

Using the Sketch Engine in Preparation for a Valency Lexicon of Czech Nouns:

The Case of Nominalizations of Support Verb Constructions

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Outline

- Institute of Formal and Applied Linguistics in Prague
- Prague Dependency Treebank (PDT)
- Support verb constructions in PDT and in PDT-Vallex
- Nominalizations of support verb constructions
- Summary

Prague

Charles Bridge



22th May 2015

PG Tips, Birmingham

3

Czech language

- ❑ West Slavic language
- ❑ Highly inflectional synthetic language
- ❑ Very flexible word order
- ❑ Spoken by over 10 million people

Charles University

- ❑ One of the oldest European universities
- ❑ Founded in 1348 by Charles IV, King of Bohemia and King of the Romans



Lesser Town Square:

Beginning of the 17th century



Lesser Town Square:

The Faculty of Mathematics and Physics today



Former House for Professed
- built by Jesuits in the 17th century
- adjoined to St. Nicholas Church



Refectory: bachelor's graduation

<https://ufal.mff.cuni.cz/projects>



Institute of Formal and Applied Linguistics
Charles University in Prague, Czech Republic
Faculty of Mathematics and Physics



ABOUT EVENTS RESEARCH ▾ PEOPLE TEACHING WIKI

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Projects

Machine Translation



Corpora



Lexicons

absolvovat^{bi,asp}

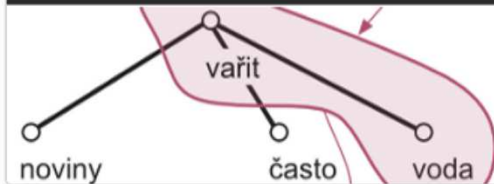
1 ≈ zakončit, končit

-frame: ACT₁ obi PAT₄ obi

-example: absolvovat studium

-rfi: pass: studium se absolvovalo s významáním

Semantics



Speech & Dialog



Text Processing



<https://ufal.mff.cuni.cz/data>

The screenshot shows the website for the Institute of Formal and Applied Linguistics (UFAL) at Charles University in Prague. The header includes the UFAL logo, the institute's name, and the university's name. Navigation links for ABOUT, EVENTS, RESEARCH, PEOPLE, TEACHING, and WIKI are present, along with a search bar. The main content area is titled "Linguistic Data" and features six categories:

- PDT & Monolingual Corpora**: Represented by an image of newspapers and a folder.
- PCEDT & Multilingual Corpora**: Represented by an image of Christmas trees with flags.
- Speech & Dialog**: Represented by an image of a woman's face and a group of people at a table.
- Discourse**: Represented by a complex dependency parse tree diagram with the acronym "PDIT" in large letters.
- Valency lexicons**: Shows the verb "absolvovat" with its frame: `ACT1 obl PAT4 obl`. It includes the meaning "zakončit, končit", an example "absolvovat studium", and a note about its passive use: "pass: studium se absolvovalo s významěním".
- Semantics & Pragmatics**: Shows a semantic network diagram for the verb "vařit" (to cook), with nodes for "noviny", "často", and "voda".

Czech linear corpora and treebanks

- Institute of the Czech National Corpus
 - Many various subcorpora of the **Czech National Corpus (CNC)**
 - synchronic (written, spoken), diachronic, ...
 - Lemmatised and morphologically annotated
 - **Linear** corpora, strings of words
- Institute of Formal and Applied Linguistics
 - **Prague Dependency Treebank (PDT) Family**
 - **Syntactic (dependency) structure**

Prague Dependency Treebank Family

- Prague Dependency Treebank (PDT): **Czech**
- Prague **English** Dependency Treebank (PEDT)
 - a manually parsed English corpus sized over 1.2 million running words in almost 50,000 sentences
 - Contains Penn Treebank - Wall Street Journal Section
- Prague **Czech-English** Dependency Treebank (PCEDT)
 - a manually annotated parallel, aligned treebank built above the Penn Treebank - Wall Street Journal text collection
- Prague DaTabase of Spoken Language
 - **spoken Czech, spoken English**
- Other treebanks (Arabic,...)

Prague Discourse Treebank 1.0: Annotation of discourse relations

- Lexically-grounded approach of identification of discourse connectives, discourse units linked by them and semantic relations between these units
- Annotations of extended textual coreference and bridging relations
- Earlier phases:
 - Grammatical coreference
 - Control
 - Coreference relations within support verb constructions
 - Reciprocity
- <https://ufal.mff.cuni.cz/pdit>

Prague Dependency Treebank 2.0

- Four interlinked layers of annotation (PDT2.0)
 - word layer (representing the “raw-text”)
 - morphological annotation (2 mil. of words)
 - m-layer
 - syntactical annotation
 - analytical (1,5 mil. of words), a-layer
 - complex semantic annotation
 - tectogrammatical layer (0,8 mil. of words), t-layer

PDT: Linking the layers

Sentence:

□ *Byl by šel do lesa.*

lit.: He-was would went to forest.

'He would have gone to the forest'

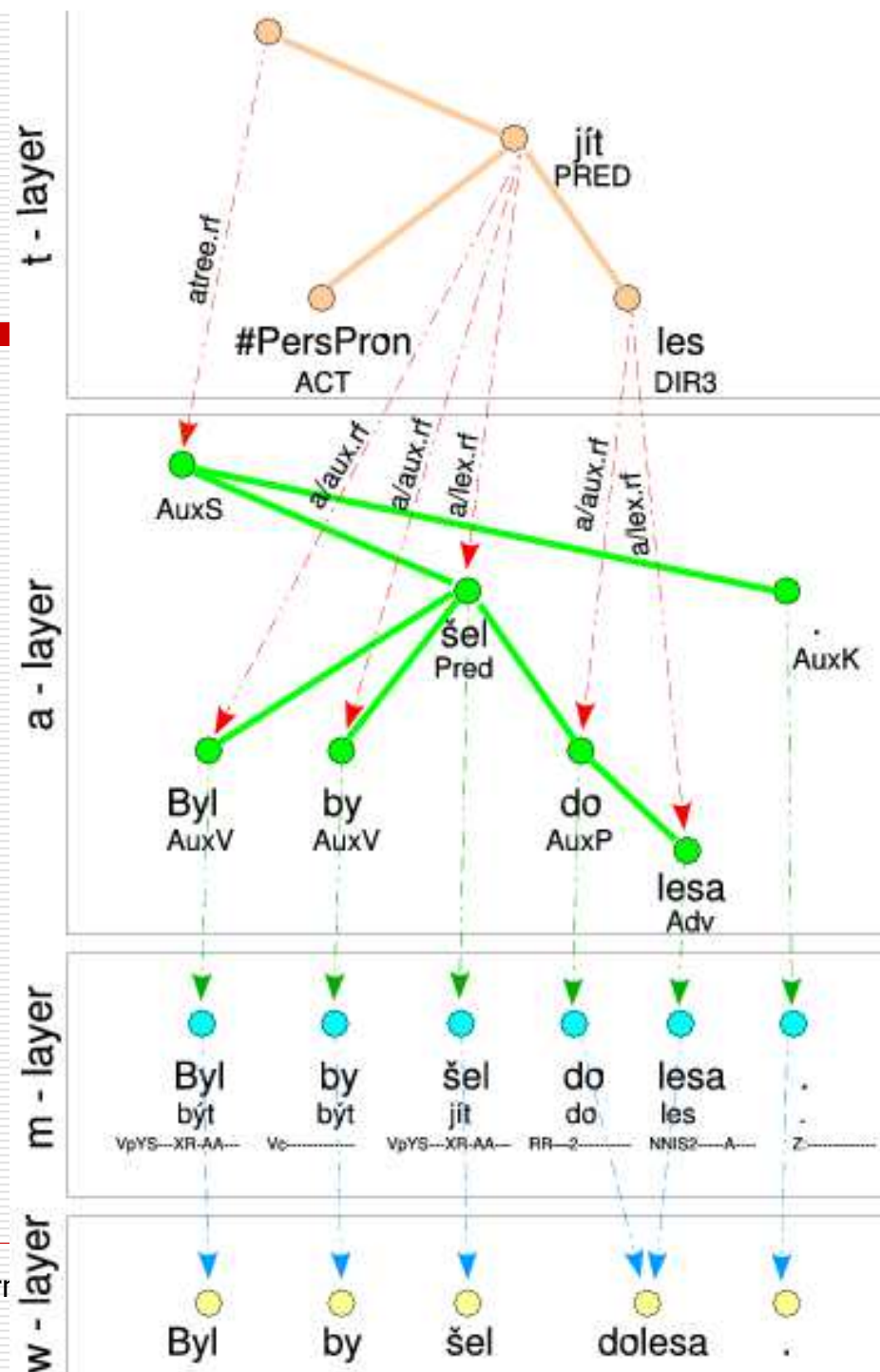
□ References from a higher layer to a lower layer:

- t-layer → a-layer
- a-layer → m-layer
- m-layer → w-layer
- 1:1 correspondence

between nodes of the m- and a-layers

22th May 2015

PG Tips, Birr



Tectogrammatical layer of PDT

- Every sentence is represented as a rooted tree with labeled nodes and edges
 - labels: so-called functors
- The tree reflects the underlying (deep) structure of the sentence
 - The nodes stand for auto-semantic words only
 - Grammatemes are attached to some nodes
 - In the cases of **deletion** in the surface shape of the sentence, nodes are introduced (added) into the tectogrammatical tree to 'recover' a deleted word

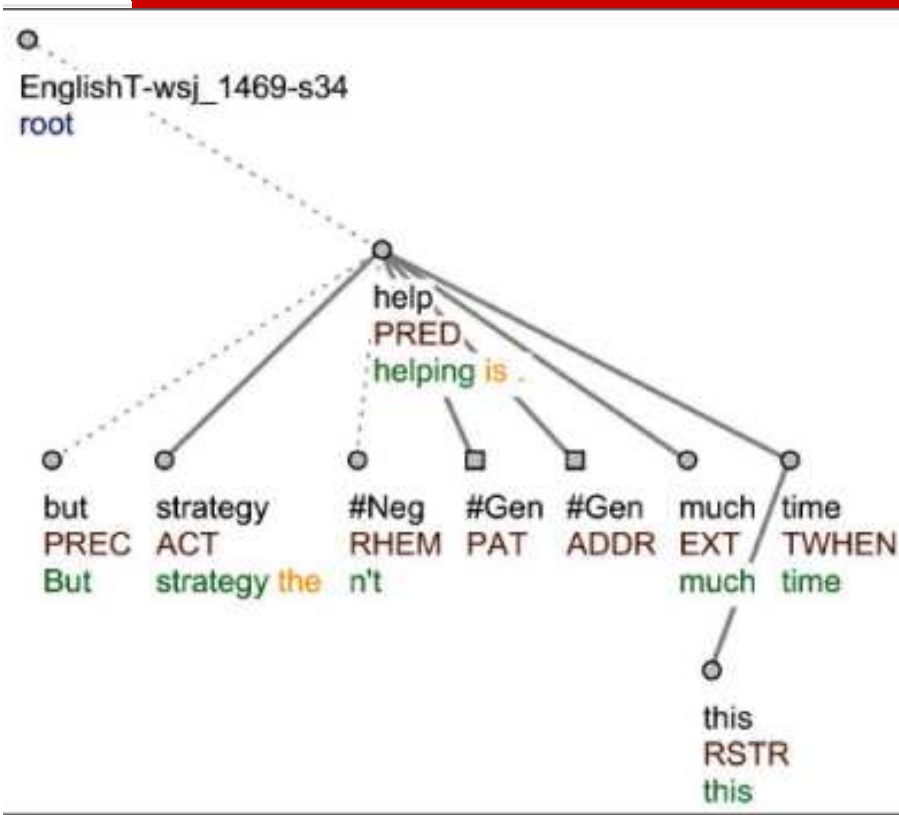
Tectogrammatical layer of PDT

- Every node representing **a verb** or a certain type of **a noun** has **a valency frame** assigned to it (by means of a reference to **a valency dictionary entry**)
 - **PDT-Vallex, EngVallex**
 - valency lexicons linked to treebanks
- Multiword expressions
 - Phrasemes
 - **Support (light) verb constructions**
 - Named entities
 - ...

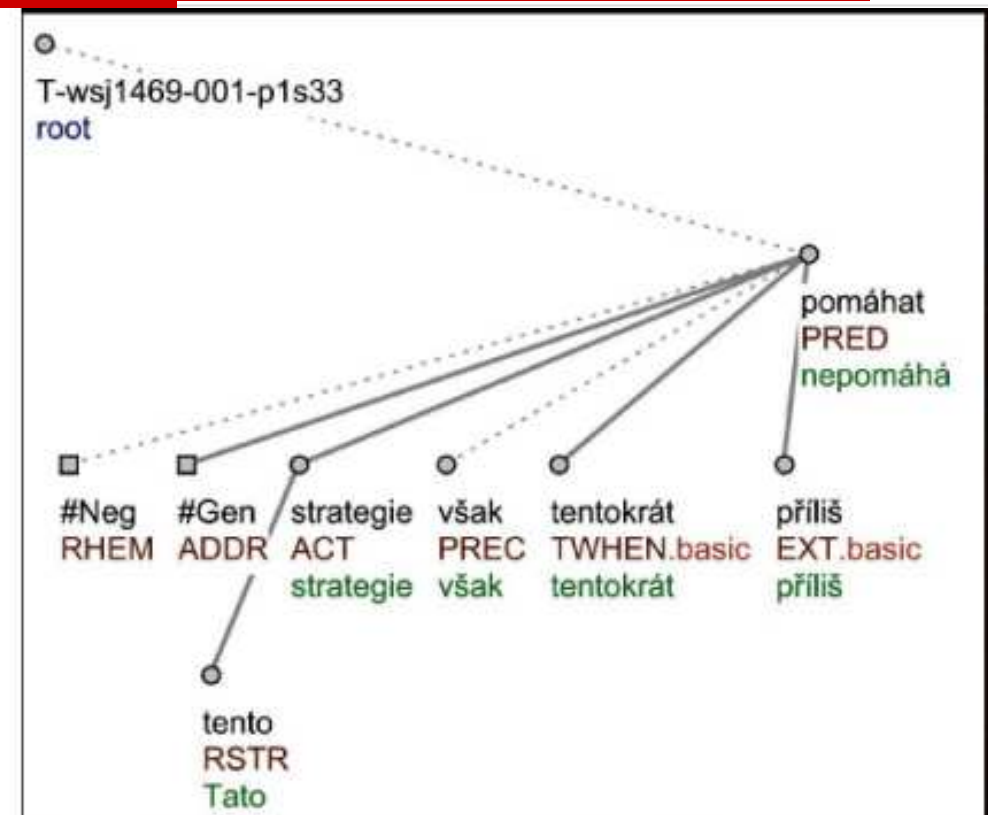
Valency in PDT-Vallex

- Based on the theory of valency developed within the theoretical framework of Functional Generative Description (Sgall, Hajičová & Panevová, 1986)
- Valency complementation:
- Inner participants (arguments, actants):
 - Actor (ACT), Patient (PAT), Addressee (ADDR), Effect (EFF), Origin (ORIG)
- Obligatory free modifications
 - esp. those with the meaning of direction (*to arrive somewhere.DIR*), location (*to dwell somewhere.LOC*) or manner (*to behave well.MANN*)

Prague Czech-English Dependency Treebank: an example



But the strategy isn't helping much this time.



