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Formalized contrastive lexical description:
a framework for bilingual dictionaries

Formalizovaný kontrastivní popis lexikálních jednotek:
deskriptivní rámec pro dvojjazyčné slovníky

(Disertační práce)

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Abstract

The goal of the study is a design of a framework for formalized representation of lexical knowledge, as presented in bilingual dictionaries. Modern lexicography has elaborated sophisticated methods of data analysis (collection) and synthesis of dictionary entries for particular types of users according to their needs. However, too little research has been done on the possibilities of representation and storage of the knowledge acquired in the first phase (analysis) and used in the second phase (synthesis). Lexicographers have seldom made any distinction between the content of the lexical description and the form how it is presented to the users. Separation of the content from a particular form would allow for re-use of the data for several purposes (creation of different dictionaries or other reference works) and for flexible interactive customization of electronic dictionaries for different types of users and their specific needs and demands. The data could also be used in Natural Language processing, if they were defined in explicit form.

In the first part of the study, the general abstract principles of representation of the lexical knowledge presented in bilingual dictionaries are sought on the basis of the existing dictionaries and the modern processes of lexicographical work. A classification of general approaches to understanding the lexicon and structuring the lexical knowledge by various types of lexicons (made both for humans and for Natural Language Processing) is presented. The basic structure of dictionary entries is analyzed on the examples of both an extremely simple and an extremely structured dictionary. Modern technical approaches, which may contribute to an efficient and high-quality representation of the lexical knowledge in bilingual dictionaries, are summarized and a generic abstract model for representation of lexical knowledge is defined in terms of objects and relations, together with a proposal for a stratified (modular) implementation for separation of language and dictionary specific components from the general model.

The second part demonstrates the use of the model for one particular practical task: a detailed description of a limited group of Norwegian nouns in contrast with their Czech equivalents. Particular specifications for the proposed generic model needed for the description of Norwegian nouns are defined, and 20 Norwegian nouns and their 20 closest Czech equivalents are analyzed and a possible representation of the knowledge is presented using the proposed generic model and the task specific specifications defined. The data structures of the main entries are listed in the appendix, but a basic demonstration of their possible interpretation and presentation to the human user is shown in the text. Finally, a summary is given of the conclusions of the analysis (both linguistic and technical aspects) and the advantages and problems of the model and its possible implementation and usability in practice.

Abstrakt

Cílem práce je návrh rámce pro formalizovanou reprezentaci lexikálních znalostí, jak jsou prezentovány ve dvojjazyčných slovnících. Moderní lexikografie vypracovala sofistikované metody datové analýzy (sběru) a následné syntézy slovníkových hesel pro určité typy uživatelů, na základě jejich specifických potřeb. Jen málo výzkumu však bylo věnováno možnostem zachycení (reprezentace) a uložení znalostí získaných v první fázi (analýze) a následně využitých ve fázi druhé (syntéze). Lexikografové jen zřídka rozlišují mezi samotným obsahem lexikálního popisu a formou, jak je prezentován uživatelům. Oddělení obsahu od specifické formy přitom umožňuje opětovné využití jednou získaných dat pro různé účely (tvorbu různých slovníků či dalších referenčních děl) a také tvorbu flexibilních elektronických slovníků, interaktivně přizpůsobitelných pro různé typy uživatelů a jejich specifické potřeby a požadavky. Tato data by pak bylo také možné využít pro účely počítačového zpracování přirozeného jazyka, pokud budou definována v dostatečně explicitní podobě.

