Part I: Foundational and general issues

1. The Principles-and-Parameters theory

- Plato’s Problem and knowledge of language (Aka: The “poverty of stimulus problem”, logical problem of language acquisition)
- The biological model of grammar: Grammar = nature + nurture
- The P&P Model
  - genotype (born) $\rightarrow$ nurture (experience) $\rightarrow$ phenotype (grown)
  - UG $\rightarrow$ Primary Linguistic Data (PLD) $\rightarrow$ PG [I-grammar]
  - UG (the initial state of the child’s mind) = Principles + parameters
  - Language acquisition = fixing the parameter values
- What does the P&P model do:
  - Solves Plato’s Problem, poverty of stimulus, etc.
  - Explains language uniformity, diversity, change

2. Principles and parameters in GB

- Some notable examples
  - Head parameter: [head initial] or [head final] (Stowell 1981, Huang 1982)
  - Null subject parameter (Rizzi 1982, and many others): [yes] or [no]
  - Null topic parameter (Huang 1984): [yes] or [no]
  - Wh-movement parameter (Huang 1982, etc.): [overt] or [covert]
  - Non-configurationality parameter (Hale 1983): the Projection Principle [yes] or [no] $\rightarrow$ Jelinek 1984 $\rightarrow$
  - The Polysynthesis parameter (Baker 1996): $\pm$agr, $\pm$NI [yes] or [no]

- Macro-parameters: Most of the parameters proposed have the character of being macro-parameters, in that their effects are observed across the board (e.g. the head parameter) and that they usually capture the fact that observed variations often cluster together. Examples:
  - Head parameter: V-final, N-final, P-final, A-final, etc.
  - Null subject parameter: null subject, free inversion, apparent long subject-extraction [Rizzi 1982]; differences between French and Italian long clitic-climbing and infinitival V-movement [Kayne 1989, 2012], etc.
  - Nominal mapping parameter [Chierchia 1998a,b]: bare argument, classifier, no plural marking, no determiners, etc.
- Non-configurationality parameter: free word order, rich inflection, radical argument drop, etc. [Warlpiri, etc.]

→ The explanatory value of macro-parameters
  - Among others: also captures traditional typological generalizations
  - Plato’s problem explained

→ Problems encountered by macro-parameters
  - Empirical:
    - Certain macro-parametric predictions are often not borne out
    - The parameters are unable to make finer distinctions that occur among languages (e.g. French vs. English word order)
    - The existence of micro-parameters without wide-ranging effects.
      - Good enough, *enough good, sufficiently good
      - John is likely to go, *John is probable to go, etc.
      - ‘Pre-classifier one-drop’ (+ or -) in Mandarin, Cantonese, TSM, etc.
  - Theoretical:
    - Extra burden on linguistic theory
    - Arbitrariness in where variation may or may not occur.

3. Principles and parameters in Minimalism

- **The MP** as a “Great Leap Forward”

- **Two goals** of the Minimalist Program: ‘beyond explanatory adequacy’—beyond explaining the ‘poverty of stimulus’ problem:
  a. Theoretical: in pursuit of the beauty of scientific theory
    - Galileo’s belief that there is a very simple explanation for Nature
    - Cf. Chen-Ning Yang (1982): three levels of beauty in science
  b. Empirical: to explain the ‘brevity of evolution’ problem

- **The MP’s** proposed answer to these goals: Reduce the size and options of UG
  a. Three factors of language design (Chomsky 2005):
    - Genetic endowment: UG
    - Experience: PLD
    - Other independent systems that are recruited in language use, such as other cognitive abilities (logical reasoning, memory), computational efficiency, minimality, and general laws of nature
  b. Many ‘principles of grammar’ are ascribed to the 3rd factor, thus radically reducing the size of UG
  c. All parameters are stated as micro-parameters, arising from the difference in the nature of some grammatical features of some functional heads. There are no macro-parameters.

- **Some mechanisms of the probe-goal system in MP:**
- Agree and Move are triggered by the need to ‘remedy’ some defective functional categories: Case-checking, Agreement, EPP requirement, ‘strong’ head features

- Movement (IM) works under Probe-Goal system
  - Trigger: the existence of certain traits of imperfection (“uninterpretable” features of some sort)
  - A functional category containing defective feature(s) [the probe] probes for a category (the goal) in its c-domain.
  - Probing leads to Agree and/or Move
  - In the English example above: v probes kisses and Moves (attracts) it; whereas T probes kisses and Agrees with it.

