

Scales, verbs and verbal prefixes

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Roadmap

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- 2 Degree achievements in English
- 3 Degree achievements in Hungarian
- 4 Telicity and paths
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Scales

- Adjectival and verbal scales
- Open / closed scales
- Two-point / multi-point scales

Open / closed scales

- Available endpoint (maximal value)
- Closed scales
empty, dry
- Open scales
large, wide, deep

Open / closed scales

- Identifying closed scales: *completely*
- completely empty (closed scale)
- */?? completely deep (open scale)

Two-point / multi-point scales

- Two-point scales
dead, alive
- Multi-point scales
dry, deep

Scales

- Adjectives
 - dry, deep, dead
- Verbs
 - dry, deepen
 - run, fly, swim
 - read, eat, knit

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Degree achievements

- Deadjectival verbs
- dry, deepen, darken

'Degree achievements'

- Activities, accomplishments, achievements
- Dowty 1979

Adjectives and verbs

- Scalar properties can be inherited from adjectives

- dry_A (closed scale)
 dry_V (endpoint)

- deep_A (open scale)
 deepen_V (no endpoint)

Endpoints and telicity

- Degree achievements can inherit the maximal point (of a closed scale) from a scalar adjective
- If the scale of the adjective is closed, the degree achievement can be telic

Telicity

- A telic predicate is non-homogeneous
(*he escaped_{telic}* vs. *he ran_{atelic}*)
- Diagnostics of telicity
 - *in*-adverb (*the paint dried in three days*)
 - *finish* (*the paint finished drying*)

Telicity

- Telicity arises as a maximality presupposition

For a telic event predicate, all event arguments of that predicate lack a continuation in all accessible worlds (cf. Piñón 2006)

- Telic events reach an endpoint; no continuation beyond that endpoint

Adjectives and degree achievements

■ Closed scale

- dry_A

- dry_V

1 the paint dried in three days (telic)

2 the paint dried for three days (atelic)
(but still wasn't completely dry)

■ Open scale

- deep_A

- deepen_V

1 ??the wound deepened in three days (telic)

2 the wound deepened for three days (atelic)

Telicity and maximal endpoints

- 1 the paint **dried** in three days
(telic; maximal endpoint reached)
- 2 the paint **dried** for three days
(atelic; endpoint not reached)

Telic degree achievements everywhere?

- 1 the pool **emptied** in ten minutes
(closed scale; endpoint of scale)
- 2 the gap between the boats **widened** in ten minutes
(open scale; arbitrary endpoint)

Telic degree achievements everywhere?

- 1 the pool **emptied** completely (closed scale)
- 2 ??the gap between the boats **widened** completely (open scale)

Telic degree achievements everywhere?

- 1 the pool **emptied** in ten minutes; # it can still empty some more, though (closed scale)
- 2 the gap **widened** in ten minutes; it can still widen some more, though (open scale)

Telic open scale degree achievements

- *widen, deepen*
- Contextually determined endpoint
- Minimal change along the scale

Adjectival scales

- Closed scale
- Open scale

Degree achievements

- From closed scale adjectives
 - telic (maximal endpoint of adjectival scale is reached)
 - atelic (endpoint is not reached)
- From open scale adjectives
 - atelic (no adjectival scale endpoint can be reached)
 - (telic (contextually determined endpoint))

Degree achievements: Abusch 1986

- *cool*: function from contexts to properties of individuals
- Telic
contextual argument c is fixed to the context of utterance
- Atelic
contextual argument c is existentially bound
(any increase in coolness)

Degree achievements: Kennedy and Levin 2008

- Adjectival core measures the amount of change along a scalar dimension as result of the event
- Verbal morpheme pos_v combines with the adjectival core
- DA is true of an object x and an event e if in the course of e , x changes in excess of the standard of comparison for the measure of change function

- Telic
Maximum element from the scale can be inherited; standard of comparison is based on the maximal element of the scale
- Atelic
Minimum standard interpretation (positive change in the measured property; based on minimal element of the scale)

Telic degree achievements

- Tied to the scale of the adjectival core

More on scales

- Abusch 1986
- Hay, Kennedy and Levin 1999
- Jackendoff 1996
- Kearns 2007
- Kennedy and Levin 2008
- Kennedy and McNally 2005

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Diagnosing telicity

■ Durative adverbs (*in / alatt* adverbs)

- (1) Feri **két óra alatt** el olvasta a könyvet
Feri two hour under away read the book.acc
'Feri read the book **in two hours**'

Open and closed scales

- 1 üres 'empty', egyenes 'straight'
- 2 széles 'wide', mély 'deep'

Closed scales

- (2) Az út **teljesen** üres (# **de lehetne még**
 the road.nom completely empty but could.be yet
üresebb)
 emptier

'The road is completely empty, # but it could still be emptier'

- (3) Az út **teljesen** egyenes (# **de lehetne még**
 the road.nom completely straight but could.be yet
egyenesebb)
 straighter

'The road is completely straight, # but it could still be straighter'

Open scales

- (4) # Az út **teljesen** széles
the road.nom completely wide
'The road is completely wide'
- (5) # Az árok **teljesen** mély
the trench.nom completely deep
'The trench is completely deep'

Open / closed scales

- *teljesen* 'completely' (closed scales only)
- (*teljesen* 'very', 'sufficiently'; subjective judgment (open / closed scales))
(Gy. Rákosi, p.c.)

