(2)
Vertical Level-Constructions: a typological overview

Olga Šemanaeva

**Ekaterina Rakhilina**

(Russian Academy of Sciences)

Construction in question

- Special space meaning: *level*, cf.:
- Russ. [Šemanaeva 2006, 2007, 2008]:
  po (*snega navalilo* **po koleno**) &
  do (*on edva dostaval mne* **do pleča**).

Typological overview, cf.:

- Engl:*The only mountains he had ever known were the three volcanoes, which* <u>came</u> **up to his knees**.
- Fr.: <u>*arriver*</u> **à l'épaule**
- Pol.: *Siostra* <u>*sięgała*</u> *mi* **do piersi**
- Lit. *Brolis man* <u>*buvo*</u> **iki pečių**
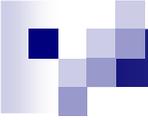
Acknoledgements

- Gratitude to all the informants and experts, especially:

Э. де Рон Хертоге, М. де Ваан, А. Назаров, В. Лооман (нидерландский); Р. Боден (французский); И. Держанский, Д. Монева (болгарский); А. Луни (английский); А. Чуткерашвили, С. Саникидзе (грузинский); Э. Карделли (итальянский); М. Сливинский, М. Ткачук (польский); С. Мерданова (агульский); В. Хуршудян (армянский); Н. Мадариага Писано (баскский); А. Джавиджаю (хинди); М.Пентус (эстонский),

And also: П.М. Аркадьев, А.В. Архипов, А.С. Бердичевский, О.А. Герасименко, С.Ю. Дмитренко, М.В.Копотев, А. Б. Летучий, П. Ю. Новичков, А.С. Панина, Е.Ю. Протасова и Л.В. Хохлова for help in the collection of data.

То В.Ю. Гусев, Д.О. Добровольский, Т.А. Майсак, С.И. Переверзева, А.Ч. Пиперски, В.И. Подлесская, Н.Р. Сумбатова, В.В. Файер, А.В. Циммерлинг, С.И. Юшманова и особенно Т.И. Резникова for helpful comments.

Languages & sources:

Languages:

- ❑ Slavic (Russian, Polish, Bulgarian, Czech, Serbo-Croatian),
- ❑ German (English, German, Dutch, Swedish, Danish, Icelandic),
- ❑ Baltic (Lithuanian, Latvian),
- ❑ Roman (French, Italian, Spanish),
- ❑ Hindi, Armenian;
- ❑ Non-Indo-European: Georgian, Agul (Daghestanian), Estonian, Hungarian, Finnish, Khmer, Japanese, Basque.

Sources:

dictionaries,

corpora,

translations of «Le Petit Prince» into English, Bulgarian, Czech, Russian and other languages,

+ a special questionnaire.

Level as a special case of dimension

- Level -- dimension construction (cf. Zolotova 2001)
  - □ = a case of vertical dimension:

high grass – 'dimension' VS. *up to his knees* – '*l*evel*'*

.

- Level-dimension: comparison with the vertical size of another object

- => Unlike the "classic" dimensional constructions (attributive: *high tree,* predicative: *the tree is high*) there are always two obligatory slots in the level construction:
- (**X**) Trajector (TR) = measured object
- (**Q**) Landmark (LM) = measure, cf. Langacker 1988.

Anthropocentricity

- Anthropocentricity of language => Landmark (as a measure) = human being.
- NB! Measures are often historically related to body parts (mainly, feet or hands & arms or parts of them), cf.:

  Engl.   *foot*   (= 30,48 cm),

                      hand (= 10,16 cm),

                      nail   (= 5,7 cm),

  French.   *pouce* ('thumb' = 2,7 cm),

  Russ.   *veršok* (originally, 'upper phalanx of index finger' = 4,45 см)

  [for Altaic languages, see: Dybo 1989, 1995,1996]

- The system of measures specific for level constructions is often based on actual names of parts of objects, first of all body parts

