



Valency in the Prague Dependency Treebank Part II.

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Valency in PDT: Outline

- the concept of valency
- valency in FGD
- valency in PDT
 - functors as labels for inner participants and free modifications
 - functors for nominal and adjectival complementations
 - functors for non-valency relations
- PDT-VALLEX, EngVallex, CzegVallex
- valency in other LRs

documentation: <http://ufal.mff.cuni.cz/pdt2.0/doc/manuals/en/t-layer/html/index.html>

Syntactic Information in PDT



- attribute **functor** for **all** nodetypes
- functors ... labels for the type of syntactic relation governing/parent node – modifying/child node
- complex nodes ... functor ~ type of valency complementation
 - inner participants
 - free modifications
 - verbal complement (Cz: doplněk)
- other nodetypes ... functor ~ non-valency relation
 - coordination
 - effective root of an independent clause
 - rhematizers, conjunction modifiers
 - multiword expressions
- (OPER)



Valency in PDT: PDT-VALLEX

- all sem. verbs, some nouns, adjectives, adverbs (aspectual counterparts as different units)
- attribute **val_frame.rf** ~ list of frame members for each frame member:
 - **functor**
 - obligatory or optional
 - possible realizations
- consistency checking
- alternations/diatheses !!!

* odpovídání

ACT(.2, u) PAT(*na-l*[.4]) ADDR(.3) ?EFF(*že*[.v]) v-w2838f1 Used: 1x
(*odpovídat- dávat odpověď*) nedokončitelné odpovídání a tázání

* odpovídat

ACT(.1, *že*[.v]) PAT(.3) v-w2839f1 Used: 85x

zaměstnání odpovídá jeho schopnostem
řešení o. požadavkům

ACT(.1) ?PAT(*na-l*[.4]) ADDR(.3) EFF(.4, .7, *že*[.v], *zda*[.v], *aby*[.v], *at*[.v], s.,

v-w2839f2 Used: 28x

odpovídal mu na jeho dotaz, že nemá pravdu
o. nám na dotazy
o. pravdu
o. nám tato slova

ACT(.1) PAT(*za-l*[.4]) ?ADDR(.3) v-w2839f3 Used: 14x

odpovídáš mi za ztrátu
svým majetkem. MEANS

ACT(.1) PAT(*na-l*[.4]) v-w2839f4 Used: 2x

organismus odpovídal na zákrok
tvorbou. MANN vaziva
tímto způsobem. MANN o. na nátlak obyvatelstva

Valency in PDT: PDT-VALLEX (cont.)

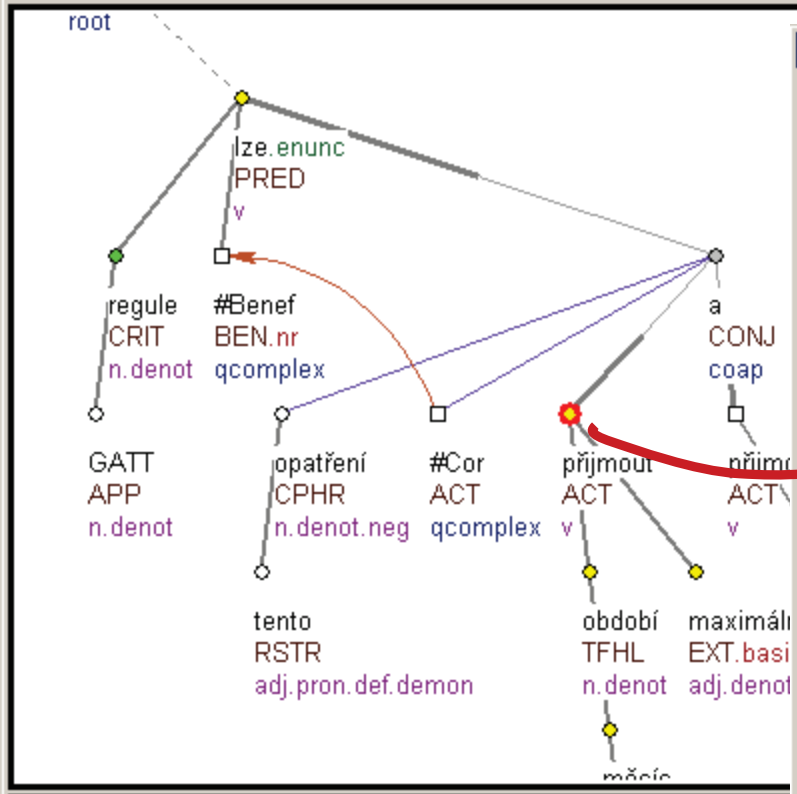


TRee Editor Default(2/1): C:/PDT-2.0/data/full/tamw/train-1/cmpr9410_001.t.gz

File View Node Session Bookmarks User-defined Help

Podle regulí GATT lze toto opatření přijmout maximálně na období šesti měsíců a pouze u vybraných položek .

PDT-VALLEX	units	frames
verbs	5 300	9 000
nouns	3 750	4 750
adjectives	800	950



74 Frame editor: unknown user

Words

Search: *

lemma
přijmout
přijít
přijít si
přijíždět
přijmout
přikázat
přikazova
příklad

Frames

Search Whole Lexicon

Search frame:

Elements

- ACT(1) PAT(4)
(akceptovat, uznávat) přijmout jeho teorii
- COMPL p. ji jako urážku
- MANN p. ji s nadhledem {lj01am.fs##38.2} (ZU)
- ACT(1) PAT(4)
(brát) přijmout dělníka na práci
- AIM[na+4] p. brigádníky na česání jablek {lm09am.fs##2.2} p. studenty (ZU)
- ACT(1) PAT(4) ?EFF(4[{{jako jakožto}/AuxY];za+4)
- (angažovat, vzít) přijmout někoho za člena, jako člena
- COMPL jako začátečníka ho přijali dobře (ZU)
- ACT(1) PAT(4) ?EFF(4[{{jako jakožto}/AuxY];za+4)
- ACT(1) PAT(4) ?ORIG(nd+2)

Show Obsolete Show Superframes

Close

Valency in PDT: PDT-VALLEX (cont.)