První část práce usiluje o nalezení obecných abstraktních principů reprezentace lexikálních znalostí prezentovaných v dvojjazyčných slovnících, a to jak na základě existujících tradičních slovníků, tak na základě moderních postupů lexikografické práce. Předložena je obecná klasifikace přístupů ke slovníku a strukturování lexikálních informací v různých typech slovníků, vytvořených jak pro lidské uživatele tak pro strojové zpracování jazyka. Základní struktura je analyzována na příkladu jak nejjednoduššího tak nejstrukturovanějšího typu slovníků. Shrnuty jsou moderní technické přístupy, které mohou přispět k efektivní a kvalitní reprezentaci lexikálních znalostí v dvojjazyčných slovnících, a je navrhnut obecný abstraktní model pro reprezentaci těchto znalostí prostřednictvím (datových) objektů a vztahů mezi nimi, společně s návrhem vícevrstevné (modulární) implementace, sloužící oddělení součástí specifických pro konkrétní jazyk či typ slovníku od obecného modelu.

V druhé části práce jsou možnosti použití navrženého modelu ukázány na příkladu konkrétní praktické úlohy: detailního popisu omezené skupiny norských podstatných jmen v kontrastu s jejich nejbližšími českými ekvivalenty. Definovány jsou konkrétní specifikace potřebné pro účel popisu norských podstatných jmen, a poté je skupina 20 norských a 20 českých podstatných jmen analyzována a získané informace jsou zachyceny pomocí navrženého obecného modelu a patřičných specifikací definovaných pro tento účel. Datové struktury výsledných slovníkových hesel jsou předloženy v příloze, ale základní možnost jejich interpretace a prezentace lidskému uživateli je demonstrována přímo v textu. Na závěr jsou shrnuty základní poznatky z analýzy (jak z hlediska lingvistického tak technického), a také výhody a problémy navrženého modelu a jeho možné implementace a použitelnosti v praxi.

Contents

Chapter 1

Introduction

At the beginning was a simple question: "Could you help me to design a database for bilingual dictionaries, please?" My friend from the Czech Technical University in Prague (ČVUT) answered promptly: "Of course, but you have to tell me what kind of information you might want to store there, of what type the items should be and how they relate to each other." I realized that I did not have an exact and complete idea of everything I would have eventually needed and how everything might be related. And I did not want to limit the design of the database for one particular dictionary only. It was in the late 1990's and I was still an undergraduate student. This study is a direct consequence of the 'simple' question.

1.1 The need for formalized representation of lexical knowledge

1.1.1 The output: the form and the content

What kind of information do the dictionaries present and how is it structured? A quick look at dictionaries of different types revealed lists of entries, sometimes with embedded sub-entries; the entries divided into sections representing particular senses and possibly some sub-senses, each presenting various information on grammatical, semantic or stylistic and pragmatic features of the headword (lemma) and its different senses, eventually also equivalents in the target language (in bilingual dictionaries). The dictionaries also presented some cues about the morphological constituency of the headwords by using different bars or dots, which only separate the morphemes, but did not say of which type the morphemes are. There were also examples, but they did not say what they want to communicate: typical use, collocability, valency, fixed expressions or even idiomatic use, etc.; whether I could just take the example and modify it or use it in a slightly different meaning? There was a lot of *implicit* information that relied on my own knowledge and ability to interpret and guess. Often it was exactly the knowledge that I was looking for in the dictionary, which I was supposed to guess. So, there was a lot of things I wanted to know *explicitly*, but the dictionary did not tell.

I needed also some overview of all the explicit *types* of information that can be necessary to build a complete dictionary article. There were obviously grammatical and stylistic labels, but what types of labels may be necessary, altogether? I started searching in the literature on lexicography, especially the large HSK volumes published

by Hausmann et al. (1991). To my astonishment, I did not find any useful answer to my questions. The only article dealing with the structure of dictionary and dictionary entries in the publication was presented by Hausmann and Wiegand (1991). But it did not say anything useful. The structure of dictionary entries was analyzed merely in terms of its form as printed on the paper, not in terms of the content, the *information* presented by the entry. And so did all the other lexicographers as well.