Level Construction Structure

		N_X	N_Q / PRO_Q	V	PREP	N_Z	N_X
1	Non-refl	*Sestra* 'sister' NOM	*mne* 'me' DAT	*doxodila* 'reached'	*do* 'up to'	*pleča* 'shoulder' GEN	
2	Refl		*Ja* 'I' NOM	*byl* 'was'	*po* 'up to'	*koleno* 'knee' ACC	*v snegu* 'in the snow' LOC

X (Trajector): the case of Russian

Special Russian construction with preposition *po* (opposed to *do*): only "dynamic" objects:

- ➢ 'layers',
- ➢ 'hair / beard',
- ➢ 'plants',
- ➢ 'human beings'
- ➢ 'dress / shoes'

Rus.:* *kamen' byl mne po pojas,*
Engl.*:*
*a <…> lizard froze atop a **waist-high** pink rock.*
(M. Cunningham)

Parameter (Y)

- Universal restrictions: Y is always vertical

- ❑ Height (for plants & human beings),
- ❑ Length (for hair and dress =«hanging» objects, related to person,
- ❑ Depth / height (layer)

   NB! Vertical dimensions are considered to be the main
(cf., e.g., width or thickness which are peripheral), Žurinskij 1971.

   Being highly predictable, Y is often omitted in the sentence, in many cases it is even forbidden,
cf. Fr.: _arriver_ _à l'épaule_ 'reach one's shoulder *height' .

Verbs (V)

(1) Existential 'be'
(2) Positional: 'sit', 'stand', 'lie'
(3) Horizontal motion: 'go', 'walk','crawl'
(4)'Start being somewhere': 'sink', 'plunge'

➢ **(1) Existential verbs**

Affirm spatial relationship between Trajector (X) and part (Z)
of the Landmark (Q), which serves as a measure, cf.:
Turk.:

dizine	*kadar*	*ot*	*var*
knee-POSS.3Sg-Dat.	up to	grass	is

Level Construction Structure

		N_X	N_Q PRO_Q	V	PREP	N_Z	N_X
1	Non-refl	*Sestra* 'sister' NOM	*mne* 'me' DAT	***doxodila* 'reached'**	*do* 'up to'	pleča 'shoulder' GEN	
2	Refl		*Ja* 'I' NOM	***byl* 'was'**	*po* 'up to'	*koleno* 'knee' ACC	*v snegu* 'in the snow' LOC

Verbs (V)

➤ **Positional (2**)

➤ Have the same function (bringing some additional semantics) : describe position in space – mainly for human beings (in reflexive constructions)

➤ In non-reflexive contexts with mobile layers, like water, snow, dust, etc.:

Germ.:

*Wenn einem das Wasser **bis zum Hals** <u>steht</u>, dann sollte man den Kopf nicht hängen lassen.* (J. Becker) 'When water reaches troat, don't hang your head'.

➤ **Horizontal motion (3**)

Expand the group of being (being + position);

describing motion (usially of a person or transport means) in a certain medium (water, fog, smog, sand);

at the same time the level of the medium could be marked, cf.:

Germ.: **fußtief** *im Schmutz <u>waten</u>*

■ '<u>to lag</u> in the dust up to the ankle' (lit.: 'ankle-deep)

V: 'Start being somewhere' (4)

➢ **Reflexive contexts (A)**
➢ **Non-reflexive contexts (B)**
  (A): <u>Reflexive</u>

■ 'start being somewhere' (in the medium), cf. 'get into the water'
  Icelandic:
  <u>vaða</u>   ***upp   að   hnjam***
  wade   up   above   knee

■ NB! E*nd-point metonymy*: ----------------------------- [rezultative state]
                                        process

■   Most frequently predicates of 'going down': sinking, plunging, etc. .
If "sinking" is incomplete the marker of level is obligatory:
    Czech: <u>zapadat</u> ***po pás*** *do závějí*
'fall down into the snowbank up to the waist'

