Notes on ‘Silent Years, Silent Hours’* & its relevance to Chinese
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Outline: I. Notes on the paper; II. Comments & questions; III. Relevance to Chinese

I. Notes on the paper

1. INTRODUCTION (P.1)
- aim: explore more silent elements: YEAR(S) and HOUR(S)
- silent NUMBER (previously discussed in Kayne (2002))
  (7)… fewer/ fewest NUMBER books (adjectival few)
  (8-9) a/every few NUMBER books (a/ every compatible with few)
- few modifying NUMBER rather than books
- overt number in:
  (10) a small number of books
- few vs small
  (15) John has a few/ *small books
  - licensing relation: few ~ NUMBER; *small ~ NUMBER
- from few ~ NUMBER to:
  - little ~ AMOUNT: a little AMOUNT money (E.g. (242) in Kayne 2002)
  - green ~ COLOUR: (13) John bought a green COLOUR car yesterday.

- summing up

<table>
<thead>
<tr>
<th>Licensed by strong/ weak antecedent</th>
<th>adjectives</th>
<th>Silent/overt elements</th>
</tr>
</thead>
<tbody>
<tr>
<td>weak</td>
<td>Few/ many [+number]</td>
<td>NUMBER</td>
</tr>
<tr>
<td>weak</td>
<td>Green/red [+colour]</td>
<td>COLOUR</td>
</tr>
<tr>
<td>strong</td>
<td>small</td>
<td>number</td>
</tr>
<tr>
<td>strong</td>
<td>(19) …a widely discussed colour</td>
<td>colour</td>
</tr>
</tbody>
</table>

2. AGE (P. 2-4)

2.1. Proposal: silent YEARS
(22) At the age of seven, John …
(24) John is three.
- interpreted as seven/ three years rather than seven/ three months/etc, except in a day care centre
(27) at the age of seven YEARS
(28) …is three YEARS
→ silent YEARS

2.2. licensing factor: age/ AGE
- YEARS in (27) licensed by an overt age
- YEARS in (24/28) licensed by a silent AGE,
  - more advantageous over silent OLD:
    (30d) The Earth is five billion years old.
    (31d) *? The Earth is five billion years of age.
    (32d) *? The Earth is five billion.

* Kayne, R. S. (2003, ms.) “Silent Years, Silent Hours”. N. Y. University.
2 The numbering of the examples is in accordance with those in the paper.
2.3. licensing factor: numerals
- when at, age, overt numeral
(37) Even at the age of three and a half, John…
(38) ** Even at the age of several/ quite a few/ not very many, John…
- when AT, AGE, overt numeral
(39) Even a three and a half, John…
(40) ** Even at several/ quite a few/ not very many, John…
(33) Their daughter is three and a half now.
(34) ** She’s several/ quite a few/ not very many now.
- when to, AGE, overt numeral
(51) Nobody can make it to a hundred without medical help.
(53) * Nobody can make it to hundreds even with medical help.
  → whether the initial prepositions and age are silent or not, numeral BUT not
  quantity expressions is needed for the reading of year-old, i.e. for the
  licensing of YEARS.

2.4. other licensing factors: the and of
- (58) At age eleven / the age of eleven, he was not yet in high school
- the age of eleven // the city of Boston in:
  - not followed by a relative clause:
    (63) * At the age of the eleven that I produced by dividing twenty-two by two…
    (64) * He lives in the city of the Boston that he used to love.
  - not allowing an initial indefinite article:
    (65) * At an age of eleven, he was not yet in high school.
    (66) * He lives in a city of Boston.
- age eleven // Lake Ontario
  - not allowing preposition
    (59) At age (*of) eleven, he was not yet in high school.
    (68) He lives near Lake (*of) Ontario.

2.5. word order between age/AGE and YEARS
- the age of eleven/age eleven; the city of Boston/Lake Ontario involve movement:
  (69) the [age, of [eleven YEARS] t_i]
  (70) age, F_0^t [three months] t_i
  (71) the [city, of Boston t_i]
  (72) Lake, F_0 Ontario t_i
  → (76) age, F_0 [eleven YEARS] t_i
- cases with both silent YEARS and AGE:
  (73) Even at three, J…
  (74) Their daughter is three now.
  (75) Nobody can make it to a hundred without medical help.
  → (77) at/AT/to D_0^t AGE, F_0 [numeral YEARS] t_i
  - following Longobardi (1994) that proper names occupy in D_0, ‘age eleven’
    resembles a proper name with age staying in D_0
  - for bare numeral ‘three’ as in (73): D_0^t AGE, F_0 [three YEARS] t_i
  - for Lake Ontario: D_0^t Lake, F_0 Ontario t_i.

