Typological Properties of Secondary Predicates

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要 約

　この発表ではまず英語、日本語、モンゴル語、タイ語そして中国語という 5 つの言語を通し、2 次述語を使った表現方法の比較を紹介する。英語では 2 次述語を使った表現方法は 6 パターン（うち 4 パターンは結果構文、2 パターンは描写構文）あるのだが、全ての言語でその 6 パターンを 2 次述語を用いて表現出来るわけではない。どの言語でどのパターンが表現出来るかというデータを中心に、2 次述語の特性をつかみに行く。例えば英語だけのデータでは、本文 (1c) で示されている Spurious Type において tight が 2 次述語として目的語を修飾しているのかそれとも動詞を修飾しているのかは判断がつかない。つまり「くつひもを結んで、結果くつひも（目的語）が tight になった」のか、「tight になる強さでくつひもを結んだ」のか。tight が形容詞あるいは副詞のどちらとして文中で機能しているかが不明瞭なのだ。

　　1c.　John tied his shoelaces **tight**.　<Spurious>　（Washio, 1997）

ところが日本語や中国語のデータを参照すると、同様の Spurious Type が副詞を用いて表現されていることが分かる（本文（5c）及び（12c）参照）。英語の 1c は日本語では 5c、中国語 12c と表現されるのだが、日本語の「く」ku は副詞の接尾語であり、また中国語の「地」de も同様なのである。

　　5c.　Taroo-ga　　　kutuhimo-o　　　**kata-ku**　　　musun-da　　<Spurious R>
　　　　　Taroo-NOM　　shoelaces-ACC　　tight-ku　　　tie-PAST
　　　　　"Taro tied his shoelaces tight."

　　12c.　張三**粘糊糊地**煮了粥　　　　　　　　　　　　　　　　<Spurious>
　　　　　Zhangsan　　**nian-hu-hu-de**　　zhu　　le　　zhou
　　　　　Zhangsan　　sticky/slimy　　　boil　PFV　porridge
　　　　　"Zhangsan boiled the porridge sticky/slimy."

　後半部分では中国語に焦点を置く。前半部分で紹介された中国語の 6 パターンのうち、2 次述語を用いた 12a、12b、12d をより詳細に見る。これらの文章の使役の程度、そして 2 次述語とどの項が結びついているかという 2 点に注目し、LCS（Lexical Conceptual Structure)という意味論と統語論の橋渡しをする道具（理論）を用い中国語の 2 次述語構文の全容を解明する。具体的には 12a、12b は強い使役であり 2 次述語は必ず目的語にリンクするのだが、それはこの 2 つのタイプの文章がそれら専用の 2 次述語を使用していることが原因なのである。また 12d は弱い使役で 2 次述語は常に主語にリンクするのだが、これも上と同様にこのタイプの文章がそれ専用の 2 次述語を使用しているからなのだ。つまり 12a、12b と 12d の差は主語や目的語の選び方でもなく、主動詞の種類でもなく、2 次述語の種類だけにより生じていると提案する。

本 文

Aims
1. Typological Properties of Resultatives and Depictives Based on Semantics
   -Which of the six types or Res & Dep do English, Japanese and Mandarin allow?
   -Few overlaps among the words for different types of resultatives and depictives.
2. Further Semantic and Syntactic Analysis of Mandarin Secondary Predicates

1. Introduction: Overview of Resultatives and Depictives with English Examples

Washio (1997) stated that in terms of the lexical semantics of the verb and secondary predicate there are three types in the resultatives such as strong, weak and spurious types. In the strong resultatives, the meaning of the secondary predicate is not included in the meaning of the verb; the verb is the "activity" type of Vendler's (1967) four aspectual types of verb (activity, state, achievement, accomplishment), which does not indicate the information of state. In the weak resultatives, the meaning of the secondary predicate is closely related to the meaning of the verb; the verb is the accomplishment type which denotes action as well as change of state. Spurious type resembles the weak type, but is a separate phenomenon. A paraphrase test can distinguish the weak ones from the spurious ones. Subject oriented type was introduced as a type of

resultatives by Wechesler (1997). All four types are illustrated in (1). In (2) two types of depictives are shown. The paraphrase test for the distinction between the weak and spurious ones is given in (3).

