Structural effects of morphological directionality in psych verbs. A typology.

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Outline

1. Introduction:
   The psych alternation cross-linguistically
2. Method:
   Feelings and how to make people talk about them
3. Results & Discussion
4. Conclusion & Outlook

1. Introduction

– The psych domain is characterized by the existence of alternating stimulus- and experiencer-directed structures in which both arguments are governed by the verb:

(1) a. *Global warming preoccupies George.*
b. *George is preoccupied with global warming.*
(Landau 2010:54)

(2) a. *Global warming worries George.*
b. *George worries about global warming.*

– These alternations seem to be widespread
– Languages differ with respect to the morphological structure of the verbal inventory in the psych domain.

1. Introduction

– Alternation morphology differs across languages:

(3) *Main alternation types*

a. **Icelandic:**

Transitive EO	→	Intransitive ES
gleðja ‘please‘		*gleðja-st* ‘please-MID‘

b. **Korean:**

Intransitive ES	→	Transitive EO
pwukkulepta ‘be.ashamed’		*pwukkulep-key hata* ‘be.ashamed-ADVR do’

c. **Finnish:**

Intransitive ES	↔	Transitive EO
huolest-ua ‘worry-INCH’		*huole-ttaa* ‘worry-CAUS’

c'.

Intransitive ES	→	Transitive EO
huolest-ua ‘worry-INCH’		*huolest-u-ttaa* ‘worry-INCH-CAUS’

1. Introduction

– In fact, this is likely to be a typological parameter (Nichols et al. 2004):

1. Intransitivizing languages

a. Greek mediopassive

x *enđiaféri* y ‘x interests y’

y *enđiafér**ete ja*** x ‘y is interested in x’

b. German reflexive, stative passive

x *ärgert* y ‘x annoys y’

y *ärgert **sich über*** x ‘y is annoyed by x’

2. Transitivizing languages

a. Turkish causativization

y x *sevin-di* ‘y is happy about x’

x y *sevin-**dir**-di* ‘x makes y happy’

b. Yucatec causativization

chi’chnak ti’ x y ‘y is annoyed about x’

*chi‘chnak-**kuns***- y x ‘x annoys y’

3. Underspecified (Double derivation, auxiliary change, conversion, mixed)

a. Hungarian double derivation

megrém-ít x y ‘x frightens y’

megrém-ül y x-tól ‘y gets frightened by x’

b. English conversion

x *worries* y

y *worries about* x

1. Introduction

- Out of the two alternants created, EO verbs may show exceptional syntactic properties
  (Belletti & Rizzi 1988, Pesetsky 1995, Haspelmath 2001, Reinhart 2002, Bayer 2004, Landau 2010, Verhoeven 2014, Temme & Verhoeven 2016, etc.)
  - Linearization
  - Passivization
  - Extraction
  - Binding
  - ...
- This is a contrast in the verbal lexicon
- Crucially, *it does not appear in all languages*

1. Introduction

(4) **Passive**

a. Turkish:

Yaya (polis tarafından) üz-dür-ül-dü.
Pedestrian policeman by sadden-CAUS-PASS-PFV

b. Icelandic:

**Vegfarand-inn var gladd-ur (af lögreglumann-inum).*
Pedestrian-NOM.DEF was gladdened-NOM by policeman-DAT.DEF

((a) taken from Verhoeven 2008:88)

(5) **Forward binding**

a. Chinese:

Lǎoshī hé xuéshēng (wúyìjiān) xiānghù jīnù-le.
Teacher and student unconsciously each.other enrage-PFV

b. German:

**Peter und Paul wundern/interessieren sich gegenseitig.*
Peter and Paul astonish/concern REFL each.other

(Verhoeven 2010:112f.)

Further typological difference in the lexicon

Ls with a subclass of EO verbs
with exceptional syntactic properties

yes	*no* (at least for ACC EOs)
German	Chinese
Greek	Turkish
Icelandic	Yucatec Maya
Hungarian	Korean
intransitivizing Ls	**transitivizing Ls**

(see Verhoeven 2010, 2014, Temme & Verhoeven 2016)

– Main research questions:

1. Do all languages show alternations in their psych domain?

2. Is the special syntactic behavior of EO predicates restricted to intransitivizing languages?

1. Introduction

– Central hypotheses:

H_1
All languages have alternating psych predicates.