- Parameters of movement (head-movement, A-movement, A’-movement) defined in terms of lexical features.

4. Parametric theory in MP

- Problems for P&P in MP
  a. Traditional macro-parameters are completely excluded as such. Don’t macro-parameters (typological generalizations) exist, and if so, how are they accommodated in UG?
  b. Given the large number of micro-parameters as based on individual lexical items, doesn’t Plato’s Problem arise again?

- Reconciling macro- with micro-parameters: (a la Roberts and Holmberg 2011).

  A: Existence problem: Both macro- and micro-parameters are needed in linguistic theory, with the former being derivative of the latter. Macro-parameters are simply aggregates of micro-parameters acting in concert.
B: Learnability problem:
(a) Micro-parameters may “act in concert” on the basis of a conservative learning strategy: “generalization of the input” (markedness):

已知 \( L = v, a, n, p, \text{asp}, T, \text{etc.}, P = \text{Parameter} \)

- 若 \( P(v) = + \), 则 \( P(n, a, p, \ldots) = + \)
- 若 \( P(v) = - \), 则 \( P(n, a, p, \ldots) = - \)

(b) Parameter hierarchy. The (micro-) parameters are themselves hierarchically organized so fixing one parameter higher on the hierarchy automatically eliminates certain values for other parameters.

Given a lexical item \( L \):

\[ L = F? \ (\text{虚化了嗎?}) \]

no | yes
---|---
\|--\|--
STOP | Does F Agree? (虚化程度 1)

no | yes
---|---
\|--\|--
STOP | Does F have an EPP feature? (虚化程度 2)

No (head-initial) | Yes (head-final)
---|---
\|--\|--
Does F trigger head-movement? | Is F realized by external Merge? (虚化程度 3a) (虚化程度 3b)

No | Yes | No | Yes
---|---|---|---
\|--\|--\|--
STOP | Does every F trigger mv’t? | STOP | Agglutinating

High analyticity (虚化程度 4)
现代汉语 现代汉语

no | yes
---|---
\|--\|--
Synthesis Polysynthesis
英语与 Mohawk, Inuktitutt.
古代汉语 Athabaskan

WVH?
Part II: Macro-parameters in a world of micro-parameters

5. Macro-parametric patterns of Modern Chinese

5.1. The analyticity of verbs and verb phrases

- light verbs vs. noun-incorporation (or denominalization)

(1) a. John telephoned.
    b. John telephoned his sister.

(2) a. Zhangsan da-le dianhua.
    Zhangsan hit-Perf telephone
    b. Zhangsan da-le dianhua gei meimei.
    Zhangsan hit-Perf telephone to sister

(3) da yu ‘to fish’, da penti ‘to sneeze’, da hu ‘to snore’, da haqian ‘to yawn’, da you ‘to get oil’, da shui ‘to fetch water’, da deng ‘to use a lamp’, da maoxian ‘to knit (do the yarn)’, da majiang ‘to do (play) mahjong’, da zi ‘to type (do the characters)’, da lie ‘to go hunting’, etc.

- The emergence of the light verb construction: Tang-Song Dynasties.

《归田录》中的一段话，说明当时轻动词“打”字的广泛使用充分反映了分析性句法的高峰：“今世俗言语之讹，而举世君子小人皆同其缪者，惟‘打’字耳。其义本谓‘考击’[i.e.,敲打]，故人相殴、以物相击、皆谓之‘打’，而工造金银器亦谓之‘打’可矣，盖有槌挝之义也。至于造舟车者曰‘打船’、‘打车’，网鱼曰‘打鱼’，汲水曰‘打水’，役夫饷饭曰‘打饭’，兵士给衣粮曰‘打衣粮’，从者执伞曰‘打伞’，以糊黏纸曰‘打黏’，以丈尺量地曰‘打量’，举手试眼之昏明曰‘打试’，至于名儒硕学语皆如此，触事皆谓之‘打’，而偏检字书了无此字。”

Compared to Old (Archaic) Chinese

(4) Wu Wang dian Yue Wang, yue . . .
    Wu King phone Yue King, saying
    ‘King Wu telephoned (or telegrammed) King Yue, saying that ….‘

Actual examples include yu ‘fish, to fish’, shi ‘food, to eat (cf. feed)’, fan ‘rice, to eat rice’ and many more (see below for more details).