V: 'Start being somewhere'. (A) reflexive

NB! Special verbs of always-incomplete "sinking" (going down) which
   perfectly fit the idea of level: 'these state difficult to get out from' [=
   obligatory level] cf. Rus. *uvjaznuť*, *pogrjaznut'*, Engl. *got stuck*

✓   They stress the end point even more than ordinary "sinking verbs";
    previous motion is of no relevance:

Hindi

mAi	**kamar-kamar tak**	*kiicar*	*mE*	*dhansaa thaa*
I	waistline-to	mud	in	got stuck (PST)

✓   Metaphorically:

Lit. : **Iki ausų** *rūpesčiuose* <u>įklimpęs</u>
   'up to the ears GEN.PL trouble LOC.PL got stuck'

Lat.: <u>ieķerties</u> **līdz ausīm** 'fall in love (litt. 'got stuck') up to the ears'

V: 'Start being somewhere': <u>non-reflexive contexts (B)</u>

✓ Non-refl. equivalent for verbs of **sinking**: verbs of **arrival**
(also stress the Goal= end-point = Level [Q]),

✓ Non-refl. direction: masses go up, not down
Engl.:
<u>came</u> <u>**up**</u> **to his knees**
Dutch:
mijn zus <u>kwam</u> **tot aan mijn borst** 'my sister (lit.) came to my breast';

➢ Verbs of **reaching**
Lexicalized semantic shift: 'reaching' => '**contact**'
Polish: *Siostra <u>sięgała</u> mi* **do piersi** 'Сестра доставала мне до груди'

Level Construction Structure

		N_X	N_Q PRO_Q	V	PREP	N_Z	N_X
1	Non-refl	*Sestra* 'sister' NOM	*mne* 'me' DAT	*doxodila* 'reached'	*do* **'up to'**	pleča 'shoulder' GEN	
2	Refl		*Ja* 'I' NOM	*byl* 'was'	*po* **'up to'**	*koleno* 'knee' ACC	*v snegu* 'in the snow' LOC

PREP and its equivalents

Semantic components:

- ‘direction’ [DIR],
- ‘location’ [LOC],
- ‘limit’ [TERM].

(i) Three (!) PREP markers (examples from Danish):
til op óver ørene ‘till [TERM] up [DIR] over [LOC] ears’.

(ii) **Two** markers (prepositions)

(iii) **One** marker: preposition [+/- case] / postposition [+/- case] / case;

(iv) **No** surface markers: attributive constructions OR compounds

(ii) Two markers (2 prepositions)

German languages: English, German, Dutch, Swedish, Icelandic, Danish: 2 main types of constructions (**iconic structure**):

- **(1) DIR + TERM**

Icelandic: ***upp að eyrum***

lit.: 'up to ears DAT'

Engl.: *naked **down to the waist***

Swedish:

*tills vattnet når er **upp till halsen***

lit.: 'till water is not up till throat'

- **(2) TERM + (DIR | LOC)**

Two possibilities:

(A) DIR | LOC = 'under': Z is a limit

Germ.: ***bis unter** das Dach*

lit.: 'to|at under the roof' (= arch / cupola)

Cf. Rus. *rostom pod potolok* = 'very high'

  & *nabit pod zavjazku* = 'absolutely full'

+ *pod utro / *den'* lit.: 'under (= near the very end of) *morning / *day*'

VS.