Adjectival scales

- Open / closed scales for adjectives in English and Hungarian
- Closed scale
dry, empty, straight
- Open scale
wide, deep

English

- From closed scale adjectives
 - telic (endpoint of adjectival scale is mapped)
 - atelic (endpoint is not mapped)
- From open scale adjectives
 - atelic (no adjectival scale endpoint can be mapped)
 - (telic (contextually determined endpoint))

Closed scales in Hungarian

- (6) A póló száradt
 the shirt.nom dried
 'The shirt dried / was drying' (atelic; not completely)
- (7) A póló **meg** száradt
 the shirt.nom *meg* dried
 'The shirt dried' (telic; completely)

Closed scales in Hungarian

- (8) Az utat egyenesítették
 the road.acc straightened.3pl
 'The road was straightened' (atelic; not completely)
- (9) Az utat **ki** egyenesítették
 the road.acc *out* straightened.3pl
 'The road was straightened' (telic; completely)

Closed scales in Hungarian

- From closed scale adjectives
 - telic with a verbal prefix / particle (scalar maximal endpoint is reached)
 - atelic without a prefix (maximal endpoint is not reached)

Open scales in Hungarian

- (10) Az út szélesedett
 the road.nom widened
 'The road widened' (atelic)
- (11) Az út **ki** szélesedett
 the road.nom *out* widened
 'The road widened' (telic)

Open scales in Hungarian

- From open scale adjectives
 - telic with a verbal prefix (an endpoint is reached)
(contextually determined endpoint or minimal change along the scale)
 - atelic without a prefix (no endpoint is reached)

Endpoints

- Endpoints with verbal prefixes
- Closed and open scale degree achievements

Closed scale DAs

- Affected argument has the property denoted by the adjective

(14) A póló **meg** száradt, ...

the shirt.nom *meg* dried

'The shirt dried. ...'

a. ?? de még mindig elég vizes

but yet always enough wet

'but it's still a bit wet'

b. ?? de még nem elég száraz

but yet not enough dry

'but it's still not dry enough'

Closed scale DAs

- Maximal endpoint is reached

(15) ?? A póló kicsit **meg** száradt
the shirt.nom small.acc *meg* dried
'The shirt dried a bit'

Open scale DAs

- Affected argument does not necessarily have the property denoted by the adjective

(16) Az út **ki** szélesedett, ...

the road.nom *out* widened

‘The road widened, ...’

a. de még mindig elég keskeny

but yet always enough narrow

‘but it’s still a bit narrow’

b. de még nem elég széles

but yet not enough wide

‘but it’s still not wide enough’

Open scale DAs

- There is no maximal endpoint to be reached

(17) Az út kicsit **ki** szélesedett
the road.nom little.acc *out* widened
'The road widened a bit'

Endpoints with telic predicates

- Closed scale DA: maximal endpoint on the scale
- Open scale DA: minimal change along the scale or contextually determined endpoint

Endpoints and telicity

- Telic interpretation is available for closed and open scale DAs alike
- Telic interpretation is possible with verbal prefixes
- Endpoints with telic predicates differ
 - Closed scale: maximal scalar endpoint
 - Open scale: minimal change along the scale or contextually determined endpoint

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Degree achievements and verbal prefixes

- Prefix choice can determine interpretation

Free choice of prefixes?

- Conventionalized endpoint ~ maximal endpoint
(warming soup / pizza / coffee)

(18) János {meg / fel} melegítette a levest
 J.nom *meg* / *up* warmed the soup.acc
 'János warmed the soup'

Choice of prefixes

- (19) János félig {meg / ?fel} melegítette a levest
 J.nom halfway *meg* / *up* warmed the soup.acc
 ‘János warmed the soup halfway’

Choice of particles

- (20) János egy kicsit {*meg* / *fel*} melegítette a
 J.nom a little.acc *meg* / *up* warmed the
 levest
 soup.acc
 'János warmed the soup a bit'

Choice of prefixes

(21) János {*meg* / *fel*} melegítette a levest
 J.nom *meg* / *up* warmed the soup.acc
 'János warmed the soup'

- *meg*: the soup is warm
- *fel*: the soup may still be cold

Warm: *meg* vs. *fel*

- *meg*: (conventionalized) endpoint of the scale
- *fel*: no scalar endpoint; the entire object is affected but change along the scale may be minimal
(cf. *el olvas* (away read): object is maximally affected)

