

# Issues in Verb Classes: Korean and Cross-linguistic Perspectives

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## 0. Position:

Beth Levin (1993) is required for each and every language (preferably in a GL style).

## 1. Polymorphicity: Motion Verbs

(1) a. Yumi loaded hay onto **the truck** (for/\*in two hours).

(Goal)

b. Yumi loaded **the truck/two trucks** with hay (in/?for an hour).

(derived Theme) [change of state]

c. Yumi loaded *two tons of hay* onto the truck in an hour. [quntizd]

d. ?\*Yumi loaded **trucks** with *two tons of hay* in an hour. [~qntizd]

Jackendoff (1996) not correct

- (2) a. Yumi-nun kkol -ul truck-ey sil-ess-ta (K) / tsumi-kon-da (J)  
Y -TOP hay-ACC -LOC load-PAST-DEC/load-PAST  
'Yumi loaded hay onto the truck.' (Goal) LOC *ni* (J)
- b. \*Yumi-nun truck-ul kkol-lo sil-ess-ta (K) /tsumi-kon-da (J)  
Y -TOP -ACC hay-INSTR loaded/load-PAST  
Lit. 'Yumi *loaded* [K/J] the truck with hay.' INSTR *de* (J)

Patterns of case alternations and types for transitive motion verbs in Korean:

### (3) Patterns of Case Alternations

[Nom=N, Acc=A, Loc=L, Inst=I]

	Type A	Type B	Type C	Type D
	neh-	sil-	chaywu-	p'uri-
	'put in'	'load'	'fill'	'spray'
Pattern 1: x-ka [N] y-lul[A] z-ey[L] V	ok	ok	ok	ok
Pattern 2: x-ka [N] z-lul[L] y-lo[I] V	x	x	ok	ok
Pattern 3: y-ka [N] z-lul[A] V	x	x	ok	x/?ok
Pattern 4: z-ka [N] y-lul[A] V	x	(?)ok	x	x

[load the truck with hay] (pile/spray---) as a **change-of-state lcp** with FORMAL = (globally) **affected** (e2,<2>), AGENTIVE = (e1, **move\_act** (e1,<1>, <3>,<2>)).

Typically consumption verbs involve this kind of ‘affected’ **incremental Themes** (Tenny 1987, Dowty 1991) and I extend this to those location change or movement-involving alternation verbs and characterize their Goal/Loc direct objects as ‘affected’ derived Themes. In Korean, this is impossible with Type B verbs. Type C ‘fill’ and Type D ‘spray’ verbs alone can show the same Goal/Loc direct objects, as in Pattern 2. Italian *caricare* ‘load’ like *load*?

## 2. Creation Verbs

- ◆ Involve a (change of state) **process** subevent and a **created artifact** as their objects.
- ◆ Typical: *mantul-* ‘make’, *cis-* ‘build or construct.’
- ◆ These verbs take only resulting entities (artifacts) and not material objects as their direct arguments. In this case the complex event (consisting of process and state) denoted by the verb has an inherent telic point (ascertained by perfective, but resultative complement in Chinese) at which the resulting artifact is brought into existence as a result of activity. They do not incorporate lexicalization of manner component restricting the first subevent and thus are **not** interpreted **polysemously** cross-linguistically.

◆ In contrast, there are a great deal of **creation verbs** that come from **change of state** verbs, showing **polysemy between change of state and creation**, exhibiting **Material/Product alternation**. Verbs such as *kup-* ‘bake,’ *kkulh-i-* ‘boil’, *thuyki-* ‘fry’, *el-li-* ‘freeze’ form the **<1<sup>st</sup>>** **class of such polysemous verbs in Korean**, which can take either artifacts or raw material objects as direct arguments. In English, *bake* alone is polysemous.

- (4) a. Mary-ka (han sikan -tongan) muwl -ul kkulh-i -ess-ta.  
M -NOM (one hour for) water -ACC boil-CAUS-PAST -DEC  
‘Mary boiled water (for one hour).’ (**change of state**)
- b. Mary-ka (han sikan-maney) miyek -uro kuk -ul kkulh-i -ess -ta.  
M -NOM (one hour-in) seaweed-INSTR soup-ACC boiled  
‘Mary made/cooked soup with seaweed (in an hour).’ (**creation**)

(5) a. o            -yu    -o    wakasu    (J)  
HON-hot water-ACC    boil  
'make hot-water' [creation, not polysemous]

b. ?\*mizu-o            wakasu  
water-ACC    boil    'boil water'(Intended)  
cf. mizu-o futoo-saseru 'boil water'

c. misoshiru-o tsukuru 'make (cook) miso'

(6) Pekka    keitt -i            kahvi -n            (Finnish).  
Peter    boil -PAST            coffee -ACC  
'Peter made the coffee.'

In Finnish, too, 'boil' has both the creation and change of state readings. If it takes an **artifact** as the **object**, it gets the **creation** reading. Otherwise (if it takes a natural kind object like water) it gets the change of state reading. Also, if it takes ACC for its object the event is quantized and if it takes PARTITIVE the event denotes a process.