- a frame element realization ~ a continuous section of an anal. tree (may be incomplete)
 - the syntactic structure of a given modification;
 - the requirements (esp. POS characteristics)

ACT(.1) PAT(.4) ... transitive verb

ACT(.1) PAT(.f) ... infinitive complementation

ACT(.1) PAT(.4) ?ORIG(z-1[.2]) ?EFF(na-1[.4]) ... optional participants

ACT(.3) DPHR(mráz.S1,po-1[záda:P6]) ... idiom

Examples of surface-form encoding:

nominative: .1

accusative: .4

adjective in instrumental: .a7

possessive pronoun or adjective: .u

numeral: .m

pronoun: .p

adverb: .d

interjection: .i

infinitive: .f

subordinate clause, with any kind of

conjunction: j[.v]

content clause

(a subordinate clause beginning with a relative pronoun/adverb): .c

direct speech: .s

Valency in PDT: PDT-VALLEX (cont.)



- a frame element realization ~ a continuous section of an anal. tree (may be incomplete)
 - the syntactic structure of a given modification;
 - the requirements (esp. POS characteristics)

ACT(.1) PAT(.4) ... transitive verb

ACT(.1) PAT(.f) ... infinitive complementation

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ACT(.3) DPHR(mráz.S1,po-1[záda:P6]) ... idiom

- regular changes of a surface form:
 - diatheses:
 - passive
 - reciprocity
 - disp. modality
 - resultative
 - other regular changes:
 - numeral constructions
 - distributivity
 - subfunctors
 -

Verbs in PDT-Vallex: <https://lindat.mff.cuni.cz/services/PDT-Vallex/>

Valency in PDT: PDT-VALLEX (cont.)



Verbs in PDT-Vallex:

<https://lindat.mff.cuni.cz/services/PDT-Vallex/>



PDT-Vallex: search and browse (v1.0)

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odpovídat

odpovídat¹_{14x, 3x} **ACT**(1) **PAT**(_{za+4}) **?ADDR**(3)

(být zodpovědný, zodpovídat) • *odpovídáš mi za ztrátu; svým majetkem.* MEANS

odpovídat²_{85x, 51x} **ACT**(1;↓že) **PAT**(3)

(shodovat se) • *zaměstnání odpovídá jeho schopnostem; řešení o. požadavkům*

odpovídat³_{2x, 8x} **ACT**(1) **PAT**(_{na+4})

(reagovat, odpovědět) • *organismus odpovídal na zákrok; tvorbou. MANN vaziva; tímto způsobem. MANN o. na nátlak obyvatelstva; USA o. kladně. MANN na demokratické reformy na Kubě*

odpovídat⁴_{2x} **ACT**(1) **ADDR**(3) **?PAT**(_{na+4}) **BEN**()|**MANN**()|**MEANS**()
|ACMP()|**CRIT**()|**CPR**()

• *odpovídala jim na dotazy takto i čtvrtý den; o. mu úsměvem*

odpovídat⁵_{28x, 19x} **ACT**(1) **ADDR**(3) **EFF**(4;7;↓že;↓zda;↓aby;↓af;↓s;↓c)
?PAT(_{na+4})

(odpovědět, odepisovat) • *odpovídal mu na jeho dotaz, že nemá pravdu; o. nám na dotazy; o. pravdu; o. nám tato slova*

Valency in PCEDT: EngVallex



- for each occurrence of a semantic verb in the corpus
- each entry is moreover linked to PropBank
(and some also to VerbNet entries for comparison)

<http://lindat.mff.cuni.cz/services/EngVallex/>



EngVallex: search and browse

(v0.5 - Beta)

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Under construction. **TESTING ONLY**

ask

ask¹ ACT_(sub) PAT_(to+inf,for[objpp;ving]) ADDR_(obj1)

- *Argentina will ask creditor banks to halve its foreign debt of \$64 billion.*
- *The National Institutes of Health asked for an HHS review of its plan to implant fetal tissue into the brain of a patient suffering from Alzheimers.*

ask² ACT_(sub) PAT_(obj1;about[objpp;ving;whether+vp];whether+vp;if+v) ADDR_(obj1;of[objpp])

- *The mathematics section of the widely used California Achievement Test asks fifth graders "What is another name for the Roman numeral IX?"*
- **trace* ask him about this law he tried to pass.*
- *John asked a question of his professor.*

ask³ ACT₍₎ ADDR₍₎ PAT₍₎ ?AIM₍₎

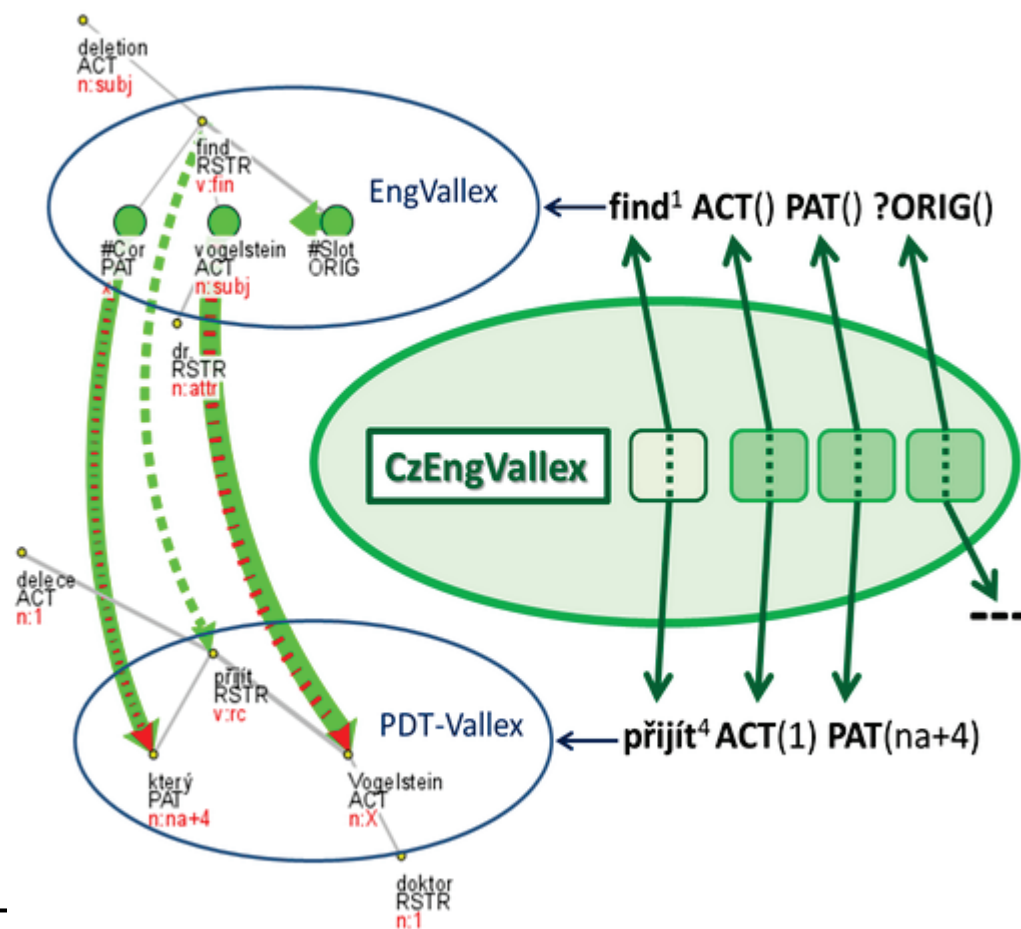
- *The company was asking \$100 million for an operation said to be loseing about \$20 million a year.*