Cool

- (22) A süti {ki / le} hült
the cake.nom *out / down* cooled
'The cake cooled'

Cool

- (23) A süti egy kicsit {??ki / le} hűlt
 the cake.nom a bit.acc *out* / *down* cooled
 'The cake cooled a bit'

Cool: *ki* vs. *el*

- *ki*: (conventionalized) endpoint of the scale
- *le*: minimal change along the scale

Dry

- (24) A fal {meg / ki} száradt
the wall.nom *meg* / *out* dried
'The wall dried'

Dry

- (25) A fal {meg / ki} száradt, (?? de még kicsit
 the wall.nom *meg* / *out* dried but yet bit.acc
 vizes)
 wet
 'The wall dried, but it's still a bit wet'

Dry

- (26) ?? A fal egy kicsit {meg / ki} száradt
the wall.nom a bit.acc *meg* / *out* dried
'The wall dried a bit'

Dry: *meg* vs. *ki*

- *meg*: maximal endpoint of the adjectival scale; surface of argument is affected
- *ki*: maximal endpoint of the adjectival scale; the entire argument is affected

Dry

- (27) A festék {meg / be / ki} száradt
the paint.nom *meg* / *in* / *out* dried
'The paint dried'

Telic DAs

- Change measured along the scale
(e.g. *meg melegít* (meg warm))
- Change measured along the affected argument
(e.g. *fel melegít* (up warm))

Telic DAs

- Change measured along the scale
 - Maximal / conventional endpoint of the scale (if available)
 - Minimal change along the scale
 - Contextually determined endpoint
- Change measured along the affected argument
 - Extension of the argument
 - Possibly different dimensions of the argument

Verbal prefixes

- To some extent, idiosyncratic
- *Meg* preferred with closed scale DAs, if the event is mapped onto the scale

Meg

(28) **meg** szárad
meg dries
'dry'

(29) **meg** érik
meg ripen
'ripens'

(30) **meg** melegszik
meg warms
'warms'

(31) **ki** egyenesedik
out straightens
'straightens'

Meg

- Inceptive *meg*; scalar endpoint with another prefix

(32) A lemez {*meg* / *be*} feketedett
 the sheet.nom *meg* / *in* blackened
 'The sheet blackened'

(33) A lemez kicsit {*meg* / ?*be*} feketedett
 the sheet.nom little.acc *meg* / *in* blackened
 'The sheet blackened a bit'

Meg

■ Inceptive *meg* and maximally affected arguments

- (34) A jég {*meg* / *el*} olvadt
 the ice.nom *meg* / *away* melted
 'The ice melted'
- (35) A mamut {*meg* / *ki*} olvadt
 the mammoth.nom *meg* / *out* thawed
 'The mammoth thawed'

Multiple scales for events

- Rappaport Hovav and Levin 2005
- Lee scrubbed the tub
 - surface of the tub (atelic)
 - scale of cleanliness (with an appropriate standard) (telic)

Locative alternation

- (36) Feri meg kente vajjal a kenyeret
 Feri.nom meg smeared butter.with the bread.acc
 'Feri smeared the bread with butter'
- (37) Feri rá kente a vajat a kenyérre
 Feri.nom onto smeared the butter.acc the bread.onto
 'Feri smeared butter onto the bread'

Locative alternation

- (38) Feri **meg** pakolta **az autót** bútorokkal
 Feri.nom meg loaded the car.acc furniture.with
 'Feri loaded the car with furniture'
- (39) Feri **rá** pakolta **a bútorokat** az autóra
 Feri.nom onto loaded the furniture.acc the car.onto
 'Feri loaded the furniture onto the car'

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Scalar adjectives and degree achievements

- No direct correlation between closed / open adjectival scales and telicity of DAs
- Telic (and atelic) DAs from both closed and open scale DAs

Telicity and verbal affixes

- Telic interpretation with verbal prefixes
- Telic predicates are maximal, lack continuation (depending on the verbal prefix)
 - Endpoint determined by adjectival scale
 - Endpoint determined by the extension of the affected argument

Telicity and the lexical entry of verbs

- Telicity is not determined in the lexical entry of verbs
- cf. Levin 2008, Filip 2008

Two-point scales

- dead, alive
- Minimal change: maximal endpoint along the scale

Achievements

- Minimal change
- Frequently appear with verbal prefixes in Hungarian

Achievements

- (40) Heather ***(meg)** halt
H.nom *meg* died
'Heather died'
- (41) Heather ***(el)** vesztette a versenyt
H.nom *away* lost the race.acc
'Heather lost the race'

Scalar adjectives and degree achievements

- Adjectival scales are relevant for the interpretations available for DAs
- Adjectival scale properties are not directly mapped to DAs
- Verbal prefixes introduce telicity
- Specific flavor of telicity can be affected by adjectival scales
- Specific flavor of telicity is determined by prefix choice

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