Tato strategie však tentokrát příliš nepomáhá .

Support verb constructions

Support (light) verb constructions

- Type of multiword expressions
- A semantically impoverished verb combines (collocates) with a noun that further specifies the semantics of the predicate (Davis & Barrett, 2013)
 - support (light) verbs: *have, give, take, make, lose, hold, ...*
 - nouns (events or states): *support, opportunity, chance, ...*
- Semantic near-equivalents to the verbs corresponding to the noun components
 - *make a substitution ~ substitute*
- Semantics, collocations, clustering, Aktionsart, ...
- **Syntactic** behaviour of SVCs (Mel'čuk, 1996)

Syntactic behaviour of SVCs

- ***Vláda*** ***má*** ***plán*** ***zvýšit*** ***daně***
- The government has a plan to raise taxes

- ***Vláda*** ***má*** ***v plánu*** ***zvýšit*** ***daně***
- The government has 'in plan' to raise taxes

Syntactic behaviour of SVCs

- | | | | | | |
|--------------------------|---------------------|------------------|--------------------|-----------------------|--------------------|
| <input type="checkbox"/> | <i>Vláda</i> | <i>má</i> | <i>plán</i> | <i>zvýšit</i> | <i>daně</i> |
| <input type="checkbox"/> | The government | has | a plan | to raise | taxes |
| | | | | <i>zvýšení</i> | <i>daní</i> |
| | | | | of-rise | in taxes |

- | | | | | | |
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Syntactic behaviour of SVCs

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zvýšení-GEN daní
of-rise in taxes

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Syntactic behaviour of SVCs

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| | | | | of-rise | in taxes |
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| | | | | on rise | in taxes |
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Syntactic behaviour of SVCs

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|---|-----------|-------------|--------------------|-------------|
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-
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Syntactic behaviour of SVCs: Verbal vs. nominal valency

- ..., which **gives** a unique **opportunity** to Asian children in this city for education. (BNC)

Syntactic behaviour of SVCs: Verbal vs. nominal valency

- ..., which **gives** a unique **opportunity** to Asian children in this city for education. (BNC)
 - give an opportunity ~ enable
 - 1 lexical unit \Rightarrow 1 node?

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gives_an_opportunity

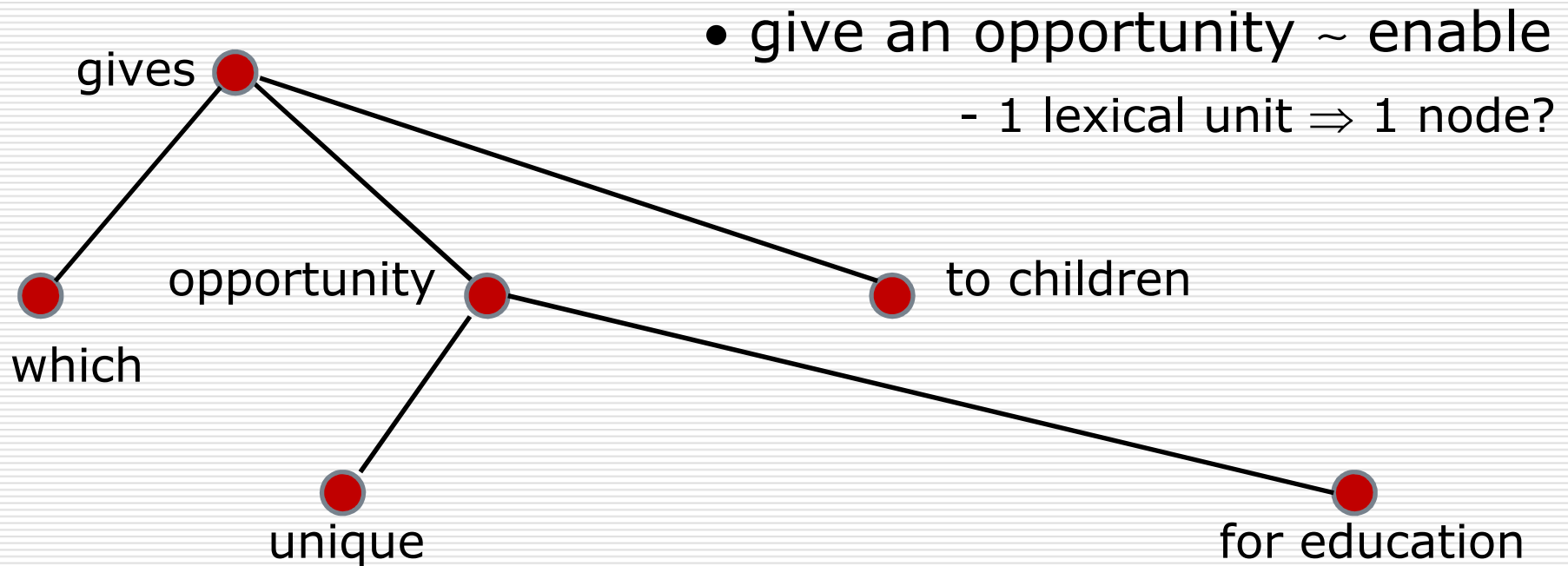


Syntactic behaviour of SVCs: Verbal vs. nominal valency

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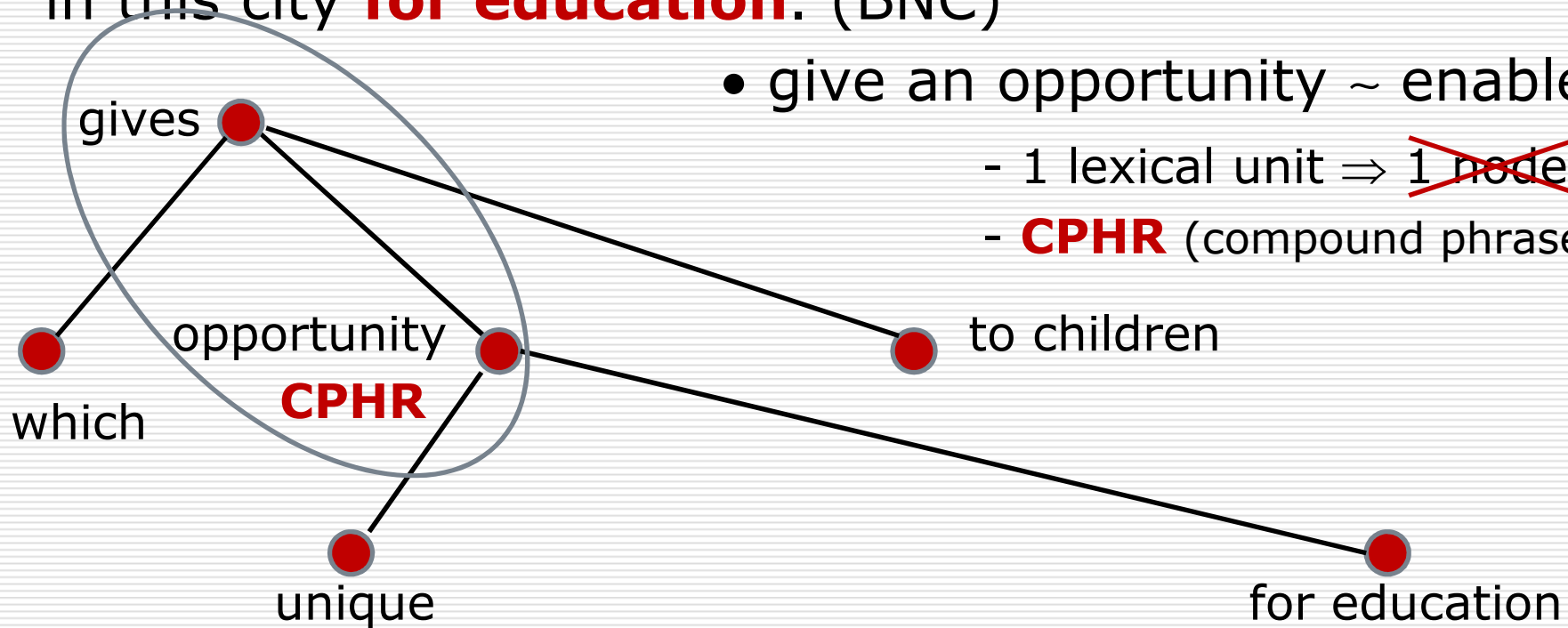
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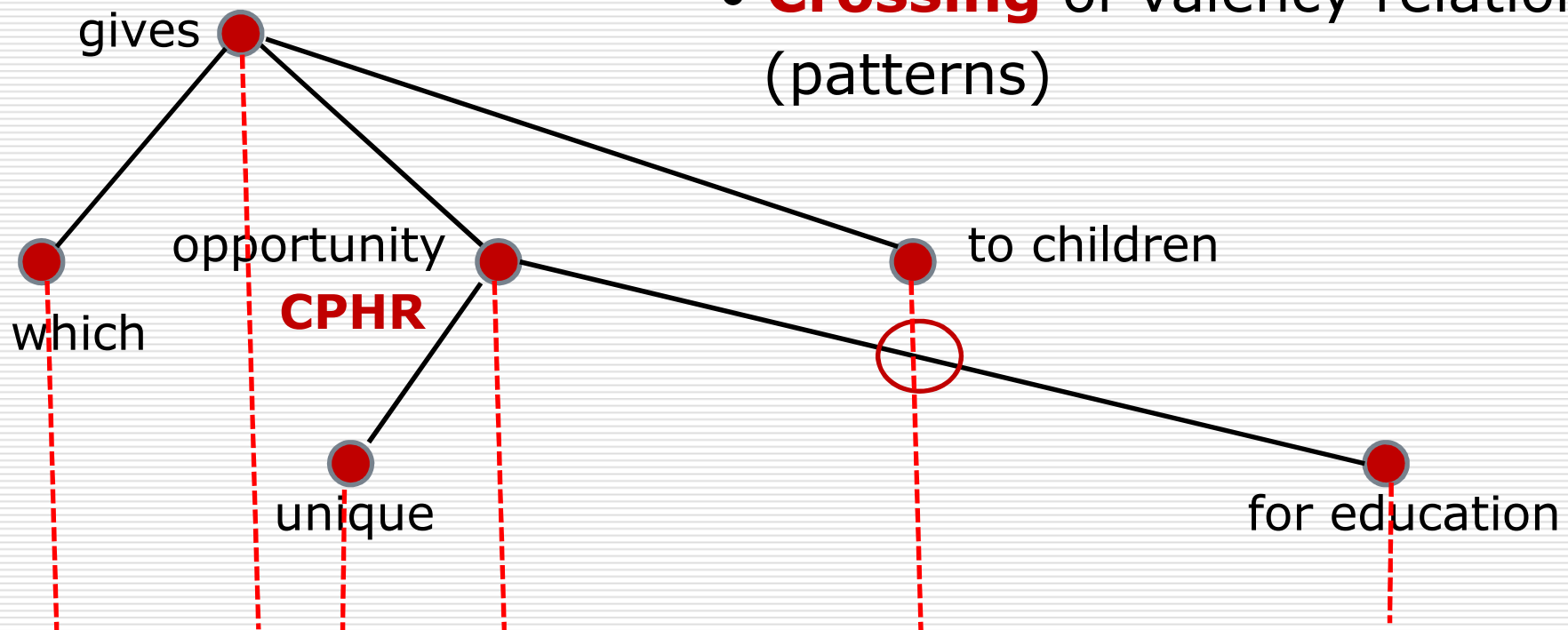


- give an opportunity ~ enable
 - 1 lexical unit ⇒ ~~1 node?~~
 - **CPHR** (compound phraseme)

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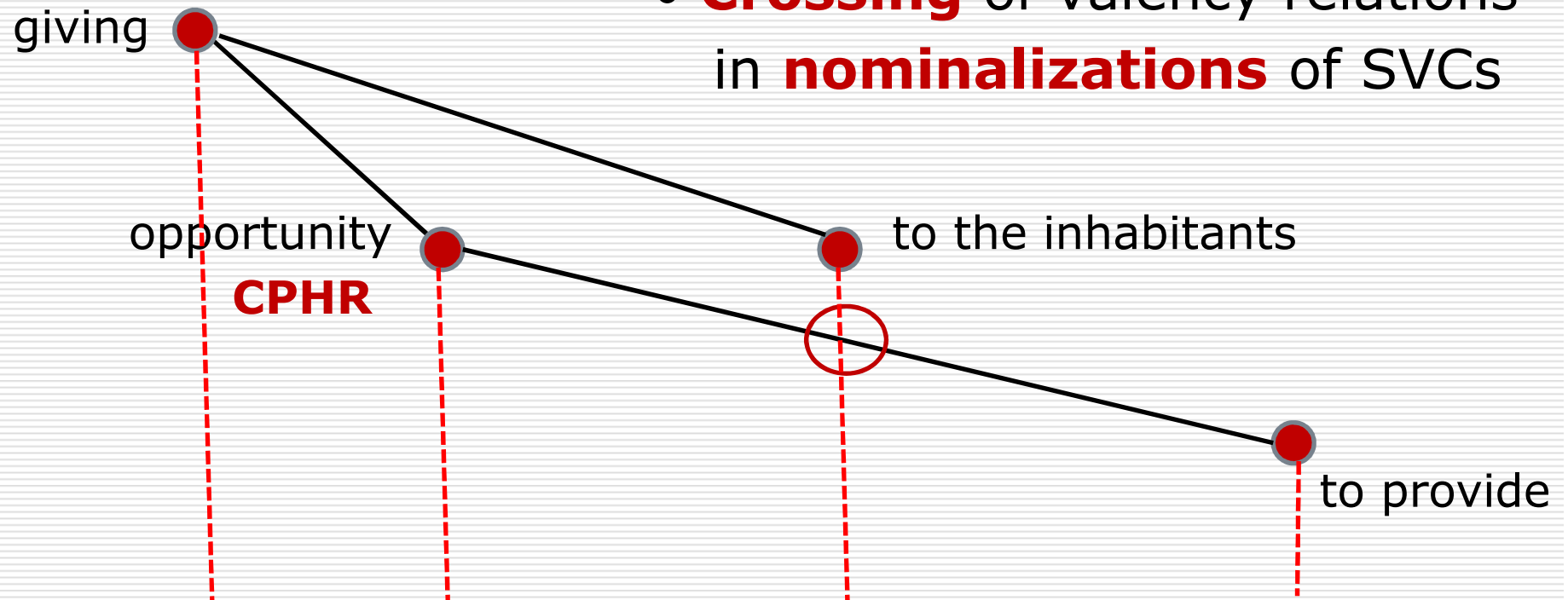
- **Crossing** of valency relations (patterns)



