarily **phonological** in nature, or **syntactic**?

Phonology vs Syntax in Generative Grammar (Minimalism)

What is the locus of the distributional constraints on clitics?



Clitic phenomena are phonological: Hock 1989-1996

- The initial string consists of a phonological **template**

$$\begin{array}{cccccc} \text{"NEXUS"} & 1 & 2 & 3 & 4 & 5 \\ & \left\{ \begin{array}{c} \acute{D} \\ \acute{X} \end{array} \right\} & (P) & \left(\begin{array}{c} \acute{P} \\ \acute{D} \end{array} \right) & (E) & (\acute{D}) \end{array} \quad (1996: 219, \text{ adapted})$$

\acute{X} = accented anything, P = clitic particle, \acute{P} = accented particle,
E = enclitic pronoun, \acute{D} = stressed pronominal **or** preverb

- All positions are optional, and all positions can “stack” except 1
- If all positions are all filled (rare) we get an alternation between accented and unaccented elements
- Syntax has **no** involvement – the template is enforced (?) at PF

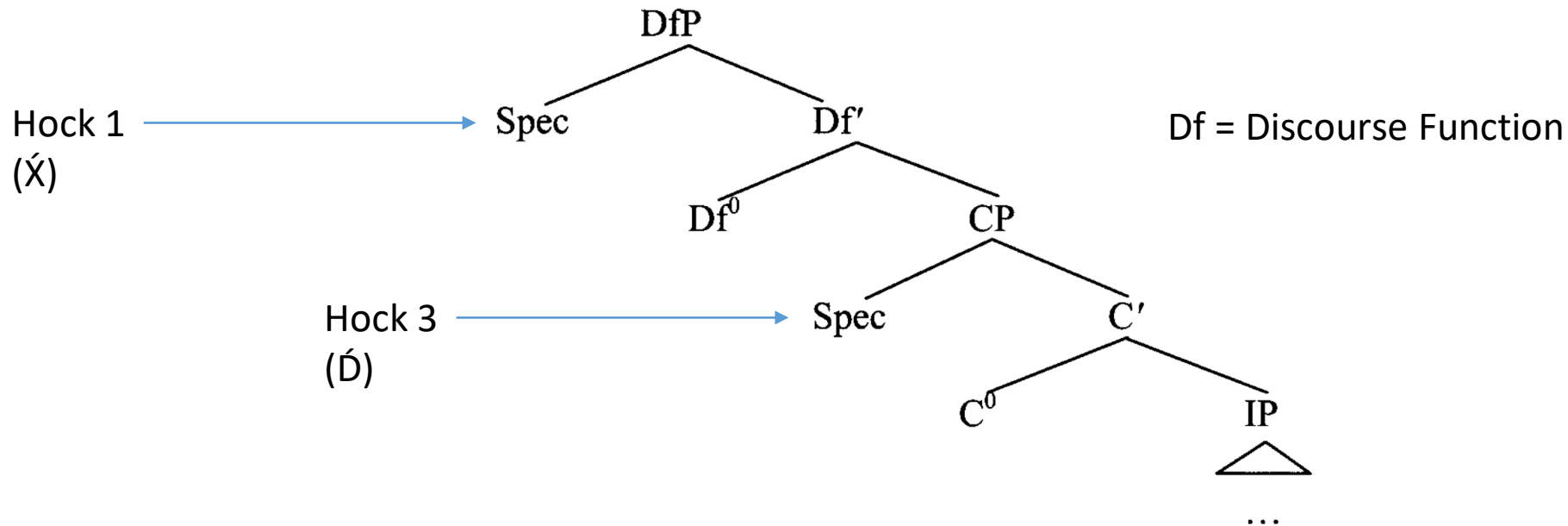
Clitic phenomena are phonological: Hock 1989-1996

- Issues
 - Overgeneration: Preverbs never precede interrogative pronouns (Lowe 2014)
 - Phonology is moving clitics and non-clitics alike: what is the motivation for this claim? (Keydana 2011)
 - Unique?



