TITLE:

The temporal reference of aspectually unmarked bare accomplishment ba-sentences in Taiwanese Mandarin

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The Temporal Reference of Aspectually Unmarked Bare Accomplishment *Ba*-Sentences in Taiwanese Mandarin[*]
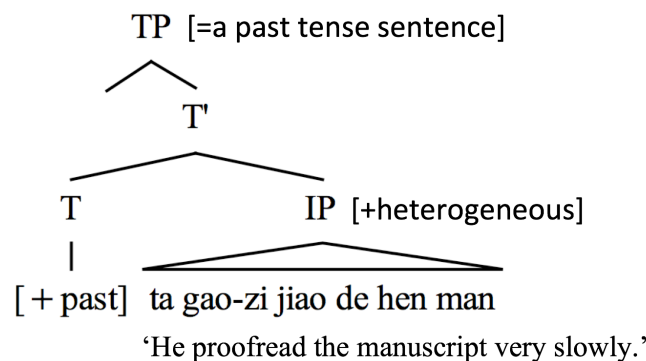
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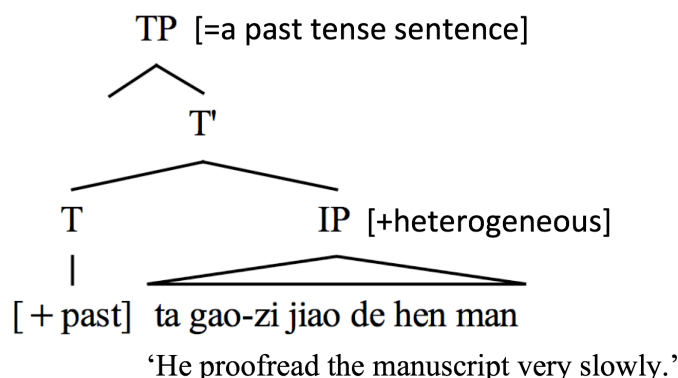University of York

1. Introduction

- Bare sentence: sentences without temporal adverbials
- Mandarin lacks inflectional morphology to indicate tense, but has morphology like devices (*zai* 在, *zhe* 著, *guo* 過, *le* 了) to add an aspectual value to a verb.
- Lin (2002) claims:

  ① Mandarin phrase structure contains a tense phrase (TP)
  ② Two selectional restrictions of tense

Covert present tense	Covert past tense
Homogeneous situation	Heterogeneous situation

(1) a. Covert present tense

$$TP \ \text{[=a past tense sentence]}$$

T'

T   IP [+heterogeneous]
|
[+past] ta gao-zi jiao de hen man

'He proofread the manuscript very slowly.'

   b. Covert past tense

$$TP \ \text{[=a past tense sentence]}$$

T'

T   IP [+heterogeneous]
|
[+past] ta gao-zi jiao de hen man

'He proofread the manuscript very slowly.'

(Lin 2002: 284)

▲ Homogeneous and Heterogeneous (Herweg 1991)

    ① Distributivity: the extension of a predicate has a uniform internal part structure

    ② Cumulativity: the extension of a predicate forms a continuous collection of overlapping entities

(2)

```
                    Situation
                 _____
                /           \
    [+distributive]     [-distributive]
    [+cumulative]       [-cumulative]
          \                  \
      uncountable          countable
          \                  \
     homogeneous        heterogeneous
```
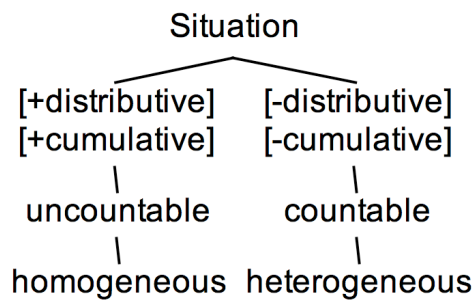
    ③ Homogeneous: states, activities
    Heterogeneous: achievements, accomplishments

· Lin's theory cannot predict:
Sentences that have heterogeneous situations have present readings, such as the accomplishment sentences in (3).