Syntactic behaviour of SVCs: Verbal vs. nominal valency

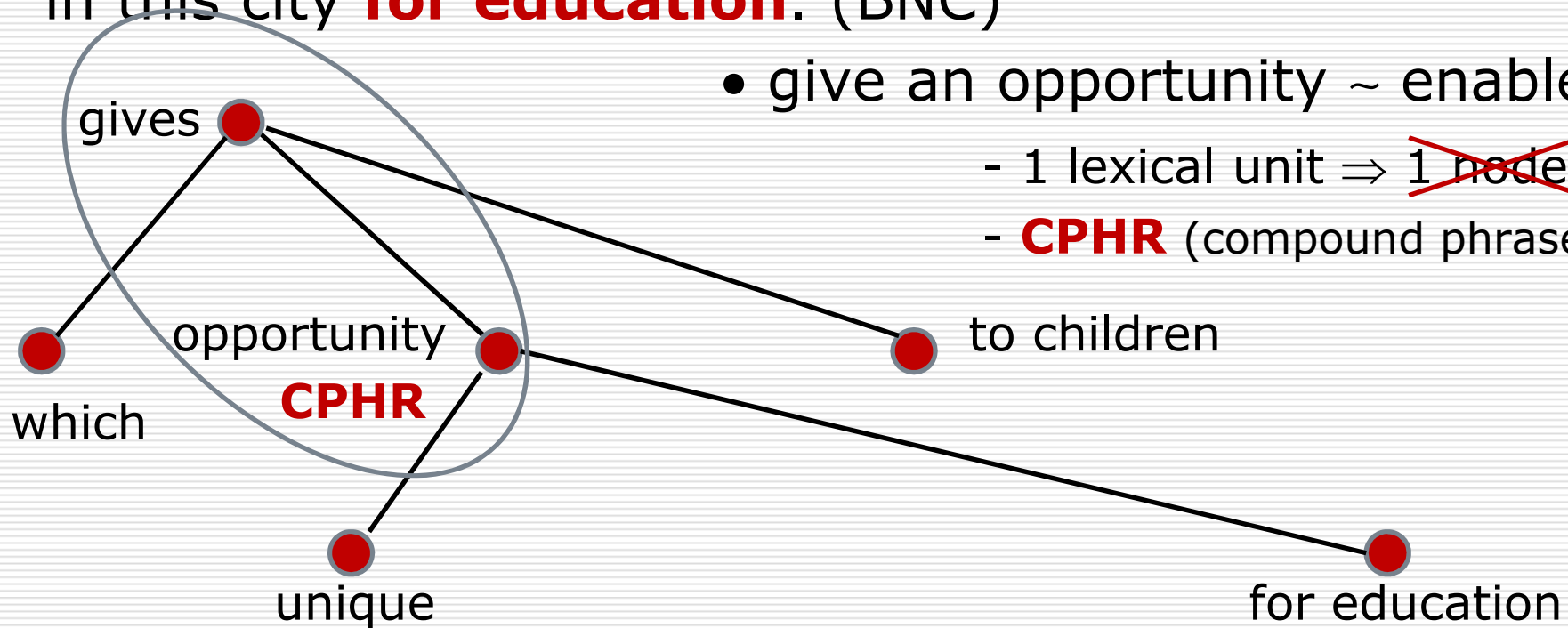
- ... changed by **giving opportunity to the inhabitants to provide** for themselves. (BNC)

- **Crossing** of valency relations in **nominalizations** of SVCs



Syntactic behaviour of SVCs: Verbal vs. nominal valency

- ..., which **gives** a **unique opportunity** to Asian children in this city **for education**. (BNC)



- give an opportunity ~ enable
 - 1 lexical unit ⇒ ~~1 node?~~
 - **CPHR** (compound phraseme)

PDT-Vallex:

verb *dát* 'give' and noun *příležitost* 'opportunity'

* **dát** 'give'

ACT(.1) **PAT**(.4) **ADDR**(.3) v-w369f1 Used: 86x

dali jim **dárky** 'they gave them **presents**'

ACT(.1) **CPHR**({pohlavek,políček,branka,gól,rána,...}.4) **ADDR**(.3) v-w369f2 Used: 34x

dal synovi pohlavek

ACT(.1) **CPHR**({pověření,podpora,souhlas,zpráva,impuls,odpověď,možnost,příkaz,naděje,popud,příčina,právo,**příležitost**,signál,šance,...}.4)

ADDR(.3) v-w369f3 Used: 28x

dal někomu **příkaz** 'to give somebody **an order**'

* **příležitost** 'opportunity'

?**ACT**(.2,.u) **PAT**(**k**-1[.3],**f**) v-w5182f1 Used: 26x

příležitost udělat.PAT trháč '**opportunity to do sth**'

příležitost ke korupci.PAT '**opportunity for corruption**'

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

give

give¹ ACT() PAT() ADDR()

(pass someone something or let someone own something)

- *Mary gave John a book.*

give² ACT() DPHR_(way) PAT()

(transfer: give way)

- *The Beatles give way to baseball in the Nipponese version.*

give³ ACT₍₁₎ CPHR() ADDR()

(give+event: the actor of give is the actor of the event, too, affecting the addressee)

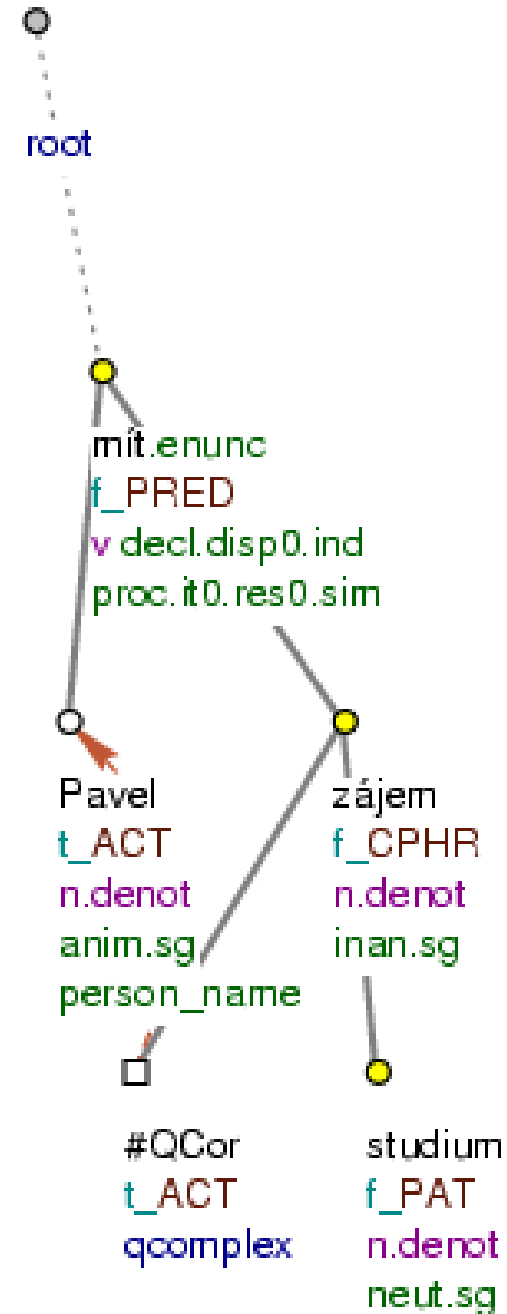
- *They gave the anti-apartheid activists a tumultuous reception upon their return.*
- *The French group has an agreement giving it the right to buy all the shares outstanding.*
- *The executives gave the chefs a standing ovation.*
- *She had given the answers to two low-ability geography classes.*

give⁴ ACT₍₁₎ CPHR_(concert,speech,...)

- *It would be best for them to play at MoR, but at least one concert they could give anywhere in the CR this year.*

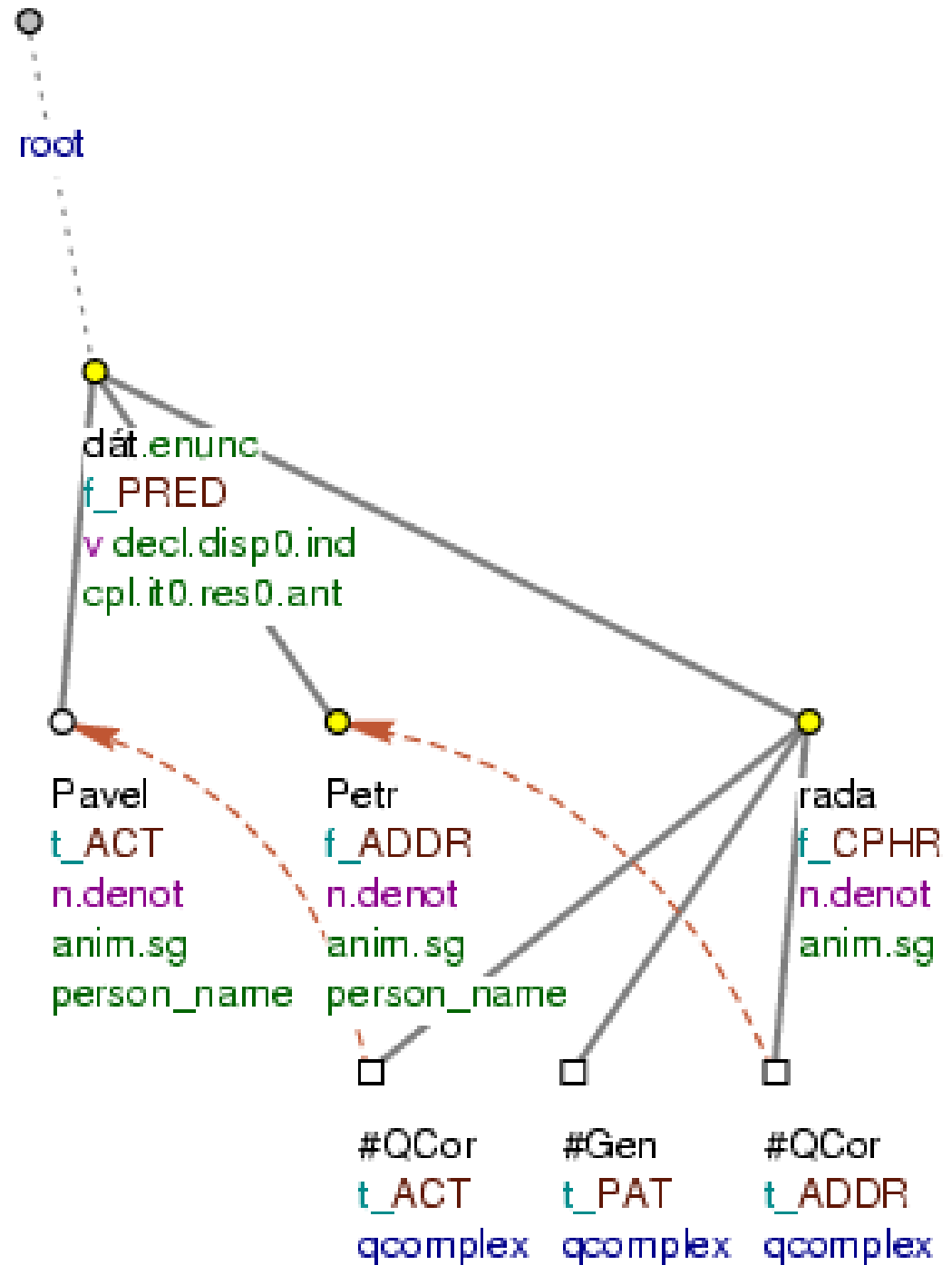
SVCs in PDT

- Functor CPHR
- Tectogrammatical lemma *#QCor*
 - shared referentially identical valency modifications
 - coreferential relations (arrows)
 - Cinková & Kolářová (2006)
- 150 support verbs in PDT-Vallex



Shared referentially identical valency modifications

Pavel dal Petrovi radu.
'Paul gave Peter advice'
~ Paul advised Peter...



