



The macro-history of Chinese syntax and the theory of change

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Part I: Introduction

- Parameters and typology
- Looking ahead

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1. Parameters and typology

- Macro-parameters and language typology
- One example: The nominal-mapping parameter (Chierchia 1998): languages may differ in what semantic type a given category maps into: NP (i.e. N) may map into an argument (type <e>) or a predicate (type <e, t>). If a language maps N into <e> directly (Chinese), then the language:
 - Has generalized bare arguments (allows bare singulars & plurals)
 - Has a generalized classifier system
 - Has no plural morphology
- Questions concerning the mapping parameter:
 - Looking within: Cheng & Sybesma (1998, 1999, 2005), Li (1998, 1999), Yang (1997), etc.

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2. Looking beyond. . .

- Is this a true parameter or is this part of a bigger picture?
Other parameters: head-parameter, pro-drop parameter, wh-parameter. Others could be added (light verb parameter, localizer parameter, telicity parameter, configurationality parameter, etc.)
- Claims: Most of the parameters can be reduced to a macro- (or mega-) parameter: the analysis vs. synthesis parameter (a concept that dates back to Sapir 1933 and before):

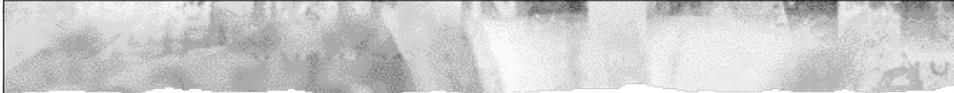
Analytic <-----> Synthetic
Modern Chinese . . . English . . . Romance . . . Inuktitut . . . Mohawk
[cf. Isolating, agglutinative, inflectional, fusional, etc.]

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2. and ahead . . .

- Modern Chinese exhibits high analyticity at the lexical, functional and argument structure levels, which makes it:
 - A (neo)-Davidsonian language par excellence
 - A 'healthy' language (free of 'viruses' that trigger various grammatical operations)
 - A language with canonical Kaynean word order
 - Old Chinese (or Archaic Chinese) as a relatively synthetic language
 - The macro-history of Chinese syntax:
 - OC to MC: emergence of high analyticity, peaking during late MC (Tang-Song dynasties)
 - MC to MnC: limited degrees of synthesis develop that result in the micro-parametric differences in various modern 'dialects'
 - The theory of change: how the changes are to be characterized
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Part II:

Modern Chinese: Some typological features

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1. Light verbs:

- John phoned home. (English)
- John da dianhua hui jia. (Mandarin)
John hit telephone back-to home
張三打電話回家, 張三打電話到家裡, 張三打電話給家裏
 - 打噴嚏、打鼾、打哈欠、打油、打水、打燈、打毛線、打麻將、打字、打主意。
- John-wa Bill-ni denwa shita. (Japanese)
- Tavvakiquitiqarpiit 你們賣不賣煙草? (Inuktitut)
- Washakoty'tawitsherahetkvhta'se' (Mohawk)
He made the thing that one puts on one's body ugly for her.

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2. Verbal simplicity ('purity')

2a. Chinese simplex verbs are not accomplishments.

The expression of accomplishments requires complex expressions:
(a) V-R compounds, (b) resultative phrases, (c) periphrastic causatives.

Chinese	English	Italian
■ jin-lai 'come in'	enter, come in	entrare, ?venire dentro
■ chu-qu 'go out'	exit, go out	uscire, ?andare fuori
■ sha-si 'kill-dead'	kill	
■ da-po 'LV-break'	break	
■ nong-huai 'LV-bad'	break	

Compare:

- John killed him yesterday, #but he did not die.
- Zhangsan sha-le ta san-ci, keshi ta mei si. 張三殺了他三次, 他都没死。
Zhangsan "killed" him 3 times, but he didn't die.