At the beginning of the 20th century, linguistics started to distinguish between linguistic signs (the *form*) as symbols and their referents and the reference itself (denotation and designation, i.e. the *content*). Somehow, lexicographers did not really start using this distinction for their own metalanguage in the dictionaries. The lexicographic literature dealt with the form of all the different labels, abbreviations, typographical effects, their order, etc. But I wasn't interested in the order or typeface of the indicators, but in their possible types (classification). The outer *form* (used abbreviations, their order, typeface, etc.) can be generated or changed automatically on-the-fly by the computers, nowadays – even on demand of the particular user. What is important is the *content*: the knowledge that is recorded in the dictionary and should be (possibly selectively) presented to the user in some *form* which is appropriate to his or her knowledge, age, linguistic insight, etc.

I could not find any literature describing the structure of the content, the lexical knowledge presented in dictionaries. The available literature described merely *how* to present the information to different types of users, what the users prefer (research on users), etc. But it did not describe *what* is to be presented, except of very vague and generic terms line 'grammatical information' or 'usage labels'.

The need for the distinction of form and content is already apparent from the plenary speech of Sue Atkins at Euralex '96 (Atkins, 1996), a review of the current lexicographical achievements and very concrete visions for the future, where also a merely practical overview of the contents of a bilingual dictionary entry was presented. The (probably) first truly practical, up-to-date and systematic overview of dictionary structure and production process has been available since the publication of *The Oxford Guide to Practical Lexicography* (Atkins and Rundell, 2008) and later by the more theoretical *Handbook of Lexicography* by Svensén (2009). Svensén summarizes the current theoretical knowledge and practical experience of lexicography, while the *Oxford Guide* presents a first true "cook-book" for how to really produce a modern and quality dictionary, with the overview of the most important theoretical and practical tools and technologies currently available and guides how to use them to achieve the best results. Probably for the first time, the different types of information that can and should be provided by a dictionary are systematically classified and intelligibly presented in one compact publication.

1.1.2   The input: Corpus linguistics, and processing of the data

A necessary presupposition to understand the lexical knowledge presented in dictionaries is also to learn how dictionaries actually are composed in practice. The modern lexicographical methods introduced me to *Corpus linguistics* and its great possibilities to analyze language on the basis of real data. I learned where and how to obtain the knowledge about lexical items. From the literature on lexicography, I had already some idea about how to present it to the users of the dictionary. But there was a great gap that was not much dealt with: what is the knowledge, how it could be structured, described and recorded. It seemed, that this part of the process takes place straight in the mind of a lexicographer: he or she gets the knowledge from real data (input), selects

the facts that are relevant for the current dictionary (processing) and records them in the resulting desired form (output). The knowledge itself is never recorded directly,[1] it is only filtered, transformed and encoded (processed) into the contents of a dictionary article – all that happens only in the mind of the lexicographer(s). A lot of the knowledge gained from the corpus is actually wasted every time a dictionary is written. The lexicographer needs always to analyze the lexical items into fine details, which must be all considered before the final decisions are done. Most of the analysis (input) gets lost, because it is not important for the current dictionary project (output) or because there is not enough space in the dictionary to present it. The rest is encoded into the description, which must be as short as possible and thus often vague and implicit. Even though the knowledge could be useful to other lexicographers' projects, they have to elaborate it again. This seemed to me as a blatant waste of time, energy and money, especially in a field, where plenty of specialists and years of their time are needed for creation of even a small book that will be used (in some cases) by a few thousand or even few hundred people, while another similar reference work may be needed in a short time, containing the information that was just wasted during the creation of the first product.

1.1.3 Lexicology and linguistics in general

So, a lot of research has been devoted both to the problem of obtaining a reliable and high-quality lexical knowledge and on the problem of its presentation to different type of users. But there was still no research on the matter of the knowledge itself, nor how it could be recorded, stored and so exchanged and reused in different projects.

I turned to lexicology (and back to general linguistics) and actually it was all there, and very systematically described. But the relation to real dictionaries seemed to be far-distant. The lexicological knowledge was still there, but synthetized together and hidden behind more or less vague symbols and labels, examples that required readers' own interpretation and guessing. There were no studies on how to describe, structure and record such knowledge generally.