(B) DIR | LOC = 'above': over Z

Germ.: ***bis über** die Knie*

lit.: 'to|at above the knees'

NB! Metaphorically 'under'-type = 'above'

(iii) Prepositions (postpositions): competition within a language system

- **Finnish** - **three** postpositions: *polvia **myöten** / **asti** / **saakka*** 'knee + up to'
  *vyötäröä **myöten** lumessa* 'up to the waist in snow';

  ruoho *oli polviin **asti*** 'grass up to the knees';

  *kuraa nilkkoihin **saakka**.* 'mud up to the ankles'

- **Slavic languages** -- competition of PO & DO:
  Bulgarian : *do,* Slovak: *po, Polish, Byelorussian: po + do*:
  *trawa **do** kolan / **po** kolana* 'grass up to the knees'

po is more likely in metaphorical contexts: **po** *uszy w długach*,

do is more frequent in spatial contexts: *broda **do** piersi*.

- **Russian** *po* **VS.** *do* **parameters** (according to Šemanaeva 2008):
  - Stable (*do*) VS. non-stable (*po)* dimension,
  - Anthropocentric *(po)* VS. unmarked *(do)* Landmark,
  - Exact *(po)* VS. non-exact *(do)* boundary,
  - Inclusion (*po*) of the end-point (Q) VS. exclusion (*do*) of the end-point (Q),
  - Static result (*po*) of the process of measurement VS. motion towards the endpoint (*do*)

(iii) Case markers (attached to level-standard Z)

➢ **Terminative** in Finno-Ugrian languages (Estonian, Hungarian, Udmurt):
Est.:

ja	*need*	*ulatusid*	*talle*	*põlvini.*
and	they	reached	his	knee (UBST.PL.**TERM**)

➢ **Limitative (= terminative 'up to')** in Kalmyk:

modn	*tana*	*tolqa-ca*	*bol-dh*	*urq-dh*
tree.NOM	your	head-**Lim**	become-CONV.IPFV	grow-RES

'The tree reached your head'.

➢ **Allative (=lative 'towards')** in Ossetic:

Лӕппу-тӕ	*бацыд-ысты*	*дон-ы*	*сӕ астау-т-ӕм*
boy-PL	come-3PL.PST.ITR	water-INESS	their loin-PL-**ALL**

'Boys got into the water up to loins'.

(iv) Attributive constructions & compounds (German languages)

- Subtypes of different structure, cf.:

Germ.: ***Kniehose*** lit. 'knee-trouses' = 'up to the knees': **[Q + X]**
Engl.: ***knee high*** *grass:* **[Q + Param-Adj] + Trajector**;
      knee-length *skirt:* **[Q + Param-Nom] + Trajector**

- Small number of Trajector-types: layers, clothes, plants, hair (cf. restrictions for Rus. *po*);
- + special restrictions (each construction has its own list of possible Trajectors).

Universal –

- Another word order: Z is always in the left position => thematisation, caused by (among other reasons) a complete loss of specificity.
- Cf. the possibility of a specific Landmark in prepositional construction:
  *the water came up to **his** knees,*
  -- impossible in attributive cnstructions / compounds:
  Body-part (Level) = abstract standard with no possessor.
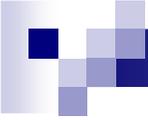
(iii) Construction choice

- The main parameter relevant for the choice of construction variability of Trajector-dimension
- Scale reflecting the degree of variability / stability

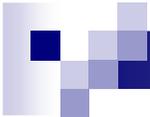The pole of maximum stability: clothes & footwear,