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2. Verbal simplicity (continued)

2b. Chinese activity verbs are atelic:

- English *write, read* etc. are telic when taking a definite object; Chinese *write, read* are atelic:
 - John wrote the letter in 30 minutes, read the book in ...
 - *Zhangsan zai sanshi fenzhong nei, jiu xie-le neifeng xin, ... jiu kan-le na-ben shu.
 - Zhangsan zai 30 fenzhong nei jiu xie-hao-le neifeng xin, ... jiu kan-wan-le na-ben shu.
- In both Chinese and English: When taking a quantified object (as an incremental theme), the verbs exhibit telic properties; when taking bare plurals/mass objects or no objects, they exhibit atelicity.
 - English verbs may be inherently telic, but may be *atelicized* in appropriate environments. [Williams 2006; cf. Borer, Tenny, etc.]
 - Claim: Chinese verbs are inherently atelic, but may be *telicized* in appropriate contexts.
 - Note: definiteness does not imply telicity, cf. zhe shui, zhe gongzuo. (Classifier is omissible in the absence of numeral.)

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2. Verbal simplicity (continued)

2c. Phrasal verbs

English	Chinese
[V ⁰]	[_v V + NP (not DP)]
peel	bo pi 'remove skin'
fish	zuo yu 'catch fish'
eat	chi fan 'eat rice'
ride	qi ma 'ride horse'
slap	da erguang 'hit ear'
sing	chang ge 'sing song'
read	kan shu/bao 'read book/newspaper'
phone	da dianhua 'LV+telephone'

Cf. 'pseudo noun incorporation' in Niuean. [Massam 2001]

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3. Nominal purity: classifiers, etc.

- Chinese, Japanese, etc.
 - yi-ben shu, liang-ge ren, san-zhang zhuoz
one-CL book, 2-CL person, 3-CL table
 - Yi-bei shui, liang-bang rou, etc.
one-cup water, two-pound meat
 - English, French, etc.
 - one book, two persons, three pounds of meat
 - Chinese Ns are “mass” (in the sense that they don’t carry plural morphology). Alternatively, Chinese Ns denote Kinds (like all mass nouns do), hence they need individuator to specify parts of the kind.
 - Chinese Ns are ‘pure’ as verbs are.
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4. Nominal purity: localizers

- English:
 - John went to the teacher. Bill sat at the table. These packages came from John.
 - Mandarin:
 - Zhangsan dao-le laoshi-nar.
Zhangsan went-to teacher-there
 - Lisi zuo zai zhuozi-pang/shang/xia/etc.
Lisi sat at table-side/top/below/etc.
 - zhaxie baoguo shi cong Zhangsan-nar lai-de.
these packages be from Zhangsan-there come-DE
 - English object-denoting Ns can also denote locations; Mandarin object-denoting Ns can only denote objects.
 - Mandarin Ns are more ‘pure’ than English Ns.
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5. Word order tendencies

Japanese: Last year John often Bill **visited**.
Chinese: Last year John often **visited** Bill.
English: Last year John often **visited** Bill.
French: Last year John **visited** often Bill.
German: Last year **visited** John often Bill.
Irish: **Visited** John last year often Bill.

- Modern Chinese: “V2 counting from the right”, kind of.
English: V Complement PP-adjunct
Mandarin: PP-Adjunct V Complement
 - [“Unmarked” Kaynean word order, abstracting away from the effects of XP movements.]
 - Modern Chinese: has V-to-v, but no V-to-I or higher, not even *have* and *be*
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6. *Nobody, each other, 3 books each*

- *Nobody*
1a. John saw nobody. (synthetic: *nobody*)
1b. John didn't see anybody. (analytic: *not ... anybody*)
 - *Each other*
2a. They criticized each other. (合併)
2b. They each criticized the other. (隔開)
 - Bi-nominal *each*
3a. They each bought three books. (隔開)
3b. They bought three books each. (合併)
 - Chinese only uses the discontinuous (analytic) strategy.
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7. *Wh*-questions and *wh*-the-hell

