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

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Part I: Introduction

- Parameters and typology
- Looking ahead
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:

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
[cf. Isolating, agglutinative, inflectional, fusional, etc.]
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

Part II:

Modern Chinese: Some typological features
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
- John-wa Bill-ni denwa shita. (Japanese)
- Tavvakiquitiqarpit 你們賣不賣煙草？ (Inuktitut)
- Washakoty’tawitscherahetkvhta’se’ (Mohawk)
  He made the thing that one puts on one’s body ugly for her.

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.

<table>
<thead>
<tr>
<th>Chinese</th>
<th>English</th>
<th>Italian</th>
</tr>
</thead>
<tbody>
<tr>
<td>jin-lai ‘come in’</td>
<td>enter, come in</td>
<td>entrare, ?venire dentro</td>
</tr>
<tr>
<td>chu-qu ‘go out’</td>
<td>exit, go out</td>
<td>uscire, ?andare fuori</td>
</tr>
<tr>
<td>sha-si ‘kill-dead’</td>
<td>kill</td>
<td></td>
</tr>
<tr>
<td>da-po 'LV-break'</td>
<td>break</td>
<td></td>
</tr>
<tr>
<td>nong-huai 'LV-bad'</td>
<td>break</td>
<td></td>
</tr>
</tbody>
</table>

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,他都沒死.
  Zhangsan "killed" him 3 times, but he didn’t die.
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.)

2c. Phrasal verbs

<table>
<thead>
<tr>
<th>English</th>
<th>Chinese</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ V⁰ ]</td>
<td>[v V + NP (not DP)]</td>
</tr>
<tr>
<td>peel</td>
<td>bo pi ‘remove skin’</td>
</tr>
<tr>
<td>fish</td>
<td>zuo yu ‘catch fish’</td>
</tr>
<tr>
<td>eat</td>
<td>chi fan ‘eat rice’</td>
</tr>
<tr>
<td>ride</td>
<td>qi ma ‘ride horse’</td>
</tr>
<tr>
<td>slap</td>
<td>da erguang ‘hit ear’</td>
</tr>
<tr>
<td>sing</td>
<td>chang ge ‘sing song’</td>
</tr>
<tr>
<td>read</td>
<td>kan shu/bao ‘read book/newspaper’</td>
</tr>
<tr>
<td>phone</td>
<td>da dianhua ‘LV+telephone’</td>
</tr>
</tbody>
</table>

Cf. ‘pseudo noun incorporation’ in Niuean. [Massam 2001]
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 individuators to specify parts of the kind.

- Chinese Ns are ‘pure’ as verbs are.

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.
  - zhexie ba guo 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.
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

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.
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)

- Tsai (1994) \([\text{OP}_0 \ [\text{you did buy what}]]\)?
  - 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

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):
    \([\text{Lisi, bei } [p, \text{Op}, [p, \text{tade pengyou pian-le } t]]]]\)
  - The embedded IP is treated as a secondary (lambda) predicate.

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

10. Coercion: English vs. Chinese

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

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

- **Read**
  - I read Chomsky this morning. *wo jinzao nian-le Chomsky.
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.

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.

- Syntactic 'conflation' (Huang 1997, etc.)

- Unselectiveness of arguments (Lin 2001)
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
10. Complex intransitives (“pseudo-incorporation”)
11. No ‘coercion’
12. No agreement, tense, case morphology

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 . . .
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

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.
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’

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…

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.

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
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.)

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.)
For Example . . .

Decomposition of verb ‘phone’

(English)
Decomposition of verb ‘phone’

Decomposition of ‘3 books’
Decomposition of ‘3 books’

```
NumP
  3
  CLP
    CL
      NP
        ben
        shu (no movement)
```

Decomposition of ‘what’=Q+what

```
CP
  XP
    C'
      C+q
        [e]
        what+q (wh-movement)
```
Decomposition of ‘what’ = Q+what

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