[Resultatives in English]

(1)

a. John pounded the metal **thin**.   <Strong>

    (Washio, 1997)

b. John broke the metal **into pieces**. <Weak>

    (Washio, 1997)

c. John tied his shoelaces **tight**.   <Spurious>

    (Washio, 1997)

d. The wise men followed the star **out of Bethlehem**.

    <SUBJ Oriented>

    (Wechesler, 1997)

[Depictives in English]

(2)

a. John ate the fish **raw**.   <OBJ Oriented>

b. John ate the fish **naked**.   <SUBJ Oriented>

<Distinctions between weak and spurious types>

    (Washio, 1997)

(3)

a. John wiped the table **clean/*dirty**.

    <Weak>

b. John tied his shoelaces **tight/loose**.

    <Spurious>

c. John tied his shoelaces tightly/loosely.

[Six Types of Secondary Predicates and their extent of causation]

(4)

TYPE	Extent of Causation	
(1a) Strong Res	Causative	
(1b) Weak Res	Causative	
(1c) Spurious Res	???	
(1d) SUBJ-oriented Res	Weak causative ←	Consequence-depictive type <u>No affected argument exists</u>
(2a) SUBJ-oriented Dep	Non-causative	
(2b) OBJ-oriented Dep	Non-causative	

I will use a term "Consequence-depictives" for the "SUBJ-oriented Res" (1d).

2. Typological properties of secondary predicates

Unlike the case of English, Japanese does not allow the strong type and consequence- depictives, but the weak and spurious ones. In Japanese the weak and spurious ones take different particles; the weak ones take –ni, while the spurious ones –ku.

[Resultatives in Japanese]

(5)

a.* Taroo-ga   kinzoku-o   **taira-ni**   tatai-ta

    <Strong Res>

   Taroo-NOM   metal-ACC   flat-ni   hit/pound-PAST

   "Taro hit/pounded the metal flat."

b. Taroo-ga   kuruma-o   **pikapika-ni**   migai-ta

    <Weak Res>

   Taroo-NOM   car-ACC   shiny-ni   polish-PAST

   "Taro polished a car into a brilliant shine."

c. Taroo-ga   kutuhimo-o   **kata-ku**   musun-da

    <Spurious R>

   Taroo-NOM   shoelaces-ACC   tight-ku tie-PAST

   "Taro tied his shoelaces tight."

d.* Taroo-ga   kuruma-o   **hetoheto-de/-ni**   not-ta

    <Con-dep>

   Taroo-NOM   car-ACC   tired-de/-ni   ride-PAST

   "Taro drove the car and he became tired."

    (←Intended meaning)

[Depictives in Japanese]

(6) a. Taroo-ga   kuruma-o   **hadaka-de**   kat-ta

    <SUBJ Ori>

   Taroo-NOM   car-ACC   naked-de   buy-PAST

   "Taro bought the car while he was naked."

b. Taroo-ga   kuruma-o   **tyuuko-de**   kat-ta

    <OBJ Ori>

   Taroo-NOM   car-ACC   secondhand-de   buy-PAST

   "Taro bought a secondhand car."

List of Japanese words which can be used as SUBJ-oriented depictives, OBJ-oriented depictives, weak resultatives or spurious resultatives

[Depictives]: X-de

(9)

<u>SUBJ-Oriented</u>

hadaka-de (naked)	N
kokorozasinakaba-de	N
honsin-de (with honesty)	N
karoo-de (too much working)	N
joodan-de (with joke)	N

(10)

<u>OBJ-Oriented</u>

hadaka-de (unwrapped)	N
atu-atu-de (hot)	N
boro-boro-de (shabby)	N
tyuuko-de (secondhand)	N
sintiku-de (newly-built)	N
hanjuku-de (soft-boiled)	N
rea-de (rare)	N

221

medeamu-de (medium)   N

[Weak Resultatives]: X-ni

(11)