- Wh-questions:
 - **What** did you buy? (wh-movement)
 - Ni mai-le **shenme**? ‘You bought what’ (wh-in-situ)
 - John-wa nani-o katta no? ‘John bought what?’ (wh-in-situ)

 - Tsai (1994) : [OP_Q [you did buy what]]?
 - Wh-in-situ: involves “discontinuous question words”
 - Wh-movement: “continuous question words”

 - What-the-hell (Huang and Ochi 2004)
 - English : What the hell did you buy? *What did you buy the hell?
 - Chinese : Ni daodi mai-le shenme?
you *diaodi* bought *what*
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8. Passives

- Mandarin passives
 - Lisi bei tade pengyou pian le.
Lisi bei his friend cheat LE
‘Lisi get cheated by his friend.’

 - Huang (1999 and references):
 - Chinese *bei*-passive is get-passive
 - Involves Null-operator movement + predication to experiencer subject (akin to *tough*-movement):
[Lisi_i bei [_{IP} Op_i [_{IP} tade pengyou pian-le t_j]]
 - The embedded IP is treated as a secondary (lambda) predicate.

 - “Morphological passive” vs. “syntactic passive”
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9. Gapping

- English:
 - John eats rice and Bill noodles.
 - John put a book on the table and 2 pens on chair.

 - Mandarin:
 - *Zhangsan chi fan, Lisi mian.
 - Zhangsan fang-le yi-ben shu zai zhuozi-shang, liang-zhi bi zai yizi-shang.

 - Chinese has no canonical gapping.
 - Ref.: Johnson (199x), Larson (1991), S-W Tang (1998)
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10. Coercion: English vs. Chinese

- *begin*
 - John began a book.
 - Zhangsan kaishi *(nian, xie, bian) yi-ben shu.
Zhangsan began *(read, write, edit) one-CI book

 - *fast*
 - John is a fast typist.
 - *Zhangsan shi ge hen kuai de daziyuan.
Zhangsan be CI very fast DE typist
 - Zhangsan shi ge dazi da-de hen kuai de daziyuan.
Zhangsan be CI [type type-DE very fast] de typist
Zhangsan is a typist who types very fast.

 - *Read*
 - I read Chomsky this morning. *wo jinzhao nian-le Chomsky.
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11. Resultatives

- Subject oriented resultatives
 - *John ate tired. John ate himself tired.
 - Zhangsan chi-lei-le.
Zhangsan ate-tired-Perf.
- Causativization of unergative resultatives
 - Zhangsan kan-lei-le baozhi.
Zhangsan read-tired-Perf newspaper
Zhangsan read newspapers and became tired.
 - Baozhi kan-lei-le Zhangsan.
newspaper read-tired-Perf Zhangsan
Lit: The newspaper read John tired.
(The newspaper caused John to 'read-tired'.)
 - *The newspaper read John tired.

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12. Other properties

- Radical Pro Drop
 - Did John see Bill? Ans: yes, *(he) saw *(him). (English)
 - Did John see Bill? Ans: yes, (he) saw *(him). (Italian, etc.)
 - Zhangsan kanjian Lisi le ma? Ans: (ta) kanjian (ta) le.
Zhangsan see Lisi LE Q? Ans: (he) saw (him) LE.
Did John see Bill? Ans: Yes, saw.
- Nominal small clauses, verb ellipsis, etc.
(鄧思穎 1998, 2004, 2005, etc.; Liu 2005 (adjectives); Lin 2001, 2005; etc.)
- Syntactic 'conflation' (Huang 1997, etc.)
- Unselectiveness of arguments (Lin 2001)

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Summary: Modern Chinese

1. Has generalized bare N (denoting kinds)
 2. Has a generalized classifier system
 3. Has no plural morphology
 4. Localizers needed for place-denoting Ns
 5. Action verbs are atelic
 6. No simplex accomplishments
 7. Resultative compounds or phrases
 8. Periphrastic causatives
 9. Extensive use of light verbs.
 10. Complex intransitives (“pseudo-incorporation”)
 11. No ‘coercion’
 12. No agreement, tense, case morphology
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Summary: more properties