(3) a. ta   gao-zi   jiao   de   hen   man
    he   manuscript   proofread   DE   very   slow
    i.   'He is proofreading the manuscript very slowly.'   (present)
    ii.   'He proofread the manuscript very slowly.'   (past)

    b. ta   zhe   fu   hua   hua   de   hen   man
    he   this   CLF   picture   paint   DE   very   slow
    i.   'He is painting this picture very slowly.'   (present)
    ii.   'He painted this picture very slowly.'   (past)

    Lin (2002: 287)

● Chang (2018) improves Lin's theory by proposing:

    ① The temporal reference of accomplishment sentences in Taiwanese Mandarin (TM) should be determined at actualisation level.

    ② Unbounded (in Depraetere's (1995) sense) accomplishment situations in TM should be treated as activities.
    ▲ Bounded situation: situation has terminated.
    Unbounded situation: situation has not yet terminated.

According to Chang, unbounded accomplishment situations should be viewed as activities. Activities are seen as homogeneous situations and therefore, serve as covert present tense's complements, giving the present readings of (3a,b). By contrast, bounded accomplishment situations are heterogeneous situations, serving as covert past tense's complements, which ultimately project past tense sentences, as in the past readings of (3a,b).

- Sun's (2014) aspectually unmarked predicate generalisations[1]:

① Aspectually unmarked eventive sentences only allow generic readings.

(4) na   ge   nu-hai   tiao   ba-lei-wu
    that   CLF   girl   dance   ballet
    'That girl dances ballet.'
    *'That girl is dancing/danced ballet.'
    ??'That girl will dance ballet.'

Sun (2015: 76)

② Aspectually unmarked eventive sentences need an overt aspect marker to license their episodic readings.
▲ Eventive sentences: sentences with an eventive predicate (activities, accomplishments, achievements)

(5) zho-tian   na   tiao   yu   si   *(le)
    yesterday   that   CLF   fish   die   *(PERF)
    'That fish died yesterday.'

Sun (2014: 47)

2. Problems

- Chang's remedies for Lin's theory still fail to predict the temporal reference of accomplishment *ba*-sentences in isolation, as examples in (6).

(6) a. xiao-jun   ba   tou-fa   tang-   juan
        Xiao-Jun   BA   hair   perm   curly
        'Xiao-Jun permed her hair and her hair is curly now.'   (present)

    b. lao-shi   ba   xiao-jun   ma-   ku
        teacher   BA   Xiao-Jun   scold   cry
        'The teacher scolded Xiao-Jun and she cried.'   (past)

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[1] The generalisations are called Bare Predicate Generalisations (BPGs) in Sun's original work. Due to the fact that my definition of 'bare' is different from Sun's, I use 'aspectually unmarked predicate generalisations' to avoid confusion.

- The final endpoints of the situations in (6a,b) are reached before the utterance time (UT) at actualisation level, but they still have different temporal references.

- Sun's generalisations cannot explain the temporal interpretation of accomplishment *ba*-sentences in (6) either.

  - Both the sentences (6a,b) do not have generic readings as Sun suggests. Rather, they have episodic readings.

  - The episodic readings of (6a,b) need not be licensed by any aspect marker.
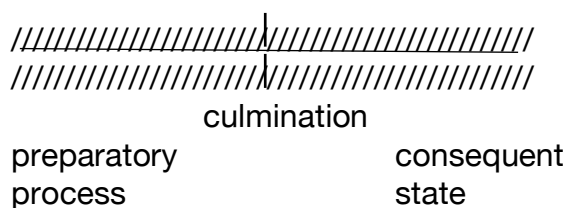
3. The indications of sentences in (6)

- Sun's generalisations cannot be applied to *ba*-sentences in TM:

  ① In TM, aspectually unmarked bare accomplishment *ba*-sentences do not have generic readings. Additionally, only episodic readings are allowed.

  ② In TM, aspectual licensing is not necessary for episodic accomplishment *ba*-sentences.

- On the secondary predicate's influence over the temporal reference of aspectually unmarked bare accomplishment *ba*-sentences in TM:

  ① If the secondary predicate of the VP denotes a state (*juan* 'curly' in (6a)), then the present tense reading is the default temporal reference.