[Ben: the need for the movement between pre- and post-YEARS positions is to pave
the way for suggesting in the next section the sequence numeral-YEAR-AGE be
parallel to numeral-classifier-noun.]

3. FRENCH AND ITALIAN (P.4-6)

3.1. Proposal: silent YEAR as a singular classifier
- because year in Thai as a classifier, proposing that YEAR is a classifier:
  (82) …AGE, F⁰ [ numeral YEAR] tᵣ
  where the silent classifier YEAR is licensed by AGE in this structure.

[Ben: the so-called classifier-noun agreement/ matching?]
- classifier YEAR: singular/ non-pluralizable
  - (83) A five drawer (*s) file cabinet / (86) This file cabinet has five drawer*(s).
  - (84) Mary has a six-year(*s)-old brother./ (87) Mary’s brother is six year*(s) old.
  - general fact: absence of plural morphology with classifiers
  - Hungarian: non-cooccurrence of the plural suffix and numerals in noun phrase
- classifier YEAR: non-modifiable
  - plural years accepts modification more readily than singular year, which is classifier-like
    - (88) ?? John is seventy wisely lived years of age. (plural)
    - (91) John is a seventy-(**wisely lived)-year-old man (singular)
  - silent classifier YEAR doesn’t receive any modification either
    - (92) At the age of seventy (**wisely lived), John…
    - (94) John is seventy (**wisely lived) today.

3.3. Claim about UG
  (95) YEAR can be silent in (82) “…AGE, F⁰ [ numeral YEAR] tᵣ” only if it is not accompanied by a plural element.
  In other words,
  (103) Silent YEAR is possible in (82) in a given language only if in that language either prenominal adjectives or overt prenominal classifiers without of can be unaccompanied by a plural morpheme.
  \[ \rightarrow (96) \] The availability of (82) in a given language depends on the syntax of plurality in that language.

[Ben: Parameter around YEAR: How plurality is realized in nominals> availability of YEAR in (82)]

- undoing movement in (82) gives rises to:
  (82) …AGE, F⁰ [ numeral YEAR] tᵣ
  \[ \rightarrow (97) \] numeral YEAR AGE
  \[ \rightarrow (98) \] numeral CL NOUN
- (98) with silent elements are parallel to the following with overt elements:
  (99) numeral adjective noun
  (100) numeral classifier noun

- English: singular YEAR and no plural marking on prenominal adjectives (101) or on prenominal classifiers (85)
  (101) John has three little (*s) brothers.
  (85) Mary has three thousand (*s) books in her library.

- French & Italian: plural marking on prenominal adjectives; no prenominal classifiers (and hence no plural marking on such classifiers)
(79) French: A l’age de sept *(ans), Jean…(at the age of seven (years), John…)  
(80) Italian: All’ eta di sette *(anni), Gianni…(at the age of seven (years, John…)  
→ years must be pronounced and YEARS is not possible in French and Italian  
where (82) is unavailable in the two languages.

- correlation between year/YEAR and plurality

<table>
<thead>
<tr>
<th></th>
<th>Plural on prenominal adjectives</th>
<th>Classifiers without preposition</th>
<th>Silent YEAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>no</td>
<td>yes (singular)</td>
<td>yes</td>
</tr>
<tr>
<td>French</td>
<td>yes</td>
<td>no</td>
<td>no (79)</td>
</tr>
<tr>
<td>Italian</td>
<td>yes</td>
<td>no</td>
<td>no (80)</td>
</tr>
</tbody>
</table>

[Ben: why can’t YEAR be simply regarded as an adjective rather than a classifier, say, silent adjective YEAR? If silent adjective YEAR was adopted, could the relevant examples be also explained? Apart from YEAR and HOUR in section 4, can other silent elements, such as CITY and COLOUR, be seen as classifiers?]

4. SOME FURTHER REMARKS ON SILENT NOUNS AND TIME (P.6-8)

4.1. more on the role of silent, singular classifier YEAR :

<table>
<thead>
<tr>
<th>Silent</th>
<th>(non)-classifier</th>
<th>pl/ sg</th>
<th>examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHILDS</td>
<td>Non-classifier</td>
<td>pl</td>
<td>(108) They have two seven-year-olds</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(110)…two seven-year old CHILD s</td>
</tr>
<tr>
<td>ONES</td>
<td>Non-classifier</td>
<td>pl</td>
<td>(118) other cars, other ones; others</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-&gt; others = other ONE s</td>
</tr>
<tr>
<td>YEARS</td>
<td>Non-classifier</td>
<td>pl</td>
<td>(119) In the (nineteen-)eighties,…</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(120) …eighty YEAR s…</td>
</tr>
<tr>
<td>YEAR</td>
<td>Classifier</td>
<td>sg</td>
<td>(111) * At the age of seventeens, J…</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(112) * John is seventeens now.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>&gt; *seventeen YEAR s</td>
</tr>
</tbody>
</table>