Clitic phenomena are phonological: Keydana 2011

- Critical of Hock, but still believes Vedic clisis is 100% phonological
- The **accented** elements of the initial string fit into this syntactic template (2011: 112):



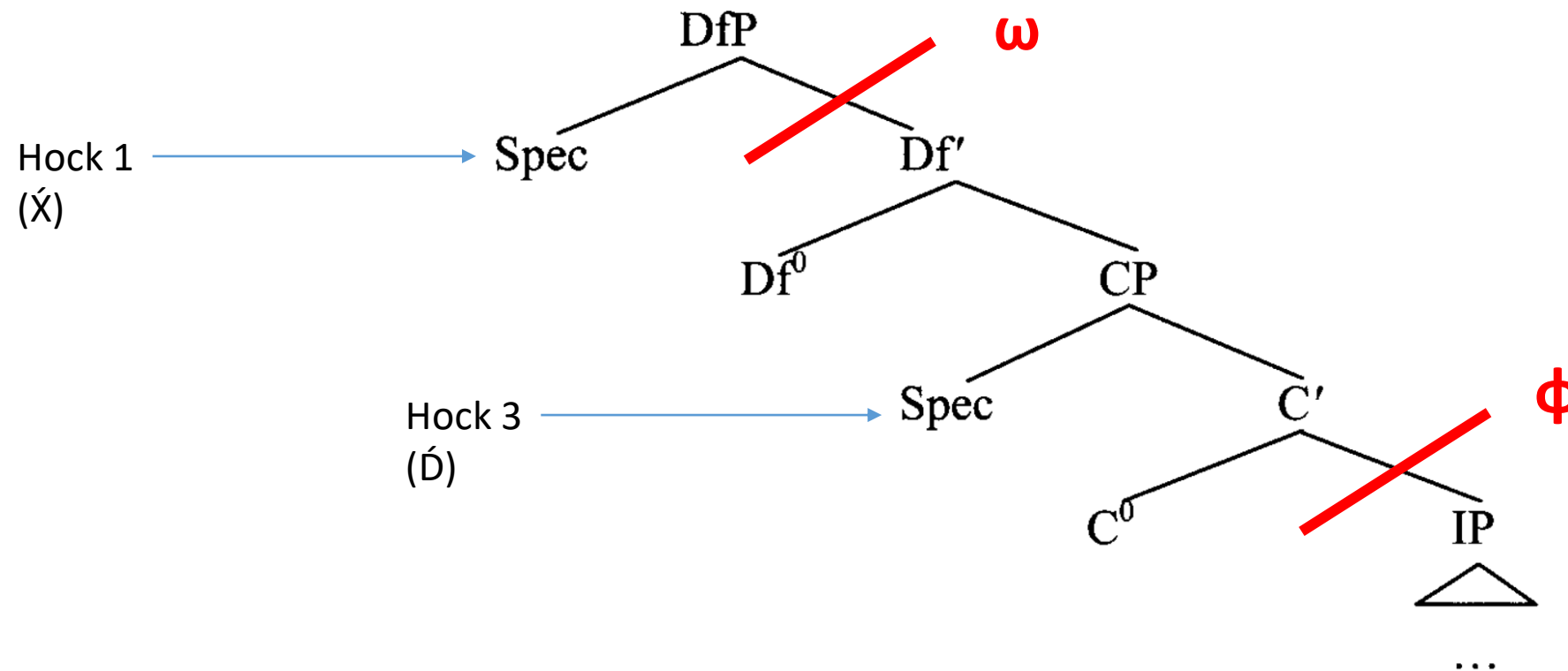
Clitic phenomena are phonological: Keydana 2011

- Hypothesis:
 - WL2 follows first phonological **word** (ω) ✓
 - WL1 follows first phonological **phrase** (ϕ) ?
- What constitutes a ϕ in Vedic? Keydana suggests we should follow Nespor & Vogel (2007:168, emphasis mine):

“The domain of ϕ consists of a C[clitic Group]* which contains a **lexical** head (X) and all Cs on its non-recursive side up to the C that contains another head outside of the maximal projection of X.”
- In this case, Keydana argues, the domain of the first ϕ of the Vedic sentence consists of the “lexical” head C^0 , and everything to its left.

*a disputed phonological category intermediate between ω and ϕ , consisting maximally of ω + clitics. Confusingly, however, a Clitic Group need not exhibit any clitics, in which case it overlaps wholly with ω .