1. Word order: “V2” counting backwards.
 2. No *wh*-movement, Split *what-the-hell*
 3. No V-to-I movement (only V-to-v movement)
 4. No expressions like *nobody*, *each other*, or ‘3 books each’
 5. No canonical *gapping* constructions
 6. Radical Pro drop
 7. Unselectiveness of subject and object (Lin 2001)
 8. Subject-oriented resultatives (*John ate tired*)
 9. Causativized unergatives (*The book read me tired.*)
 10. Nominal small clauses (Tang 2005)
 11. “I criticized 3 years of Bush”
 12. “He hu- his -mour, you blew your cow”
 13. And more . . .
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Explaining the clustering

- Fact: these properties seem to *cluster* together in one language-type to the exclusion of another (cf. Greenberg's implicational universals).
- Why the clustering: because they are manifestations of the same generalization.
- Traditionally: head parameter, wh-movement parameter, mass-count (or semantic-mapping) parameter, telicity parameter, light-verb parameter, etc.
 - Problem: still not general enough.
- The macro-parameter: These properties are all manifestations of high analyticity. Chinese lexical items are extremely pure (i.e. analytic) at three levels:
 - Lexical categories: no 'virus' driving derivation
 - Functional categories: no 'virus' driving movement, etc.
 - Argument structure: conceptual structures are not strictly grammaticalized

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Explaining the clustering

- NB: There isn't really anything like [+analytic], [-analytic], of course. But the parameter can basically be reduced to the (traditional) syntax-lexicon division, as follows
 - Lexical parameterization hypothesis: the difference in the nature of lexical items is the source of the parameter.
 - The difference itself comes from whether a given item has undergone certain lexical operations, thereby picking up 'viruses' that trigger movement, etc. (< in turn, the difference arises from the difference in degree of grammaticalization—for example.)
 - Clustering: comes from the natural tendency for properties to hold cross-categorially, barring specific situations that override the default.
 - English: has substantial L-syntax, and S-syntax
 - Chinese: has little or no L-syntax. Mainly S-syntax.

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Making sense of the clustering:

Chinese Ns are 'pure', so:

1. Has generalized bare arguments
2. Has a generalized classifier system
3. Has no plural morphology
4. Localizers needed for place-denoting Ns

Chinese Vs are 'pure', so:

1. Action verbs are atelic
 2. No simplex accomplishments
 3. Resultative compounds or phrases
 4. Periphrastic causatives
 5. Extensive use of light verbs.
 6. Complex intransitives ("pseudo-incorporation")
 7. No 'coercion'
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Making sense of the clustering:

Purity: absence of viruses (inflectional morphology), so:

1. No agreement, tense, case morphology
2. No V-to-I movement (only V-to-v movement)
3. No *wh*-movement, Split *what-the-hell*
4. No NP-movement for long passives
5. Word order: "V2" counting backwards.
6. No expressions like *nobody*, *each other*, or '3 books each'
7. No canonical *gapping* constructions

Purity: no argument structure as formal feature, so:

1. Radical Pro drop
 2. Unselectiveness of subject and object (Lin 2001)
 3. Subject-oriented resultatives (*John ate tired*)
 4. Causativized unergatives (*The book read me tired.*)
 5. And more...
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Prediction (eg): Classifier > No *wh*-movement; etc.

Light verbs and classifiers: parallel

- Conceptually, two sides of the same coin:
 - Mass nouns => need classifiers
 - Atelic verbs = 'mass verbs' => need V + Result
 - Stative verbs = 'mass verbs' => need inchoative or causative LVs
 - Classifiers classify nouns and telicize masses
 - Light verbs classify events and (may) telicize events
 - Nominal classifier = light noun = auxiliary noun
 - Light verb = verbal classifier = auxiliary verb
- Typologically: many languages show the cluster
- Historically: in the history of Chinese syntax, the rise of classifiers and the rise of light verbs occur in parallel:
 - beginning in the two Han dynasties and maturing in Tang-Song.
 - 漢語輕動詞結構的興起與個體量詞的使用在歷史上同步發展：始於漢魏六朝而成熟於唐宋。(cf. Peyraube, etc.) “打”的出現應在唐宋之後，但“令，使，為，以，etc.”則相當早。(cf. 趙歧注 etc.)