The pole of minimum stability: layers

In the middle (closer to the maximum): hair, plants

Stable vertical dimension
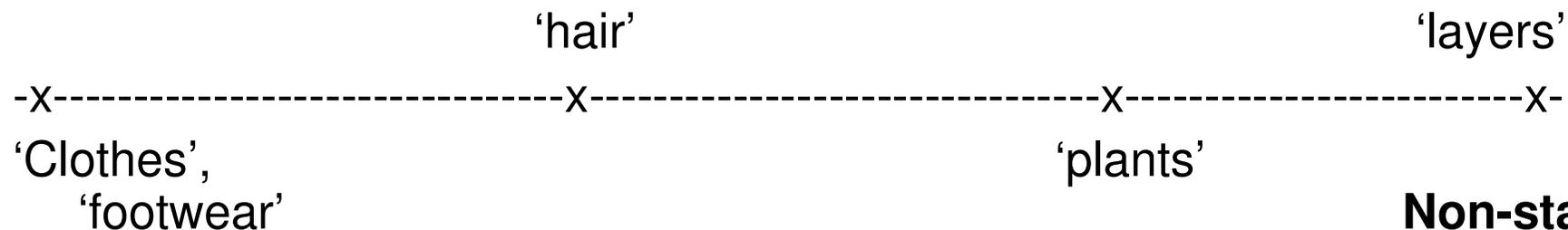
```
                                    'hair'                                      'layers'
-x-------------------------------x-------------------------------x-----------------------x-
'Clothes',                                              'plants'
   'footwear'                                                        Non-stable
                                                                 vertical dimension
```

(iii) Construction choice

The level of <u>clothes & footwear</u> as the most stable, may be expressed in the idiomatic nominal constructions:

❖ **['Level' + 'Trajector (clothes & footwear)']$_N$**
  Engl.: *ankle socks / boots*'

Both <u>clothes & footwear</u> and <u>hair</u> (which have more or less stable dimension within a certain cultural situation) are possible in a less idiomatic nominal constructions with a nominal attribute:

❖ **['Level' + 'Parameter']$_N$ + 'Trajector'$_N$**
  Engl.: *a **shoulder-length** fringe of hair all round*

All types of objects (from the list) including those with non-stable dimension could be «measured» with the help of attributive constructions, less stative than the nominal ones:

❖ **['Level' + 'Parameter']$_{Adj}$ + 'Trajector'$_N$**
  Swedish.: ***knähög snö*** 'knee-high snow'.

+ there is a possibility for further ranking of the variability of the dimension using the opposition: Attr VS. Pred construction
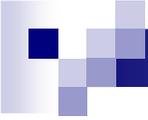
Level standard (Z): body-parts

- Body-parts occurred as level-markers in our sample:

- ankle
- ankle-bone
- calf
- knee
- waist
- belly
- navel (belly-button)
- breast
- underarm
- shoulder

- neck
- throat
- chin
- lips
- teeth
- eyes
- ears
- crown of the head
- elbow
- wrist

- Universal characteristics of level-standards:
  - ✓ asymmetry of Source domains (front-back; top-bottom)
  - ✓ Connection between Z (Level=Body-part) & X (Trajector)

- NB! Observable boundary (projection or line)

Level Construction Structure

		N_X	N_Q / PRO_Q	V	PREP	N_Z	N_X
1	Non-refl	*Sestra* 'sister' NOM	*mne* 'me' DAT	*doxodila* 'reached'	*do* 'up to'	**pleča 'shoulder' GEN**	
2	Refl		*Ja* 'I' NOM	*byl* 'was'	*po* 'up to'	***koleno* 'knee' ACC**	*v snegu* 'in the snow' LOC

Asymmetry of Source domains

✓ **Front-back**: measuring from the front (cf. Žurinskij 1974):
'To stand in the water up to one's breast, *back of the head / shoulder blades

 human corpus has a clear front / back asymmetry, front surface being more important: Fillmore 1969, Апресян 1974

NB! 'waist': «universal» level, not only measuring from the front,
    cf.: *waist length hair* (back)

✓ **Top-bottom**, cf. Svorou 1994:
Top: from head to shoulders
Bottom: from hips to feet
Bottom domain is used mainly for spatial levels,
Top domain is more often used metaphorically: 'big quantity' / 'intensity'.

Standard metaphorical markers:

'neck / throat', 'ears', + (rarely) 'eyes' (top domain)

Engl.:
- *She was **up to her neck** in misery*
- *She is **up to her ears** in marriage proposals*
- *I've been **up to my eyes** in family secrets, tears, break-ups and make-ups.* (C. Ahern)

Other languages:
- French.: *être dans les ennuis **jusqu'au cou***
  'in troubles up to the **neck**'.