  ② If the secondary predicate of the VP denotes an activity (*ku* 'cry' in (6b)), then the past tense reading is the default temporal reference.

4. Analysis

- On the basis of Moens & Steedman's (1988) event ontology and Grimshaw's (1990) a-role (aspectual role), Rhys (1996) suggests:

  ① As a functional head (coverb), *ba* assigns two a-roles, <Cause> and <Affect>, with <Cause> to the *ba*'s own specifier position and <Affect> to the DP in the specifier position of its VP complement (*ba*-DP), as in (8).

  (7) Moens & Steedman's scheme of accomplishments

  ```
  ///////////////////////////|/////////////////////////
  ////////////////////////|////////////////////////////
              culmination
  preparatory             consequent
  process                 state
  ```

(8)

baP
    DP   ba'
  <Cause>
           ba   VP
              DP   V'
          <Affect>
                 V
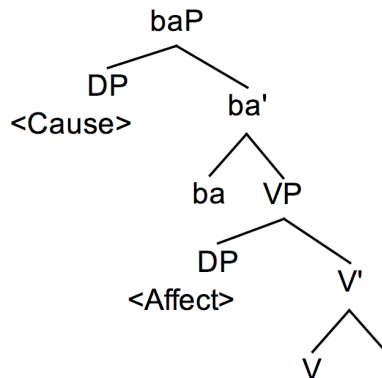
② Accomplishment *ba*-sentences have a complex event structure (preparatory process + consequent state), and *ba* picks out the participant of the second subevent, i.e. consequent state, which is predicated of the *ba*-DP.

③ According to Grimshaw, the cause argument of an accomplishment is always associated with the first subevent, preparatory process.

- Following Rhys, accomplishment verb compounds in (6a) *tang-juan* 'perm curly' and (6b) *ma-ku* 'scold cry' denote complex events. The respective main verbs (V_1) of (6a,b) are *tang* 'perm' and *ma* 'scold', which denote the preparatory process; the respective secondary predicates (V_2) *juan* 'curly' and *ku* 'cry' otherwise indicate the consequent state.

- In TM, it is the consequent state that determines the temporal reference of aspectually unmarked bare accomplishment *ba*-sentences.

  ① If the secondary predicate is stative, as *juan* 'curly' in (6a), then the default temporal interpretation is the present tense, as in (9).

  ② If the secondary predicate denotes an activity, as *ku* 'cry' in (6b), then the default temporal interpretation is the past tense, as in (10).

(9)   Present tense interpretation

```
            TP   [=a present tense sentence]
            ╱╲
              T'
            ╱ ╲
         T      baP
      [+present]  ╱╲
              DP     ba'
          <Cause>    ╱╲
                   ba   VP
                      ╱ ╲
                   DP      V'
               <Affect>    ╱╲
                          V
                        ╱ ╲
                     V₁    V₂
                        [+state]
```

(10) Past tense interpretation

```
            TP   [=a past tense sentence]
            ╱╲
              T'
            ╱ ╲
         T      baP
      [+past]   ╱╲
              DP     ba'
          <Cause>    ╱╲
                   ba   VP
                      ╱ ╲
                   DP      V'
               <Affect>    ╱╲
                          V
                        ╱ ╲
                     V₁    V₂
                        [+activity]
```
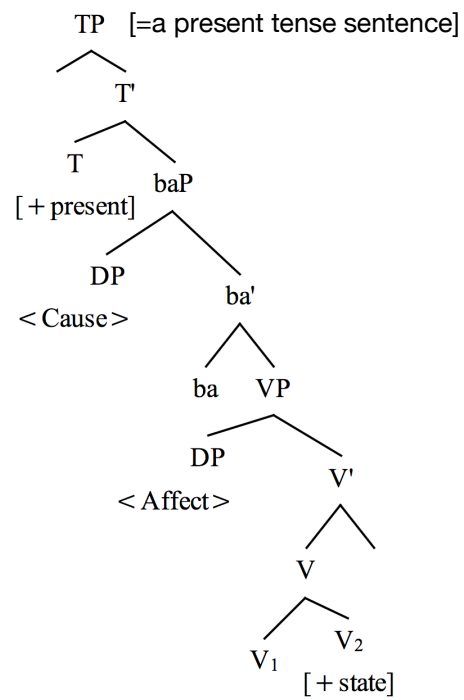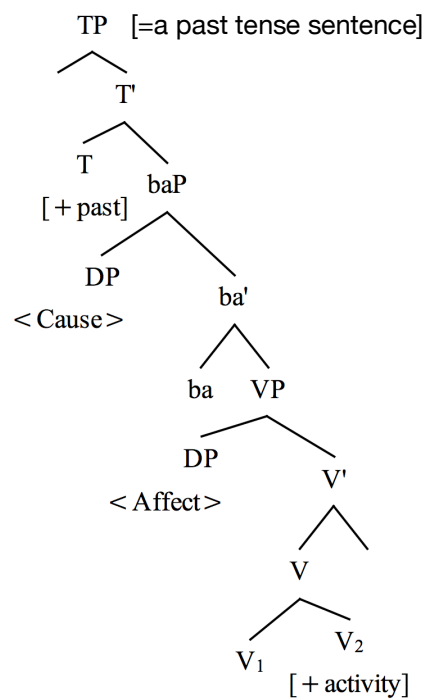
- More supporting data

