Variation and Change:
A parametric approach

Part I:
Syntactic features of OC
Typological features of OC

- No need for light verbs
  - Wu Wang dian Yue Wang. WW phoned YW.
  - 就: fan 'rice, give rice (feed one with rice)' 有一母見信 取信

- No pseudo-incorporation
  - yu 'to fish' (→ da yu 'do fish' (漁>打魚))
  - yu 'to bathe' → xi yu 'wash a bath' (浴 > 洗浴), pu 'sun-bathe' > sai taiyang 'bathe [in] the sun' (陽 > 晒太陽)

- Simplex accomplishments, etc.
  - 小、好、易: xiao/hao/e 'small/good/bad, belittle/like/dislike'
  - 舊 shou 'give, receive'
  - 似: yu 'to fish'
  - 死: si 'die, die-for' (e.g., si guo 死國 'die for the country')
  - 衣: yi 'cloth, clothes'; 食 shi 'food, eat, feed' (禮記: 食人之寒則衣之，問人之肥則食之，納人之正則正之)
  - 王: king, make-king, consider-king (左傳: 莊公問王我乎？)
  - you 友: friend, befriend; zi 子: son, take-as-son; etc. (若子：友風而子西)

Features of OC (cont.)

- Telicity
  - 許 shi 'kill': 臣弑其君，子弑其父，非一朝一夕之故, ...
  - 破 po 'break', chu 'exit' ru 'enter': 破窗而入

- Derivational morphology
  - Mei reconstructed *s- as a prefix for the causative, directive, etc.
  - Feng (p.c.): 政 (使政), 教 (使教), 敎 (DO田). The right-side radical is probably the written form of the prefix.

- No resultative compounds
  - The V-R compound was not fully established until Tang-Song.

Mei 1991 and references
- There was no need to develop a compound when a simplex word could serve the needs.
Features of OC (cont.)

- No need for classifiers
  - san niu ‘3 cows’, er yang ‘2 sheep’ 五禮、五玉、三帛、三鬟 …
  - but yi-dan shi ‘one bamboo-basket of food’ 一箪食, 一瓢飲 for mass nouns

- Has plural morphology:
  - Sagart 1993: infix -r- (Peyraube 1996 relates it to classifiers)
  - Wh-interrogatives: moved (Aldridge 2002, and Aldridge 2006)
    - 誰誰欺？ wu shei qi?
    - ‘Who did I deceive?’

- Wh-indefinites: “extremely limited” (Aldridge 2006; more after Han)

- Has suo for object relative clauses (movement to T; Aldridge 2006, etc.

<table>
<thead>
<tr>
<th>Has NP-movement (e.g. be-passives)</th>
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<tbody>
<tr>
<td>萬乘之國，被關於越。</td>
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<tr>
<td>10k-chariots DE nation—en surround at Zhao</td>
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<tr>
<td>A nation of 10k chariots was surrounded by/in Zhao:</td>
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</tbody>
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Features of OC (cont.)

<table>
<thead>
<tr>
<th>The development of localizers (Peyraube 2003, Guo 2002):</th>
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<tr>
<th>Archaic:</th>
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<tbody>
<tr>
<td>八佾舞于庭, 是可忍也, 孰不可忍也?</td>
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<tr>
<td>ba-you wu yu ting, shi ke ren ye, shu bu ke ren ye?</td>
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<tr>
<td>Ba-you dance at home, this can tolerate Prt, ...</td>
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<tr>
<td>(As for dancing the 8x8 dance in hallway/home, if this can be tolerated, what cannot be tolerated?)</td>
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<tr>
<td>不至堯之子而至舜. (Does not go to Yao's son, but goes to Shun.)</td>
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<tr>
<td>妇人笑于房. (The woman laughed in the room.)</td>
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<tr>
<td>王立于沼, 王坐于堂, etc. (The king stood at the pond, sat in the hall.)</td>
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</tbody>
</table>
Features of OC (cont.)

- Pre-Medieval: (localizer needed for object-denoting Ns, while no preposition 'at' was optional)
  - [Xiangyu] killed the Puppet Emperor [e] River-South.
  - 殺義帝江南. [史記高祖本紀八]
  - sha Yi Di jiang-nan.
- 桓公與夫人蔡姬戲船中. [史記世家]
  - Huan Gong yu fu-ren Caiji xi chuan-zhong
  - Lord Huan and woman Ms.-Tsai play boat-interior
- 習后、史良娣葬長安城南. [漢書列傳]
- 習王憐曰：「天下同宗，死長安葬長安，何必來葬為！」

Features of OC (cont.)