Valency in PCEDT: CzEngVallex

- a cross-linguistic comparison of valency behavior: Czech and English verbs

The deletion Dr. Vogelstein found ...



Valency in PCEDT: CzEngVallex

<http://lindat.mff.cuni.cz/services/CzEngVallex/CzEngVallex.html>



ptát se PDT-Vallex : **ask** EngVallex

ptát se ACT₍₁₎ PAT_(na+4;↓zda;↓jestli;↓c;.s) ADDR₍₂₎^{PDT-Vallex}

zeptat se, otázat se

- *ptát se dcery na známky;p. se na děti*

ask ACT_(sub) PAT_(to+inf;for[objpp;ving]) ADDR_(obj1)^{EngVallex}

- *Argentina will ask creditor banks to halve its foreign debt of \$64 billion.*
- *The National Institutes of Health asked for an HHS review of its plan to implant fetal tissue into the brain of a patient suffering from Alzheimers.*

Argument mapping for "ptát se" (v-w5371f1) and "ask" (ev-w141f1):

ACT → ACT

PAT → PAT

ADDR → ADDR

Show corpus examples

ask ACT_(sub) PAT_(obj1;about[objpp;ving;whether+vp];whether+vp;if+v) ADDR_(obj1;of[objpp])^{EngVallex}

- *The mathematics section of the widely used California Achievement Test asks fifth graders "What is another name for the Roman numeral IX?"*
- **trace* ask him about this law he tried to pass.*
- *John asked a question of his professor.*

Argument mapping for "ptát se" (v-w5371f1) and "ask" (ev-w141f2):

ACT → ACT

EFF → PAT

ADDR → ADDR

PAT → ---

Show corpus examples

Valency in PCEDT: CzEngVallex

<http://lindat.mff.cuni.cz/services/CzEngVallex/CzEngVallex.html>



ptát se PDT-Vallex : **ask** EngVallex

ptát se ACT₍₁₎ PAT_(na+4;↓zda;↓jestli;↓c;.s) ADDR₍₂₎^{PDT-Vallex}

zeptat se, otázat se

- ptát se dcery na známky;p. se na děti



ask ACT_(sub) PAT_(to+inf;for[objpp;ving]) ADDR_(obj1)^{EngVallex}

- Argentina will ask creditor banks to halve it
- The National Institutes of Health asked for implant fetal tissue into the brain of a patient

pcedt When I **ACT** asked American **ADDR** for **PAT** its **side** **PAT** of the story for use in my MBA class , where I teach business ethics , it did not respond .

Argument mapping for "ptát se" (v-w537)

ACT → ACT

PAT → PAT

ADDR → ADDR

pcedt Když jsem se společnosti **ADDR** American Airlines **ptal na** **PAT** její **verzi** **PAT** příběhu , abych to použil při výuce ve své třídě manažerského studia , kde vyučuji obchodní etiku , neodpověděla .

ask ACT_(sub) PAT_(obj1;about[objpp;ving;whether+vp];whether+vp;if+v) ADDR_(obj1;of[objpp])^{EngVallex}

- The mathematics section of the widely used California Achievement Test asks fifth graders "What is another name for the Roman numeral IX?"
- *trace* ask him about this law he tried to pass.
- John asked a question of his professor.

Argument mapping for "ptát se" (v-w5371f1)

ACT → ACT

EFF → PAT

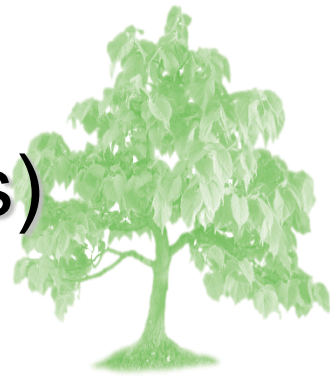
ADDR → ADDR

PAT → ---

pcedt The discrepancy may be because **asking people** **ADDR** **about** **PAT** their fitness **regime** **PAT** is a bit like inquiring about their love life .

pcedt Rozpor může být způsoben tím , že **ptát se lidí** **ADDR** **na** **PAT** cvičební **režim** **PAT** je trochu jako vyzvídat podrobnosti milostného života .

Valency in PDT: Inner Participants (Verbs)



- Actor (ACT) ... functor for the first syntactic position
- Patient (PAT) ... functor for the second syntactic position
- Effect (EFF) ... the third syntactic position (semantically indistinct)
- Addressee (ADDR)
- Origin (ORIG)

Valency in PDT: Inner Participants (Verbs)



- **Actor (ACT)** ...functor for the first syntactic position

human and non-human agent

Její manžel tam pracuje dál.

Her husband still works there.

Ten román mě oslovil.

The novel appealed to me.

*Byl zabit bleskem
zločiny mafie na Sicílii*

*He was killed by lightning.
the Mafia's crimes on Sicily*

bearer of an event / of a quality or property

Sklo zůstává nalepené na fólii

The glass stays stuck to the foil.

Matka leží.

Our mother is in bed.

Karoserie je z plechu.

The car body is made of plate.

radost obyvatel z nezávislosti

the joy of the citizens of an independence

experiencer

Českým skokanům se dařilo dobře. *The Czech jumpers were doing well.*

Je mi smutno.

I am sad

Líbí se mi to.

I like it.

possessor

Přítel má nové auto.

A friend of mine has a new car.

Přítel prodal chalupu.

A friend of mine sold his cottage.

Valency in PDT: Inner Participants (Verbs)



- Actor (ACT)
- **Patient (PAT)** ... functor for the second syntactic position
object affected by an event (created / being destroyed / changing its property ...)

Postavili stany.

They pitched the tents.