- At the other extreme are polysynthetic languages like Inuktitut and Mohawk:

(5) Inuktitut:
    tavvakiquqarpiit
    ‘Do you have any tobacco for sale?’
(6) Mohawk (from Baker 1996)
Washakoty’tawitsherahetkvhta’se’.
‘He made the thing that one puts on one’s body ugly for her.’

while other languages would be situated at various intermediate positions in the continuum:

(7) Isolating Analytic . . . . . . . . . . . . . . . . . . . . . . . . . . . . Synthetic Polysynthetic

Modern Chinese . . English . . . Italian / Romance . . . . . . . . Inuktitut / Old Chinese Mohawk

- Pseudo-incorporation [anti-passive] vs. (real) incorporation

(8) bu yu catch-fish ‘to fish’; zhuo yu catch-fish ‘to fish’; bo pi remove-peel ‘to peel’; zuo meng make-dream ‘to dream’; kai wanxiao make-joke ‘to joke’; etc.

In another variety, a PNI construction spells out the typical (or cognate) object of a verb:

(9) chi fan eat-rice ‘to eat’; he jiu drink-wine ‘to drink’; kan shu read-books ‘to read’; chang ge sing-song ‘to sing; tiao wu jump-dance ‘to dance’; etc.

- Verbal coercion

    c. John began to read/write/edit a book.

As pointed out by Lin & Liu (2005), this type of ‘coercion’ does not occur in Chinese:

    Zhangsan begin one-Cl book
    
b. Zhangsan kaishi kan/xie/bian yi-ben shu.
    Zhangsan begin read/write/edit one-Cl book
    ‘Zhangsan began to read/write/edit a book.’

The verb begin appears to be able to ‘eat up’ (i.e., synthesizes with) a prototypical complement verb in English, but its Chinese counterpart kaishi does not have this property.

- Lexical vs. compound vs. phrasal/periphrastic causatives

(12) English Modern Chinese Italian
    enter, come in jin lai ‘come in’, *ru entrare, ??venire dentro
    exit, go out chu-qu ‘go out’, *chu uscire, ??andare fuori
(13)  a. The window broke.
    b. John broke the window.

(14)  a. chuangzi po-le.
        window  break-Perf
        ‘The window broke.’
    b. *Zhangsan po-le chuangzi.
        Zhangsan break-Perf window
        Zhangsan hit-break/make-break/make-break-Perf window
        ‘Zhangsan broke the window.’
        Zhangsan kick-break/push-break/crush-break/knock-break-Perf window
        ‘Zhangsan kicked/pushed/crushed/knocked the window broken.’

• Telic vs. Atelic (Tai 1984)

(15)  #John killed Bill several times, but Bill did not die.

(16)  Zhangsan sha-le Lisi haoji ci, dan Lisi dou mei si.
        Zhangsan kill-Perf Lisi several time, but Lisi all not die

• Interim summary: verbal analyticity

(17)  a. the light verb construction
    b. pseudo noun incorporation
    c. compounds or phrasal accomplishments
    d. verbal atelicity, and
    e. absence of verbal coercion

That these properties all cluster within the same language is worth noting, indicating that they represent special cases of a more general character of the language.

5.2. Nouns and other categories

• Numeral classifiers

(18)  yi ben shu ‘one Cl book’, liang zhi bi ‘two Cl pens’, wu pi ma ‘five Cl horse’, ershi-wu ge xuesheng ‘25 Cl students’, etc.

    - classifiers and ‘light nouns’ (Chao 1958: auxiliary nouns)
    - mass nouns = atelic nouns
    - As opposed to English, Chinese verbs and nouns are both ‘atelic’
    - Note again: clustering.

• Localizers (as light nouns)
(19)  a. They went to John.
    b. This idea came from John.
    c. Bill stood at the table.

(20)  a. tamen qu-le Zhangsan-*(nali).
      they went-to Zhangsan-there
    c. Lisi zhan zai zhuozi-*(pang/shang/xia/hou/qian).
      Lisi stand at table-side/top/under/back/front

• Summary: other categories

(21)  a. numeral classifier for count nouns
    b. localizer for locational nouns
    c. discontinuous prepositions (beside vs. by X’s side)
    d. overt positive degree marker (hen)

The clustering of these properties (17, 21) makes it clear that Modern Chinese is consistently more analytic than English, with respect to the structure of every lexical category. This is a very striking macro-parametric pattern.

6. Capturing analyticity syntactically:

How do we capture the range of properties that systematically distinguish Chinese from a (relatively) more synthetic language?

• There is no parameter called [+analytic] vs. [+synthetic] except as a collective observational generalization.

