

Workshop on Affectedness,
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**Undergoers and goals:
on measuring out and being affected**

Boban Arsenijević,
University of Niš

Goals of the talk

- Address some of the predictions and questions from the intro talk.
- Present the data from Serbo-Croatian, and
- investigate some further consequences of the available analyses of the aspect-affectedness relation,
- toward an even simpler model of affectedness
- based on a limited set of incorporation templates.

Main arguments

- The direct object (DO) position is best specified as the position encoding the measuring out relation between its filler and the eventuality denoted by the VP, thus only indirectly sensitive to thematic roles.
- As it is more economical to express arguments as DOs than as indirect objects (IO) or adjuncts, when no measuring out can be established, the syntactically most local participant fills the DO position.
- All non-light verbs incorporate manner or one of the participants, and their behavior in respect of measuring out is a syntactic consequence of this 'choice'.

Predictions and questions from the intro talk

P1: Incremental theme verbs do not take goals.

P2: Closed scale verbs require measuring out objects, hence cannot describe states.

Q1: Why the mapping goes from the object to the verb and is this the only option?

P1: Incremental theme + goal

- Pretty much all incremental theme verbs can still take a bounding constituent.

(1) a. Watch your mouth boy, you might get killed down.

b. Edward drank it down to about half-full and then started gagging hard with every sip.

c. We opened the business quite successfully and built it up to 20 staff.

- The bounding predicate entailed by incremental theme verbs can be sub-specified by a goal.

The pattern found in cognate objects

- Cognate objects sub-specify an object incorporated in the verb.
- (2) a. Sharan smiled a generous smile.
b. Lady Gaga sang two songs on the David Letterman show last night you know.
- The availability of cognate goals implies that incremental theme verbs incorporate goals.
 - Explains complementarity with manner: limits on incorporation (one constituent at most).

P2: Closed scale verbs and states

- Certain states can be described using verbs that involve a scalar component (path, open scale) (Anderson 1977).

(3) The snow covered the mountain ((from the valley floor) to the ridge).

- A non-agentive subject contributing an open scale licenses a stative interpretation (for/in, */vgradually, */vslowly) .

Measuring out does not entail telicity

- English states are equivalent with their progressive counterparts (their present form can denote holding at the speech time, Parsons 1989: progressive as state of action).
- No S_V : the state of covering (mapping) holds at a period restricted by the tense.
- Telicity requires two components: a process (a gradual change along a scale) and a (result) state (a particular value being reached).

Measuring_out – telicity dissociation

- Even in atelic VPs, when the verb and the direct object carry matching scales, they need to be mapped.
- (4)
- a. Kangaroo rats (inhabit / live on) (the Santa Cruz Mountain / America).
 - b. The soldiers (surrounded / stood around) the city.
 - c. The snow (covered / was on) the mountain from the valley floor to the ridge.
 - d. (The fog extended / There was fog) from London to Paris.

Q1: Why the mapping goes from the object to the verb?

- It does not necessarily, it is a point of variation.
- In Slavic languages, like Serbo-Croatian (S-C), the mapping is from the verb onto the object.

(5) a. Marija je pila vodu. *atelic*

M Aux drink.Pcpl water.

‘Marija drank (the) water.’

b. Marija je po-pila vodu. *telic*

M Aux over-drink.Pcpl water.

‘Marija drank the water.’ (bounded!)

S-C verb

- The S-C verb can be divided into four ‘slots’:

(quantitative prefix*)	(result prefix)	stem	Infl
iz-po-	nad-	vlač	-iti
out-over-	above-	pull	-Inf

‘to pull [[DO]] above something so that no more pulling events are available and each available pulling event has taken place’

(iz ‘out’ entails exhaustivity and po ‘over’ maximal coverage of the object, Žaucer 2010, Arsenijević 2012)

Stems

- The stem of a S-C verb typically expresses (incorporates?):
 1. a stative property: blistati ‘to be sparkling’
 2. manner of action/process: kotrljati ‘to roll’
 3. result (of change): ustoličiti ‘to enthrone’
(lit. *in-chair*, parallel to the Latinate *en-throne*)
 4. direction (of change): ubrzati ‘to speed up’
(lit. *in-speed*, ~ hypothetical Latinate ‘en-velocitate’)

Result prefixes

- Aka. internal prefixes, lexical prefixes.
- There can be at most one.
- Must always be the closest one to the stem.
- ‘Repeats’ the P head of a result (possibly elided due to contextual prominence).

(6) Za-vuk-ao se (za orman).
 behind-pull-PcplMSg Refl behind wardrobe
 ‘He squeezed himself behind the wardrobe.’

Quantitative prefixes

- Aka external, superlexical prefixes.
- They can stack.
- No associated PP.
- Quantitative interpretation closely related to the corresponding preposition:

na 'on' - accumulation, iz 'out' - exhaustivity
po 'over' - full coverage, do 'until' - completion

Morphologically collapsed SVC?

- Each subpredicate can take an argument.

(7) Iz-u-bacivali su lopte u koš.
out-in-thrown Aux balls.Acc in basket.Acc

‘They threw all the balls into the basket.’

iz(lopte) u(lopte) bac(lopte)

Na-u-bacivali su se lopte u koš.
on-in-thrown Aux Refl.Acc ball.Gen in basket.Acc

‘They had their fill of throwing the ball into the basket’

na(se) u(lopte) bac(lopte)

Grammaticalized incorporation

- Languages with DOs involve grammaticalized (mediated by the Acc-DO position) incorporation of the components such as manner and result into a particular syntactic head.
- DO (measuring out) is an effect of incorporation of the result predicate into the process predicate, licensed by the coreference of their arguments.
- Prediction: verbs incorporating manner require additional marking of result in order to establish a measuring out interpretation for the DO.