Uspal dcerku.

He put his daughter to sleep.

Prodal dům.

He sold the house.

Házel kamenem

He was throwing a stone.

object specifying an event or its goal

Rád hraje kopanou / na klavír

He likes playing football / the piano

possessor

Kniha patří Janovi

The book belongs to Jan.

Matce nezbyly žádné peníze.

No money remains to my mother.

stimulus

Jareček se bojí psů.

Jareček is afraid of dogs.

recipient

Ozval se mu.

He let him know.

theme/topic of a book, story, painting (esp. verbs of communication)

Vyprávěl nám o svých cestách.

He was talking on his travels.

Valency in PDT: Inner Participants (Verbs)



- Actor (ACT)
- Patient (PAT)
- **Effect (EFF)** ... the third syntactic position (semantically indistinct) quality/property or state the Patient has in the course of the event

Považoval Pavla za odborníka. He considered Pavel a professional.

Zachovali památku neporušenou. They kept the memory intact.

final state

Zvýšili počet voličů z 50% na 75%. They increased the number of the voters from 50% to 75%.

so called slavonic accusative (esp. verbs of perception)

Slyšet hodiny tíkat. lit: He heard the clock ticking.

dictum = what was said (esp. verbs of communication)

Petr vyprávěl o dovolené zábavné historky.

Petr told us amusing stories about his holiday.

direct or indirect speech

Řekli mu: "Nechod tam!"

They told him: "Do not go there!"

Oznámil, že nepřijde.

He announced that he would not come.

Valency in PDT: Inner Participants (Verbs)



- Actor (ACT)
- Patient (PAT)
- Effect (EFF)
- **Addressee (ADDR)**

recipient with verbs of giving

Dal dítěti hračku.

He gave the child a toy.

Učí děti angličtinu.

He gives children English lessons.

original possessor

Vzal dítěti hračku.

He took the toy from the child.

Ukradl cizinci peněženku.

He stole a wallet from a foreigner.

benefactor/recipient the event is directed at

Obrátil se na soud s problémem. He turned to the court with a problem.

partner of the event

Svou nejtěžší bitvu vybojoval s přáteli/nad přáteli.

He won his heaviest battle with his friends.

Valency in PDT: Inner Participants (Verbs)



- Actor (ACT)
- Patient (PAT)
- Effect (EFF)
- Addressee (ADDR)
- **Origin (ORIG)**

material something is made from

Vyráběli nábytek ze dřeva.

nádoba z plechu

They made furniture out of wood.

a dish (made) of plate

circumstances, event or state on the basis of which something comes into existence

Vybudoval kariéru na cizí práci.

He built his career on other people's work.

original owner (usually animate), the source something comes from

Získal na dětech slib.

dárek od maminky

He got a promise from the children.

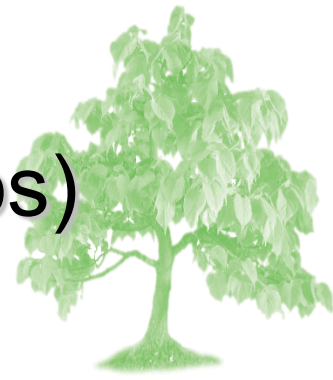
a present from his mom

initial state (with verbs of change)

Předělala loutku z kašpárka na čerta.

She remade the puppet from the jester into the devil.

Valency in PDT: Free Modifications (Verbs)

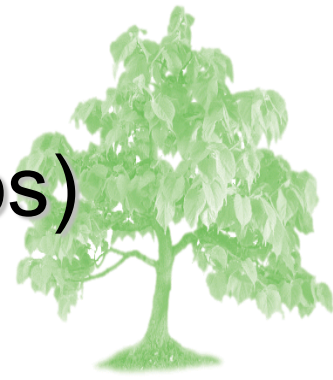


- Local and directional modifications
- Temporal modifications
- Manner
- Causality

- Verbal/Predicative Complement

- Additional

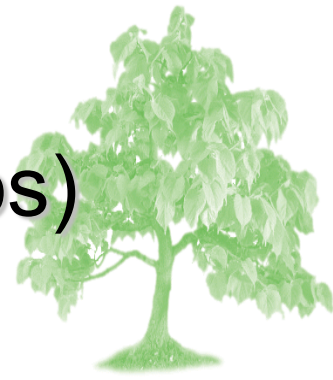
Valency in PDT: Free Modifications (Verbs)



- Local and directional modifications

- **DIR1** *Přijeli z Plzně.* *They came from Plzeň.*
Ustoupil od stěny. *He stepped back from the wall.*
jeden z chlapců *one of the boys*
- **DIR2** *Šli podél lesa.* *They walked along the forest.*
Přes louku vede cesta. *There is a path across the meadow.*
- **DIR3** *Odešel do města.* *He left for a city.*
Schoval se pod deštník. *He hid himself under an umbrella.*
Položil to blízko vázy. *He put it near the vase.*
- **LOC** *Obchod stojí naproti nádraží.* *The shop is located opposite the station.*
Nebezpečí může být všude kolem nás. *Danger can be all around us.*
Kde na mě počkáte? *Where will you wait for me?*

Valency in PDT: Free Modifications (Verbs)



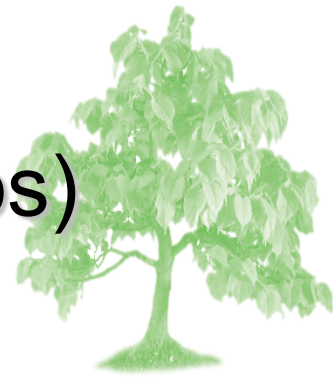
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+ **subfunctors** for more specific classification

e.g.: DIR2 ... basic (adverb, noun_{Instr}), across, along, around, betw, near, nr

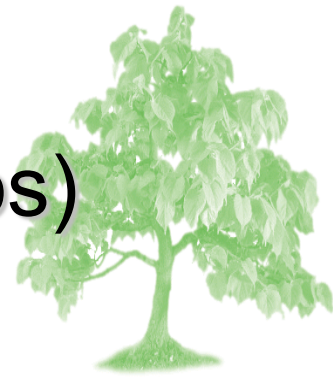
Valency in PDT: Free Modifications (Verbs)