1.1.4 Computational (formal) linguistics

As a next natural step, I turned to the computational linguistics and its formalisms, where I would expect some ready frameworks for recording and storing lexical knowledge, but I was quite disappointed again. There were lists of forms and their features, but always a single feature only or a limited set of such features – pronunciation, morphological class, syntactic class, etc. Most of them expecting a 1:1 or 1:n relation.

More complicated formalisms use sophisticated *feature structures* and principles such as *unification*, but they still try to cut clear borders between the categories, often they are not prepared to handle semantics (at least the basic fact that words can behave differently in different meanings) and usually not even basic variability in language. The existence of idioms, multi-word expressions and fixed expressions generally seem to be almost ignored by many theories as well, or complicated extensions have to be developed for such natural features of the natural language, as if the graphical word were the basic component of language.

In the more modern approaches to formal description of natural language (e.g. LFG, HPSG, Meaning-Text Theory, FGD, WordNet, FrameNet, etc.) there seems to be more

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[1]Not really any more. See 2.2 for more details.

cooperation between mathematicians and linguists, but the formalisms usually concentrate on a limited field of linguistic problems (often just syntax and other rules and principles in general) and the complex knowledge about individual lexical items is seldom in the focus. In cases, where such knowledge is really required and used, even very basic facts and principles are encoded in very complex structures, which are not transparent to linguists unfamiliar with the particular framework and its specific implementation, and generally have very little in common with the information as it can be presented in dictionaries. The divergence seems to be so big, that the trace of the original common lexical knowledge is not apparent any more. But in spite of the intransparency, both worlds often demand the same knowledge (content), just in completely different forms.

1.1.5   Computational lexicography…?

But traditional lexicographers started to use computers for creation of dictionaries as well. At first only as smarter typing machines, but soon they realized, that computers can help them to organize and systematize the information. At first, custom editing systems appeared, followed by more general products such as TshwaneLex, iLex, IDM, OMBI, etc. But their contribution to the representation of lexical knowledge seldom goes into much finer details than the general categories described in the traditional lexicographical theory: grammatical indicators are separated from usage labels and from glosses or examples, and in the best case the editor can unify their form and in that way keep (visual) consistency across the dictionary. The first great step is made, but there is no need to complete the process of the separation of form and content: the purpose is still to produce the most systematic and consistent *form* of the resulting dictionary, not to declare explicitly the features of the lexical items. The editing system usually does not care about the meaning of the content, nor its explicitness.

The need for some common mark-up of dictionaries was also noticed by the Text Encoding Initiative (TEI), which defined a standard for mark-up of dictionary text in chapter 9 of their guidelines[2]. The mark-up does not go any further either. It can be used to mark and classify (assign to types and categories) the information in a dictionary, but it is still *document-centric*, i.e. it follows the structure of the linear dictionary text and does not explicitly relate the pieces of information to one another. It can thus be used to formalize and (to some degree) explicate the lexical knowledge in a dictionary, but it still cannot be used to represent the knowledge independent of its form.

An effort to unify and standardize the formalized representation of lexical knowledge generally, but mainly from the fields of formal linguistics and Natural Language Processing (NLP), has been made in the projects EAGLES and ISLE/MILE[3], eventually leading to the development of the *Lexical Markup Framework*,[4] standardized as ISO-24613:2008.[5] This framework finally allows to represent also the relations among the lexical knowledge, but it is extremely complex and still anything but transparent for traditional lexicographers and the common concept of dictionary. Despite its complexity, its flexibility seems to be still limited. Without further extensions it may not satisfy even the current needs of lexicographers[6] (not to speak about the future ones), because it presupposes some specific theoretical or methodological approaches.

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[2]TEI (2007)

[3]Calzolari et al. (2004)

[4]LMF (2008)

[5]Another project aimed at more local standardization and unification of lexical resources was run in Denmark under the name STANLEX (Braasch, 1995).