- Postverbal PP-adjuncts (VP movement across adjuncts a la Kayne?)
  - 季氏旅於泰山 . . . Ji traveled on Mt. Ta. [論語八佾]
  - 戰車之國被圍於趙. [史記列傳 魯仲連]
    - A 10k-chariot-kingdom got surrounded by Zhao.
  - 孟子見梁惠王於齊...
    - Mengzi jian Liang Hui-Wang yu qi. Mencius saw King Hui of Liang in Qi.
  - 出於幽谷。 Emerged from the valley.
Has canonical gapping (He 2005):

- 為客治飯, 而自__藜藿。 (淮南子·説林)
  Wei ke zhi fan, er zi ___ lihuo. (Huainanzi: Shuolin)
  ‘For guests cook rice and for oneself, ___ grass.’

- 霸為博士，堪__譯官令。 (漢書·儒林傳)
  Ba wei boshi, kan ___ yi guanling. (Hanshu: Rulin Zhan)
  Ba was an official scholar and Kan, ___ the chief-of-staff.

- 故天子聽政，使公卿至於列士獻詩，聲獻曲，史獻書，師__箴，瞍__賦，瞍__譜，百工__諫（國語·周語）（春秋左丘明）
  gu tianzi tingzheng, shi gongqing zhiyu lieshi xian shi, gu xian qu, shi xian shu, shi ___ zhen, shou ___ iu, meng ___ song, bai-gong ___ jian.
  ‘So emperor govern cause high-lords to various-officials contribute poetry, musicians contribute music, historians contribute reports, teachers ___ advisory documents, blind1 ___ poetic-genre1, blind2 ___ poetic-genre2, various-officers ___ corrective-advice’

Features of OC (cont.):

- History of unaccusatives—locative and directional complements (Peyraube 2005)
- Archaic: pre-verbal subjects
  - niu yang xia lai (Shijing) 牛羊下来（诗经）
    cow sheep down come
  - Jihou da qu qi guo (Zhan-guo Ce) 纪侯大去其国
    Ji-Marques great leave his country
    The Marguis of Ji left his country in great style.
  - 孔子趋出，子路趋而出（荀子）
    kongzi qu chu, zilu qu er chu
    Confucius/Zilu hurried up and left.
  - Zou chu men. 走出门（韩非子）
    run exit gate
    (He) ran and went out of the gate.
Features of OC (cont.)

- MC (Late Han to 6 dynasties): postverbal subjects
  - Sheng chu ci gu. (Lun Heng, 200 AD). 生出此叙（论衡）
    Give-birth come this mulberry
    That mulberry tree emerged.
  - jiban sheng chu er ganzhe (FBXJJ)
    at-that give-birth come two sugarcane.
    At that moment, two sugarcanes sprang up.
  - huran zi yong chu er chi-shui, yi leng yi nuan
    sudden naturally surge come-out two pond-water one cold one warm
    Suddenly two pond-waters sprang up, one cold one warm.

- Peyrabue: V+Vd+NP, derived from NP+V+Vd after the NP has been moved into the post-Vd position

OC properties: summary

1. No light verbs
2. No pseudo-incorporation
3. Has simplex accomplishments
4. Has causative, executive morphology
5. No resultative compounds and phrases
6. Little use of periphrastic causatives
7. Has plural morphology
8. No (count) classifiers
9. No need for localizers
10. Has wh-movement, not indeterminates
11. Has relativization movement (suo)
12. Has NP-movement (ergative and passives)
13. Has VP movement (not Kaynean order)
14. Has gapping (has V-to-I)
Part II

The macro-history of Chinese syntax

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The macro-history

- Archaic Chinese (OC) = synthetic
- Medieval Chinese (MC) = rise of analyticity
- Late Medieval: fully analytic
  - Proliferation of light verbs (弄・教・打, etc.).
  - Atelicity, full grown classifier system, localizers, etc.
  - Resultative compounds, discontinuous Phrase resultatives.
  - No wh-movement, no only-phrase movement, no VP movement
- Modern Chinese: has undergone some degree of grammaticalization:
  - The development of modern aspectual suffixes
  - The auxiliarization of verbs (development of modern co-verb constructions--ba, gen), gapped passives, etc.
  - Dialectal variations representing various degrees of synthesis

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The process . . . What and how?

- **OC → MC:**
  - Grammaticalization → over-grammaticalization → P-ambiguity → Adaptation (reanalysis) → compensation (as a result) → "face lift"
  - [synthetic → analytic] "peak" at end of MC (Sui).