H_2
Transitive EO predicates only exhibit psych phenomena in languages with a significant preference for an intransitivizing alternation.

2. Method

- Core piece: A cross-linguistic database of alternating psych predicates
- Issue of comparability: English translations as *tertium comparationis* are problematic

> Every language imposes its own classification upon human emotional experience, and English words such as anger or sadness are cultural artifacts of the English language, not culture-free analytical tools.
>
> (Wierzbicka 1992:546)

- Anthropological and psychological research suggests there may be a number of basic emotions elicited by *Universal Antecedent Events* (UAEs, see Boucher & Brandt 1981; Ekman 1999; Hupka et al. 1999)

2. Method

- Five basic emotion modes:
  (Johnson-Laird & Oatley 1989, Ekman 1994, Turner 2007)

(6)

HAPPINESS	Sub-goals being achieved	*delight, like, enjoy, please, charm, enthuse, amuse, interest, fascinate, …*
SADNESS	Failure of major plan or loss of active goal	*sadden, mourn, afflict, depress, grieve, disappoint, bore,…*
ANGER	Active plan obstructed	*annoy, anger, hate, irritate, bother, enrage, frustrate, …*
FEAR	Self-preservation goal threatened	*fear, frighten, worry, terrify, startle, shock, scare, dread …*
DISGUST	Gustatory goal violated	*disgust, nauseate, gross out, repel, offend, appall, horrify, …*

- Simple UAE scenarios are presented orally
- Semantic subcomponents guide elicitation
- Participants describe situations by referring to their own emotional ontologies

2. Method

- Data collected:
  - Citation form
  - Naturalistic usage in simple declaratives
  - Distributive restrictions
    (e.g. stimulus animacy, register)
  - Information on transparent interlexical relations
    (where available)
- Inversion required (but other questions possible)
- Data coded for morphological and syntactic patterns
- Current database contains around ~1200 items
- Languages covered so far:
  Icelandic, Spanish, Korean, Chinese, Finnish,
  Turkish, Bété

3. Results & Discussion

Table 1. Distribution of base orientation in sample (n = 465 pairs)

Language	Bases total	%ES	%EO	%Double
Icelandic	30	6.67	90	3.34
Spanish	119	0	100	0
Korean	116	91.38	0	8.62
Chinese	75	92	2.67	5.34
Turkish	64	68.75	12.5	18.75
Finnish	61	47.54	32.79	19.67

base = morphologically less complex alternant (Nichols et al. 2004)

- Clear reflection of the typological parameter: Intransitivization in IE languages vs. Transitivization in Asia (Nichols 2004, Cysouw 2011)
- However, patterns are not always clear-cut

3. Results & Discussion

- Bété is absent from Table 1
- Stimulus argument is not governed by the verb across alternants → No psych alternation

(7) a. *Júrú jɛ́ cǐ̋ceǰ̄ī sɪ̄ɓā (dàgű kā́dɔ̄ ɔ́ jɛ́).*
anger PRF little.one sting (brother big POSS reason)

`The little brother is enraged because of the big brother.‘

b. *Dàgú kā́dɔ jɛ́ cǐ̋ceǰ̄ī júrú sɪ̄ɓ-à.*
brother big PRF little.one anger sting-CAUS

`The big brother has enraged the little brother.‘

(8) a. *Nɛ́ɲɛ́lù súrú gű mű́ná wű́.*
toy pour child joy onto.