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Wh-movement vs. wh-in-situ

- English (Dylan Tsai 1994):
 - Who, what, where, when, etc.
 - Whoever, whatever, wherever, etc.
 - Somewhat, somehow, somewhere, etc.
- Chinese
 - Shei, shenme, nali, shenmeshihou, etc.
 - Interrogative (under Q-morpheme)
 - Existential (in non-veridical contexts)
 - Universal (in the context of *dou* 'all')
 - Chinese wh-words are analytic (discontinuous), English wh-words are synthetic.
- Similarly, *what-the-hell* vs. *daodi ... what*

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Summary:

- The clustering reflects the analysis-synthesis difference at three levels:
 - Lexical categories (light verbs, classifiers, syn-sem mismatches, etc.)
 - Functional categories (n-words, reciprocals, tense, agreement, wh-movement, etc.)
 - Argument structure as grammatical features (e.g., Huang 2006, Lin 2001, etc.)
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Hence, ...

- Chinese as a Davidsonian language par excellence
 - Under lexical decomposition: light verbs, classifiers, result-states, localizers are all overtly manifested.
- Chinese as a 'healthy' (virus-free) language
 - No appropriate triggers for wh-movement, NP-movement, Case-checking movement, etc.
 - Kaynean language par excellence
- Chinese as a "discourse-oriented" language
 - Radical pro-drop, etc.

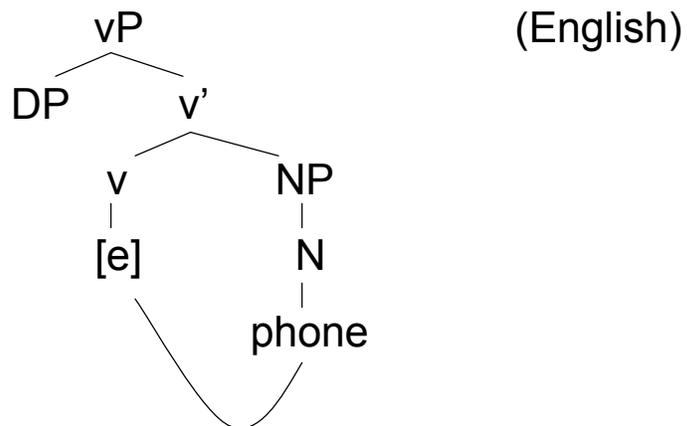
NB: Pre-Modern (Tang-Song) Chinese [800-1100] is most analytic. (About the same time as OE.)

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For Example . . .

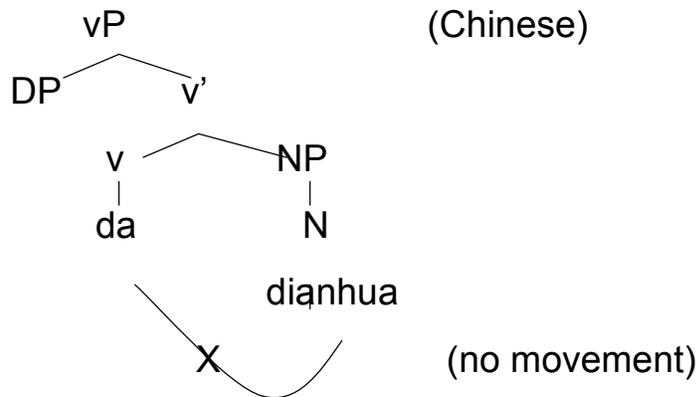
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Decomposition of verb 'phone'