- **MC → MnC:** (from Tang-Song onwards)
  - Grammaticalization that results in various degrees on mild synthesis.
  - [Beginning of a new cycle]

The process

Based on works by Mei (1980, 1988), Sargart (1993), Yu, M. (1984), AC had affixes expressing causativization, denominalization (Mei’s *s-*), plurality (Sargart’s *–r-*), nominalization (*m-). Also Benedict’s (1972) *-n for collectiveness. Another sort of ‘prefix’ was based on the voicing contrast of initial consonants (清浊别义) which could be seen as reflexes of earlier ‘real’ prefixes as well. The loss of such affixes led to the rise of these new constructions, among other things (such as the genesis of tones and other prosodically conditioned changes; cf. Feng 2001, 2005).
The process ...

(Most likely) what happened: Loss of the affixes, voicing-distinction-as-prefix, etc., led to strong P-ambiguity (Roberts 2007 and references) which led to adaptations that resulted in:

- High syntactic analyticity
- Other changes (tonal genesis, disyllabification, etc.; Feng 2001, 2005 on prosody and syntactic change; Wang 2006 on language as a CAS)

The case for tonal genesis and disyllabification (Chao 1968):

shi shi shi shi shi shi shi shi shi shi shi shi shi shi shi shi shi shi shi shi shi shi shi shi shi shi shi shi shi shi shi shi shi shi shi shi shi shi shi shi

A poet of the stone house by the name of Shi, loves eating lions, vows to eat 10 lions. He often goes to town to see lions. At 10 am, it happens that 10 lions have come to the city. At that moment, …

The mechanism

For the child: There obviously couldn’t be any direct change like *s- → da do*, *s- → shi* cause, *∅ → shi* etc. More likely: the rise of analyticity ← the loss of head-movement.

AC (and Pre-AC) affixes like *s-, -r-, etc., were functional categories with [uninterpretable, +EPP/strong] features that trigger head movement. Hence there were denominal verbs, simplex accomplishments, simplex telics, Ns can function as count nouns needing no classifiers, NPs may contain locational meaning ingredients.

Loss of the overt affixes → P-ambiguity → opacity → reanalysis (= 'asterisectomy' with resulting loss of the causative, denominalizer, etc.)

Compensation of the loss: recruitment of already available light verbs, light nouns, classifiers (=measure words), etc.

These newly recruited elements were (at least partially) interpretable; they do not trigger head movement. → analytic/periphrastic forms

The light verbs/nouns were already available in AC, but were "shelved", due to blocking by the availability of the synthetic forms. (Cf. Embick 2007)
Part III: Grammar Change

- OC to MC: analyticization
- MC to MnC: some degrees of synthesis

Rise of lexical analyticity: loss of head-movement

a. The rise of light verb constructions: *yu ‘to fish’ → da *yu ‘do fish’ (渔>打鱼)
b. The rise of periphrastic causatives: *xun ‘to tame’ → *shi *shun ‘cause to be tame’ (驯之 > 使之顺)
c. The rise of compounds and pseudo-incorporation: *yu ‘to bathe’ → *xi *yu ‘wash a bath’ (浴 > 洗浴), *pu ‘sun-bathe’ → *sai *taiyang ‘bathe [in] the sun’ (曝 > 晒太阳)
d. Rise of classifiers: *san *niu ‘three cows’ → san *tou *niu ‘3 CL cow’ (三头 > 三头牛)
e. Rise of localizers: *bayou *wu *yu *ting ‘dance the 8x8 in hall’ → zai *ting- *zhong *tiao *bayou *wu ‘dance the 8x8 at the hall’s interior’ (八佾舞于庭 > … 在庭中跳八佾舞) [Peyraube 2003, Guo 郭锐 2002, Wei 2000, etc.]
OC > MC: Rise of light verb construction and pseudo-incorporation:

- **AC:**
  \[[VP *s-DO [NP yu/fish_N]] \rightarrow [VP *s-yu/fish_V [NP <t>]]\]
  \[*s- +鱼_N \rightarrow 魚_V\]
  **NB:** \(*s- = [+u, +strong/EPP]*) (triggers head-movement)

- **MC/MnC:**
  \[[VP da_DO [NP yu]] \rightarrow da yu ‘do fish’\]
  \[ 打 鱼 (LV construction)\]
  \[[VP zhuo_DO [NP yu]] \rightarrow zhuo yu ‘catch fish’\]
  \[ 捉 魚 (pseudo-incorp.)\]
  **NB:** \(da, zhuo = -s/EPP\) (does not trigger movement)