[6]Cf. Maks et al. (2008)

From the demands of traditional lexicography, a lexical database for collection of lexical knowledge (with the purpose of its re-use for different dictionaries) has been developed in the Netherlands under the name *Referentiebestand Nederlands* (RBN).[7] The database has thus exactly the economical purpose mentioned here before: to collect information obtained in the development of different dictionaries and use it for production of further dictionaries in the future, which is an important factor for small languages with limited resources and profitability of the lexicographic production. However, the database is aimed at a limited scope of particular purposes and probably more or less limited as to the type of information it can contain, again. Even though it claims some flexibility, the description presupposes a limited group of categories and relations that can be recorded. The implementation in MS Access is not as flexible and platform-independent, as the authors claim, either.

1.2 Objectives and limits

The goal of this study is to fill the gap between the process of *data collection* and *data selection* (and construction of dictionary entries)[8] and find out how the lexical knowledge acquired by lexicographers for the purpose of the development of different types of dictionaries (with the focus on bilingual dictionary) could be efficiently represented: structured, systematically organized and stored for easy use in the further (possibly automatized) process of selection and production of the dictionary and eventually re-use for production of other dictionaries.

The desired objectives of the framework are:

- **focus on content:** the framework should primarily record the content, the lexical knowledge itself, independent of the form; hints useful for selection of data for particular types of dictionaries or users may be added if they cannot be deduced from the information otherwise, but they should not replace explicit information (e.g. actual facts reasoning for such decision)

- **explicitness:** the data should be of explicit types and have explicit values (exact or vague); relations between the elements should be explicit as well (i.e. which features are addressed to which objects)

- **generality:** no framework can be both complete and universal at the same time, but separation of generic principles (a model) and a task dependent specification (i.e. language- or dictionary-dependent) should be pursued as much as possible[9]

- **extensibility:** the framework should be open for easy extensibility at all levels (both of the model and specification), possibly even during the process of its use

- **scalability:** the framework should be scalable both in the quantity and quality; scalability in the dimension of quality means that it should allow for the possibility of having information recorded at an arbitrary level of granularity, explicitness or specificity; it should not force the lexicographer to specify details that he does not want to (cannot) specify, but it should allow him to specify (add) the details later

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[7] van der Vliet (2007)
[8] See chapter 2.2 for more details.
[9] See chapter 5.3.

- **naturalness:** the representation should be transparent to lexicographers and linguists, as much as possible; it should follow the natural understanding of lexical description as structured in dictionaries and understood in lexicology and linguistics generally; elementary facts (features) should be represented by atomic features and should not require the editor to construct complex structures or relations or modify other features or other parts of the structure

- **separation of analogy and anomaly:** lexical items should specify their membership in appropriate classes and possible irregular (anomalous, exceptional) features specific to them only; they should not repeatedly specify features resulting from general rules or some regularity in the system (e.g. membership in some class)

- **efficiency:** each feature common to a whole class of expressions should be defined on one place only (a template) and the principle of inheritance should be used to apply it to all the members

The comment on the requirement of *generality* sets also the first limit for the framework: its specification cannot be completed for every type of task (every type of language, dictionary, etc.). The goal is thus to find a generic model that can serve different purposes and possibly some basic specifications for the most typical tasks of bilingual lexicography (of European languages).

In the focus of this study is the *representation* of the data. The problems of the *data collection* and *data selection* (and its adaptation and presentation to different users) are not dealt with in this study, they will only be touched superficially. These problems have been extensively dealt with in the lexicography before and they still are in the focus of the lexicographical research.

This study follows to a great deal the same general desiderata as the ones defined by Atkins (1996) for future bilingual dictionaries, including the idea of *virtual dictionaries*: i.e. dictionaries able to be interactively adapted (customized) to the needs of the particular users by means of separation of the content from the possible forms it can take.

