

VARIATION IN CIRCUMSTANTIAL MODALITY.

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1. INTRODUCING POLISH AND ST'ÁT'IMCETS CIRCUMSTANTIALS.

Pol: Involuntary State (ISC).

- (1) Jankowi czytało się tę książkę z przyjemnością.
John.Dat read.Neut Refl this book.Acc with pleasure
'John read this book with pleasure (without expecting it).'

St': Out-of-control.

- (2) ka-mets-s=kan-á=k'a
CIRC-write-CAUS=1SG.SUBJ- CIRC=EPIS
ti=n-skwátsits=a.
DET=1SG.POSS-name=EXIS
'I drew my name by accident.'
(Davis, Matthewson & Rullman (DMR 2007))

Pol ISCs carry circumstantial modal meaning, as in Kratzer 1981, 1991; dative subject not 'in control'.

St' ka...a in (2) = circumstantial modal (DMR 2007); agent not 'in control'.

The dative subject is helpless / not 'in control' regarding the manner of the eventuality reported by the sentence. Dziwirek (1994) quoting Gołąb (1975): "the logical subject ... does not cause the quality of the action ... [which] results from circumstances independent of him."

2. SYNTAX OF POLISH ISCs.

1. High Applicative Phrase (AppIP)

2. A (silent) modal R = head of High Appl.

3. A human dative subject = specifier of AppIP

4. A Manner Adv = argument of modal R.

- Except in context, or with Vs with manner (sneeze), ISCs need Manner Adv
- Semantic effect of Manner: (3) = dancing brought pleasure to John, versus (4) = John danced well (the manner of dancing was good):

- (3) Jankowi tańczyło się dobrze.
John.Dat danced.Neut Refl well
'John enjoyed dancing.'

- (4) Janek tańczył dobrze.
John.Nom danced.Masc well
'John danced well.'

5. Tense Phrase = complement of AppIP

- TP – an impersonal construction with a) się as indefinite pronoun; b) default V (Neuter); c) object in Acc:

- (5) Czytało się tę książkę.
'One/people/someone reads this book.'

Proposal: Manner Adv as argument of modal (von Fintel and Iatridou's goal-modals (2004) : To go to Harlem, you ought to take the A-train).

Proposal: The Pol modal (a) heads an Applicative, (b) is circumstantial (c) with universal force, (d) is obligatorily relativized to the human dative subject, (e) takes manner expression as an argument.

3. COMPARING POL AND ST'.

- (6) wá7=lhkan ka-cát-s-a ta=k'é't'h=a
IMPF=1SG.SUBJ CIRC-lift-CAUS- CIRC DET=rock-EXIS
'I can lift the rock.'

- (7) ka-lhéxw-a ta=snéqwm=a
CIRC-come.up-CIRC DET=sun=EXIS
'The sun came out.'

(6) = agent not in control; modality relativized to subject so personal.

(7) = no agent; modality not relativized to subject so impersonal.

Analysis: Out-of-control as modal with linguistically encoded circumstantial modal base and varying modal force (DMR 2007):

- (8) [[ka-...-a]]^o = λP<e,t> . λx . λw . ∀w'[w' ∈ f_x(B(w)) → P(x)(w')]

Polish: Just a fixed reading: no choice, with personal modality.

- (9) Marta chciała zjeść ciastko, a jej się kichnęło.
'Marta wanted to eat a cookie, but she (inevitably) sneezed.'

Pol ISCs

- encoded by a dative phrase
- fixed reading
- must be personal
- manner oriented
- pairs up with "actuality entailments"

St' Out-of-control

- affixal
- several readings
- may be impersonal
- not manner oriented
- no need for "actuality entailments"

Deriving differences:

Morphosyntax: Pol modal heads High Appl, St' modal does not.

Readings and Modal force:

Pol ISCs display just a universal reading because R has fixed force.

St' modals are not specified for modal force (DMR (2007)).

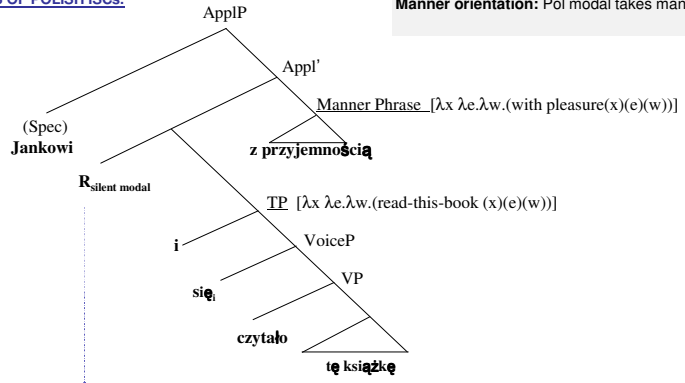
Relativization to subject and personal modality:

Pol : sensitivity to subject built/hardwired into interpretation of modal linked to dative marking in Appl; modal must be personal.