• Probe-goal system:
  - Merge, Agree, Move.
  - Features of lexical items: [strong], [EPP], etc.
  - Lexical decomposition

• Light verbs vs. incorporation

(22)  a.         VP         b.    VP
V      NP    \rightarrow    V      NP
DO        N      phone/
[e]         phone/ fish/ sneeze 
t    etc.
(23) a.         VP         b.    VP
V      NP       V      NP
   da ───>    da  
   dianhua/  dianhua/
yu/penti, etc.  yu/penti, etc.

• pseudo-incorporation - similar to above
• causativization: lexical, compound, phrasal

(24) [VP CAUSE [VP (the window) break . . . ]]  break (the window)

• Classifiers

(25) a.        divP         b.   divP
  div      NP       div      NP
  [e]  ───>    [e]  
  N      book  N      book

(26) a.        CLP         b.   CLP
  CL      NP       CL      NP
  ben ───>    ben  
  N      shu  N      shu

• Localizers, similarly

In each of these cases, we see that head movement results in synthesis, whereas non-
movement preserves lexical analyticity. The latter makes Chinese a ‘Davidsonian language
par excellence’ in the sense that it fully spells out each component of a decomposed
predicate as assumed in much work on the semantics of events. 

7. Analyticity in functional syntax

• Wh-in-situ: No T-to-C movement for questions, nor Wh-to-Spec/C

• Wh-the-hell (in situ): no movement to CP
(27) What the hell are you doing?    Why on earth are you still here?!  
(28) *What are you doing the hell?  *Why are you still here on earth?!  
(29) *Who saw what the hell?    (cf. Who saw what?)

Zhangsan daodi yao shenme shihou cai lai?  
Zhangsan daodi want what time then come  
‘When the hell will Zhangsan eventually come?’

- Negative NPs, reciprocals, binominal each

(31) a. John did not see anybody.  
    b. John saw nobody.
(32) a. They each criticized the other(s).  
    b. They criticized each other.
(33) a. They each ate three apples.  
    b. They ate three apples each.

But in Chinese, only the discontinuous (analytic) forms are acceptable:

(34) a. Zhangsan mei you kanjian renhe ren.  
    Zhangsan not  have seen  any  person  
    ‘Zhangsan has not see anybody.’
    b. *Zhangsan kanjian-le meiyou ren.  
       Zhangsan see-Perf  no  person

(35) a. tamen ge piping-le duifang.  
    they each criticized-Perf other  
    ‘They each criticized the other(s).’
    b. *tamen piping-le bici.  
       they criticized each-other

(36) Summary and other differences  
    a. wh-in-situ  
    b. discontinuous wh-the-hell construction  
    c. absence of negative quantifiers, reciprocals, and bi-nominal each  
    d. Kaynean word order par excellence (or ‘V2 counting backwards’)  
    e. absence of canonical gapping [略]

Huang (2013): All the properties of (36) follow from: Chinese has V-to-V, V-to-v, but no v- to-T or T-to-C movement.

- **Summary for Modern Chinese:** Modern Mandarin displays high analyticity at almost every level of grammar
8. Old Chinese typological properties

In contrast to Modern Chinese, Old Chinese (Archaic Chinese, 500 BC to 200 AD) exhibits a full array of properties that make it a relatively synthetic language. Indeed, it will be seen that Old Chinese behaved more like Modern English, in the relevant typological properties we have reviewed.

8.1. Lexical categories

At the lexical level, the following properties put OC in sharp contrast with Modern Chinese.

(37) Old Chinese (OC) lexical categories
   a. denominal verbs: no need for light verbs
   b. true incorporation: no pseudo incorporation
   c. simplex causatives: no compounds or phrasal accomplishments
   d. countable nouns: no need for numeral classifiers
   e. nouns qua locations: no need for localizers

- denominal verbs: no need for light verbs

(38) a. 魚 yu ‘fish, to fish’
    b. 食 shi ‘food, to eat’
    c. 衣 yi ‘clothing, to get clothed’
    d. 飯 fan ‘rice, to have rice’
    e. 歌 ge ‘song, to sing’
    f. 王 wang ‘king, to be a king’

- no pseudo-incorporation
  - no examples like bu yu ‘catch fish’ or chi fan ‘eat rice’ found in Modern Mandarin.