- Local and directional modifications
- Temporal modifications

- **TWHEN** *Zítra má být už hezky.* *Tomorrow weather should be nice.*
+ subfunctors: basic, after, approx, before, begin, betw, end, flow, mid, nr
- TFHL *Používá se jen dočasně.* *It is used only temporarily.*
- TFRWH *Přeložil výuku z pátku na vhodnější dobu.*
He postponed the lesson from Friday to more convenient time.
- THL *Spor se táhne donekonečna.* lit: *The dispute lasts forever.*
- THO *Běžně chodil k svému lékaři.* *Commonly he visited his physician.*
- TOWH *Přeložil výuku na pátek.* *He postponed the lesson to Friday.*
- TPAR *Hraje a přítom zpívá.* *He is playing and at the same time singing.*
- TSIN *Znají se od školy.* *They know each other since their school years.*
- TTILL *Dodnes nevím, kde je.* *Till today I do not know where he is.*

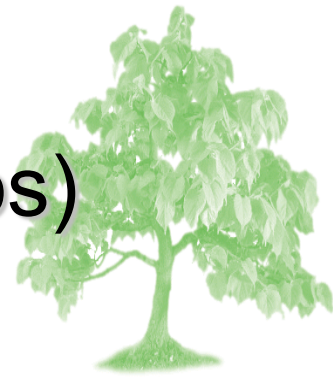
Valency in PDT: Free Modifications (Verbs)



- Local and directional modifications
- Temporal modifications
- Manner (ACMP, CPR and EXT with subfunctors)

- **MANN** *Pracuje pomalu.* *He is working slowly.*
- ACMP *Tatínek s maminkou šli do divadla.* *Father with mother went to the theater.*
válečná plavidla včetně bojových letadel a vrtulníků *warships including air force*
- CPR *Naproti tomu Jirka přišel včas.* *On the contrary, Jirka was on time*
Na Afriku zbývají jen asi 3 miliardy dolarů ročně, což je méně, nežli obdržela loni
Malajsie. *..., which is less than Malaysia got last year.*
- CRIT *Podle regulí GATT lze toto opatření přijmout maximálně na dobu šesti měsíců.*
According to the GATT rules, it is possible to take the measure
- DIFF *Pavel je o 2 cm větší než já.* *Pavel is taller than me by 2 cm.*
- EXT *Utkání se příliš nevyvedlo.* *The match wasn't very good.*
- MEANS *Napsal to na počítači.* *He wrote it on the computer.*
- REG *Sbor je (co) do počtu slabý.* *The choir is weak, as to the number of people.*
- RESL *Marie úspěšně prošla zkouškami.* *Marie passed the exams successfully.*
- RESTR *Kromě Pavla nepřišel ještě Mirek.* *Apart from Pavel, also Mirek didn't come.*

Valency in PDT: Free Modifications (Verbs)



- Local and directional modifications
- Temporal modifications
- Manner
- Causality

• AIM *Jsem tu pro to, abych vám pomohl.* lit: I am here in order to help you.

• **CAUS** ***Nepovím vám to, protože byste mi stejně nevěřili.***
I will not tell you because you would not believe me anyway.

Kvůli tobě mám teď po dobré náladě. Because of you my good humor is gone.

• CNCS *Ač zemřeli, ještě mluví. Although they are dead, they still speak.*

Při vší opatrnosti stejně několik hrnců rozbila.

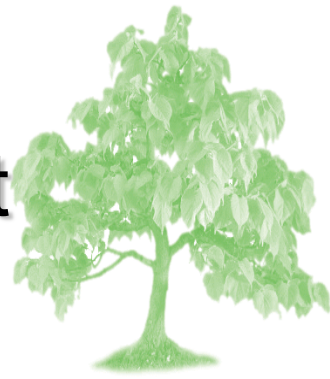
Despite all her carefulness she has still broken several pots.

• COND *Jestliže nepůjde dobrovolně, použijeme násilí.*

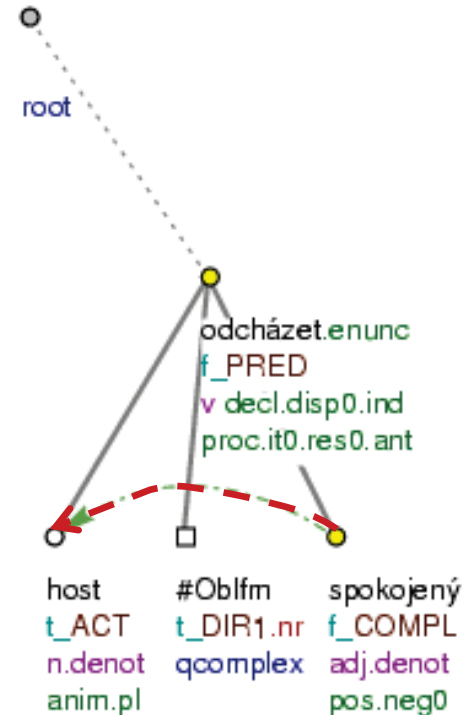
lit: *If he does not go willingly we shall use a force.*

• INTT *Šel nakoupit, aby doplnil zásoby. He went shopping to replenish the stock.*

Valency in PDT: Predicative Complement

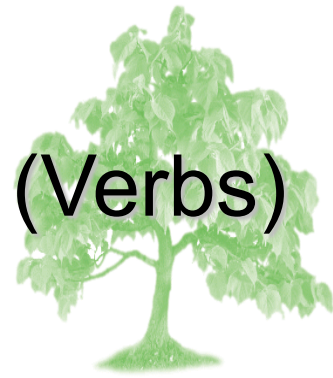


- **functor COMPL**
- two syntactic dependencies
 - verbal governing node ... parent in a dependency tree
 - nominal governing node ... coreference arrow (compl.rf, later)



Hosté odcházeli spokojeni.
lit. *Guests were leaving satisfied*

Valency in PDT: New Complementations (Verbs)



- BEN

Kreslil pro děti nádherné obrázky. He painted beautiful paintings for the children.

Padá mu hlava na prsa. His head is falling on his breast.

Ten pán vám měl ale fousy! The beard the man had!

- CONTRD

Zatímco loni v premiéře proti Samprasovi hrál chaoticky, nyní už měl plán.

While he played chaotically last year in his premiere against Sampras, now he had a plan.

- HER

Zůstal zde majetek po třech a půl milionu Němců.

The property after 3,5 million of Germans was left here.

Jméno dostala holčička po kmotře. The girl has got the name after the godmother.

BUT: Jméno dostala holčička od kmotry.ORIG The girl has got the name from the godmother.

- SUBS

Do učeben zasednou otcové místo svých synů.

The fathers will sit in the classrooms instead of their sons.