Clitic phenomena are phonological: Keydana 2011



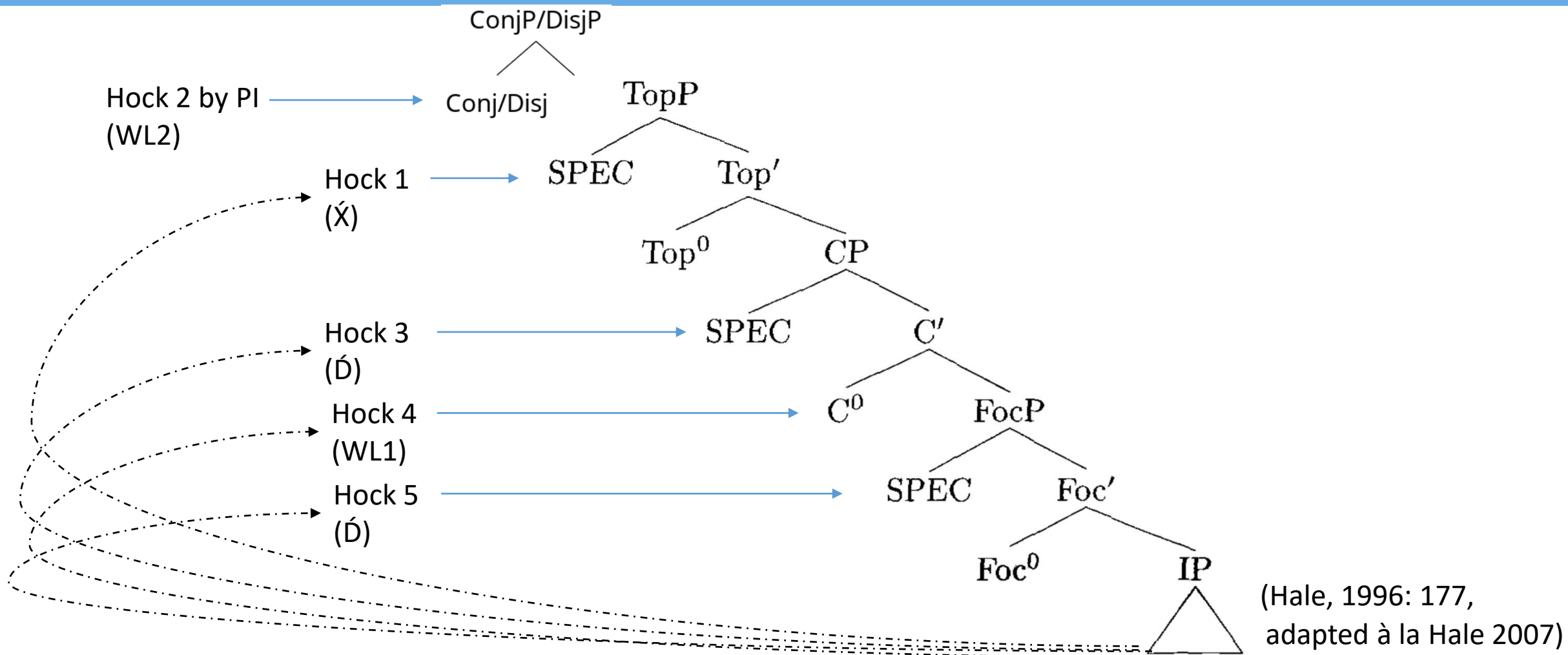
Clitic phenomena are phonological: Keydana 2011

- Issues
 - This definition of ϕ does not, in fact, fit with Nespor & Vogel (2007: 168)
“The intended interpretation of [this definition] is that in which only V, N, and A are considered lexical heads”
 - Even if we were to accept it, note that it is directly analogous to a syntactic definition
“The null hypothesis [is] that clitic placement is a PF phenomenon” (Keydana 2011: 122)
 - Keydana essentially hypothesises that **WL1 move to C⁰**. And he is not the first to do so...