(11) with a stative V$_2$

    a.   xiao-jun   ba   mo-bu   nong-   **shi**   (present)
        Xiao-Jun BA   duster   make   wet
        'Xiao-Jun dampened the duster and it is wet now.'

    b.   xiao-jun   ba   yi-fu   ran-   **hong**   (present)
        Xiao-Jun BA   clothes dye   red
        'Xiao-Jun dyed the clothes red and they are red now.'

with an activity V$_2$

    c.   xiao-jun   ba   xiao-gou   xia-   **pao**   (past)
        Xiao-Jun BA   dog   scare run
        'Xiao-Jun scared away the dog.'

    d.   xiao-jun   ba   ke-ren   gan-   **zou**   (past)
        Xiao-Jun BA   customer expel walk
        'Xiao-Jun turned out the customer.'

5. Conclusion

- Neither telicity nor boundedness is enough to determine aspectually unmarked bare accomplishment *ba*-sentences in TM.

- The predicate type of V$_2$ of accomplishment VPs determines the temporal reference of aspectually unmarked bare accomplishment *ba*-sentences.

    ①   A stative V$_2$ would choose covert present tense.

    ②   An activity V$_2$ would choose covert past tense.

- Only episodic readings rather than generic readings are allowed for bare accomplishment *ba*-sentences, which do not need aspectual licensing.

6. References

Chang, Y.-J. (2018). *The Temporal Reference of Bare Accomplishment Sentences in Taiwanese Mandarin*. Paper presented at Linguistics and English Language Postgraduate Conference. University of Edinburgh, 4-6 June 2018.

Depraetere, I. (1995). On the Necessity of Distinguishing Between (Un)boundedness and (A)telicity. *Linguistics and Philosophy*, *18*, 1–19.

Grimshaw, J. (1990). *Argument Structure*. Cambridge, MA: The MIT Press.

Herweg, M. (1991). Perfective and Imperfective Aspect and the Theory of Events and States. *Linguistics*, *29*(6), 969–1010.

Lin, J. W. (2002). Selectional Restrictions of Tenses and Temporal Reference of Chinese Bare Sentences. *Lingua*, *113*, 271–302.

Moens, M., & Steedman, M. (1988). Temporal Ontology and Temporal Reference. *Computational Linguistics*, *14*(2), 15–28.

Rhys, C. S. (1996). Event Structure and the "Ba" Construction. *York Papers in Linguistics*, *17*, 299–332.

Sun, H. (2014). *Temporal Construals of Bare Predicates in Mandarin Chinese*. Doctoral Dissertation. University of Nantes / Leiden University.

Sun, H. (2015). Evidence Against A Scope Analysis of Temporally Free Readings of Relative Clauses in Mandarin. In E. Labeau & Q. Zhang (Eds.), *Cahiers Chronos: Taming the TAME systems* (pp. 63–81). Amsterdam/New York: Rodopi.