Mám-li ovšem mluvit za sebe, trochu maluji a píšu.

But should I speak for myself, I paint and write a little.

Valency in PDT: Nouns (only in PDT)



nominal complementations (Piřha, 1981)

- Partitive (MAT) (also Material) ... inner participant
- Appurtenance (APP) (cz přináležitost)
- Identity (ID)
- Author (AUTH)
- **(Restrictive) attribute (RSTR)**

more-or-less used for all non-valency nominal attributes

Valency in PDT: Nouns (only in PDT)



nominal complementations (Piřha, 1981)

- Partitive (MAT) (also Material) ... inner participant governing node ... container; quantification

sklenice piva, kořík hub

skupina studentů, sada nořů

miliony lidí; čtvrt milionu

a glass of bier, a basket of mushrooms

a group of students, a set of knives

millions of people; a quarter (of) million

Valency in PDT: Nouns (only in PDT)



nominal complementations (Piřha, 1981)

- Partitive (MAT) (also Material) ... inner participant
- Appurtenance (APP) (cz přináležitost)

~ something belongs to something

family relations: *otec dítěte, můj bratr*

the father of the child, my brother

part-whole rel.: *střecha domu*

a roof of a house

set-member rel.: *člen týmu, tým brankářů
organizace neslyšících*

*a member of the team, a team of goal-keepers
an organization of the hearing-impaired*

possession: *naše kapela, její seznam*

our band, her list

Valency in PDT: Nouns (only in PDT)



nominal complementations (Piřha, 1981)

- Partitive (MAT) (also Material) ... inner participant
- Appurtenance (APP) (cz přináležitost)
- Identity (ID)

form ... nominative of identity (cz nominativ jmenovací) / genitive meta-language expressions

slovo stát

the word to stand

proper nouns and names of animals, objects and events

nápis Obětem války

the sign "To the victims of war"

skladba Svatý Václave

the piece Saint Wenceslas!

povídka Opatrně

the short story Carefully

pražská Galerie U Řečických

the Prague gallery U Řečických

starobylé písně ze Sušilovy sbírky Vandrovali hudci

old songs from Sušil's collection Vandrovali hudci

publikace Začínáme podnikat

the publication Introduction to business

Valency in PDT: Nouns (only in PDT)

nominal complementations (Piřha, 1981)

- Partitive (MAT) (also Material) ... inner participant
- Appurtenance (APP) (cz přináležitost)
- Identity (ID)
- Author (AUTH) ... free modification

the author of an artefact

form ... a noun expr. by genitive or by a possessive adjective

básně Vítězslava Nezvala poems by Vítězslav Nezval

dekret nového prezidenta Leonida Kučmy

the order of the new president Leonid Kutchma

román Oty Filipa

a novel by Ota Filip

autorova současná tvorba

author's present work

jeho texty

his texts

skladatelovo nejúspěšnější hudebně-dramatické dílo

the composer's most famous musically-dramatic piece)

podobizna Matěje Kopeckého od M. Alše the portrait of Matěj Kopecký by M. Aleš



báseň.enunc
f_DENOM
n.denot
fem.pl

Nezval
f_AUTH
n.denot
anim.sg
person_name

Vítězslav
f_RSTR
n.denot
anim.sg
person_name



Valency in PDT: Nouns

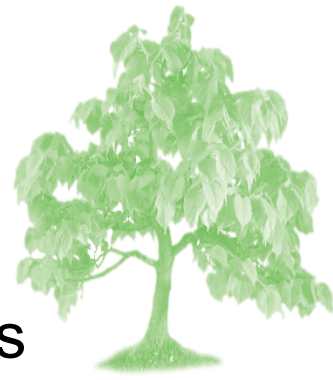
nominal complementations (Piřha, 1981)

- Partitive (MAT) (also Material) ... inner participant
- Appurtenance (APP) (cz přináležitost)
- Identity (ID)
- Author (AUTH)
- Restrictive attribute (RSTR)

<i><u>drsné</u> počasí</i>	<i><u>rough</u> weather</i>
<i><u>sedící</u> žena</i>	<i>a <u>sitting</u> woman</i>
<i><u>několik</u> měsíců</i>	<i>a <u>few</u> months</i>
<i><u>pět</u> dětí</i>	<i><u>five</u> children</i>
<i><u>Karlova</u> univerzita</i>	<i><u>Charles</u> University</i>
<i><u>Karel</u> Novák</i>	<i><u>Karel</u> Novák</i>
<i><u>rozhodčí</u> Severýn</i>	<i><u>the referee</u> Severýn</i>
<i>v Praze - <u>Dejvicích</u></i>	<i>in Prague - <u>Dejvice</u></i>

- Descriptive attribute (DSTR) ... not in PDT

Valency in PDT: Adjectives



- the same repertoire of complementations as for verbs
- plus complementations for comparative and superlative
- (Piřha, 1982), (Panevová, 1998)
 - PAT: *plný čeho [full of st], schopný čeho [capable of st], lačný čeho [athirst to st], podobný čemu [similar to st], příbuzný čemu [related to st]*
 - ADDR: *nepříjemný komu [unpleasant to sb], přístupný komu [accessible to sb] povědomý komu [familiar to sb]*
 - PAT ADDR: *odpovědný komu za co [responsible for st to sb], vděčný komu za co [grateful to sb for st]*

Functors for Non-Valency Relations



- effective root of an independent clause
- coordination, apposition
- complex predicates, multiword expressions, phrasemes
- rhematizers

Functors for Non-Valency Relations



- effective root of an independent clause

PRED *Pavel dal kytku Marii. Paul gave a flower to Mary.*

DENOM restriction to nouns in nominative

Názory čtenářů. Readers' opinions.

K názorům čtenářů {#EmpVerb.PRED}.

VOCAT *Milá Jano! Dear Jane!*

Pane majore, hodlám zavést nové prvky.

Sir, I intend to introduce new elements.

PARTL *Pozor! Attention!*

Ano, to je pravda. Yes, that is true.

PAR *Přijedu 13. prosince (pátek).*

I will arrive on December 13 (Friday).

Functors for Non-Valency Relations



- effective root of an independent clause
- coordination, apposition

CONJ *Mezi smysly patří zrak a sluch. Eyesight and hearing belong to the senses.*
Vyniká jak svědomitostí, tak houževnatostí.

She stands out due to her thoroughness, as well as her stringiness.

Šel, aniž by to viděl. {#Neg.CM} lit. He was walking without seeing it.