Nominalizations of support verb constructions

Nominalizations of support verb constructions

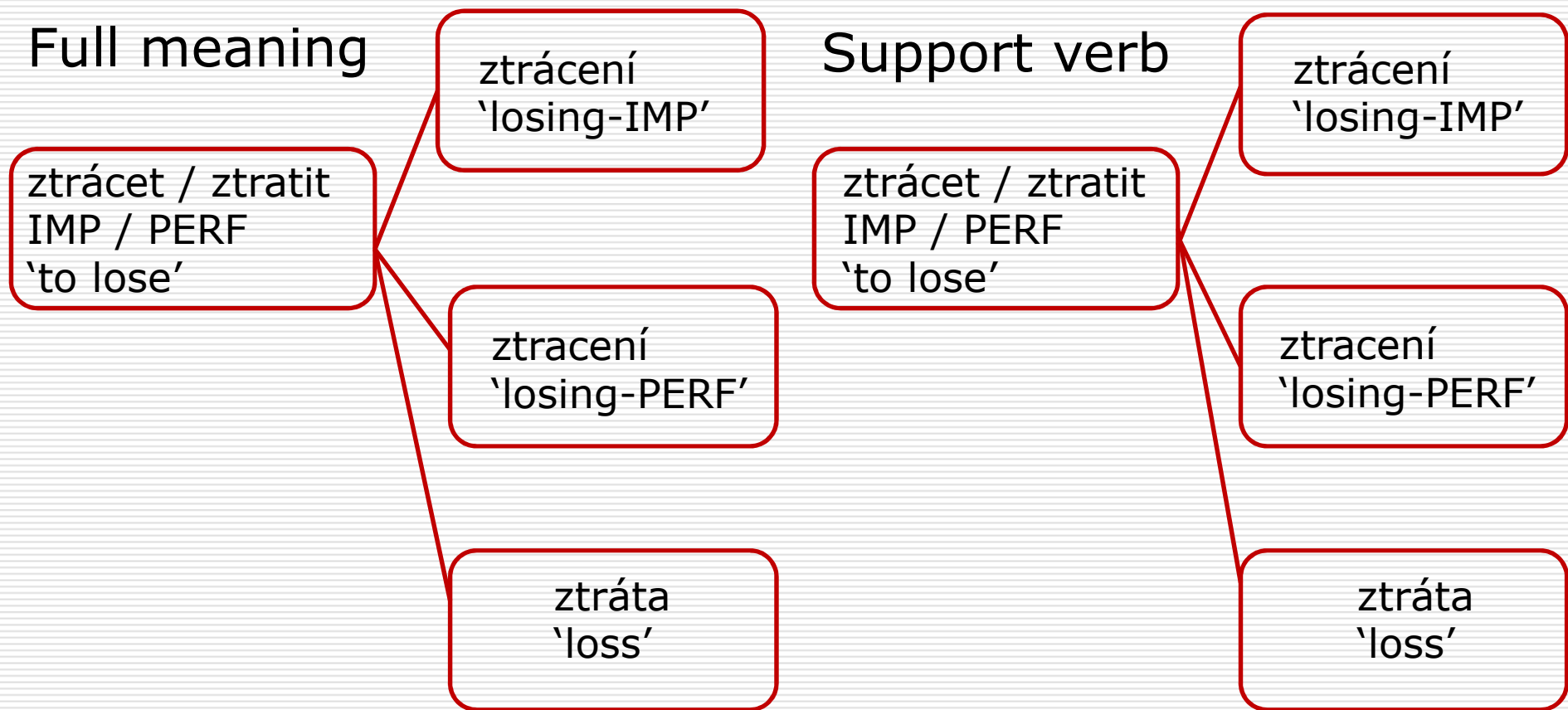
- ❑ Not captured in PDT
- ❑ Not treated in PDT-Vallex
- ❑ So far no collocation dictionary for Czech
- ❑ Research questions
 - Which types of nominalizations can stand for nominalizations of SVCs?
 - Do nominalizations of SVCs have the same valency properties as nominalized constructions in which the nouns have full meaning?
 - How to treat them in a valency lexicon?
 - Focus of my research: Czech
 - English examples: by way of illustration

Types of Czech deverbal nouns

- Nouns derived by productive means
 - suffixes *-(e)ní/tí*, e.g. *sbírání / sebrání* 'collecting, gathering'
 - both aspectual pairs
 - can be derived from almost all verbs
 - ~ gerundive nominals in English
- Nouns derived by non-productive means or by the zero suffix
 - e.g. *sběr* 'collection'
 - not sensitive to aspect
 - can be derived from only some of verbs
 - ~ derived (result) nominals in English
 - Chomsky (1972); Grimshaw (1991)

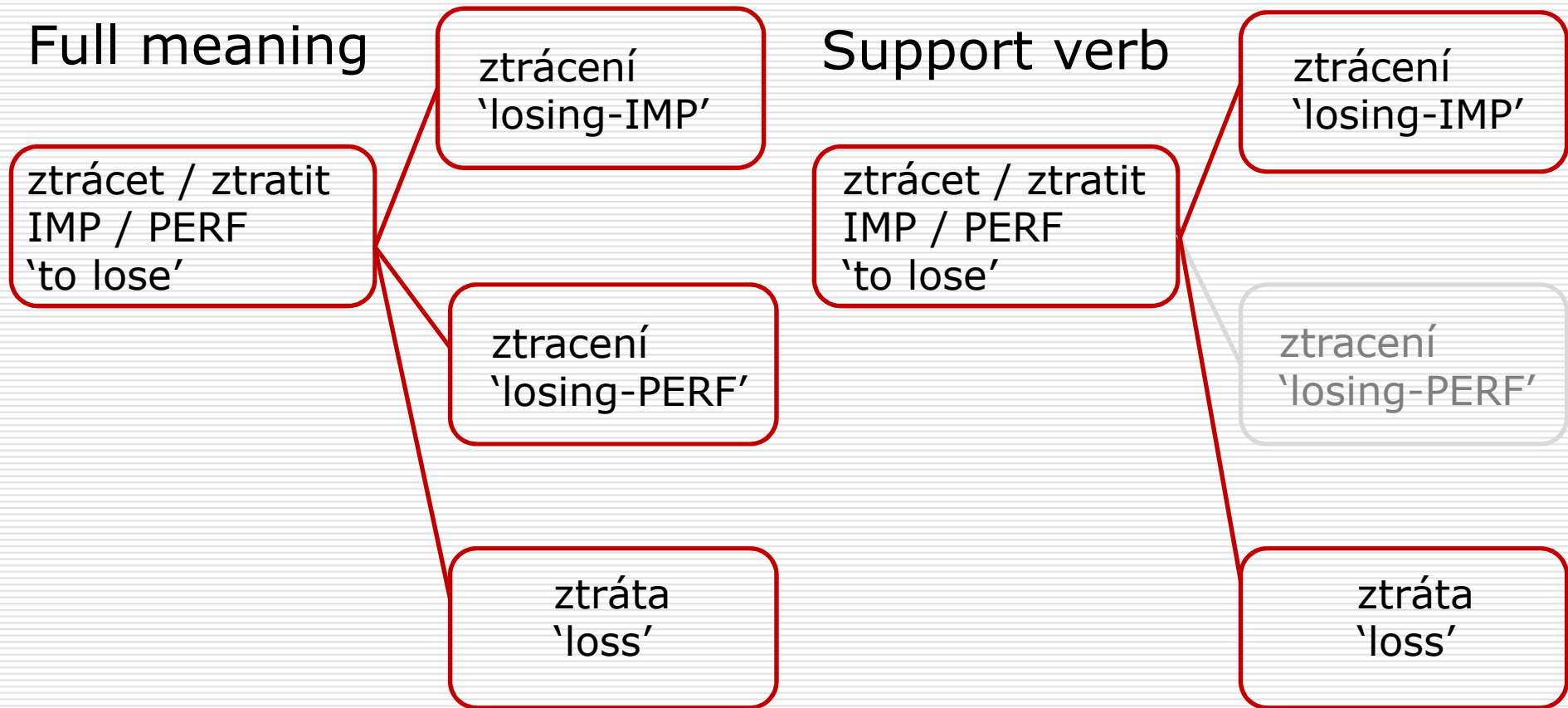
Nominalizations of support verbs:

- Can all types of deverbal nouns stand for them?



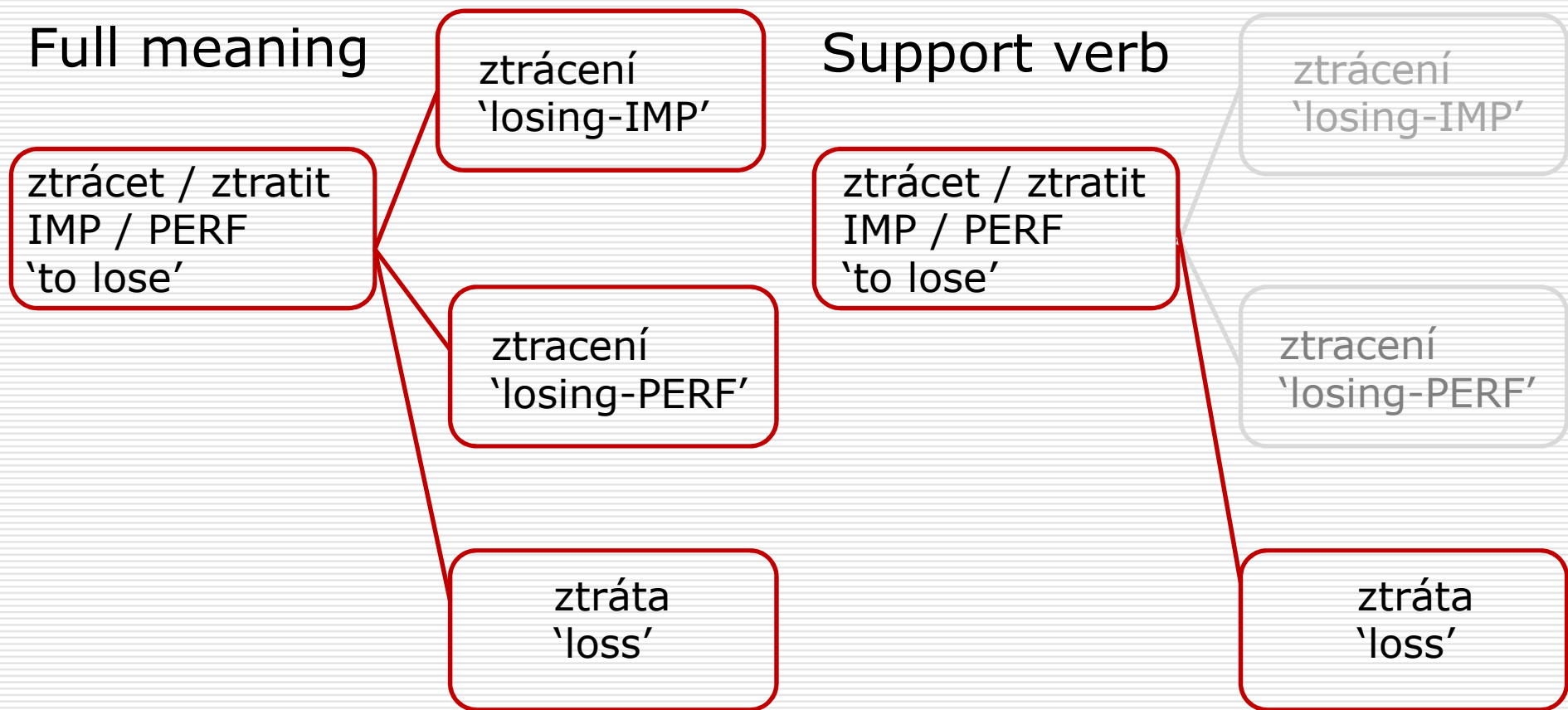
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- Can all types of deverbal nouns stand for them?
- If not all types, **which ones** can?



Nominalizations of support verbs:

- Can all types of deverbal nouns stand for them?
- If not all types, **which ones** can?



Which types of nominalizations of support verbs?

- Mostly nouns derived by productive means in Czech and gerundive nominals in English
 - *poskytovat* 'to provide' → *poskytování* 'providing'
- However, not always so straightforward
 - Czech *mít* 'to have' → no nominalization in Czech
 - Czech *dát* 'to give' → *dávání* 'giving-IMP'
dání 'giving-PERF': very rare, limited usage, e.g. *dání přednosti* 'giving way'
- Czech non-productively derived nouns or English result nominals exceptionally (e.g. *ztráta* 'loss')
 - The nominalization can exist but is not used in its impoverished meaning, e.g. *selling the idea* vs. ****sale of the idea***

Do support verbs and their nominalizations share the same noun components?

support verb
to lose

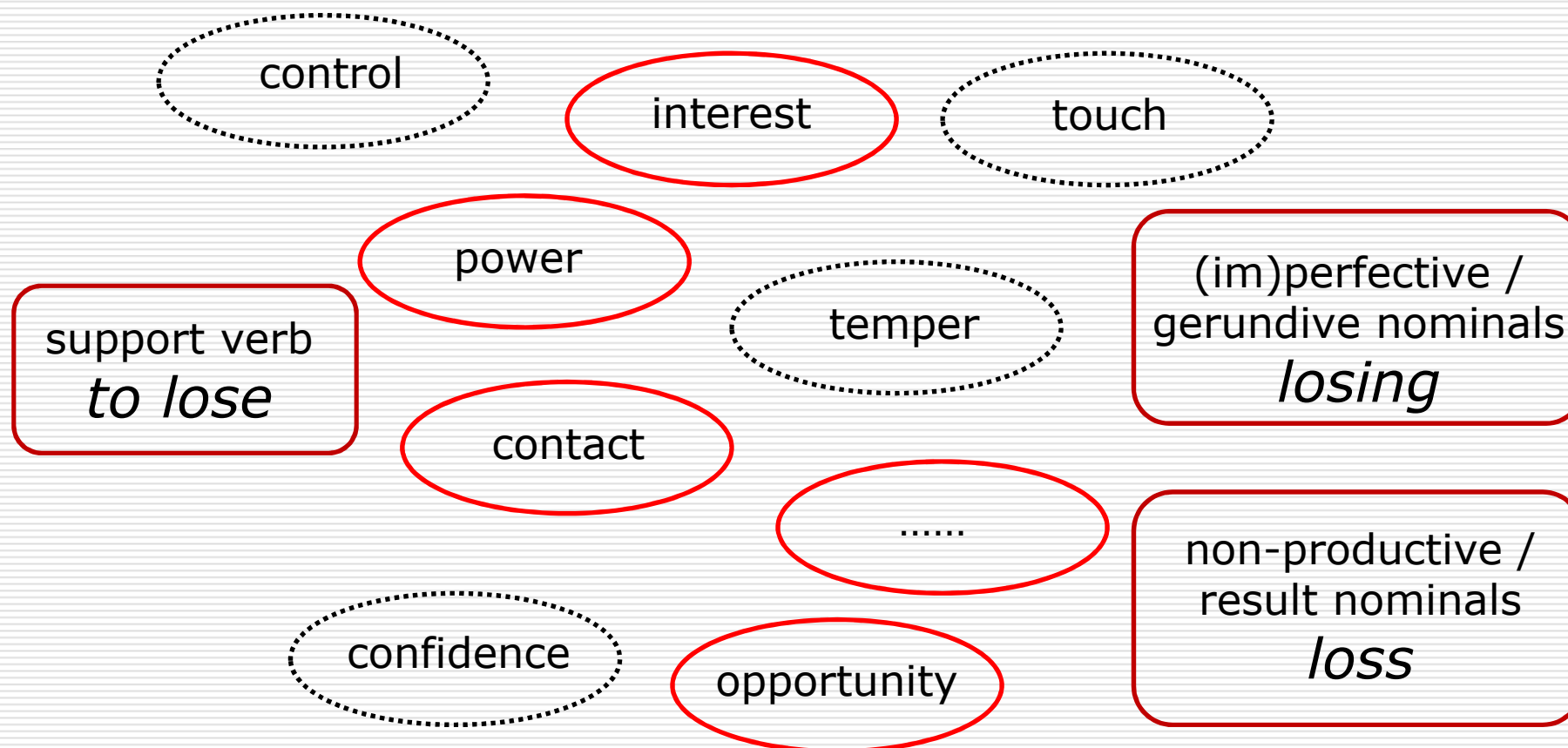
(im)perfective /
gerundive nominals
losing