- Polish: ***po uszy*** *w długach*   'in debt up to the **ears**'.
- Georg.: ***yelamde*** *valebši*   'in debt up to one's **neck**'
- Serb./Croatian: ***Do grla*** *su mi ove svakodnevne vožnje vozovima.* Lit. 'The every-day railway trips are up to my **throat**' (Jachnow 2005)

"Bottom" body parts as metaphorical markers

Engl.:

➢ 'knees':

You're knee-deep in relatives, while I haven't a clue whether I possess any at all. (BNC)

➢ 'elbows' : 'a lot of work' (narrow meaning)

 [functional boundary between *hand* (working part) and *arm* (non-working part)]

Engl. *up to the elbows in work*,

Polish: *urobiony po łokcie* 'swamped with work up to the elbows'.

Level standards (Z) & Trajectors (X)

- **Connection between Z и X (and other participants):**

different objects in different situations are measured using different sets of levels

- Rus.: *po pleči* 'shoulders' (PL): hair / from the back,
  cf. Engl. SG: *shoulder-length hair*
- *po plečo* (SG): height (from one side), cf. Šemanaeva 2007.
- In Agul, the level standard measuring height is 'neck'.

- Another universal standard for hair (and also beard and clothes) is 'waist'

Engl.: *waist-length*.

- More rarely but possible: 'jaw', 'cheek', 'collar', 'chin' (in compound with *length* as parameter): *jaw-length*, *cheek-length*, *collar-length*:

…her **chin-length** hair was blond… (C. Sittenfeld)

up to the jaw, *up to the collar in water*:

NB! Rus. :*volosy po koleno*, Engl. (!) *knee-length hair*

- 'ankle' & 'knee': clothes and footwear; + 'calf' & 'hip': *ankle-length, knee-length, calf-length, hip-length, thigh-length*.

Footnote: **Level standard & a problem of categorization**

- Cf. **'waist' VS. 'beltline**'(1) & **'neck' VS. 'throat**' (2).

- **(1)** Rus. *pojas* ('beltline': functional) VS. *talija* 'waist' (esthetic)
Iordanskaja, Paperno 1996:
level-constructions require functional name -- *po pojas / *po taliju*

- **(2)** 'neck' («external» body part) VS. 'throat' (internal).
  Normally, different usages, e.g.:
external ('neck') tends to spatial interpretation,
internal ('throat') is more often metaphorical, cf. Rus.: *po šeju v vode* 'in the
  water up to one's neck' VS. *raboty po gorlo* 'up to the neck (lit. throat) in
  work' [NB! In a letter of Ch. Dickens one can find: "I am at present *up to the
  throat in work*"]
- ❖ Relevance of opposition
Bulg: *гърло* 'throat' & *шия* 'neck'; metaphorically *шия*:
 *затънал съм **до шия*** 'I have sunk up to the neck' (in the work).
Slovak (the same cognates): *hrdlo* 'throat' & *krk* 'neck'
NB! metaphor for *krk*:
*už mám tvojich výčitiek **po krk*** 'I'm fed to the teeth (lit. neck) with your blames'

Internals as level-standards

- **Construction of penetration** (sort of metaphor of intensity)**: going deep**

- **Physical** VS. **mental** / **emotional** states

- **Physical** states: dampness & cold.