<u>always link to only affected arguments</u>

konagona-ni (powder)	N	
pesyanko-ni (squashed)	N	
karikari-ni (deep fried)	N	
komugiiro-ni (colour of wheat)	N	→ Mimetics[1]
kati-kati-ni (hard)	N	
bisyo-bisyo-ni (very wet)	N	
pika-pika-ni (shiny)	N	
doro-doro-ni (melted/slimy)	N	
mapputatu-ni (clearly two)	N	
hosigata-ni (star-form)	N	
hanjuku-ni (soft-boiled)	N	
rea-ni (rare)	N	
medeamu-ni (medium)	N	

[Spurious Resultatives]: X-ku

(12)

aka-ku (red)	A
siro-ku (white)	A
komaka-ku (fine)	A
ara-ku (coarse)	A
hoso-ku (thin)	A
huto-ku (thick)	A
kata-ku (hard)	A
yuru-ku (loose)	A

[Some examples of incompatibility]

(5)<weak resultatives>

b. Taroo-ga   kuruma-o   **pikapika-ni**   migai-ta

                                    <Weak Res>

   Taroo-NOM   car-ACC   shiny-ni   polish-PAST

   "Taro polished a car into a brilliant shine."

(7)a. <as OBJ-oriented depictives>

* Taroo-ga   kuruma-o   **pikapika-de**   not-ta

   Taroo-NOM   car-ACC   shiny-de   ride-PAST

   "Taro drove the shiny/polished car."

b. <as spurious resultatives>

* Taroo-ga   kuruma-o   **pikapika-ku**   migai-ta

   Taroo-NOM   car-ACC   shiny-ni   polish-PAST

   "Taro polished a car into a brilliant shine."

(6) <OBJ-oriented depictives>

b. Taroo-ga   kuruma-o   **tyuuko-de**   kat-ta

                                    <OBJ Ori>

   Taroo-NOM   car-ACC   secondhand-de   buy-PAST

"Taro bought a secondhand car."

(8) <as weak/spurious resultatives>

* Taroo-ga   kuruma-o   **tyuuko-ni/ku**   not-ta

   Taroo-NOM   car-ACC   secondhand-ni/k   ride-PAST

   "Taro drove the car, as a result the car became secondhand."

[Cross-linguistic Property of Secondary Predicates]

<Thai>

Depictives: *maw* (drunk), *im* (full), *nYay* (tired)

Resultatives: *tEEk* (broken), *bEEn/riap* (flat),

                             teun (awake), *peuk* (deep)

<Mongolian>

Depictives: adjectives + *eer*(Instr), adjectives + *bai*(be)

                             + *h*(Infi) + *ad*(Dat)

Resultatives: intransitives + *tai*(CVB), adjectives

                           + *bai*(become) + *tai*(CVB)

[Resultatives in Mandarin]

(12)

a. 張三打**破**了玻璃   <Strong>

   Zhangsan   da   **po**   le   bo-li

   Zhangsan   hit   broken   PFV   glasses

   "Zhangsan hit the glasses broken."

b. 張三殺**死**了李四   <Weak>

   Zhangsan   sha   **si**   le   Lisi

   Zhangsan   kill   die   PFV   Lisi

   "Zhangsan killed Lisi dead."

c. 張三**粘糊糊地**煮了粥 [2]   <Spurious>

   Zhangsan   **nian-hu-hu-de**   zhu   le   zhou

   Zhangsan   sticky/slimy   boil   PFV   porridge

   "Zhangsan boiled the porridge sticky/slimy."

d. 張三吃**膩**了粥   <Concequence-Depictives>

   Zhangsan   chi   **ni**   le   zhou

   Zhangsan   eat   bore   PFV   porridge

   "Zhangsan ate porridge and became bored."

[Depictives in Mandarin]

(13)

a. 張三**怕怕地**跑了   <SUBJ Oriented>

   Zhangsan   **pa-pa-de**   pao   le

   Zhangsan   shyly   run   PFV

   "Zhangsan shyly ran."

b. ?張三**熱呼呼地**吃了饅頭   <OBJ Oriented>

   Zhangsan   **re-hu-hu-de**   chi   le   mantou

   Zhangsan   hotly   eat   PFV   bun

   "Zhangsan ate the bun hot."