`The toy pleases the child.‘

b. *Mű́ná jɛ́ gű wű́ súr-ó.*
joy PRF child onto pour-MID

`The child was pleased.‘

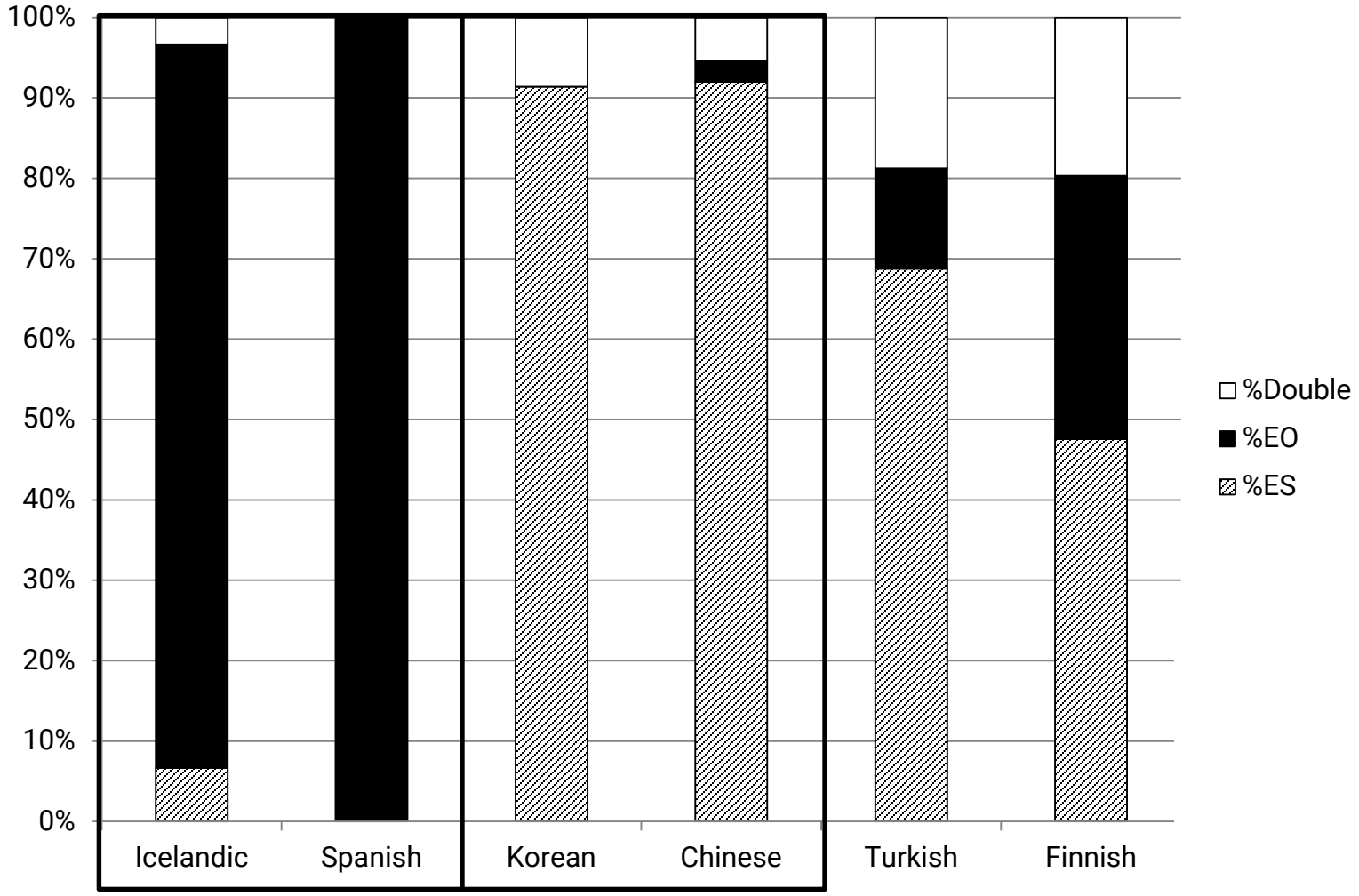
3. Results & Discussion

- Experiencer constructions in Bété tend to show a certain structure:
  - The experiencer tends to be an object or the possessor of a bodypart.
  - The emotion is usually specified in nominal form
  - Its effect is expressed via semantically bleached general action predicates.
  - Verbs may convey emotion meaning via metaphor, e.g. ‘sting’ or ‘seethe’ for anger.
- Dyadic structure → No slot for a governed expression of the stimulus in transitive form?

→ H_1 has to be rejected.