Ben: The need for positing YEAR as classifier is that this silent element has conditional marking by both plural and singular marking. Therefore if it was suggested as adjective (though structurally quite sound), it would either take plural or singular marking in any circumstance and could not produce the dichotomy between (119/120) and (111/112)

4.2. Proposal: silent classifier singular HOUR

- English:
  (126) It’s six.  
  (127) …six HOUR…  
→ (128)…CLOCK/ TIME, F⁰ [six HOUR] ti, with singular classifier HOUR. Note that there is no definite article in English.

- French and Italian:
  (122) French: Il est six heures. (it is six hours = six o’clock)  
  (124) French: * Il est six. (It is six)  
  (132) French: *Il est les six (heures). (due to definiteness effect)  
  (123) Italian: Sono le sei . (are the six = six o’clock)  
  (125) Italian: Sono le ore sei (are the hour six)  
→ absence of the definite article in French (122, 124) forces the presence of heures (hours); presence of the definite article le in Italian (123, 125) allows for the optional
presence of hours.

- correlation between hours/HOURS and the definite article:

<table>
<thead>
<tr>
<th>Variation around hours/HOURS</th>
<th>Variation around years/YEARS</th>
</tr>
</thead>
<tbody>
<tr>
<td>English has silent HOUR in (126), has (128)</td>
<td>English has silent YEAR in ‘at the age of seven’ (22), has (82)/(97)</td>
</tr>
<tr>
<td>French lacks silent HOUR in (124), lacks (128)</td>
<td>French lacks silent YEAR in ‘A l’âge de sept *(ans)’ (79), lacks (82)/(97)</td>
</tr>
<tr>
<td>BUT Italian has silent HOUR in (123), has (129)…le ORE, F^[0] [sei ORA] t_i def. art.-pl. pl. sg-classifier</td>
<td>Italian lacks silent YEAR in All’eta di sette *(anni)’ (80), lacks (82)/(97)</td>
</tr>
</tbody>
</table>

→ Italian: the singular classifier ORA may be due to the plural definite article le originating between ORA and t_i.

[Ben: Parameter: presence/absence of definite article > availability of HOUR]

4.3. Similarity & difference between expressions of time and age

<table>
<thead>
<tr>
<th>Similarity</th>
</tr>
</thead>
<tbody>
<tr>
<td>time</td>
</tr>
<tr>
<td>(134) …in two hours/ in two hours’ time (135) …* in two (’s) time</td>
</tr>
<tr>
<td>The possessive structure of time in (135) prevents time from licensing silent classifier HOUR.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>time</td>
</tr>
<tr>
<td>definite article correlates with HOUR</td>
</tr>
</tbody>
</table>

5. CONCLUSION (p. 8)

Significant role of silent nouns (with syntax of plurality and determiners) in UG
Silent years in Chinese

II. Comments & questions

1. Phonetic silence but syntactic prominent

A silent element despite its ‘lack of phonetic realization’ (fn3) is not equivalent to the general understanding that a phonologically null element can be recovered. It in fact can’t be recovered or else the sentence would be ungrammatical. So this silent element has its syntactic reflex. In the case of years and hours, the presence of the silent element lies in the licensing relation with age and time. Such a close relation is then construed as the one between a classifier and its corresponding noun. To establish this classifier-noun relation syntactically, the pre-numeral AGE/TIME items are suggested to be due to movement from the post-YEAR/HOUR position so that the original sequence Numeral-YEAR/HOUR-AGE/TIME matches the Numeral-Classifier-Noun sequence.

2. What is the role of D^0?  

For time expressions, since the definite article is involved in Italian for instance, it’s easy to understand the inclusion of D^0 as the landing site for TIME. But what about the age expression? The discussion only involves the plural marking, which is hard to imagine to involve D^0. Might this D^0 be due to the fact that the age expression actually refers to an ordinal reading (which has a definite sense), eg. ‘John is eleven’
meaning ‘John has just passed the eleventh year’. Likewise, ‘It’s six in the morning’ indicates ‘the sixth hour’. This deictic/definite interpretation is thus due to the presence of D⁰.

3. Why can D⁰ be supported by silent elements?
But even if this semantic interpretation for the existence of D⁰ in the age expression is accepted, what about its syntactic status? When a bare numeral is used as in ‘John is eleven’, ‘eleven’ is put under D⁰, which is occupied by a silent AGE due to the movement from the lower layer. Why wouldn’t the numeral ‘eleven’ be suggested to occupy the D⁰ position instead of letting the silent element support the whole DP?