1.3   Contents of the study

In the first part, the general abstract principles of representation of the lexical knowledge presented in bilingual dictionaries are sought on the basis of the existing dictionaries and the modern processes of lexicographical work. Chapter 2 presents a classification of general approaches to understanding the lexicon and structuring the lexical knowledge by various types of lexicons (i.e. their authors), made both for humans and for Natural Language Processing. In chapter 3, the basic structure of dictionary entries is analyzed on the examples of both an extremely simple and an extremely structured dictionary. Chapter 4 summarizes modern technical approaches, which may contribute to an efficient and high-quality representation of the lexical knowledge in bilingual dictionaries. In chapter 5, a generic abstract model for representation of lexical knowledge is defined in terms of objects and relations, together with a proposal for a stratified (modular) implementation for separation of language and dictionary specific components from the general model.

The second part demonstrates the use of the general model for one particular practical task: a detailed description of a limited group of Norwegian nouns in contrast with

their Czech equivalents. Chapter 6 defines particular specifications for the proposed generic model, needed for the description of Norwegian nouns. Chapter 7 contains a detailed analysis of 20 Norwegian nouns and their 20 closest Czech equivalents, and a possible representation of the knowledge acquired from the corpus analysis using the proposed generic model (from chapter 5) and the task-specific specifications defined (in chapter 6). The data structures of the entries are listed in the appendix, but a basic demonstration of their possible interpretation and presentation to the human user is shown in chapter 7 as well. Chapter 8 summarizes the conclusions of the analysis (both linguistic and technical) and the advantages and problems of the model and its possible implementation and usability in practice.

Part I

From practice to theory

Chapter 2

Approaches to lexicographic description

The practice of lexicographic description has traditionally been closely bound to some particular purpose. The specific type of dictionary and its target users determine the form of the dictionary and the methods used to build it. In the second half of the 20th century, the rise of computational linguistics came with new requirements for lexical resources and new possibilities of the development of traditional dictionaries. The principles have not changed much, however. Instead of the development and improvement of the traditional lexicographic theory and practice, computational approaches often strengthened production of simplified lexicons with superficial description. The traditional lexicography has not changed much and until recently it remained bound to the medium of paper books and the traditional methods, improved only by the development of corpus linguistics as the most important resource for modern lexicography. Otherwise, computers have often been used only as advanced typing machines in the process leading from the resources to the final product. The development of specialized editing software for composition of dictionaries helped to systematize the process. Only lately large publishing houses started experimenting with modern media and their new possibilities of more flexible presentation of lexical information. But the world of traditional lexicography is still staying away from the world of computational lexical resources.

2.1 Approaches to lexicographic production

The approaches to lexicographic description can be classified according to the complexity of the structure of the resulting output (the product). There are several approaches common to both the lexicography oriented to human users and build-up of lexical resources made for Natural Language Processing. A simplified typology with their respective advantages and disadvantages may be as follows:

2.1.1 Writing a "novel"

The only traditional possibility to write a dictionary has for a long time been to write it like a *novel*. It is still the typical approach of people educated in the humanities only. The traditional printed dictionary thus presents linear text, structured by means of typography into entries (macrostructure) and the entries into its various components.

The typeface, its size and different effects can indicate the type of information currently presented. But that is often the only "structure" available. Many authors compose the entries just according to the current need and the user has sometimes problems to identify the original purpose why some labels have been placed in a particular order and what their scope is.

The question of *scope* is the most serious problem in linear text. Stylistic, pragmatic or other usage labels and even grammatical information sometimes do not apply to the whole entry, but only to its part: some specific use of the word, one of its senses or particular context. In a linear text, it may be difficult to find the end of the validity of some label. When used in the head of the entry, the label is expected to apply to the whole entry, i.e. to all its senses and sub-senses and possibly also to the examples and idiomatic expressions listed in the entry. When defined within some of the senses, it is expected to apply only to the particular sense and all its contents, including sub-senses; bot not to the other senses (e.g. all the following ones). When a label is placed just before some particular example or idiomatic expression, it is expected to apply to this expression only. However, in some situations the borders within the entry are not clear in a linear text.