non-productive /
result nominals
loss

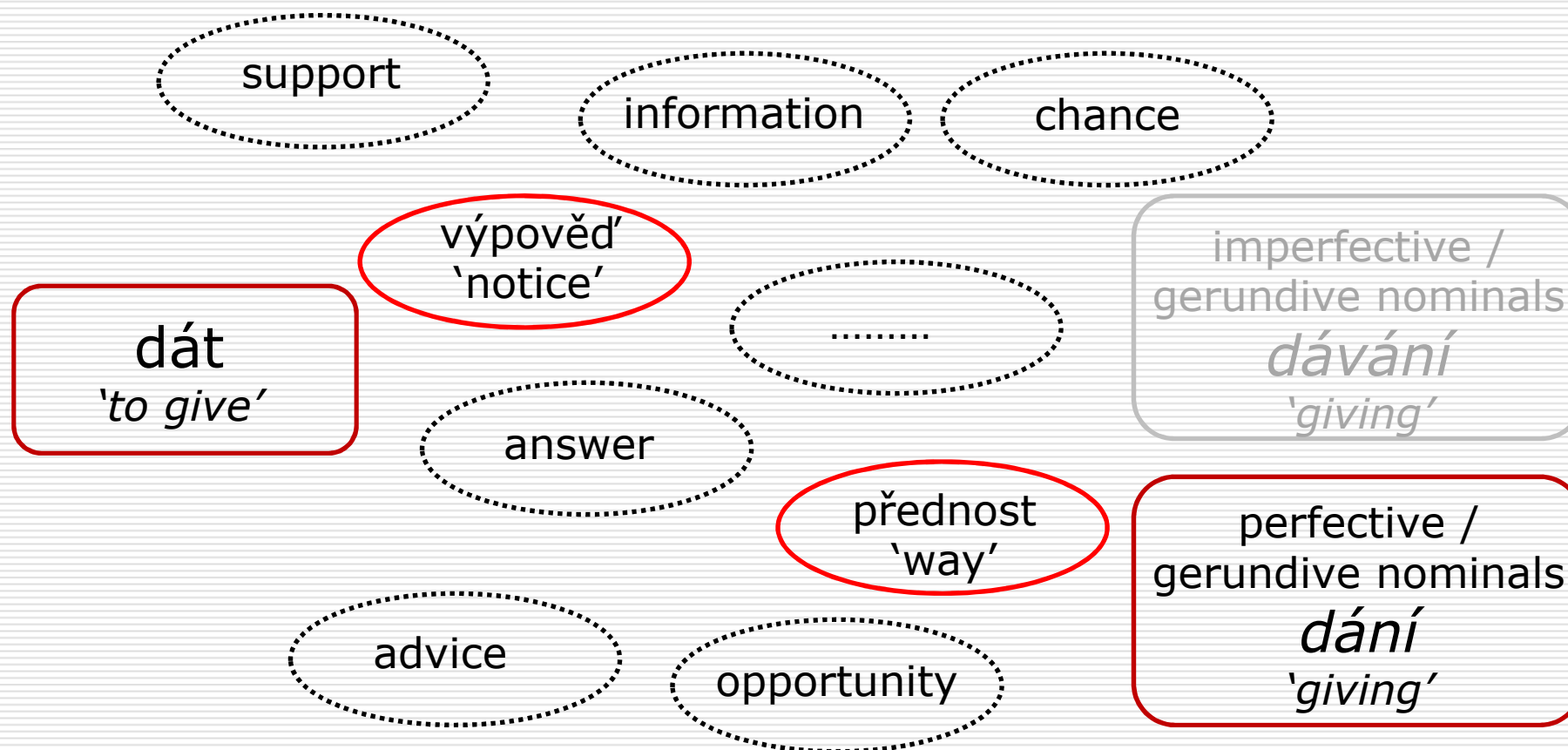
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Do support verbs and their nominalizations share the same noun components?



PDT-Vallex

* **sběr** `collection`

?ACT(.2..7..u) PAT(.2..u) v-w5901f1 Used: 8x
sběr dat.PAT, rostlin.PAT `data collection`

* **sbírání** `collecting-IMP`

ACT(.2..7..u) PAT(.2..u) v-w5905f1 Used: 4x
(sbírat) sbírání materiálu.PAT `collecting of material`

* **sbírat** `to pick-IMP / to collect-IMP / to gather-IMP`

ACT(.1) PAT(.4) v-w5906f1 Used: 7x
sbírat houby `to pick mushrooms`

ACT(.1) CPHR({odvaha,zkušenost,...}.4) v-w5906f2 Used: 1x

sbíral odvahu dát výpověď `he gathered (his) courage to give (his) notice`

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CPHR

PDT-Vallex

- Nouns: Valency frames with CPHR?

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CPHR

PDT-Vallex

- Nouns: Valency frames with CPHR?
- If yes, what would be the forms of participants?

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CPHR

Searching for valency of nouns in linear corpora (CNC)

- Valency of nouns → Searching for syntactic relations
 - Query: a linear notation of dependency relations
 - A noun modified by a participant in prepositionless GEN_{Adnom}:
 - ([lemma="..."] [!(tag="[Z|R|V|J].*")]{0,2} [tag="N...2.*"])

Optional positions

I exclude punctuation, prepositions, verbs and conjunctions

A noun in GEN_{Adnom}

- CQL query type
- A query can often cover various dependency relations that do not match my intention ⇒ All found occurrences have to be manually checked

opportunity (noun) British National Corpus freq = 15,869 (141.5 per million)

| unary rels | object of | 5,397 | 3.3 | modifier | 5,281 | 1.1 | pp for-p | 2,275 | 11.6 | and/or | 1,722 | 0.8 |
|------------|-----------|------------|------|-------------|------------|------|-------------|-----------|------|----------------|-----------|------|
| VPto | provide | <u>802</u> | 8.06 | equal | <u>320</u> | 9.8 | people | <u>93</u> | 3.97 | problem | <u>50</u> | 4.26 |
| Sforto | take | <u>681</u> | 6.29 | new | <u>262</u> | 6.05 | woman | <u>54</u> | 4.34 | time | <u>38</u> | 2.5 |
| | give | <u>597</u> | 6.46 | employment | <u>213</u> | 8.32 | development | <u>45</u> | 4.42 | challenge | <u>34</u> | 6.45 |
| | offer | <u>467</u> | 8.1 | job | <u>134</u> | 6.41 | child | <u>41</u> | 3.79 | education | <u>28</u> | 4.31 |
| | create | <u>178</u> | 7.12 | good | <u>120</u> | 5.7 | student | <u>39</u> | 5.09 | threat | <u>26</u> | 6.03 |
| | seize | <u>165</u> | 9.12 | great | <u>110</u> | 6.15 | study | <u>31</u> | 4.08 | choice | <u>26</u> | 5.26 |
| | miss | <u>153</u> | 8.28 | educational | <u>106</u> | 8.14 | work | <u>29</u> | 2.92 | training | <u>25</u> | 4.62 |
| | get | <u>120</u> | 4.13 | earliest | <u>97</u> | 8.85 | advancement | <u>26</u> | 8.05 | facility | <u>19</u> | 4.79 |
| | present | <u>100</u> | 6.67 | unique | <u>95</u> | 8.27 | growth | <u>24</u> | 4.89 | responsibility | <u>19</u> | 4.79 |
| | see | <u>98</u> | 3.77 | ideal | <u>88</u> | 8.19 | member | <u>24</u> | 3.18 | job | <u>19</u> | 3.69 |
| | lose | <u>94</u> | 6.14 | business | <u>87</u> | 5.44 | pupil | <u>23</u> | 5.37 | constraint | <u>18</u> | 6.55 |
| | use | <u>94</u> | 4.15 | golden | <u>85</u> | 8.21 | education | <u>23</u> | 4.01 | need | <u>17</u> | 3.47 |
| | welcome | <u>93</u> | 7.81 | excellent | <u>82</u> | 7.82 | training | <u>20</u> | 4.28 | experience | <u>16</u> | 3.65 |
| | afford | <u>73</u> | 7.59 | career | <u>81</u> | 6.81 | profit | <u>19</u> | 4.84 | work | <u>16</u> | 2.07 |
| | find | <u>66</u> | 3.78 | training | <u>77</u> | 6.1 | discussion | <u>18</u> | 4.87 | employment | <u>15</u> | 4.75 |

opportunity *(noun)* British National Corpus freq = 15,869 (141.5 per million)

valency

| unary rels | object of | 5,397 | 3.3 | modifier | 5,281 | 1.1 | pp for-p | 2,275 | 11.6 | and/or | 1,722 | 0.8 |
|------------|-----------|------------|------|-------------|------------|------|--------------------|-----------|------|----------------|-----------|------|
| VPto | provide | <u>802</u> | 8.06 | equal | <u>320</u> | 9.8 | people | <u>93</u> | 3.97 | problem | <u>50</u> | 4.26 |
| Sforto | take | <u>681</u> | 6.29 | new | <u>262</u> | 6.05 | woman | <u>54</u> | 4.34 | time | <u>38</u> | 2.5 |
| | give | <u>597</u> | 6.46 | employment | <u>213</u> | 8.32 | <u>development</u> | <u>45</u> | 4.42 | challenge | <u>34</u> | 6.45 |
| | offer | <u>467</u> | 8.1 | job | <u>134</u> | 6.41 | child | <u>41</u> | 3.79 | education | <u>28</u> | 4.31 |
| | create | <u>178</u> | 7.12 | good | <u>120</u> | 5.7 | student | <u>39</u> | 5.09 | threat | <u>26</u> | 6.03 |
| | seize | <u>165</u> | 9.12 | great | <u>110</u> | 6.15 | study | <u>31</u> | 4.08 | choice | <u>26</u> | 5.26 |
| | miss | <u>153</u> | 8.28 | educational | <u>106</u> | 8.14 | work | <u>29</u> | 2.92 | training | <u>25</u> | 4.62 |
| | get | <u>120</u> | 4.13 | earliest | <u>97</u> | 8.85 | advancement | <u>26</u> | 8.05 | facility | <u>19</u> | 4.79 |
| | present | <u>100</u> | 6.67 | unique | <u>95</u> | 8.27 | growth | <u>24</u> | 4.89 | responsibility | <u>19</u> | 4.79 |
| | see | <u>98</u> | 3.77 | ideal | <u>88</u> | 8.19 | member | <u>24</u> | 3.18 | job | <u>19</u> | 3.69 |
| | lose | <u>94</u> | 6.14 | business | <u>87</u> | 5.44 | pupil | <u>23</u> | 5.37 | constraint | <u>18</u> | 6.55 |
| | use | <u>94</u> | 4.15 | golden | <u>85</u> | 8.21 | education | <u>23</u> | 4.01 | need | <u>17</u> | 3.47 |
| | welcome | <u>93</u> | 7.81 | excellent | <u>82</u> | 7.82 | training | <u>20</u> | 4.28 | experience | <u>16</u> | 3.65 |
| | afford | <u>73</u> | 7.59 | career | <u>81</u> | 6.81 | profit | <u>19</u> | 4.84 | work | <u>16</u> | 2.07 |
| | find | <u>66</u> | 3.78 | training | <u>77</u> | 6.1 | discussion | <u>18</u> | 4.87 | employment | <u>15</u> | 4.75 |

valency

opportunity *(noun)* British National Corpus freq = 15,869 (141.5 per million)

valency

| unary rels | object of | 5,397 | 3.3 | modifier | 5,281 | 1.1 | pp for-p | 2,275 | 11.6 | and/or | 1,722 | 0.8 |
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| VPto | provide | <u>802</u> | 8.06 | equal | <u>320</u> | 9.8 | people | <u>93</u> | 3.97 | problem | <u>50</u> | 4.26 |
| Sforto | take | <u>681</u> | 6.29 | new | <u>262</u> | 6.05 | woman | <u>54</u> | 4.34 | time | <u>38</u> | 2.5 |
| | give | <u>597</u> | 6.46 | employment | <u>213</u> | 8.32 | <u>development</u> | <u>45</u> | 4.42 | challenge | <u>34</u> | 6.45 |
| | offer | <u>467</u> | 8.1 | job | <u>134</u> | 6.41 | child | <u>41</u> | 3.79 | education | <u>28</u> | 4.31 |
| | create | <u>178</u> | 7.12 | good | <u>120</u> | 5.7 | student | <u>39</u> | 5.09 | threat | <u>26</u> | 6.03 |
| | seize | <u>165</u> | 9.12 | great | <u>110</u> | 6.15 | study | <u>31</u> | 4.08 | choice | <u>26</u> | 5.26 |
| | miss | <u>153</u> | 8.28 | educational | <u>106</u> | 8.14 | work | <u>29</u> | 2.92 | training | <u>25</u> | 4.62 |
| | get | <u>120</u> | 4.13 | earliest | <u>97</u> | 8.85 | advancement | <u>26</u> | 8.05 | facility | <u>19</u> | 4.79 |
| | present | <u>100</u> | 6.67 | unique | <u>95</u> | 8.27 | growth | <u>24</u> | 4.89 | responsibility | <u>19</u> | 4.79 |
| | see | <u>98</u> | 3.77 | ideal | <u>88</u> | 8.19 | member | <u>24</u> | 3.18 | job | <u>19</u> | 3.69 |
| | lose | <u>94</u> | 6.14 | business | <u>87</u> | 5.44 | pupil | <u>23</u> | 5.37 | constraint | <u>18</u> | 6.55 |
| | use | <u>94</u> | 4.15 | golden | <u>85</u> | 8.21 | education | <u>23</u> | 4.01 | need | <u>17</u> | 3.47 |
| | welcome | <u>93</u> | 7.81 | excellent | <u>82</u> | 7.82 | training | <u>20</u> | 4.28 | experience | <u>16</u> | 3.65 |
| | afford | <u>73</u> | 7.59 | career | <u>81</u> | 6.81 | profit | <u>19</u> | 4.84 | work | <u>16</u> | 2.07 |
| | find | <u>66</u> | 3.78 | training | <u>77</u> | 6.1 | discussion | <u>18</u> | 4.87 | employment | <u>15</u> | 4.75 |