(14)

TYPE	Extent of Causation
(12a) Strong Res	Causative
(12b) Weak Res	Causative
(12c) Spurious Res	???
(12d) Consequence Dep	Weak causative
(13a) SUBJ-oriented Dep	Non-causative
(13b) OBJ-oriented Dep	Non-causative

3. Semantic and Syntactic analysis of Mandarin Secondary Predicates

3.1 Basic Data

The "resultative" construction in Mandarin can be divided into 3 types.

Two key issues: (i) linking of the arguments of the two predicates (ii) causation.

15)

John   chi-yan-le   mantou   <Weak causative>

John   eat-bored-ASP   bun

"John ate buns and became bored."

16)

John   niu-gan-le   maojin   <Causative>

John   wring-dry-ASP   towel

"John wrung the towel, which made the towel dry."

17)

Zhe zhong   yao   hui   chi-si   ni   <Causative>

this kind   drug   will   eat-die   you

"Eating this kind of drug (by you) will make you dead."

18)

*Ni hui chi-si   zhe zhong yao   <non-existence>

you will eat-die   this kind   drug

"you will eat this kind of drug and die."

←(intended meaning)

[Causative vs. Non-causative]-BA(affected object),
                    BEI(passive); Huang (1988) etc.

19)

a. * John ba   Zhangyu   chi-yan-le

    John BA   octopus   eat-bored-ASP

b. * Zhangyu   bei   John chi-yan-le

    octopus   BEI   John eat-bored-ASP

20)

a.   John ba   maojin   niu-gan-le

John BA   towel   wring-dry-ASP

"John wrung the towel dry."

b.   Maojin bei   John niu-gan-le

towel   BEI   John wring-dry-le

"The towel has been wrung dry by John."

21)

a.   Zhe zhong yao   hui   ba ni   chi-si

this   kind   drug   will   BA you   eat-dead

"Eating this kind of drug will make you dead."

b.   Ni   hui   bei   zhe zhong yao   chi-si

you   will   BEI   this kind   drug   eat-dead

"You will be made dead by eating this kind of drug."

3.2 The real semantics of Mandarin Secondary Predicates

There are two types of secondary predicates in terms of their semantics, namely those with internally- and externally-caused change of state (see McKoon and Macfarland 2000), which are respectively "weak-causative" and "causative". I further argue that the argument undergoing internally-caused change always links to Actor and the one undergoing externally-caused change (a truly "affected" argument) always links to Undergoer.

22)

Examples of internally- and externally-caused states

a. Internally-caused state   <weak-causative>

    zui,   ni/yan,   bing,   bao,   bao

    drunk,   bored,   sick,   full,   thin

b. Externally-caused state   <causative>

    po/huai, ping, gan, liang, xing,   si,   cuo,   shen,

                                        shange,   fat

    broken, flat, dry, shine, awake, dead,   wrong, deep,

                                        injured,   pan

23)

Linking of the arguments of the two predicates;

-Internally caused state by its definition must link to Actor

-Externally caused state can link to Actor or Undergoer

24)

Diagnostic

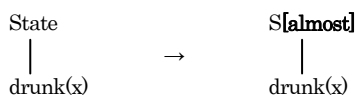▪ "Almost test"

a. Internally-caused state

  wo cha-dian   zui

  I   almost drunk

  "I'm almost drunk."

b. Externally-caused state
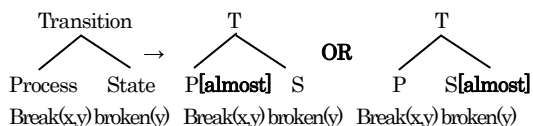
  bo-li   cha-dian   po

  glasses   almost   broken

  1. "The glasses were nearly hit to be broken, but were NOT hit."

  OR

  2. "The glasses were indeed hit but not fully broken."