DISJ *ať vítaný, či nevítaný welcome or not (only one of them is true)*
Vysloví se bud' pro, nebo proti návrhu.

They will be either for or against the proposal.

ADVS *Vypadalo to, že bude hezky, ale začalo pršet.*

The weather looked nice but then it started raining.

CONFR *Bristol je v Anglii, kdežto Glasgow je ve Skotsku.*

Bristol is in England, whereas Glasgow is in Scotland.

CONTRA *spor Klaus versus Zieleniec. a variance Klaus vs. Zieleniec*

CSQ *Byl nemocný, proto nepřišel. He was sick so that's why he didn't come.*

GRAD *Nemůže se pohnout, natož vstát. He can't move, let alone get up.*

REAS *Úkol splníme, vždyt' není obtížný. We'll fulfill the task, for it is not difficult.*

Functors for Non-Valency Relations

- effective root of an independent clause
- coordination, apposition

APPS

Božena Němcová _ *autorka Babičky*

Božena Němcová _ *the author of Babička*

Morová rána : *Skuhravý zraněn.*

Catastrophe : *Skuhravý injured*

Labe/Elbe.

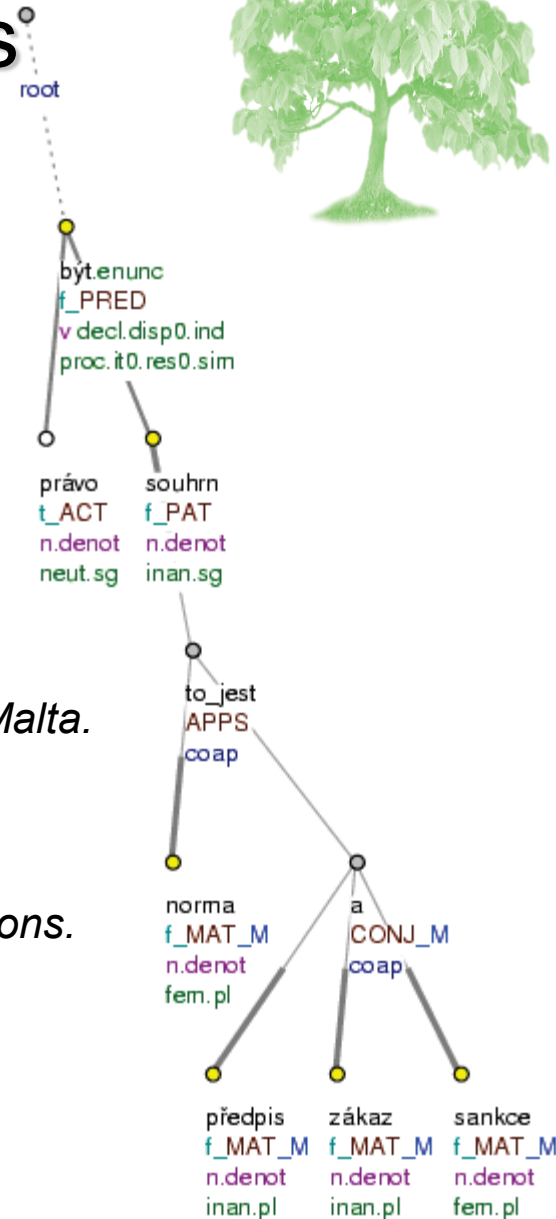
Tomu odpovídala cílová místa _ *Kypr, Kréta, Malta.*

This was reflected by the destinations _ *Cyprus, Crete, Malta.*

ODS (Občanská demokratická strana)

Právo je souhrnem norem, to jest předpisů, zákazů a sankcí.

*Law is a collection of norms, i.e. regulations,
prohibitions and sanctions.*





Functors for Non-Valency Relations

- effective root of an independent clause
- coordination, apposition
- complex predicates, multiword expressions, phrasemes

CPHR ... a part of compound predicate ... 'light verb' + noun

Dostali rozkaz nevycházet ze stanů.

They received a command not to leave their tents.

Učinil rozhodnutí.

He made a decision.

Je třeba odejít.

It is necessary to leave.

BUT: verbonominal predicate with copula *být*

Kočka je savec.PAT The cat is a mammal.PAT

DPHR ... (a dependent part of) a phraseme

Jde mi na nervy. He gets on my nerves.

Chodil křížem.DIR2 krážem.

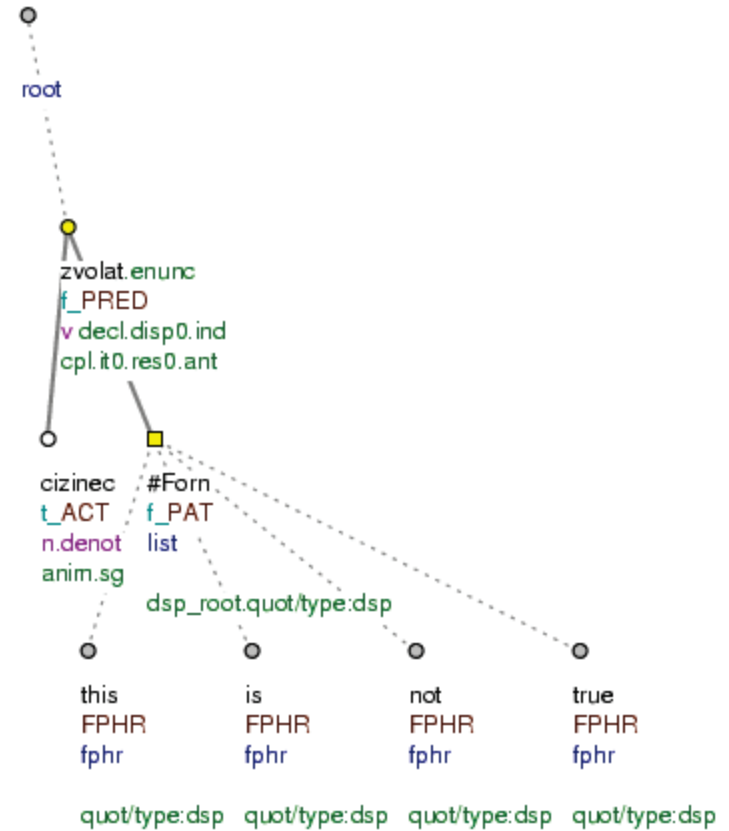
lit: He was walking criss cross.