valency

support
verbs

Sketch Engine

| | | | | |
|--|---------------------------------------|---|---|---|
| pp obj of-p 1,073 1.2 | modifies 550 0.1 | subject of 535 0.6 | pp obj with-p 250 1.7 | pp obj for-p 215 1.1 |
| equality 114 9.99 | cost 105 6.23 | arise 102 8.16 | student 17 3.98 | look 38 3.81 |
| advantage 113 7.8 | policy 85 5.32 | come 50 3.6 | provide 12 2.08 | grateful 32 9.01 |
| lack 66 7.03 | commission 69 6.66 | present 29 5.13 | present 10 3.6 | wait 18 5.06 |
| range 55 5.41 | employer 37 6.68 | exist 26 6.29 | child 6 1.05 | hope 8 3.56 |
| window 35 5.31 | programme 13 2.96 | open 25 4.7 | area 6 0.86 | pupil 7 3.83 |
| number 25 2.99 | knock 9 7.4 | occur 17 5.11 | people 6 0.03 | |
| loss 21 4.55 | set 9 3.51 | cost 13 4.89 | | pp obj to-p 142 0.6 |
| use 21 3.55 | scheme 9 3.01 | offer 10 2.69 | pp obj at-p 232 2.2 | respond 17 6.14 |
| provision 17 4.44 | legislation 8 4.22 | afford 7 4.92 | look 12 2.15 | lead 10 2.61 |
| land 13 3.63 | officer 8 2.68 | slip 6 5.08 | jump 8 5.78 | access 9 4.11 |
| inequality 12 6.79 | advertisement 7 5.85 | affect 6 2.95 | | look 8 1.56 |
| source 12 3.68 | initiative 7 4.31 | pass 6 2.82 | adj subject of 226 1.2 | commitment 6 3.76 |
| sort 12 3.56 | structure 6 2.34 | remain 6 2.5 | available 112 6.67 | |
| glad 11 6.28 | | become 6 1.1 | open 16 4.4 | pp to-p 132 0.6 |
| aware 11 4.77 | | | good 8 1.9 | people 7 0.26 |
| lot 10 3.43 | | pp in-p 334 0.8 | | |
| absence 9 4.81 | | area 26 2.97 | pp of-p 219 0.2 | pp obj as-p 117 2.7 |
| moment 9 3.46 | | education 20 3.87 | people 11 0.91 | see 12 0.78 |
| detail 9 2.44 | | market 16 3.1 | education 8 2.55 | use 10 0.96 |

Sketch Engine

nominalizations
of support verbs

| | | | | |
|------------------------------|-------------------------|---------------------------|-------------------------------|-----------------------------|
| pp obj of-p 1,073 1.2 | modifies 550 0.1 | subject of 535 0.6 | pp obj with-p 250 1.7 | pp obj for-p 215 1.1 |
| equality 114 9.99 | cost 105 6.23 | arise 102 8.16 | student 17 3.98 | look 38 3.81 |
| advantage 112 7.8 | policy 85 5.32 | come 50 3.6 | provide 12 2.08 | grateful 32 9.01 |
| lack 66 7.03 | commission 69 6.66 | present 29 5.13 | present 10 3.6 | wait 18 5.06 |
| range 55 5.41 | employer 37 6.68 | exist 26 6.29 | child 6 1.05 | hope 8 3.56 |
| window 35 5.31 | programme 13 2.96 | open 25 4.7 | area 6 0.86 | pupil 7 3.83 |
| number 25 2.99 | knock 9 7.4 | occur 17 5.11 | people 6 0.03 | |
| loss 21 4.55 | set 9 3.51 | cost 13 4.89 | pp obj at-p 232 2.2 | pp obj to-p 142 0.6 |
| use 21 3.55 | scheme 9 3.01 | offer 10 2.69 | look 12 2.15 | respond 17 6.14 |
| provision 17 4.44 | legislation 8 4.22 | afford 7 4.92 | jump 8 5.78 | lead 10 2.61 |
| land 13 3.63 | officer 8 2.68 | slip 6 5.08 | | access 9 4.11 |
| inequality 12 6.79 | advertisement 7 5.85 | affect 6 2.95 | adj subject of 226 1.2 | look 8 1.56 |
| source 12 3.68 | initiative 7 4.31 | pass 6 2.82 | available 112 6.67 | commitment 6 3.76 |
| sort 12 3.56 | structure 6 2.34 | remain 6 2.5 | open 16 4.4 | pp to-p 132 0.6 |
| glad 11 6.28 | | become 6 1.1 | good 8 1.9 | people 7 0.26 |
| aware 11 4.77 | | pp in-p 334 0.8 | | |
| lot 10 3.43 | | area 26 2.97 | pp of-p 219 0.2 | pp obj as-p 117 2.7 |
| absence 9 4.81 | | education 20 3.87 | people 11 0.91 | see 12 0.78 |
| moment 9 3.46 | | market 16 3.1 | education 8 2.55 | use 10 0.96 |
| detail 9 2.44 | | | | |

Sketch Engine

nominalizations
of support verbs

| | | | | |
|------------------------------|-------------------------|---------------------------|-------------------------------|-----------------------------|
| pp obj of-p 1,073 1.2 | modifies 550 0.1 | subject of 535 0.6 | pp obj with-p 250 1.7 | pp obj for-p 215 1.1 |
| equality 114 9.99 | cost 105 6.23 | arise 102 8.16 | student 17 3.98 | look 38 3.81 |
| advantage 112 7.8 | policy 85 5.32 | come 50 3.6 | provide 12 2.08 | grateful 32 9.01 |
| lack 66 7.03 | commission 69 6.66 | present 29 5.13 | present 10 3.6 | wait 18 5.06 |
| range 55 5.41 | employer 37 6.68 | exist 26 6.29 | child 6 1.05 | hope 8 3.56 |
| window 35 5.31 | programme 13 2.96 | open 25 4.7 | area 6 0.86 | pupil 7 3.83 |
| number 25 2.99 | knock 9 7.4 | occur 17 5.11 | people 6 0.03 | |
| loss 21 4.55 | set 9 3.51 | cost 13 4.89 | pp obj at-p 232 2.2 | pp obj to-p 142 0.6 |
| use 21 3.55 | scheme 9 3.01 | offer 10 2.69 | look 12 2.15 | respond 17 6.14 |
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| land 13 3.63 | officer 8 2.68 | slip 6 5.08 | | access 9 4.11 |
| inequality 12 6.79 | advertisement 7 5.85 | affect 6 2.95 | adj subject of 226 1.2 | look 8 1.56 |
| source 12 3.68 | initiative 7 4.31 | pass 6 2.82 | available 112 6.67 | commitment 6 3.76 |
| sort 12 3.56 | structure 6 2.34 | remain 6 2.5 | open 16 4.4 | pp to-p 132 0.6 |
| glad 11 6.28 | | become 6 1.1 | good 8 1.9 | people 7 0.26 |
| aware 11 4.77 | | | | |
| lot 10 3.43 | | pp in-p 334 0.8 | pp of-p 219 0.2 | pp obj as-p 117 2.7 |
| absence 9 4.81 | | area 26 2.97 | people 11 0.91 | see 12 0.78 |
| moment 9 3.46 | | education 20 3.87 | education 8 2.55 | use 10 0.96 |
| detail 9 2.44 | | market 16 3.1 | | |

Sketch Engine

Word sketch item 7 (0.1 per million)

JSH follow. I believe we must give increasing **opportunities** to disabled **people** to get into work. Mr
HOE sales depends on the attractiveness of false **opportunities** to enough **people** . The success of get rich-quick
HPX second example of the importance of giving **opportunities** to other **people** comes from the type of
AAV developed mainly for providing vocational **opportunities** to young **people** beyond the age of 16. Sixth
EVM ensuring that their business gives every **opportunity** to young **people** to learn about the world
EVM jobs and non-Compact jobs? <p> Both offer **opportunities** to young **people** and satisfy employers'
KRH larger way, we are offering this kind of **opportunity** to **people** . I think there's one other thing

- *The psychology of January sales depends on the attractiveness of false opportunities to enough people.*

Losing control / interest / opportunity / touch

- CQL query type (BNC):
 - [word="losing"][word="of"]?[word="the|a|an"]?
[tag="A.*"]{0,2}[tag="N.*"]
 - verbal forms (e.g. *we are losing*) vs. nominalizations
 - *It was frustrating from the point of view of losing an opportunity to move closer to...*
 - *I was in danger of losing control of the situation.*
 - *These Swedish bats seem ... to be unique in apparently losing interest in the street lights from May to late summer.*
 - *THE Government was yesterday accused of losing touch with the rapid rate of mental hospital closures.*

Losing control / interest / opportunity / touch

- CQL query type (BNC):
 - [word="losing"][word="of"]?[word="the|a|an"]?
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 - *It was frustrating from the point of view of losing an **opportunity to move** closer to...*
 - *I was in danger of losing **control of the situation**.*
 - *These Swedish bats seem ... to be unique in apparently losing **interest in the street lights** from May to late summer.*
 - *THE Government was yesterday accused of losing **touch with the rapid rate** of mental hospital closures.*

Valency behaviour of the nominalizations of support verbs

- Do nominalizations of support verbs express Agent?
If yes, in which form?
 - **their** giving notice?
- BNC: CQL query type

```
[tag="DPS"]?[tag="A.*"]{0,2}[word="the"]?[word="giving"][word="of"]?[tag="A.*"]{0,2}[lemma="notice|support"]
```

- *These will involve **their** giving notice to the tenant*
- *..., subject to **their** giving adequate notice of their intention and*
- *that the price of **their** giving support to any minority government would be*

Valency behaviour of the nominalizations of support verbs

- Do nominalizations of support verbs express Agent?
If yes, in which form?
 - giving advice **by somebody**?
- BNC: CQL query type

```
[word="giving"][word="of"]?[word="the|a|an"]?  
[tag="A.*"]{0,2}[lemma="advice|reasons"][lemma="by"][tag="A.*"]{0,2}[  
tag="N.*"]
```

- *Some provision was made for the giving of legal advice **by salaried solicitors** outside the ambit*
- *The factors relevant to the giving of reasons **by the Parole Board** or **a local review** committee are not the same*

Valency behaviour of the nominalizations of support verbs

- They usually keep their “objects”
 - ... changed by ***giving opportunity to the inhabitants to provide for themselves*** (BNC)
- But what about **deverbal compounds**?
 - synthetic compounds (Plag, 2003)
 - compounds with a deverbal noun head and a non-head noun that is interpreted as an argument of the base verb, e.g. *bookselling / book sale, window cleaning* (Alexiadou, 2015)

“Deverbal compounds with an internal argument are just as productive as their corresponding argument-supporting nominals, if a suitable context is provided and a slightly idiomatized meaning is intended: e.g., if *John is scratching a tree* and we refer to this as *John's scratching of the tree*, we can easily also (ironically) say that *John is doing some tree scratching* or even call him *a tree scratcher*.” (Alexiadou, 2015)

loss of blood ~ blood loss

loss (*noun*) Alternative PoS: [verb](#) (1)
 British National Corpus freq = [15,289](#) (136.3 per million)

| modifier | 6,908 | 1.4 | pp of-p | 5,311 | 5.7 | object of | 3,647 | 2.1 | and/or | 2,693 | 1.2 | pp obj of-p | 1,123 | 1.2 |
|---------------|---------------------|------|------------|---------------------|------|------------|---------------------|------|--------------|---------------------|------|-------------|---------------------|------|
| job | 523 | 8.33 | job | 176 | 6.8 | suffer | 327 | 9.02 | damage | 295 | 9.33 | sense | 127 | 6.91 |
| weight | 262 | 8.56 | life | 165 | 5.52 | make | 246 | 4.44 | profit | 185 | 8.1 | rate | 70 | 5.07 |
| net | 243 | 9.41 | control | 99 | 5.97 | report | 209 | 7.61 | gain | 153 | 9.0 | effect | 36 | 4.45 |
| quarter | 172 | 8.25 | earnings | 98 | 8.15 | cause | 190 | 7.11 | injury | 48 | 6.62 | risk | 26 | 5.43 |
| net | 147 | 8.63 | confidence | 65 | 7.0 | incur | 96 | 8.77 | expense | 37 | 6.87 | fear | 21 | 5.51 |
| total | 122 | 7.62 | income | 62 | 6.14 | mean | 78 | 5.31 | destruction | 31 | 7.25 | result | 20 | 3.79 |
| financial | 101 | 6.97 | power | 43 | 4.3 | reduce | 76 | 6.19 | pain | 29 | 6.06 | feeling | 19 | 4.8 |
| heavy | 100 | 7.58 | face | 40 | 4.34 | show | 75 | 4.61 | time | 27 | 2.0 | amount | 19 | 4.34 |
| hearing | 98 | 8.04 | appetite | 39 | 7.47 | prevent | 72 | 6.69 | liability | 18 | 5.73 | pain | 18 | 5.54 |
| blood | 79 | 6.93 | business | 38 | 4.24 | announce | 71 | 6.39 | diarrhoea | 17 | 7.19 | cause | 18 | 5.06 |
| economics | 74 | 6.05 | profit | 36 | 5.58 | involve | 66 | 5.62 | bereavement | 16 | 7.36 | event | 18 | 4.06 |
| pre-tax | 71 | 8.23 | land | 36 | 4.93 | cut | 61 | 6.09 | change | 16 | 2.89 | number | 17 | 2.43 |
| substantial | 70 | 7.39 | amenity | 35 | 7.44 | sustain | 53 | 7.73 | suffering | 15 | 6.59 | threat | 15 | 5.3 |
| great | 68 | 5.41 | time | 34 | 2.32 | face | 49 | 5.84 | cost | 15 | 3.36 | extent | 15 | 5.06 |
| heat | 63 | 7.11 | revenue | 31 | 6.1 | cover | 49 | 5.46 | death | 14 | 3.62 | consequence | 12 | 4.99 |
| further | 62 | 6.26 | function | 31 | 5.11 | follow | 48 | 4.49 | year | 14 | 1.49 | time | 12 | 0.84 |
| consequential | 58 | 8.06 | memory | 28 | 5.44 | avoid | 47 | 6.33 | inflammation | 13 | 6.91 | degree | 11 | 3.96 |
| significant | 58 | 6.61 | employment | 28 | 5.39 | experience | 43 | 6.62 | grief | 13 | 6.49 | experience | 11 | 3.13 |
| potential | 56 | 7.0 | support | 28 | 4.35 | feel | 43 | 4.35 | theft | 13 | 6.28 | value | 11 | 2.94 |
| considerable | 51 | 6.71 | interest | 28 | 3.71 | see | 41 | 2.53 | depression | 12 | 5.92 | case | 11 | 2.24 |
| serious | 47 | 6.33 | faith | 26 | 5.94 | offset | 38 | 7.76 | closure | 12 | 5.83 | year | 11 | 1.15 |
| capital | 47 | 5.77 | blood | 26 | 5.44 | record | 38 | 5.98 | love | 11 | 4.06 | pattern | 10 | 3.43 |
| massive | 45 | 6.97 | status | 25 | 5.16 | include | 38 | 4.4 | separation | 10 | 5.77 | cost | 10 | 2.82 |
| future | 45 | 6.49 | mother | 25 | 4.0 | estimate | 32 | 6.39 | property | 10 | 3.42 | level | 10 | 2.21 |
| possible | 45 | 5.15 | cent | 25 | 3.22 | produce | 32 | 4.24 | sadness | 9 | 6.27 | possibility | 9 | 4.38 |