- <u>«Levels» of penetration of dampness | wetness: 'skin' + 'clothes'</u>
Danish: *våd **índtil skíndet*** lit. 'wet to the skin';
Latvian: (the same meaning) *izmirkt **līdz ādai***
+ 'clothes' (the same role),
cf. Dutch: *tot op het hemd nat,* lit.: 'wet to the shirt', cf. Rus. *do nitki* 'to the thread' (metonymically = clothes)

- <u>«Levels» of penetration of cold: 'bones' + 'bone marrow'</u>
[skin is not deep enough]
Engl.: *He* was *chilled **to the bone** and hungry…* (J.R.R. Tolkien)
Uzbek: *совуқ **миягача** чиқади*, lit. 'cold reaches marrow'

   + 'tips of the fingers', 'hair roots'
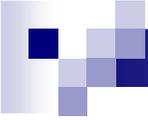
Construction of penetration:
mental / emotional states

- «Level» of penetration: 'bones, marrow, brain'
- In most cases negative evaluation (the same for physical states):

Engl.: *I was shocked* **to my marrow** *to see the front page of the Sunday Mirror...* (S. Townsend)

Germ.: *sich* **bis auf die Knochen** *blamieren* ≈ 'to bring shame deep to the bones';

Fr.: *j'ai encore peur* **jusque dans les moelles**...(G. de Maupassant) 'I'm still afraid till the bone marrow'.

- Positive evaluation is however also possible:

Germ.: *j-m treu* **bis in die Knochen** *sein* 'to remain faithful to smb. till one's bones'.

Serb. / Croat.: *Pošten je* **do srži**, *smiješ mu povjeriti šta hoćeš*

'He is honest till his bone marrow, you can entrust him everything' (from Jachnow 2005).
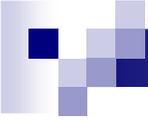
Other types of level standards (Z)

- (1) animal body parts (hoof, tail, muzzle…)

Dutch: **tot aan zijn bek** 'up to the muzzle',

   tot aan zijn kop 'head <animal>';

Engl.: …*Jo's too-laden horse plunged through the sand and sinking* **fetlock deep**... (E.Seton-Thompson)

- (2) clothes, footwear and their parts

Footwear (up from the bottom):

   metonymically chooses the upper end as a level marker

Clothes (down till the bottom) вычhooses the lower end, cf.:

   Engl.: … *jutting-jawed fly fisherman who was* **up to his waders** *in a river.*

As the snow even in the yard was more than **boot-deep**, *they were thankful that their skirts and petticoats were pinned well up out of the wet snow.*(BNC)

- (3) ground / floor (for clothes or hair)
- (4) parts of artifacts

(4) Parts of artifacts

- **-parts of vehicles ('bumper', 'axe', 'center of a wheel', 'roof')**

Dutch: ***tot aan de bumper*** *in de modder* 'up to the bumper in the mud';

Hung.:	*A kerek-ek*	***tengely-ig***		*süllyed-t-ek*		*a*		*sár-ba.*
	DEF wheel-PL	axe-TERM		sank-PST-3PL.S		DEF		mud-ILLAT

'The wheels went deep into the mud up to their axes' (Apresjan, Páll 1982)

- **- parts of buildings ('windows', 'roof', 'ceiling', 'ridge')**

Rus.: ***po samyje okna*** *v snegu* 'in snow up to the windows';

Dutch: ***tot de nok toe***' (*de nok* 'ridge')

Hung.:	*A*	*kunyhó (egészen)*	***ablak-párkány-á-ig***		*süllyed-t*
	DEF	hut	window-ledge-SG-TERM		sink-PST
	a	*föld-be*	*[az*	*agyag-ba]*	
	DEF	ground-ILLAT	[DEF	clay-ILLAT]	

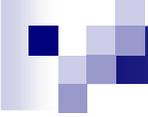'A hut went down into the ground (clay) up to its windows' (Apresjan, Páll 1982)

- **- parts of weapon ('handle')**

Bulg.: *нож, забит **до дръжката*** ≈ Engl.: ***to the hilt*** (about a knife or a dagger).

- **- metaphors ('intension'):**

Engl.: ***up to the hub*** = center of a wheel (be involved into a certain activities),

Amer. Engl.: *He was enjoying himself **up to the handle***

Conclusion I: some generalizations

✓ The fact that there is a certain semantic domain demanding some special morphosyntactic means in many (maybe, in all) languages is highly important for general linguistics and typology.