3. Results & Discussion

Figure 1: Visual representation of base distribution across sample languages (n = 465 pairs)



3. Results & Discussion

- Icelandic and Spanish are strongly detransitivizing. Both languages show clear psych effects. (see e.g. Zaenen et al. 1985, Franco 1990, Landau 2010)
- Korean and Chinese are overwhelmingly transitivizing. Their psych domain has been shown to pattern with canonical action predicates. (Verhoeven 2010, Temme & Verhoeven 2015)
- Turkish data is somewhat heterogeneous. Still, the majority of base pairs is transitivizing. This coincides with observations of canonicity in its psych domain (Özsoy 2009, Kutscher 2009, Verhoeven 2014).
- Functional motivation due to semantics of overt causation (Pesetsky 1995)

3. Results & Discussion

- Finnish bases are distributed across orientation patterns
- ES bases around 1.5 times as frequent as EO bases
- Base orientation as a predictor for psych phenomena?
  - Landau (2010) claims non-canonical behavior for psych passives
  - Linearization effects:

(8) a. *Ystävä-n näkeminen innosta-a nais-ta.*
friend-GEN seeing:NOM excite-3.SG woman-PTV

`Seeing the friend excites the woman.‘

b. *Nais-ta innosta-a ystävä-n näkeminen.*
woman-PTV excite-3.SG friend-GEN seeing:NOM

`The woman is excited seeing the friend.‘

3. Results & Discussion

- Nelson (1999) finds that at least a subset of Finnish causativized EO alternants with stative event structure also displays non-canonical behavior (cf. also Pylkkänen 2000)
- Others have argued that at least Finnish passive is uninformative in this regard due to lack of comparability (e.g. Sakuma 2013)

– Psych effects in secondary causatives contra H_2?
→ H_2 modulated by event structure?
– Role of morphology in event structure is still unclear cross-linguistically (but see Pylkkänen 2000)
– A controlled empirical study of psych phenomena in pairs across base orientations is needed

4. Conclusion & Outlook

- Possible addition of a fourth language type: No psych alternation due to complex structures in psych expressions, awaiting further empirical substantiation
- H_2 borne out for (3a) Icelandic, Spanish; (3b) Korean, Chinese, Turkish, but may need modification for (3c) type languages
- Dataset still largely limited to well-researched lects
- In particular, all intransitivizing languages in Table 1 have close ties to Standard Average European
- Other phyla with similar structures needed
- More languages coming: Cabécar, Hungarian, Tagalog, Georgian, Tamil, Greek, Romanian, Yucatec Maya, Khoekoegowab
- Goal: 30 languages from 5 macro-areas

4. Conclusion & Outlook

- Construction of parallelized rating studies based on database material
- Statistical evaluation of H_2 within and across sample languages
- Touchstones:
  - Psych effects across Finnish alternation types
  - Appearance of psych effects in (3a) intransitivizing languages from other macro areas
- Incorporation into a typologically adequate and empirically founded theory of psych expressions

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Thank you!
Bedankt!
Vielen Dank!

Sample questionnaires

Target domain: SADNESS

Stimulus: inanimate

A girl loses her favorite toy and is unable to find it again.

1. [NOW] Which words would best describe the way the loss of his favorite toy makes the girl feel?
2. [SHORT LATENCY] Which words could be used to describe the way the girl felt in the very moment when she noticed that she had lost the toy?
3. [HIGH DEGREE] Which words could be used to best describe the way the girl felt if the toy she lost was not only her favorite, but also the only one she owned?
4. [ELSE] Which other words might be used to describe the way the girl feels when losing her toy?

Sample questionnaires

Target domain: FEAR

Stimulus: animate

A woman encounters a robber.

1. [NOW] Which words would best describe the way the loss of his favorite toy makes the girl feel?
2. [SHORT LATENCY] Which words could be used to describe the way the robber made the woman feel by suddenly appearing in front of her?
3. [HIGH DEGREE] Which words could be used to best describe the way the woman feels about the robber when he pulls a gun on her and threatens to kill her?
4. [ELSE] Which other words could be used to describe how the robber makes the woman feel?