loss of blood ~ blood loss
 loss of control ~ *control loss

loss (*noun*) Alternative PoS: verb (1)
 British National Corpus freq = 15,289 (136.3 per million)

| modifier | 6,908 | 1.4 | pp of-p | 5,311 | 5.7 | object of | 3,647 | 2.1 | and/or | 2,693 | 1.2 | pp obj of-p | 1,123 | 1.2 |
|---------------|------------|------|-------------------|------------|------|------------|------------|------|--------------|------------|------|-------------|------------|------|
| job | <u>523</u> | 8.33 | job | <u>176</u> | 6.8 | suffer | <u>327</u> | 9.02 | damage | <u>295</u> | 9.33 | sense | <u>127</u> | 6.91 |
| weight | <u>262</u> | 8.56 | life | <u>165</u> | 5.52 | make | <u>246</u> | 4.44 | profit | <u>185</u> | 8.1 | rate | <u>70</u> | 5.07 |
| net | <u>243</u> | 9.41 | <u>control</u> | <u>99</u> | 5.97 | report | <u>209</u> | 7.61 | gain | <u>153</u> | 9.0 | effect | <u>36</u> | 4.45 |
| quarter | <u>172</u> | 8.25 | earnings | <u>98</u> | 8.15 | cause | <u>190</u> | 7.11 | injury | <u>48</u> | 6.62 | risk | <u>26</u> | 5.43 |
| net | <u>147</u> | 8.63 | <u>confidence</u> | <u>65</u> | 7.0 | incur | <u>96</u> | 8.77 | expense | <u>37</u> | 6.87 | fear | <u>21</u> | 5.51 |
| total | <u>122</u> | 7.62 | income | <u>62</u> | 6.14 | mean | <u>78</u> | 5.31 | destruction | <u>31</u> | 7.25 | result | <u>20</u> | 3.79 |
| financial | <u>101</u> | 6.97 | power | <u>43</u> | 4.3 | reduce | <u>76</u> | 6.19 | pain | <u>29</u> | 6.06 | feeling | <u>19</u> | 4.8 |
| heavy | <u>100</u> | 7.58 | face | <u>40</u> | 4.34 | show | <u>75</u> | 4.61 | time | <u>27</u> | 2.0 | amount | <u>19</u> | 4.34 |
| hearing | <u>98</u> | 8.04 | appetite | <u>39</u> | 7.47 | prevent | <u>72</u> | 6.69 | liability | <u>18</u> | 5.73 | pain | <u>18</u> | 5.54 |
| blood | <u>79</u> | 6.93 | business | <u>38</u> | 4.24 | announce | <u>71</u> | 6.39 | diarrhoea | <u>17</u> | 7.19 | cause | <u>18</u> | 5.06 |
| economics | <u>74</u> | 6.05 | profit | <u>36</u> | 5.58 | involve | <u>66</u> | 5.62 | bereavement | <u>16</u> | 7.36 | event | <u>18</u> | 4.06 |
| pre-tax | <u>71</u> | 8.23 | land | <u>36</u> | 4.93 | cut | <u>61</u> | 6.09 | change | <u>16</u> | 2.89 | number | <u>17</u> | 2.43 |
| substantial | <u>70</u> | 7.39 | amenity | <u>35</u> | 7.44 | sustain | <u>53</u> | 7.73 | suffering | <u>15</u> | 6.59 | threat | <u>15</u> | 5.3 |
| great | <u>68</u> | 5.41 | time | <u>34</u> | 2.32 | face | <u>49</u> | 5.84 | cost | <u>15</u> | 3.36 | extent | <u>15</u> | 5.06 |
| heat | <u>63</u> | 7.11 | revenue | <u>31</u> | 6.1 | cover | <u>49</u> | 5.46 | death | <u>14</u> | 3.62 | consequence | <u>12</u> | 4.99 |
| further | <u>62</u> | 6.26 | function | <u>31</u> | 5.11 | follow | <u>48</u> | 4.49 | year | <u>14</u> | 1.49 | time | <u>12</u> | 0.84 |
| consequential | <u>58</u> | 8.06 | memory | <u>28</u> | 5.44 | avoid | <u>47</u> | 6.33 | inflammation | <u>13</u> | 6.91 | degree | <u>11</u> | 3.96 |
| significant | <u>58</u> | 6.61 | employment | <u>28</u> | 5.39 | experience | <u>43</u> | 6.62 | grief | <u>13</u> | 6.49 | experience | <u>11</u> | 3.13 |
| potential | <u>56</u> | 7.0 | <u>support</u> | <u>28</u> | 4.35 | feel | <u>43</u> | 4.35 | theft | <u>13</u> | 6.28 | value | <u>11</u> | 2.94 |
| considerable | <u>51</u> | 6.71 | <u>interest</u> | <u>28</u> | 3.71 | see | <u>41</u> | 2.53 | depression | <u>12</u> | 5.92 | case | <u>11</u> | 2.24 |
| serious | <u>47</u> | 6.33 | <u>faith</u> | <u>26</u> | 5.94 | offset | <u>38</u> | 7.76 | closure | <u>12</u> | 5.83 | year | <u>11</u> | 1.15 |
| capital | <u>47</u> | 5.77 | blood | <u>26</u> | 5.44 | record | <u>38</u> | 5.98 | love | <u>11</u> | 4.06 | pattern | <u>10</u> | 3.43 |
| massive | <u>45</u> | 6.97 | status | <u>25</u> | 5.16 | include | <u>38</u> | 4.4 | separation | <u>10</u> | 5.77 | cost | <u>10</u> | 2.82 |
| future | <u>45</u> | 6.49 | mother | <u>25</u> | 4.0 | estimate | <u>32</u> | 6.39 | property | <u>10</u> | 3.42 | level | <u>10</u> | 2.21 |
| possible | <u>45</u> | 5.15 | cent | <u>25</u> | 3.22 | produce | <u>32</u> | 4.24 | sadness | <u>9</u> | 6.27 | possibility | <u>9</u> | 4.38 |

Semantic impoverishing of the nominalization of support verbs vs. deverbal compounds (in BNC)

Nominalizations

- *loss of blood / memory / job* ~ *blood / memory / job loss*
- *loss of control / confidence / interest / chance*

Deverbal compounds

- ✗ **control / *confidence / *chance / *interest loss*

Semantic impoverishing of the nominalization of support verbs vs. deverbal compounds (in BNC)

Nominalizations

- *loss of blood / memory / job*
- *loss of control / confidence / interest / chance*
- *losing job / losing money / losing weight*
- *losing control / interest / opportunity / touch*

Deverbal compounds

- ~ *blood / memory / job loss*
- ✗ **control / *confidence / *chance / *interest loss*
- ~ *job-losing, weight-losing, money-losing*
- ✗ **control / *interest / *opportunity / *touch losing*

Semantic impoverishing of the nominalization of support verbs vs. deverbal compounds (in BNC)

Nominalizations

- *loss of blood / memory / job*
- *loss of control / confidence / interest / chance*
- *losing job / losing money / losing weight*
- *losing control / interest / opportunity / touch*
- *selling the books*
- *sale of books*
- *selling the idea*

Deverbal compounds

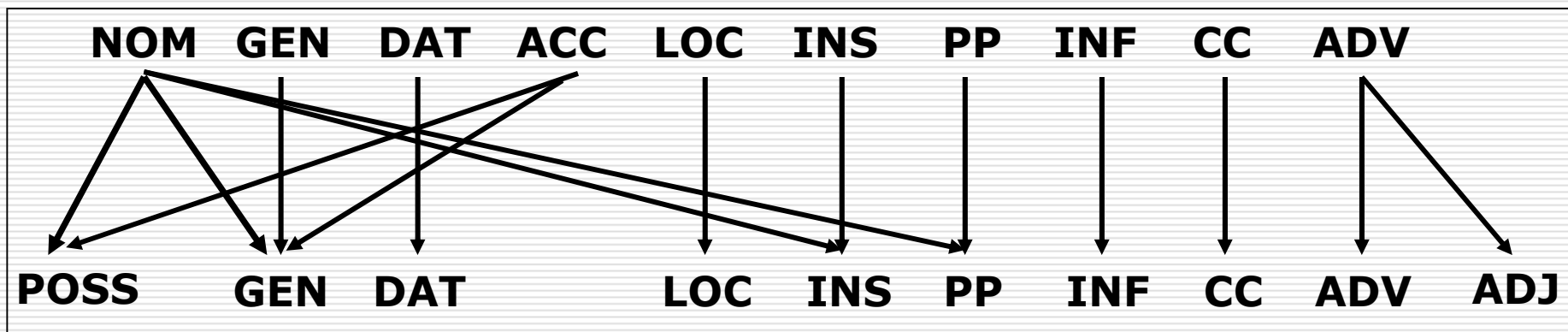
- ~ *blood / memory / job loss*
- ✗ **control / *confidence / *chance / *interest loss*
- ~ *job-losing, weight-losing, money-losing*
- ✗ **control / *interest / *opportunity / *touch losing*
- ~ *bookselling / book-selling / book selling*
- ~ *books sale*
- ✗ **idea selling / *idea-selling*

Valency of Czech nouns

- Czech: highly inflectional language
- Forms of adnominal participants
 - not only in prepositional cases but also in prepositionless ones (GEN, DAT, INS)
 - typical as well as special shifts in surface forms of participants
- Polyvalent nouns
 - various combinations of participants
- Participants
 - Actor (ACT), Patient (PAT), Addressee (ADDR), Effect (EFF)

Typical shifts in surface forms of participants

Surface forms of complementations of verbs

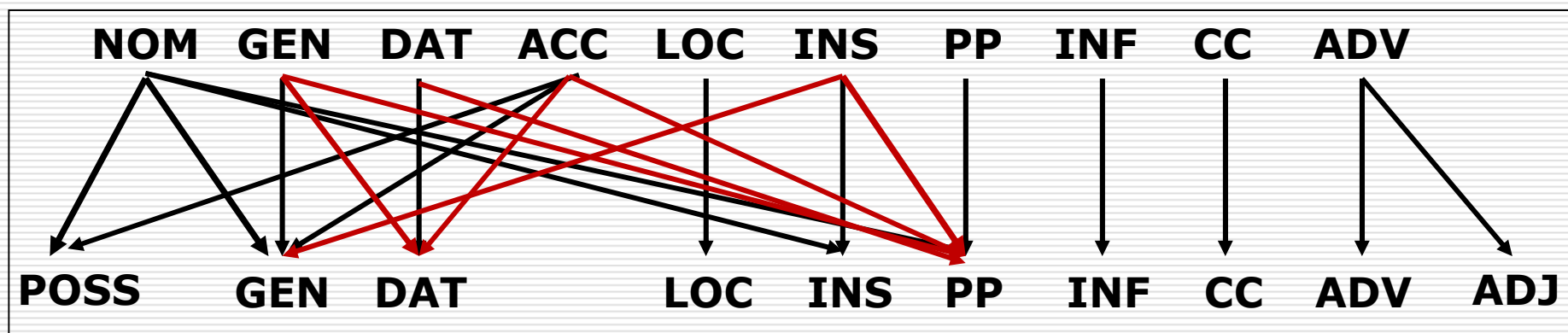


Surface forms of complementations of nouns

- Forms of verbal structural cases (NOM and ACC) change while the non-structural ones keep the same form
- *sbírání borůvek* *děťmi*
picking blueberry-GEN.PL children-INS
'picking blueberries by children'

Special shifts in surface forms of participants (my Ph.D. dissertation)

Surface forms of complementations of verbs



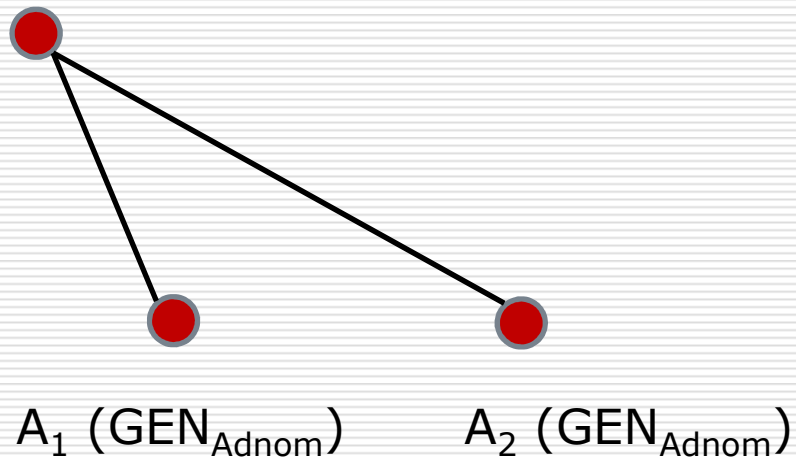
Surface forms of complementations of nouns

- ACC → DAT
- *varovat řidiče* → *varování řidičům*
to warn driver-ACC.PL → warning driver-DAT.PL
'to warn drivers' → 'warning to drivers'