<2nd> class: *chari-* 'set,' *tha-* 'mix,' *kakkwu-* 'grow,' *kkwuri-* 'wrap,'  
*ssah-* 'pile'

- ◆ behave like *kkulh-i-* 'boil', though with a heavier manner sense involving some sense of motion. Unlike their counterparts in English, these verbs in Korean show Figure=Material/Product alternation.

(a) Mary-ka (??han sikan -maney) **umsik-ul canchi-sang-ey** chari-ess-ta.  
M-NOM one hour -in dish -ACC feast table -LOC set-PAST-DEC  
'Mary set dishes onto the dinner table (in one hour).'  
[Unbounded Process in K] [Material]

(b) Mary-ka (han sikan -maney) **katkaci umsik -uro canchi-sang-ul** chari -ess -ta.  
M-NOM one hour-in various dishes-INSTR feast table-ACC set-PAST-DEC  
'Mary set a dinner table with various dishes (in one hour).'  
[Accomplishment – Creation]

(b)' Mary set a dinner table with various dishes.

(b)" ?Mary set various dishes onto the dinner table

<3<sup>rd</sup>> class: *kkakk-* ‘cut, carve,’ *pic-* ‘shape (dough)’ *mal-* ‘roll (into),’  
*kko* ‘twist,’ *yekk-* ‘weave’

- ◆ Apply alternatively to the Material object or the Product object. The **Product object** generates the **creation** reading. They behave like the English *carve*, as in (a) *carve a toy out of the piece of wood*. (b) *carve the piece of wood into a toy* (Levin & Rappaport (1993)), even though the Korean verb *kkakk-* ‘carve’ with the Material object does not show the resultative Product part *into a toy* in one sentence, requiring a bi-clausal structure.

<4<sup>th</sup>> class: *ttulh-* 'bore' and *pha-* 'dig'

- ◆ Unlike *bore* in English, *ttuwlh-* 'bore' can also take either a Location argument or **an artifact such as 'hole' as its direct object**. If *ttulh-* is composed with an artifact, of which the predicate is like (*pyek-ey*) *kumeng-ul ttulh-ess-ta* Lit. 'bored a hole (in the wall),' it constitutes a **creation-lcp**.

## General action verb 'do': *ha-* in Korean

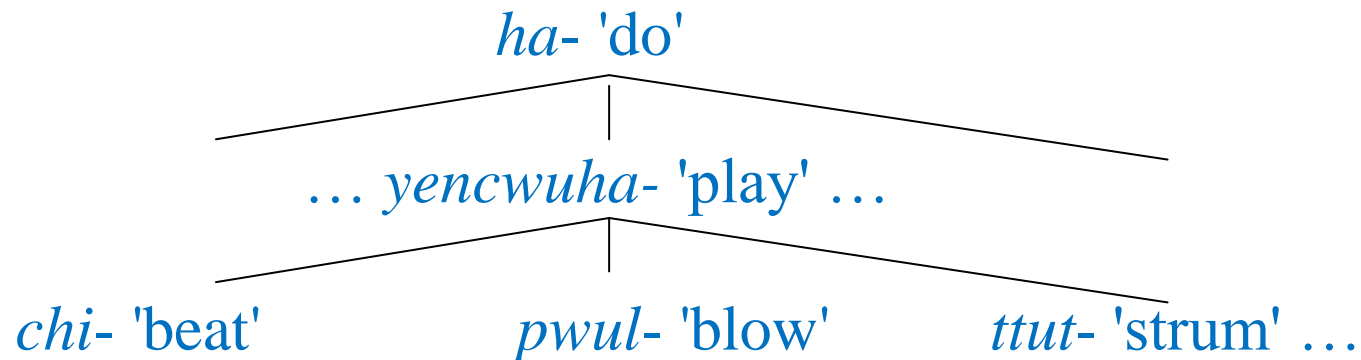
- ◆ what kinds of substantive nominals it can take in various languages can be inferred from the qualia structures of the relevant nominals in the lexicon. The verb *ha-* in K has an **underspecified** process meaning covering almost all action verbs, for *ha-* occupies the highest level in the ontology of the hierarchy of action verbs with 'play' and then 'blow'-'scrape,' etc. under it for various musical instruments in Korean. Then, the specific meaning of *ha-* is selected from the qualia of its combined substantival noun. The selection is from either the telic or agentive in its qualia. The verb *ha-* requires the **specification** of its verbal meaning with the aid of the quale involved.

(8) Mary-nun piano-rul *ha-n-ta*  
M-TOP piano-ACC do-PRES-DEC  
'Mary plays the piano as a job/major.'