▪ Semantic structures of "almost test" (Pustejovsky, 1992)

(c) Int.Caus. (drunk)

State   S[almost]

| → |

drunk(x)   drunk(x)

(d) Ext.Caus (break)

Transition   T   T

 /\\   →   /\\ OR /\\

Process State   P[almost] S   P   S[almost]

Break(x,y) broken(y) Break(x,y) broken(y) Break(x,y) broken(y)

Importantly, the distinction between internally- and externally-caused states can be seen when they merge to another verb to compose a resultative compound.

25)

a. Wo cha-dian chang-yan-le   zhe ge

  I   almost   sing-bored-le this song.

  "I sang this song and became almost bored."

b. Wo cha-dian da-po-le   bo-li

  I   almost   hit-broken-le glasses.

  "I almost hit the glasses broken."

  OR

  "I hit the glasses which made them almost broken."

3.3 Lexical Conceptual Structures (LCS)[3]

According to Kageyama (2007), CAUSE represents "indirect causation", where no affected argument exists, while CONTROL does "manipulative causation". I will apply CAUSE to weak causative type and CONTROL to causative type.

-Internally-caused state: [do'(x, y)]CAUSE   [BECOME pred'(x)]

-Externally-caused state: [do'(x, y)]CONTROL [BECOME pred'(x/y)]

26) Proposal

the affected argument (the *pred'(α)*) in the LCS has primacy to link to OBJ

27)

John chi-bing-le   zhangyu   <weak causative>

John eat-sick-ASP   octopus

  "John ate the octopus and John became sick."

LCS: [do'(x, y)]CAUSE[BECOME pred'(x)]

28)

John niu-gan-le   maojin   <causative>

John wring-dry-ASP towel

"John wrung the towel, which made the towel dry."

LCS: [do'(x, y)]CONTROL[BECOME pred'(y)]

29)

Zhe zhong yao hui chi-si   ni   <causative>

this kind   drug will eat-die you

"Eating this kind of drug will make you dead."

LCS: [do'(x, y)]CONTROL[BECOME pred'(x)]

Reversing the arguments in (28) leads to ungrammaticality (see (30)). I argue that compound predicates have their events connected by CAUSE or CONTROL, and the affected argument (the argument of the predicate under CAUSE) has primacy for linking – to OBJ in active clauses, with the other core argument linking to SUBJ (even though it may have no subject proto-properties). For example in (30), the resultative predicate *si* "dead" is an externally-caused one, hence the affected argument *ni* "you" has to link to OBJ, and the alignment in (30) is impossible.

30)

* Ni hui chi-si   zhe zhong yao <non-existence>

  you will eat-die this kind   drug

  "you will eat this kind of drug and die."

                       ←(intended meaning)

Possibility of [do'(x, y)]CAUSE[BECOME pred'(y)]

Theoretically there should be another type of resultative, which is weak-causative and where the resultative predicate's argument links to OBJ. Previous analyses, such as Li (1995) and Her (2007) could not explain why this type does not exist. However, under my proposal, the LCS of this type would be [do'(x, y)]CAUSE[BECOME pred'(y)], but by definition, in this type of LCS, the resultative predicate must be the internally-caused one, brought about by the entity that is the first

argument of *do*.

The patterns are slightly obscured by (31), an example that Li and Her used, where the argument of *lei* "tired" can link to SUBJ or OBJ. This is because *lei* "tired" in Chinese is one of the few resultative predicates that can allow interpretations of both internally- and externally-caused change (see Levin & Rappaport Hovav, 1995). The prediction is that (31a) is weak-causative and (31b) is causative.

31)
John zhui-lei-le   Lee
John chase-tired-le Lee
a. "John chased Lee and (John) got tired."   <weak-causative>
b. "John chased Lee, which made him (Lee) tired." <causative>

Notes

1. For categorisation of mimetics, see Kageyama (2007).
2. Interestingly this spurious type does not seem to exist in Cantonese, but in Mandarin.
3. LCS is not a fully unified model. In this presentation, I use Kageyama's (2007) theory of LCS with a small amendment on the interpretation of the status *y*.

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