Clitic phenomena are (primarily) syntactic: Hale 1987-2007

- Hale (1987) was the first to treat Vedic clitic phenomena within a Generative framework (then Transformational grammar). Updated & adapted in Hale (1996, 2007).
- Hypothesis:
 - WL2 are generated sentence initially and move to second position by **Prosodic Inversion** (PI) (Halpern 1995).
 - WL1 are generated within IP and **move to C⁰**. Also subject to PI.
 - Hock's position 5 is a FocP generated under CP (Hale 1996 only)

Clitic phenomena are (primarily) syntactic: Hale 1987-2007



Clitic phenomena are (primarily) syntactic: Hale 1987-2007

- Issues
 - FocP under CP was “provisionally” named and not returned to in Hale (2007). So far the only attempt to account for Hock 5.
 - Prosodic inversion à la Halpern (1995) not universally accepted as a possibility, but other options (e.g. Lowe, 2011, 2015) are available to prevent clitics from appearing sentence initially at PF.
 - Still no disambiguation between “wh-words”, demonstratives & preverbs.

More clitics than are dreamt of in your philosophy – Lowe 2014

- Still a primarily **syntactic** account of Vedic clisis
- Observation of the following patterns:
 - Relative pronoun *yád* has a different distribution from interrogative pronoun *kím* (e.g. the latter never follows a preverb in the initial string) → “wh-words” unhelpful category
 - *yád* patterns more closely with demonstrative pronoun *tád*
- Hypothesis:
 - *tád* is optionally enclitic (witness sandhi phenomena) → *yád* is optionally enclitic
 - Important: c. 70% of tokens are clause-initial, so non-clitic
 - Preverbs are optionally **proclitic**

More clitics than are dreamt of in your philosophy – Lowe 2014

- *tad* as enclitic
 - Undergoes **internal sandhi** (i.e. retroflexion) when appearing “late” in the initial string, suggesting it forms a ω with its neighbour (examples from Lowe 2014: 21-23)
 - (5) *pári śyá suvānó akṣā índur ávye mādacyutaḥ*
around **that** pressed_i flows drop_i in_sheep’s_wool moving_ecstatically
“**That** drop having been pressed flows through the sheep’s wool, moved in ecstasy”
(9.98.3)
 - (6) *agníṣ tã víśvā bhúvāni veda*
Agni **those** all worlds knows
“Agnis knows all those worlds” (3.55.10)
 - Occurs 12 times with “unambiguously prosodically independent word”
 - 12 counter examples (10 if we discount disyllabic forms *tásmād*, *tábhir*)
 - Lowe explains these as simply non-clitic occurrences of *tád*

More clitics than are dreamt of in your philosophy – Lowe 2014

- *yad* as enclitic
 - No sandhi diagnostics as <y> is always maintained
 - But positionally, *yád* is equivalent to *tád* because both can be preceded by preverbs, while *kím* cannot, e.g.