4. What is the role of F⁰?
That should be a functional category between DP and NP. Why wasn’t the conventional NumP used instead of this unknown F⁰? Could it be due to the suggestion of the silent classifier YEAR/HOUR, which needs another functional category for accommodation?

5. Bare numerals & silent classifiers
On the one hand, the silent YEAR/HOUR in English is correlated with non-plural marking on prenominal adjectives and with the availability of prenominal classifiers. But on the other, it implies that in expressing age/time, English uses bare numerals (more than French and Italian), such as ‘John is eleven’, ‘It’s six’, etc. Then the question is: what is the relationship between bare numerals and silent classifiers? And how could the syntactic configuration of and between these two be benefited from the understanding of silent elements?

III. Relevance to Chinese

1. Silent COLOUR?
Recall: (13) John bought a green COLOUR car yesterday.
(a) 阿 John 琴日買咗 [綠色嘅車/*綠車/*綠車/*深綠嘅車/綠綠嘅車].
→ Silent COLOUR is not preferable in Chinese.

2. Silent YEAR?
Recall: (24) John is three.
(b) 佢今年三*(歲)/佢今年十八*(歲)/ 佢今年十八*(歲).
(c) 你夠六十五??(歲)就可以攞長者咭.
(d) 佢成二十一*(歲)中學都未畢業.
(e) 佢嘅五十*(歲) 嚖年就開始落 disco.
(f) 三*(歲)就可以讀幼稚園.
(g) 十八*(歲)就可以去投票.
→ Silent YEAR is not preferable in Chinese, except in literary Chinese:
(h) 林小姐芳齡二十一, 係一位空中服務員.
(i) 年滿十八(歲)就要換領成人身份證.

2.1. Alternation: age eleven & the age of eleven?
Recall: (58) At age eleven/ the age of eleven, he was not yet in high school.
(j) [*佢芳齡十一]/[佢成十一歲]都仲未讀中學.
→ Chinese doesn’t have such alternation

2.3. 岁 as a classifier?
Recall: (88) ?? John is seventy wisely lived years of age. (plural)
(91) John is a seventy-(**wisely lived)-year-old man (singular)
(k) 阿 John 活咗[七十個年頭/ 七十年/ ??七十歲].
(l) 阿 John 活咗[七十個精彩嘅年頭/*七十精彩(嘅)年/*七十精彩(嘅)歲].
- 歲 is not a pure classifier but a classifier plus. Given 個年頭 stands for 歲, the
  modifier precedes the head noun 年頭 rather than the classifier 個 as expected. On
  the other hand, 歲, as a merger of a classifier and a noun, can’t be modified. So its
  classifier-ness appears to be more prominent than its nouniness.
(m) 佢都成四十幾?((歲), 佢未試過…
(n) 佢都成四單幾(*歲), 佢未試過…
- As the unit 章 is made up of 十歲, it can’t cooccur with a final 歲. Since 章 and 十
  are both counting unit, 歲 in the combination of 十歲 is very likely to be a counting
  unit too and hence its readiness to be a classifier.
  ⇒ 歲 is an overt classifier in Chinese.

3. Silent HOUR?
Recall: (126) It’s six.
(o) 家陣三*(點/時)
(p) 十一*(點/時)我就出街.
(q) 五十*(分)就落堂.
(r) 家陣踏十一./ 踏九落堂.
  ⇒ silent HOUR is not preferable in Chinese except in the Cantonese style of
  saying minutes (r)

3.1. 點 as a classifier?
(s) 佢聽日咩鐘數會喺 office 唛? 三點(鐘)嘛?
- in Cantonese 數 reflects 鐘(the time/ the clock) is going to be counted and 點 is the
  unit through which the counting is done.
  ⇒ 點 as a classifier in Cantonese.

4. Conclusion: silent classifiers and bare numerals
The unavailability of silent classifiers: years and hours in Chinese implies that
numerals in the language tend not to be used bare at least in expressions of age and
time. Rather, they are associated with units or classifiers which have to be
phonetically overt. Unlike Chinese numerals, the English counterparts can be used
bare (or have to be in some cases), which indicates that the classifier between the
numeral and the noun needs to be silent on occasions of age and time.

Putting the consideration of bare use of numerals into Kayne’s framework of
variation in European languages plus Chinese gives the following summary:

<table>
<thead>
<tr>
<th></th>
<th>Kayne’s parameter</th>
<th>Ben’s inclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>silent elements</td>
<td>YEAR</td>
</tr>
<tr>
<td>Chinese</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td>English</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>French</td>
<td>no</td>
<td>yes</td>
</tr>
<tr>
<td>Italian</td>
<td>no</td>
<td>yes</td>
</tr>
</tbody>
</table>