The primary telic of 'piano': *yenjwuha-* 'play' [stage-level]

The secondary telic of 'piano': 'play it as a job/major' [individual-level]

◆ Ontology of action verbs associated with musical instruments



(Im and Lee 2001, to appear in *Advances in Generative Lexicon*)

## ◆ *ha-ta* ‘do’ crosslinguistically

Japanese *suru*: with clothings – ‘wear’, as in Korean

Chinese *zuo*: with substantive artifact nominals – ‘make’

*zuo gang-qin* ‘make a piano’

French *faire*: ‘play’ with a definite article + ‘violin’/’piano’

*Marie fait du violon.*

‘make’ with an indefinite article + ‘violin’

*Marie fait un violon.*

German *tun*: ‘make’ in general (narrow in meaning)

Italian *fare*: ?



## ◆ Removal verbs

Shows the characteristics of the salient encoding of the **non-presence of the Figure** involved at the Source from which it moved. The removal verb *chiu-* ‘remove, clear’ shows the Figure object and the Source Ground/Theme object alternation (cf. Martha Palmer’s *clear, clean*).

(9) Yumi-ka    cepsi-rul table-eyse (thong-uro)    chiu-ess-ta  
      -NOM dish-ACC    -from    basket-toward    remove-PAST-DEC  
      ‘Yumi removed dishes from the table (into the basket).’ (J. katazuke-ta)

(10) Yumi-ka    table-ul (\*cepsi- ro /(? ??cepsi-rul)    chiu-ess-ta  
      -NOM dish-ACC dish-with/ACC    clean-PAST-DEC  
      ‘Yumi cleared the table.’

(11) a. ttal –ul            chiu-ess-ta        (J. musume-o katazuke-ta)  
daughter-ACC clear-PAST-DEC  
'got rid of (married) the daughter.'

b. \*cip-ul            chiu-ess-ta    (K)  
    \*ie-o            katazuke-ta (J)  
house-ACC    cleared  
'cleared the house' in the marrying interpretation impossible.

### 3. The Status of Accomplishment; No Accomplishment Verbs in Chinese

- ◆ Many languages including English, Korean, Japanese and Italian have accomplishment verbs with telicity realized by some perfective in the regular tense/aspect system.
- ◆ In contrast, Chinese has activity/process verbs plus resultative complement words to become analogous to accomplishment verbs.  
Observe:

(12) a. ta hua quan le [temporally bounded but not telic]  
he draw circle ASP

‘He drew a circle (process, not an accomplishment).’

b. ta hua hao le quan  
he draw RESULT ASP circle

‘He drew a circle (an accomplishment).’

(13) (same with *gai fangzi* ‘build a house’)

ta gai ??(hao/wan/dao) le yi ge fangzi  
he build RESULT ASP 1 CL house

‘He built one house (without RESULT Comp, either funny or contextually somehow interpreted (confirmed by Chu-Ren Huang); funny because <no RESULT and Quantization> are in conflict).

## 4. How to represent TELICITY?

Pustejovsky's transition idea (dynamically posed)

*build a house* e1: **process** e2: **exist** (y) [quantized], not *houses*

*run into the store* e2: **be at** (here **in**) (x, y)

*run a mile* (accomplishment but not creation, motion of *run*)

e2: **be at 1 mile's distance** (x)

no Goal expressed

Grammars puzzled

*ta gai wan/dao/hao yi ge fangzi*

e1: **process** e2: **exist** (y) [quantized]

## telicity:

An event description  $R$  is *telic* iff it applies to events  $e$  such that all parts of  $e$  that fall under  $R$  are initial and final parts of  $e$  (see Krifka 1998) (Kennedy 2002)

## quantization:

is becoming  $n$  completely *individuated* objects (for me), cf. Krifka: A predicate  $P$  is *quantized* iff no entity that is  $P$  can be a subset of another entity that is  $P$  (see Krifka 1998) (Kennedy 2002)

## 5. Crosslinguistically different lexicalization: the case of *look for* and *find*

- a. In Korean (and possibly Japanese), they are realized in one word *chac-ta* ‘look for/find’ (for Montague, *seek*: try to find)  
in the progressive, it is ‘look for’  
in the perfective, it is either ‘find’ or ‘look for’  
with aspectual adverbials ‘finally’ etc, it is ‘find’
- b. In Chinese, *zhao* ‘look for’ becomes ‘find’ when it composes with the RESULTative Complement (perfective) *dao*. Observe the Chinese example:

- (14) a. ta    zhao    Anna    le  
      he    look for    A    ASP  
      ‘He looked for Anna.’
- b. ta    zhao    **dao**    le    Anna  
      ‘He found Anna.’

## ■ Psych Predicates etc.

### 6. KTimeML

For morpheme-by-morpheme **agglutinative** languages, more attention to morphemes is needed for TimeML – KTimeML (Im et al).

### 7. Conclusion:

Cross-linguistic perspectives and investigations are required for theory and application.

**Thank you!**

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Lee, Chungmin, Beom-mo Kang, Seungho Nam (1999) “A Lexical Semantic Study of Predicates in Korean,” a soft science technical development research project report to the Ministry of Science and Technology, Korea.