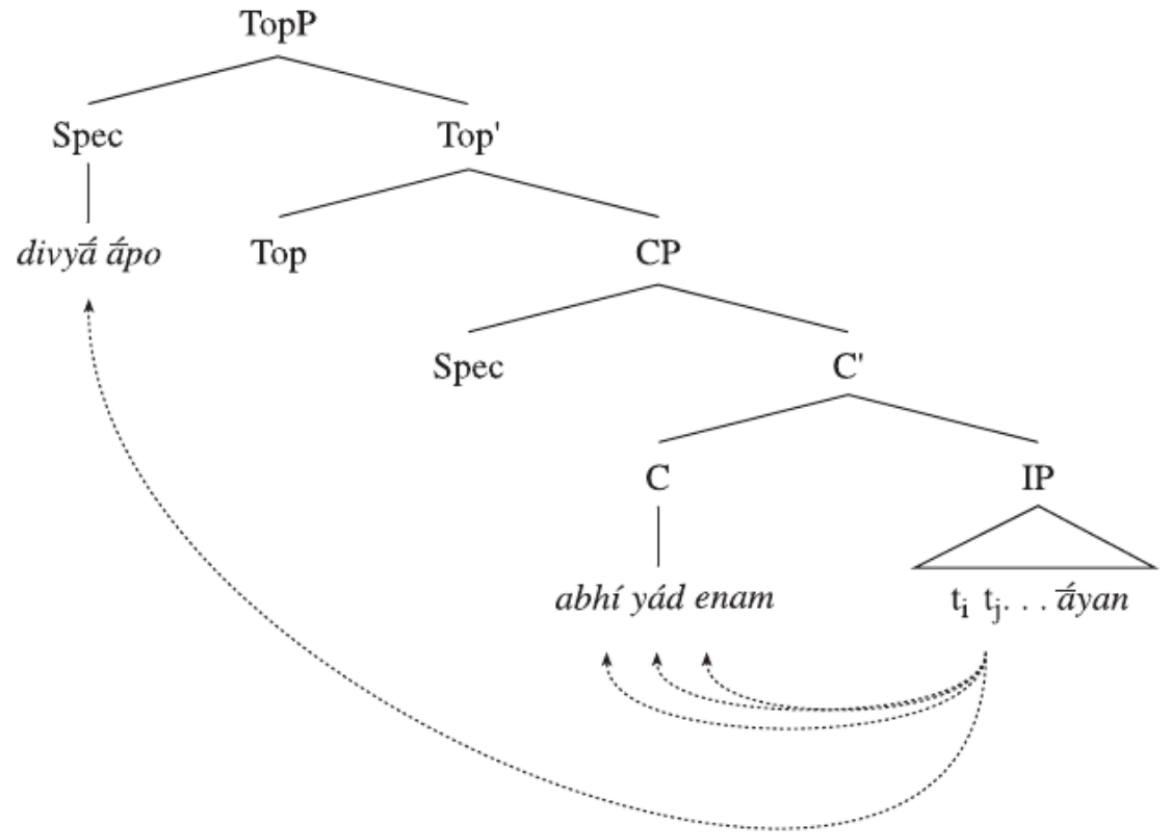
(5) *pári śyá suvānó akṣā índur ávye mādacyutaḥ*
around that pressed_i flows drop_i in_sheep's_wool moving_ecstatically
“That drop having been pressed flows through the sheep’s wool, moved in ecstasy”

(8) *rātáhvyaḥ práti yáḥ śásam ínvati*
receiving-oblation in-return who.REL teaching advances
“...who, receiving the oblation, advances the teaching in return.” (1.54.7)

(9) *kó dámpatī sámanasā ví yūyod*
who.INT married-couple shared-mind asunder separates.SUBJ
“Who would split up a married couple with a singular mind?” (10.95.12)

More clitics than are dreamt of in your philosophy – Lowe 2014

- Syntactic implications:
 - TopP maintained as in Hale (1996)
 - WL2 dealt with in PF (Lowe 2011, 2015)
 - **Interrogatives in [Spec, CP] (sometimes relative pronouns)**
 - WL1 in C⁰
 - Some **relative pronouns, demonstrative pronouns** and **preverbs** in C⁰, forming a clitic cluster with WL1.



(Lowe, 2014: 177)

More clitics than are dreamt of in your philosophy – Lowe 2014

- Issues

- Internal sandhi ≠ (syntactic) clisis

- Sandhi phenomena in RV are messy, but the kind of retroflexion monosyllabic forms of *tád* undergoes are found with verbs such as *sthā* and *stu*, without correlating with movement to C⁰

- *yád* does show some differences in distributions vs. *tád*, such as regularly appearing **before** WL1, while *tád* in correlative clauses can appear **after** WL1:

(10) *vísvam só agne jayati tváyā, dhánam yás te dadāśa mártyaḥ*

everything he_i O-Agni wins with-you, wealth who_i to-you has-given mortal_i

“He wins everything with you, O Agni, the mortal who has bestowed wealth upon you.” (1.36.4)