Functors for Non-Valency Relations

- effective root of an independent clause
- coordination, apposition
- complex predicates, multiword expressions, phrasemes

FPHR *Cizinec zvolal: "This is not true." The foreigner shouted: "This is not true".*





Functors for Non-Valency Relations

- effective root of an independent clause
- coordination
- complex predicates, multiword expressions, phrasemes
- rhematizers; conjunction modifiers (see TFA later)

ATT	<i>Je to <u>bohudíky</u> za námi!</i>	<i>Is it <u>thank God</u> over!</i>
	<i>Vypovědět ji <u>prostě</u> nelze.</i>	<i>It is <u>simply</u> impossible to expel it.</i>
	<i>To je <u>fakticky</u> zlé.</i>	<i>That is <u>really</u> bad.</i>
INTF	<i>To <u>on</u> Jirka ještě spí.</i>	<i>lit: <u>Well</u>, Jirka still is still sleeping.</i>
MOD	<i><u>Pravděpodobně</u> přijdeme.</i>	<i>We will <u>probably</u> come.</i>
	<i>Vím <u>jistě</u>, že Praha mě poznamená.</i>	<i>I know <u>for sure</u> that Prague will affect me.</i>
PREC	<i>Jsem <u>tedy</u> šťasten.</i>	<i>I am <u>therefore</u> happy.</i>
	<i><u>Ale</u> to zatím není náš případ.</i>	<i><u>But</u> that is not our case so far.</i>

RHEM adverbial and particle expressions

On o tom jen nevěděl nic. He only did not know anything about it.

negative/affirmative expressions

Kdyby {#EmpVerb.COND} ano, pak by asi skončil ve vězení

If so then he would probably end up in prison.



Functors for Non-Valency Relations

- effective root of an independent clause
- coordination
- complex predicates, multiword expressions, phrasemes
- rhematizers; conjunction modifiers

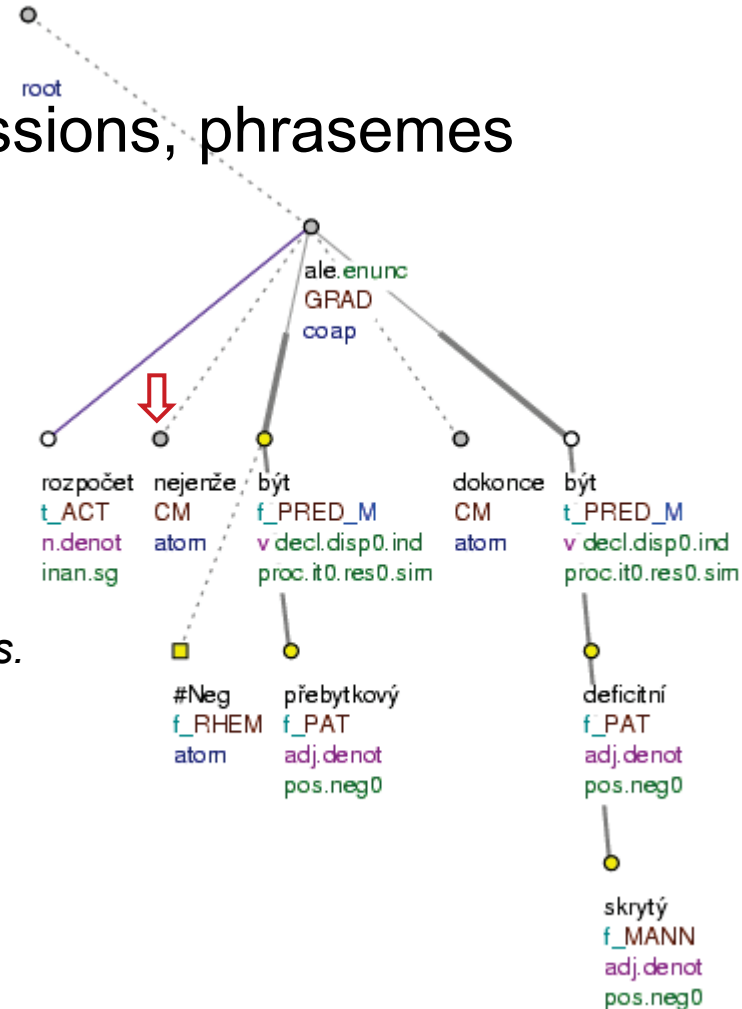
CM

*Rozpočet nejenže.CM není přebytkový,
ale.GRAD dokonce.CM je skrytě deficitní.*

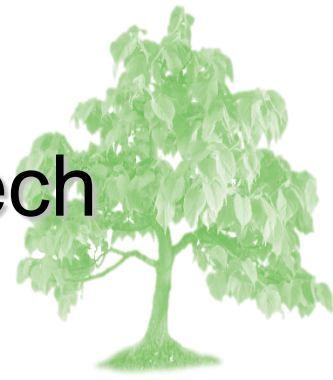
*The budget not only isn't surplus,
it is even covertly deficit.*

*Kreslíme tužkou a.CONJ k tomu.CM ještě.CM
malujeme pastelkami.*

We draw with a pencil and moreover with colored pencils.

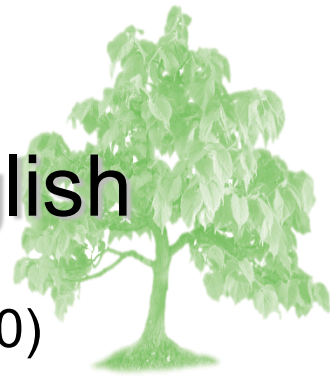


Valency in Other Lexical Resources: Czech



- other electronic LRs for Czech
 - VALLEX (Lopatková et al., 2008)
<http://ufal.mff.cuni.cz/vallex/2.5/>
 - Czech Syntactic Lexicon (Skoumalová, 2001)
 - VerbaLex (Hlaváčková, Horák, 2006)
- printed dictionaries:
 - Slovesa pro praxi (Svozilová et al., 1997)
 - Slovník slovesných, substantivních a adjektivních vazeb a spojení (Svozilová et al., 2005)

Valency in Other Lexical Resources: English



- FrameNet (Fillmore, Baker et al., 1998; Ruppenhofer et al., 2010)
- VerbNet (Palmer, Kipper Schuler et al., since 2000)
- PropBank Lexicon (Palmer et al., 2004)
- Pattern Dictionary of English Verbs (Hanks, Pustejovsky, since 2005)
- LCS databáze (Dorr, 2001)

- EngVallex (Šindlerová et al., 2007)
- CzEngVallex (Urešová et al., 2015)

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