- simplex causatives: no compounds or phrasal accomplishments
  - OC also abounds in examples of causativization, with simplex verbs exhibiting alternations between causative and non-causative readings:

(39) a. 破 po ‘break (both inchoative and causative uses)’
    b. 小 xiao ‘small, belittle (= make small)’
    c. 受 shou ‘receive, bestow (=cause to receive)’
    d. 假 jia ‘borrow, lend (=cause to borrow)’

These alternations indicate the existence of verb movement into a light verb CAUSE. Some causative verbs in OC start out as nouns, which first denominalize and then causativize, much as English food > feed (on) > feed (someone). Some examples from the Classical texts:
(40) 君子問人之寒，則衣之；問人之饑，則食之；稱人之美，則爵之。《禮記·表記》

junzi wen ren-zhi han, ze yi zhi; wen ren-zhi ji, ze shi

gentleman ask person’s cold, then clothe him; ask person’s hunger, then feed

zhi; cheng ren-zhi mei, ze jue zhi. (from Liji, Biaoji)

him; praise person’s virtues, then nobility him

‘When a gentleman wonders about one’s being cold, he will clothe him; when he

wonders about one’s hunger, he will feed him; and as he praises one’s virtues, he

will make him a member of the noble class.’

(41) 諸母漂，有一母見信飢，飯信。《史記：淮陰侯列傳》

zhu mu piao you yi mu jian Xin ji, fan Xin. (from Shiji)

various women wash, have one woman see Xin hungry, rice Xin

‘Various women were washing clothes [by the river]. One woman saw Xin being

hungry, so she riced Xin [=fed him with rice].’

Mei (1989, 2008a, 2008b & 2012) has postulated a denominative prefix and a causative

prefix in OC (and earlier), both reconstructed in the form of *s-. In the terms of the Probe-

Goal system, we can take the *s- as an affixal light verb with the elementary meaning of DO

or CONSIDER, see note 22). Due to their highly affixal (hence [+strong])

nature, *s-DO triggers denominalization by noun-incorporation, and *s-CAUSE triggers

causativization by verb-movement:

(42)

Some of the causatives are ‘Mental causatives’ or ‘putatives’ (意动):

- 小、好、贤、友
- 如：小天下、好学、礼贤下士、友风子雨
• No resultative compounds (Mei 1991)
  壓而殺之；壓殺百姓；百姓皆壓死；
  壓而傷之；射傷麋鹿；麋鹿皆射死；
  *壓死百姓  
  *射死麋鹿

  - Real resultative compounds were not formed until late in the 6 dynasties and fully in bloom in Tang

• No resultative phrasal constructions

  Only later in MC we have examples like 吹我罗裳开

• No classifiers

  (43) 三人行，必有我師焉。
  san ren xing, bi you wo shi yan.
  three person walk must have my teacher there
  ‘When three people get together, there must be a teacher of mine there.’

• No need for localizers

  (44) 八佾舞於庭。是可忍也，孰不可忍也?
  Bayi wu yu ting, shi ke ren ye, shu bu ke ren ye
  8x8 dance at hall this can tolerate Prt, what not kan tolerate Prt
  ‘To have the 8x8 court dance performed in [his own] hall! If this can be tolerated, what [else] cannot be tolerated?’

• Old Chinese exhibit extensive synthesis in lexical categories—both verbal and nominal categories
• Davidsonian structure is somewhat obscured, as in English but different from Modern Chinese.

8.2. Clauses

At the clausal level, OC exhibits several word order differences from Modern Chinese (MnC). The best known is that wh-objects are fronted to a pre-verbal position after the subject:

• wh-movement

  (45) 沛公安在？《史記·項羽本紀》
  Peigong an zai? (Shiji.Xiangyu)
  Peigong where be-at
  ‘Where is Lord Pei?’
(46) 吾谁欺，欺天乎？《论语·子罕》
wu shei qi, qi tian hu? (Lunyu.Zihan)
I who deceive, deceive heaven Q
‘Who do I receive; do I deceive Heaven?’

• Suo-movement under relativization

(47) 魚我所欲也；熊掌亦我所欲也。《孟子》
yu wo suo yu ye; xiongzhang yi wo suo yu ye. (Mencius)
fish I what like FP, bear-palm also I what want FP
‘Fish is what I desire; a bear’s palm is also what I desire.’

Certain constituents get pre-posed when they bear the focus, for example when they occur with wei ‘be’ or ‘only’:

(48) 率師以來，唯敵是求。
shuai shi yilai, wei di shi qiu (Zuozhuan.Xuan 12)
lead troop since only enemy Dem seek
‘Since leading the troops, no one but the enemies [have I been] running after.’