(11) *yó mártyaḥ śísīte áti aktúbhir, má nah sá ripúr īśata*

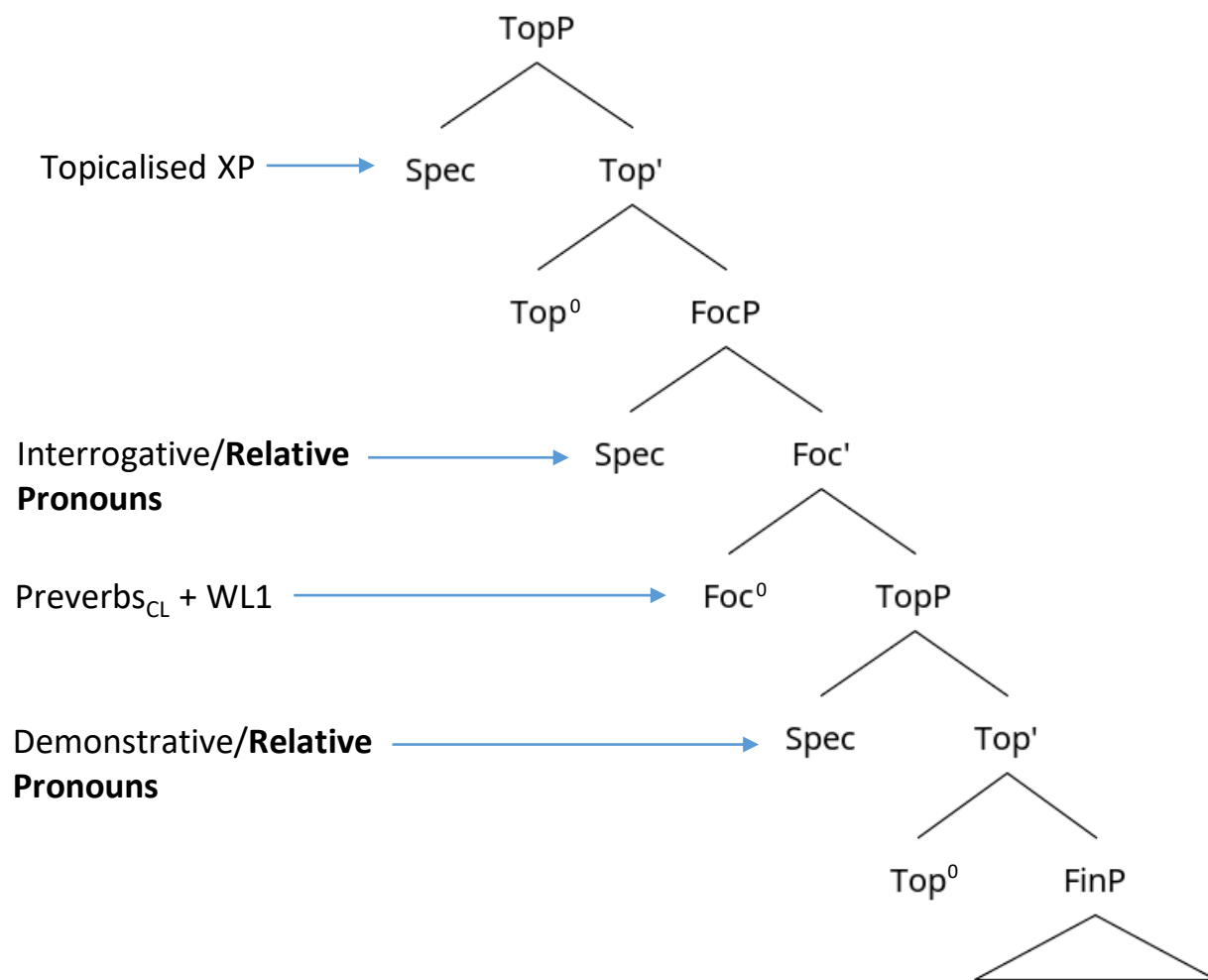
which_i mortal_i sharpens through nights, NEG us this rogue rule.INJ

“The mortal who sharpens [his weapons] through the night, let not this [man,] rogue [that he is,] rule over us.” (1.36.16)

- Later Sanskrit preverbs → prefixes, but *yad/tad* → **full lexical words** (to this day!), usually sentence-initial.
 - Is this expected?