St' : optional sensitivity to subject (index on choice function) , not hardwired into modal affix on V; modal can remain impersonal.

Manner orientation: Pol modal takes manner argument.

4. SEMANTICS OF POLISH ISCs.



$$(10) [[R_{modal}]]^w, f_{circumstantial} (P_{\langle e, \langle t, t \rangle \rangle} (Q_{\langle e, \langle t, t \rangle \rangle} (X_e)) (X_e) = 1$$

iff $\{w' : w' \in \cap f_{circumstantial}(w) \text{ \& } P(x)(e)(w') = 1\} \subseteq \{w' : Q(x)(e)(w') = 1\}$
where e is a presupposed salient eventuality and $f_{circumstantial}$ is a salient circums. modal base

(10) spells out the truth-conditions for the silent modal R:

- R takes two properties as arguments, and results in property of individuals that will be applied to the dative subject in the ISC.
- The restrictor of the modal = TP clause, the nuclear scope = Manner phrase.
- R claims that: in all the worlds in the salient circumstantial modal base in which the restrictor property is true of the relevant individual and event, the nuclear scope property is also true of the relevant individual and event.
- This means that in all the worlds that fit the relevant circumstances in which the dative participates in the event, the manner of the event is as described (i.e. given the circumstances, the manner of the event is INEVITABLE).

5. CONSEQUENCES FOR LINGUISTIC THEORY.

MORPHOSYNTACTIC VARIATION IN MODALITY

Prefixes/suffixes on lexical verbs; Modal verbs; Second position clitics; **HIGH APPLICATIVES**

SEMANTIC VARIATION IN MODALITY

Linguistic encoding of modal force; **LINGUISTIC ENCODING OF MODAL BASES**

APPLICATIVES AT DIFFERENT LEVELS OF STRUCTURE WITH DIFFERENT SEMANTIC RELATIONS:

- Individual AppIs; Event AppIs; Modal AppIs
- Modal Applicatives:

New type (but see (Rivero 2003, 2009)).

Above TP in CP-domain.

Introduce modality and possible worlds.

Examples : Pol ISCs, South Slavic 'feel-like': Bulgarian **Na decata im se raboteše**. 'The children were in a working mood.'

Selected References: Arregui, A. 2005. *On the Accessibility of Possible Worlds: The Role of Tense and Aspect*. Ph.D. Thesis, UMass., Amherst.

Arregui, A. 2007. When aspect matters: the case of would-conditionals. *Natural Language Semantics* 15.3: 221-264. Bhatt, R. 1999. *Covert Modality in Non-Finite Contexts*. Ph.D. Thesis, UPenn.

Cuervo, M. C. 2003. *Datives at large*. PhD dissertation, MIT. Davis, H., L. Matthewson & H. Rullmann. 2007.

'Out of Control' marking as circumstantial modality in St'át'ímcets. To appear in volume edited by L. Hogeweg & al. Amsterdam: Benjamins. Dziwirek, K. 1994. *Polish Subjects*. New York: Garland.

von Fintel, K. and S. Iatridou. 2004. What to do if you want to go to Harlem: Notes on Anankastic Conditionals and Related Matters. ms., MIT. Gołąb, Z. 1975. Endocentricity and endocentration of verbal predicates: illustrated with Latin and Slavic material. *General Linguistics* 15: 1-35.

Kratzer, A. 1981. The Notional Category of Modality. H. J. Niekemeyer & H. Rieser, eds. *Words, Worlds, and Contexts*. Berlin: de Gruyter.

Kratzer, A. 1991. Modality. *Semantics: An International Handbook of Contemporary Research*, 639-650. N.Y.: de Gruyter. Pytkänen, L. 2002/2008. *Introducing Arguments*. MIT Press: Cambridge.

Rivero, M. L. 2003. Reflexive clitic constructions with datives: syntax and semantics. *Formal Approaches to Slavic Linguistics* 11: 469-494. Rivero, M. L. 2009. Intensionality, high applicatives, and aspect: involuntary state constructions in Bulgarian and Slovenian. *Natural Language and Linguistic Theory* 27.1: 151-196.