→ Come from the loss of N-to-V movement

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Rise of periphrastic causatives, etc.:

- **AC:** \(shi 食 ‘food; shi zhi 食之 ‘eat it; shi Hanxin 食韩信 ‘feed Hanxin’\)
  \[[VP *s-CAUSE [VP *s-DODHAVE [NP shi_N]]] \rightarrow 食韩信–have-cause = feed\]
  **MC:** \(ling zhi shi 今之食 ‘make him eat’; shi zhi you shi 使之有食 ‘cause him to have food’ (致动)\)

- **AC:** \(hao 好 ‘good, like,’ (Feng 2005)\)
  \[[VP v_CONSIDER [VP zhi BE [NP hao_N]]] \rightarrow 好之 ‘like it’\]
  **MC:** \(yi zhi wei hao 以之为好 ‘consider it good’\)
Rise of classifiers:


\[ \text{AC: } [\text{Num } 3 [\text{CL } \text{4r-} \text{NP cow}]] \rightarrow [\text{Num } 3 [\text{CL cow} \text{NP } \text{<cow> }]] \]
\[ \text{MC: } [\text{Num } 3 [\text{CL tou} \text{CL NP cow}]] \quad \text{三牛 > 三头牛} \]

Borer (2005): plural is the classifier, the Divider. Cf. also Li (1998, 1999), where plural is not treated as CI, but an empty plural node allows N-raising to Num'.

Rise of localizers:


\[ \text{AC: } \text{to } [\text{LP PLACE (of) NP John}] \rightarrow [\text{John} \text{PLACE } \text{<John>}] \]
\[ \text{Bu zhi Yao zhi zi, er zhi Shun 不至尧之子, 而至舜 ‘not to Yao’s son, but to Shun’} \]

\[ \text{MC & MnC: } \text{to } [\text{LP place (of) NP John}] \rightarrow ... \rightarrow [\text{John(s) place}] \]
\[ \text{zhi Shun chu, dao Shun de dijiang 至舜处, 到舜的地方 ‘to Shun’s place’} \]
Summary:
- Loss of head-movement
- Return of the suppressed
- Arrive, survive, thrive
- Result: Chinese phrase structure = “Davidsonian par excellence”

Word-order changes: The loss of A’- and A-movement due to Loss of V-to-v-to-l0:

a. wh-object: *wu shei qi? 吾谁欺? ‘I who deceive’ = ‘who did I deceive?’
b. object pronouns in the domain of negation: 莫之能御 mo zhi neng yu ‘not it can resist’ = ‘cannot resist it’; 未之有也 wei zhi you ye ‘not-yet it have prt.’ = ‘hasn’t possessed it yet!’
c. object DP focused with wei ‘only’: 随马首是瞻 wei mashou shi zhan ‘only horse-head it look’ = ‘only at the front horse did [I] look [at it]’.
d. object relative pronoun preposed: 我所欲 wo suo yu ‘I rel-pron desire’ = ‘that which I desire’
Loss of XP-movement and loss of canonical gapping:

- Post-verbal adjuncts moved to preverbal position.
  - AC 出于幽谷 > MC/MnC 从幽谷出来
  - AC: chu yu yougu > MC/MnC: cong yougu chulai.
    exit from glens from glens out-come
  (Loss of +EPP which triggered VP movement)

- Subjects of unaccusatives moved to postverbal position (Peyraube 2005)
  (Loss of +EPP on T/Foc)

- Loss of canonical gapping:
  (Loss of v-to-T)

Summary:

- AC had v-to-T, triggered by some $F^0$ (perhaps Focus) with uninterpretable and +EPP that Probes an appropriate Goal and attracts it to Spec/F (wh-phrase, only-phrase, VP-move, unaccusative raising) or to $F^0$ (clitic movement, etc.), or that enabled canonical gapping.

  The +EPP was lost during MC. Hence: ‘healthy’ functional elements—without ‘virus’ (Piatelli-Palmarini and Uriagereka 2004.)

- No $A’$-movement. Hence: Kaynean word order.

  BTW: a Kaynean order par excellence is one that is obtained with all lexical elements linearized in the reverse order of their Merge; the system has the character of a pushdown storage automaton.
Summary

- Major changes from AC to MC exemplify macro-parametric change from considerable synthesis to high analyticity.

- These changes can be analyzed, in MP terms, as parametric changes involving the nature of lexical and functional categories, their argument structures, mostly attributed to the loss of +EPP features.

- Analyticity results from the 'return of the suppressed', which in turn is enabled by reanalysis, itself caused by opacity and high P-ambiguity of underlying null functional categories.