Double post-nominal genitives

- Nominalised structures with two actants (A_1 and A_2) expressed by GEN_{Adnom}

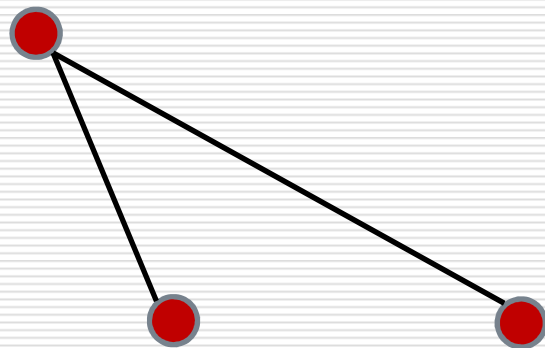
Noun (N)



Double post-nominal genitives

- Nominalised structures with two actants (A_1 and A_2) expressed by GEN_{Adnom}

Noun (N)

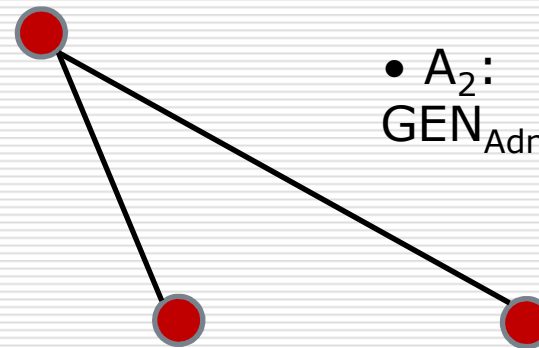


A_1 (GEN_{Adnom})

A_2 (GEN_{Adnom})

- *zbavení ženy starostí*
'relieving woman of the worries'

zbavení 'relieving'



• A_2 :
 $GEN_{Adnom} \leftarrow GEN_{Adverb}$

A_1
ženy.ADDR
woman-GEN.SG

\leftarrow ACC

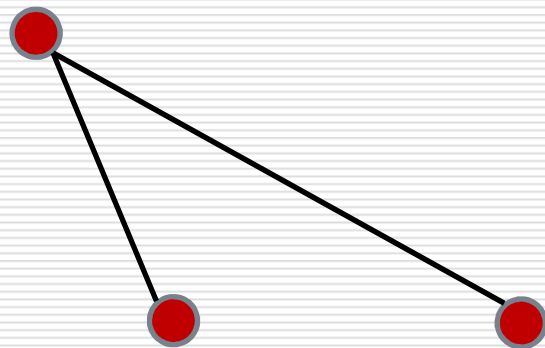
A_2
starostí.PAT
worry-GEN.PL

\leftarrow GEN_{Adverb}

Double post-nominal genitives

- Nominalised structures with two actants (A_1 and A_2) expressed by GEN_{Adnom}

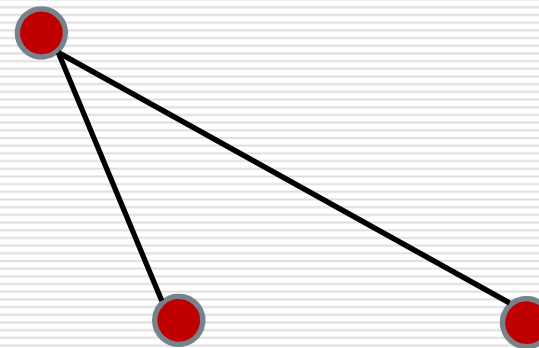
Noun (N)



$A_1 (GEN_{Adnom})$

$A_2 (GEN_{Adnom})$

sbírání 'picking'



A_2

borůvek.PAT

blueberry-GEN.PL

← **ACC**

A_1

děti.ACT

children-GEN

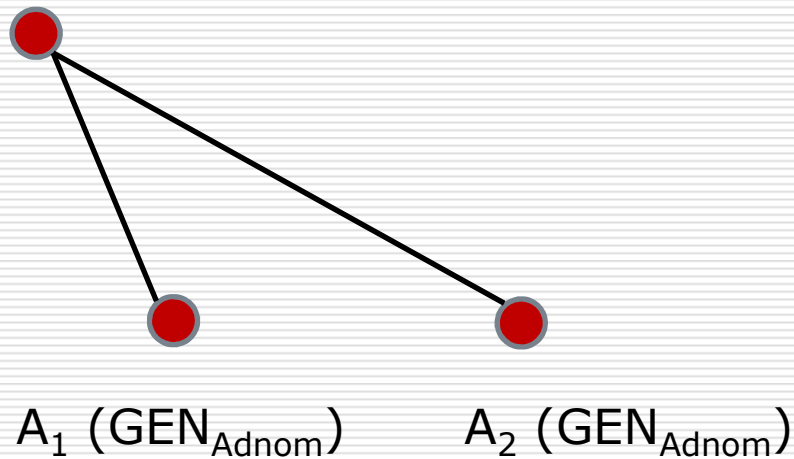
← **NOM**

- **sbírání borůvek dětí*
'picking blueberries (by) children'

Double post-nominal genitives

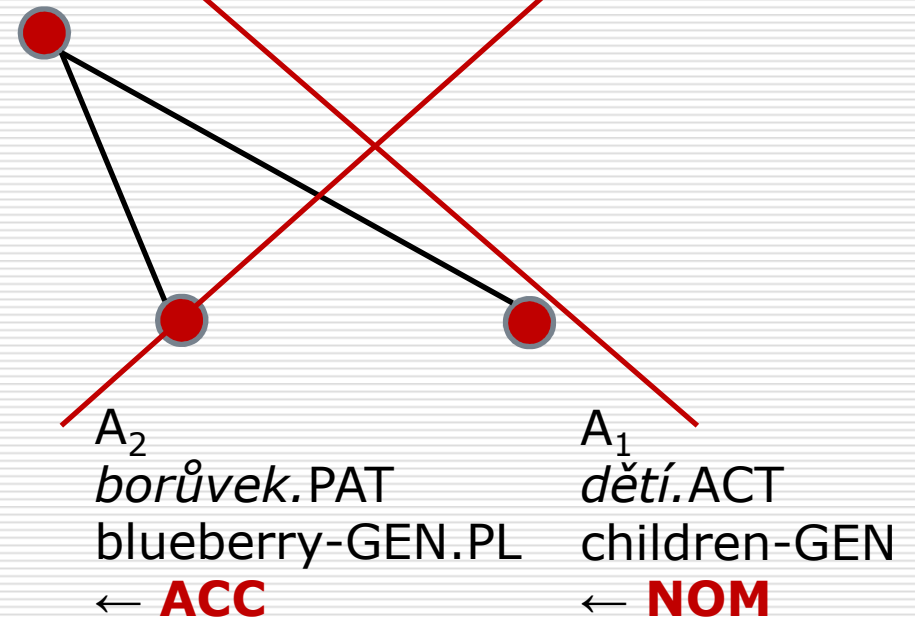
- Nominalised structures with two actants (A_1 and A_2) expressed by GEN_{Adnom}

Noun (N)



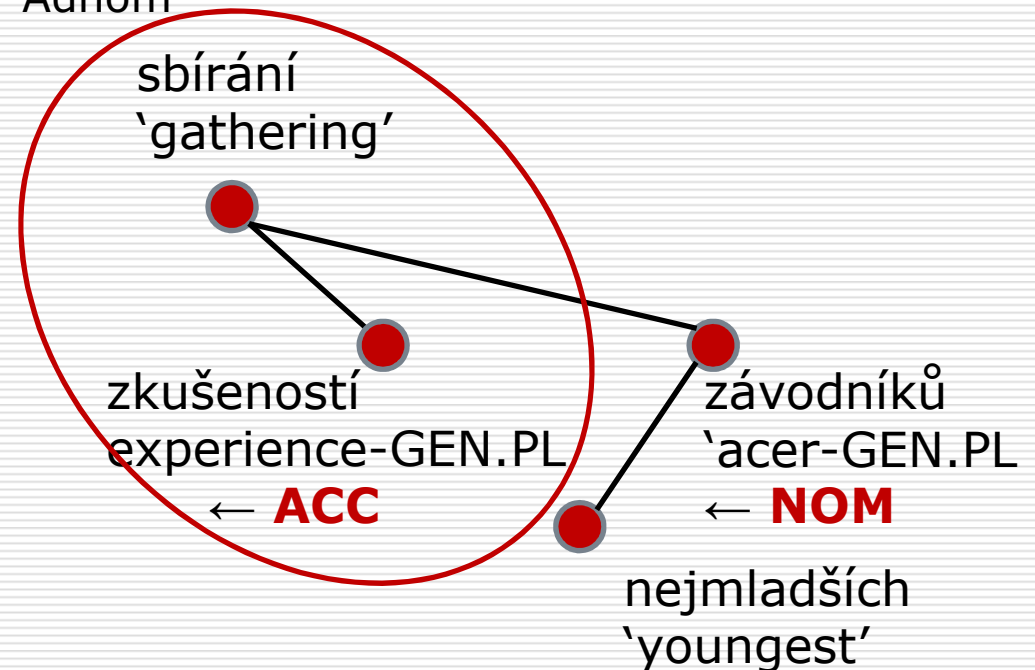
- **sbírání borůvek dětí*
'picking blueberries (by) children'

sbírání 'picking'



Double post-nominal genitives

- Nominalised structures with two actants (A_1 and A_2) expressed by GEN_{Adnom}



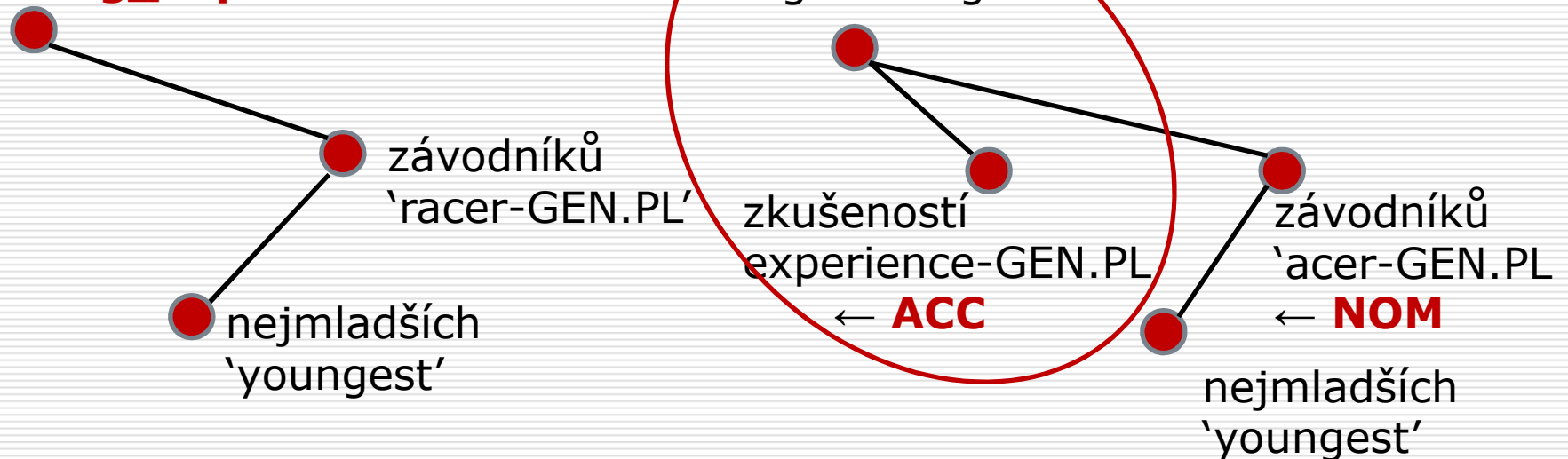
- *sbírání zkušeností nejmladších závodníků*

'gathering experience-GEN.PL [by] youngest-GEN.PL racer-GEN.PL'

Double post-nominal genitives

- Nominalised structures with two actants (A_1 and A_2) expressed by GEN_{Adnom}

sbírání_zkušeností
'gathering_experience'



**This structure
behaves like
1 lexical unit**

- *sbírání zkušeností nejmladších závodníků*

'gathering experience-GEN.PL [by] youngest-GEN.PL racer-GEN.PL'

PDT-Vallex

- Nouns: Valency frames with CPHR?
- If yes, what would be the forms of participants?

* **sběr** `collection`

?ACT(.2..7..u) PAT(.2..u) v-w5901f1 Used: 8x
sběr dat.PAT, rostlin.PAT `data collection`

?

* **sbírání** `collecting-IMP`

ACT(.2..7..u) PAT(.2..u) v-w5905f1 Used: 4x
(sbírat) sbírání materiálu.PAT `collecting of material`

?

* **sbírat** `to pick-IMP / to collect-IMP / to gather-IMP`

ACT(.1) PAT(.4) v-w5906f1 Used: 7x
sbírat houby `to pick mushrooms`

ACT(.1) CPHR({odvaha,zkušenost,...}.4) v-w5906f2 Used: 1x

sbíral odvahu dát výpověď `he gathered (his) courage to give (his) notice`

CPHR

PDT-Vallex

- Nouns: Valency frames with CPHR?
- If yes, what would be the forms of participants?

* **sběr** `collection`

?ACT(.2..7..u) PAT(.2..u) v-w5901f1 Used: 8x
sběr dat.PAT, rostlin.PAT `data collection`

No: *sběr zkušeností `collection of experience`

* **sbírání** `collecting-IMP`

ACT(.2..7..u) PAT(.2..u) v-w5905f1 Used: 4x
(sbírat) sbírání materiálu.PAT `collecting of material`

Yes: ACT(?) CPHR(.2)

sbírání zkušeností `gathering experience`

* **sbírat** `to pick-IMP / to collect-IMP / to gather-IMP`

ACT(.1) PAT(.4) v-w5906f1 Used: 7x
sbírat houby `to pick mushrooms`

ACT(.1) CPHR({odvaha,zkušenost,...}.4) v-w5906f2 Used: 1x

sbíral odvahu dát výpověď `he gathered (his) courage to give (his) notice`

CPHR

Summary:

Nominalizations of support verbs constructions

- Not straightforward one-to-one correspondence between a SVC and types of its nominalization
 - *selling the idea* / **sale of the idea*
- Individual collocation pairs
 - *dání přednosti* 'giving way' but ??*dání příležitosti* 'giving opportunity' → *poskytnutí příležitosti* 'providing opportunity'
- Reasons for a new entry in the lexicon
 - impoverished meaning
 - different valency behaviour
 - deverbal compounds in English, double postnominal genitives in Czech
- Crossing of valency relations (patterns)

□ Thank you for your attention!

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