Or when they serve as contrastive topics, as pointed out by Aldridge (2012):

(49) 楚國方城以為城，漢水以為池。
Chu guo Fangcheng yi wei cheng, Han Shui yi wei chi. (Zuozhuan, Xi 4)
Chu state Fangcheng use be wall Han River use be moat
‘The Chu used Mt. Fangcheng as their castle wall and the River Han as their moat.’

Pronominal objects are cliticized before the verb in the domain of negation:

(50) 昔君之惠也，寡人未之敢忘。
xi jun zhi hui ye, guaren wei zhi gan wang
past prince’s favor FP, I not it dare forget (Guoyu.Jinyu)
‘The favor of the prince in the past, I dare not forget it.’

Sometimes pre-posed objects trigger ‘clitic doubling’, as already shown in (94) above with the demonstrative shi, and in (97) below with zhi:

(51) 宋何罪之有？《墨子·公输》
Song he zui zhi you (Mozi.Gongshu)
Song what sin/crime it have
‘What sin/crime does Song have?’
• [+EPP], etc.

(52)

There is another well-known difference in word order between OC and MnC with respect to the occurrence of post-verbal clausal adjuncts. Examples like the following are typical:

(53) 萬乘之國，被圍於趙。《史記.魯仲連》
wan sheng zhi guo, bei wei yu Zhao. (Shiji.Luzhongliang)
10K carriage Gen nation, get surround by/at Zhao.
‘A nation of 10 thousand carriages got surrounded by/in Zhao.’

In the following clips from Mencius, the adjunct phrase yi yang ‘with a sheep’ has the choice of preceding or following the VP. According to some, the choice is not entirely free, but motivated by considerations of focus (cf. Lu 1982, Liu 1958):

(54) a. 何可廢也? 以羊易之!《孟子.梁惠王》
he ke fei ye yi yang yi zhi (Mengzi.Lianghuiwang)
how can abolish Prt with sheep replace it
‘How can we abolish [the sacrifice]? Replace it with a sheep!’

b. 我非愛其財而易之以羊也。《孟子.梁惠王》
wo fei ai qi cai er yi zhi yi yang ye.
I not love its wealth and replace it with sheep Prt
‘It’s not because I love [to save] the wealth that I replaced it with a sheep.’

(55) . . . [ [VP yi zhi] [v yi [yang [APPL t; [VP t]]]]] . . .
replace it use sheep

• Hence, the word order of Old Chinese does not exhibit “Kaynean word order”
• Canonical gapping (from Iris Wu 2002, He (2008):

(56) 為客治飯而自 Ø 黍藿。《淮南子·說林》
wei ke  zhi fan er zi ___ lihuo  (Huainanzi.Shuolin)
for  guest cook rice and self  grass
‘For guests cook rice, but for oneself [cook] grass.’

(57) 故天子聽政，使公卿至於列士獻詩，瞽獻曲，史獻書，師 ___ 箴，瞍 ___ 赋，矇 ___ 誦，百工 ___ 諫 (國語：周語) ( 春秋左丘明)

• OLD Chinese clauses exhibit various movement to the Focus Phrase region

8.3. The macro-history of Chinese syntax

• Old Chinese (dating from 500 BC to 200 AD) was fairly synthetic
• Old Chinese to Middle Chinese: analyticization: the language underwent a gradual change from the late Han toward analyticity, peaking around the Tang-Song dynasties (roughly from 200 to 900 AD)
• After that, 900- (Pre-Modern), a new cycle of development has occurred towards mild synthesis in varying degrees in various dialects, resulting in the major dialect groups of Modern Chinese as we know them today.

9. Parametric variation among Chinese dialects (略)
• The major dialects of Modern Chinese differ in degrees of analyticity.
• In general: Cantonese < Mandarin group < TSM
  - W.r.t. to pre-classifier ‘one-drop’ (本書，個靚仔，片麵包)
    □ Cantonese allows it in any position
    □ Mandarin allows dropping in object but not subject position
    □ TSM disallows dropping anywhere
  - W.r.t. aspects markers
    □ Cantonese has more than Mandarin, which has more than TSM
  - W.r.t. definite objects
    □ Cantonese strongly prefers SVO, Mandarin allows, TSM prefers SOV

10. Concluding remarks:
• Chinese exhibit typological properties at different stages that distinguish it from other language types.
• Each typological property may be seen as the result of a particular setting of the value of a micro-parameter.
• The clustering of micro-parameters acting in concert give rise to macro-parametric patterns. Hence, there is no need to resort to traditional macro-parameters (like e.g., +analytic, -synthetic, etc.).