Some more detail

- Underlying structure involves three relevant predicates:

predicate_{act}(x) (manner of action)

predicate_{process}(y) (manner of process)

predicate_{result}(z) (result state)

- Incorporation of *predicate*_{result} into the *predicate*_{act/process} yields the measuring out effect.
- Licensed by the restriction that $y = z$.

S-C data

- In what follows, I present data from S-C supporting the presented view (by confirming its predictions).
- Main generalization: result prefixes and overt result PPs are possible only when the verb expresses manner, i.e. neither entails nor presupposes a closed scale.

Manner verbs and result prefixes I

- Presupposed (not entailed) open scale.
- No presupposed result.
- Result prefix interpretation, possible result/goal phrase.

(8) a. Jovan je gurao auto. *atelic*
J Aux pushed car
'Jovan ran / was pushing a/the car.'

b. Jovan je u-gurao auto u vrt. *telic*
J Aux in-pushed car in garden
'Jovan pushed a/the car into the garden.'

Manner verbs and result prefixes II

- A closed scale (result, here: death) presupposed by the verb.
- No result prefix, no overt result/goal possible.

- (9) a. Jovan je gušio Mariju. *atelic*
J Aux strangle M
'Jovan was strangling Marija.'
- b. Jovan je u-gušio Mariju. *telic*
J Aux in-strangle Marija
'Jovan strangled Marija (completely).'

Direction of change

- Degree achievements, entail an open scale.
- Incorporate a degree result relation (> standard).
- No result prefix, no overt result/goal.

- (10) a. Marija je glačala kamen. *atelic*
M Aux slickened stone
'Marija was polishing the stone.'
- b. Marija je u-glačala kamen. *telic*
M Aux in-slickened stone
'Marija polished up the stone.'

State verbs with result prefixes

- Result prefix turns a state verb into a result incorporating verb (state into result state).
- Entailed result (incorporated, being shiny).
- No result prefix, no overt result/goal.

- (12) a. Cipela je/se sijala. *atelic*
shoe Aux/Refl shined
'The shoe was shiny.'
- b. Jovan je u-sijao cipelu. *telic*
J Aux in-shined shoe
'Jovan made the shoe shiny.'

Incorporated result PPs

- Entailed result (incorporated, being shiny).
- The P element not a prefix but an incorporated preposition.
- Possible overt results/goals (the latter only as a cognate, sub-specifying, result).

(13) U-dom-iću štenad u #(finu) kuću.
in-home-Fut1Sg puppies in fine house
'I'll get the puppies a nice home.'
(I'll in-home the puppies into a fine house)

Verbs of motion: manner

- ‘Manner of motion’ verbs do not entail motion (neither English nor S-C):

(14) riding a stationary bike, driving a crane,
running on a stationary machine...

- These verbs can take result prefixes in S-C:

(15) (u-)jaha-ti	(u-)vesti auto	(u-)trčati
in-ride-Inf	in-drive-Inf	(in-)run
‘to ride in’	‘to drive in’	‘to run in’

Verbs of motion: direction

- S-C narrow verbs of motion (motion or motion plus direction) cannot take result prefixes.

(16) (*u-)dizati, (*u-)kretati se
in-raise in-move Refl
'raise' 'move'

- The same holds of (other) degree achievement verbs like *grejati* 'to warm', *(pro)dužiti* 'to lengthen'.
- Comparative (>) occupies the prefix slot?

Result incorporating verbs

- Assuming that state verbs and their prefix result verb counterparts are not derivationally related, result verbs are all out without the prefix – unlike most other verbs

(17) *dom-iti, *bezglav-iti, *nemar-iti
home-Inf headless-Inf careless-Inf

vs.

glač-ati, guš-iti voz-iti
slick-Inf choke-Inf drive-Inf

Tabular representation. Inferences?

	Manner	Manner + presupp. closed scale result	Open scale result	Closed scale result PP	Closed scale result Adj
Result prefix	+	-	-	+	+
Prefixless	+	+	+	-	-
PP result	+	-	-	+ (cogn.)	-
Adj result	-	-	+ (cogn.)	-	-

Closed scale is not used by itself, with result interpretation.

Beavers' scale of affectedness derived

- x undergoes a quantized change: **closed scale result incorporated** (break/shatter/destroy),
- x undergoes a nonquantized change: **open scale result incorporated** (widen/cool/cut/slice),
- x has a potential for change: a **presupposed closed scale**; (rub/punch/hit),
- x is unspecified for change: **no scale** (see/laugh at/smell/follow).
- Test whether other factors discussed play a role.

Summary: factors of affectedness for further investigation

- Meaning expressed by the verb stem: closed scale (absolute result) > open scale (comparative result, directed path) > manner (involvement in an activity, affectedness possible) > state (impossible affectedness).
- Presupposed vs. entailed results.
- Category and type of the incorporated result.

Factors for typological research

- Incorporation patterns.
- Availability and restrictions on satellites.
- Availability and the directedness of measuring out: VP to DO / DO to VP.
- Availability and distribution of, and restrictions on the aspectual marking.
- Case and other marking of arguments.

Thank you!