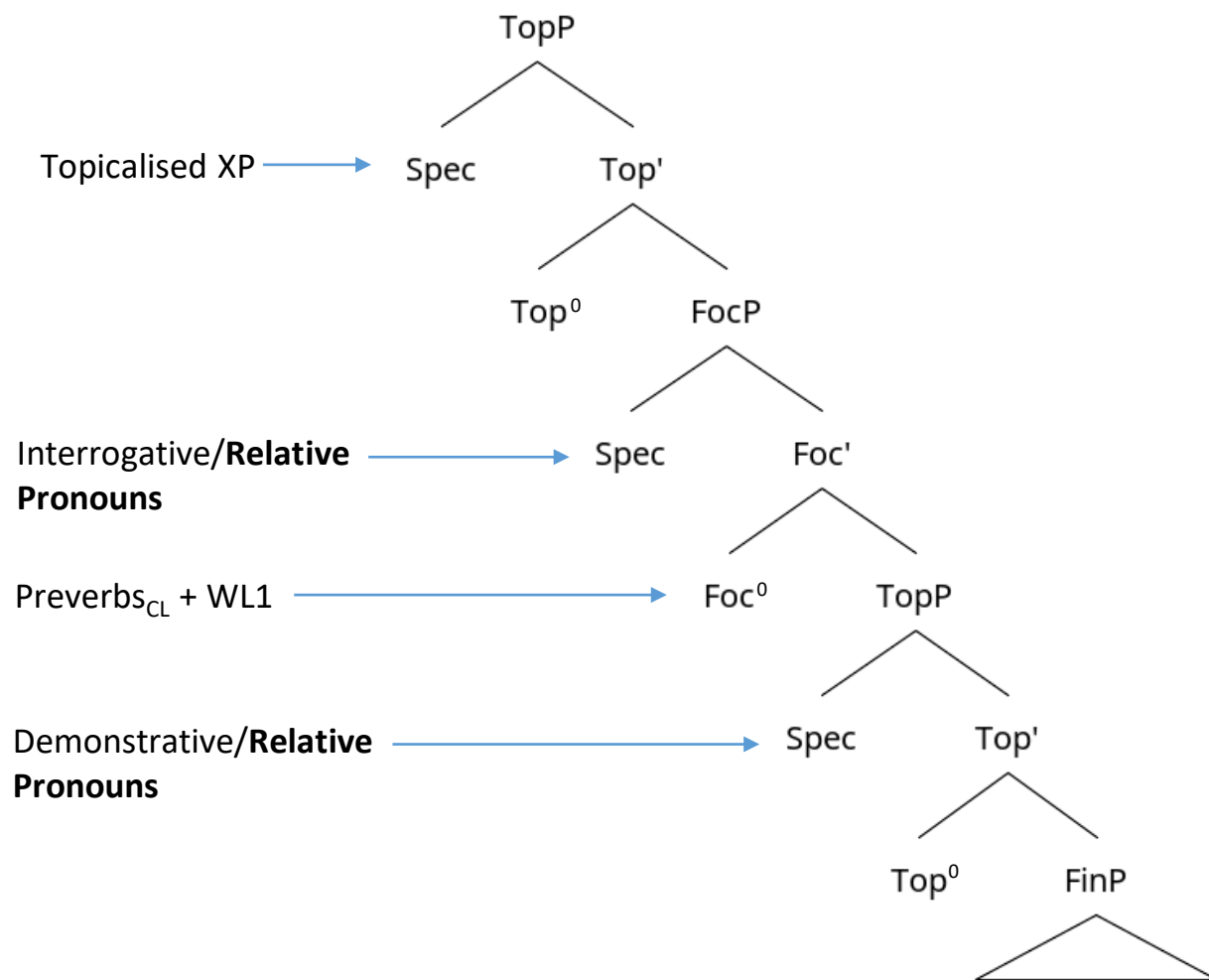


The Disentanglement - Proposal



- A combination of Hale (1996), Rizzi (1997) and Lowe (2014)
- The real troublemaker is the **relative pronoun**
- What happens next?
 - Confounding of movement → FocP vs. TopP
 - Simplification of initial string

The Disentanglement - Questions



- The test: a sentence containing...
 1. A topicalised XP
 2. A relative pronoun
 3. A preverb
 4. WL1...?
- What motivates the Foc⁰ clitic cluster?
- Where did *yad* (*yo-) originate?

Consequences

- The relative pronoun in Vedic Sanskrit seems to find itself at a crossroads
 - It seems to have a distribution overlapping interrogatives and demonstratives
 - It is certainly (re)analysable as a clitic in many situations (?cf. Old Irish, Watkins 1963)
- What could this tell us about the situation in PIE?
 - The LP seems to “collapse” across the IE languages, usually allowing maximally one “topicalised” element – rare whenever there is “wh-movement”
 - Could this “collapse” be linked to the shift from correlative → “plain” relative clauses in other language families?



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