✓ In our case, it is a situation of measurement in the vertical dimension; the dimension is prototypically variable, and the measurement is relative (the standard is part of Trajector or another object).

✓ This situation requires special linguistic means in all the languages of our sample (and far beyond) => it is cognitively relevant.

✓ Its cognitive relevance is based on its anthropocentricity: the corresponding constructions are related to the human world and privilege human-oriented Trajectors, Verbs and Levels, as clothes or functional layers for Trajector, body-parts for Level.
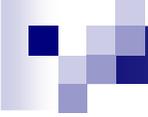
Conclusion II: some generalizations

✓ The structure of the level frame is complicated. Natural languages produce idiomatic means, unifying different aspects of the situation => constructions.

✓ Level constructions form a family. All members of level-family, as it was shown, demonstrate semantic integrity – and essential resemblance to the other members of the family.

✓ Actual linguistic experience in construction typology is not very rich (Haspelmath, Buchholz 1998 is one of the notable exceptions so far). What we suggest may be considered as a preliminary analysis along the similar lines.

✓ HOWEVER, our results allow us to enumerate some important "methodological steps" (each of them representing a separate linguistic task) leading to a more coherent cross-linguistic typology of constructions.
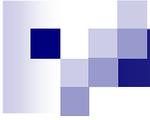
Conclusion II: notes on methodology

- The basic philosophical idea of CxG is FRAME which specifies the structure of construction – whatever surface realizations it may have.

  Task 1: to describe the frame.

  The structure of the frame is determined by the its "cognitive goal", in our case it is the (relative) measurement of objects.

- In this narrow semantic domain, one can distinguish more iconic constructions, where the number of participants for corresponding constructions matches with the number of frame-slots (cf. Rus.: *sugroby **X** byli **V** mne **Q** vysotoj **Y** po **PRED** pojas **Z***),
  and more idiomatic ones, where some participants can be omitted or have non-standard marking (cf. Engl.: *ankle **Z** socks **X***).

  Task 2: to classify the types of constructions relying on the structure of the frame
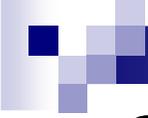
Conclusion II: notes on methodology

- **Task 3**: to look for restrictions on participants

  Restrictions result from semantic properties of the given type of construction. Though particular slots in particular constructions require different types of participants, the general strategy in filling in the slots remains the same. E.g., Level (Q) normally presents topological classes of observable "lines" or "projections"; all the divergencies are motivated.

- In case the participant is not expressed on the surface (as Parameter of Direction of measurement in Germanic compounds) a special task arises:

  Task 4: to establish rules reconstructing semantic characteristics of the implicit participant (e.g.: direction – always up? – cf. hair or clothes; parameter – always vertical? – cf. "penetration construction")

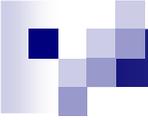# Conclusion II: notes on methodology

- **Task 5**: corpus analysis checked by informants.

  Ideally, a thorough study is needed, and the research should be supported by corpus analysis of every slot completed with expert evaluation of corpus data and field work with a special questionnaire.

- The same semantic component could occur (depending on the construction type) in different constituents. Cf. 'variability / stability' (different degrees) of the Trajector-dimension: in type of Trajector, in the verb (ex., of sinking) in the preposition, in the type of compound.

=> «existence» of invariant semantics characteristic to the whole family of constructions may be proved only appealing to different parts of the construction structure.

Task 6: to search for "semantic center" of the construction

Conclusion II: notes on methodology

- The meaning of a construction is often distributed over its structure and can increase in one component, decreasing in another. Thus, it is impossible to define the level standards ignoring the parameters of direction or type of Trajector.

Task 7: correlations of the components of construction

Construction Grammar

+ Lexical typology

= Exciting linguistic results