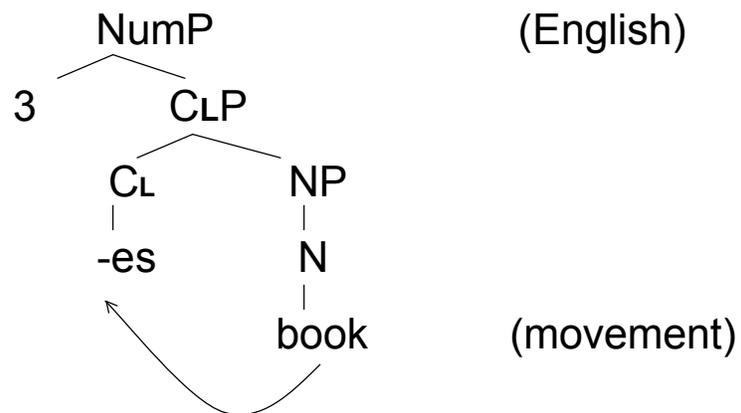
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Decomposition of verb 'phone'



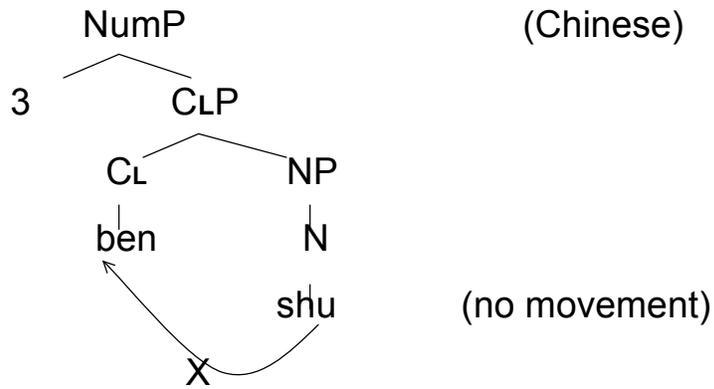
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Decomposition of '3 books'



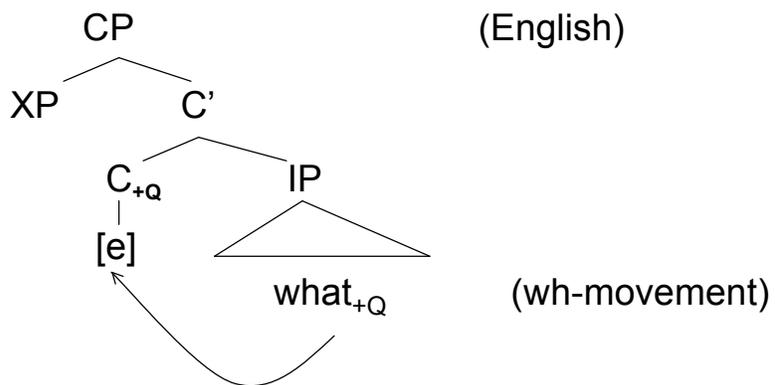
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Decomposition of '3 books'



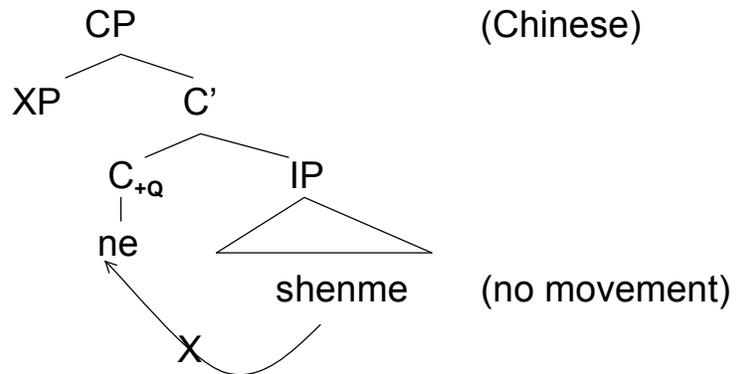
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Decomposition of 'what'=Q+what



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Decomposition of 'what' = Q+what



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