Educated authors can give the book and its entries some structure, but it is very difficult to keep consistency even when the authors follow some clearly defined and in advance well prepared style guide;[1] the (manual) verification of consistency without the help of computers is difficult, time-consuming and unreliable. The situation has been lately much improved by the development of specialized editing systems, as will be discussed later.

This approach does not make any difference between *form* and *content*.[2] The content is determined (and identified) solely by the form. The form is also the ultimate limit for the information included in the dictionary: printed dictionaries are limited in their size and only information that can be presented efficiently on a small space can be included. This limitation can be partly overcome by means of efficient codes, abbreviations and smart references.[3] Another consequence of this limitation is compression of information, usually in the form of a *lexicograhic example*, where several features are implicitly presented by means of some typical short example, and the author relies on the user and his presupposed knowledge and ability to recognize which features of the keyword are indicated by the example and deduce further information on its usage. A single example phrase may for example indicate both the typical valency and semantic prosody of the keyword. However, for the user there is (without further knowledge) no unambiguous way how to distinguish (within the example) between the exclusive (limiting) features, common preferences, typical usage and plain random components complementing the example just to make it grammatically complete.

This type of dictionaries is virtually unusable for Natural Language Processing or later reuse as a resource for other tasks. Parsing such dictionary may be extremely difficult if not completely impossible. Even for dictionaries following very strictly some elaborated style guide, parsing usually needs a lot of human effort and assistance and often it can be easier to transfer the knowledge by entering (transcribing) it manually, item by item, than trying to let the computer acquire it from the text automatically. The only possibility to make the text useful for future reuse is to mark it in some explicit way, e.g. by using the TEI standard for dictionaries.[4] Such effort is already the first

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[1] The role of a style guide was described e.g. by Landau (1991, 243) and Atkins and Rundell (2008, 117).
[2] That means: *what* is presented (the *content*) and *how* it is presented (the *form*) (see 1.1.1).
[3] Cf. Haraldsson (1995).
[4] Text Encoding Initiative, `http://www.tei-c.org/`, see Guidelines chapter 9 (Dictionaries).

step to the separation of *content* and *form* and to structuring the entry, even though the structure may still remain linear.

2.1.2 Collecting a list

Another extreme of lexicographic description are *lists* of simple items. The macrostructure is a plain list of items, which have generally no (or just a very simple linear) microstructure. This approach is typical both for simplified pocket dictionaries (see chapter 3.2 for examples) and for computational linguistics, where it still can be the most appropriate and efficient solution for many closely specialized, single-purpose tasks. It is also relevant for other types of word-lists, like orthographical or pronunciation dictionaries. On the other hand, it is often a general solution used by people with solely technical education and no knowledge of linguistics.

A list of ordered items is the ideal structure in cases where the correspondence between some form (a linguistic sign) and the associated feature(s) is 1:1. Each form can be assigned one (or more) unambiguous features of some type with a single value. This approach has traditionally been used in computational linguistics almost until the end of the 20th century, because it is by far the most efficient (fastest to search through) for computers. Unfortunately, it is still frequently used in many legacy resources in the Internet, even for bilingual dictionaries.[5] The *list* is also the easiest approach to transfer legacy dictionaries into the world of modern digital media. The digital dictionary is then built as a list of entries, i.e. ordered pairs *keyword – description*. The description is then the whole dictionary entry with its linear structure, which remains unparsed and thus only accessible to humans. Such "digital dictionary" has no better effect than saving people the time needed for searching the entry in a paper book.

The *list* is in principle pure content without any form. If there is any form, it is an inherent part of the content.

2.1.3 Constructing trees

Construction of *trees* is the next natural step after "writing a novel" and the first step to separate form and content. The author must first realize that the "style guide" does not only relate to the *style* (i.e. form), but rather to the fact that there are various *types* of *content* included in the dictionary, which are later *presented* by some unified style (form).

The most typical dictionaries are actually *lists* (alphabetically ordered) of entries structured as *trees*. The head (or lemma) of the entry is the root node and the senses and sub-senses are the branches (non-terminal nodes). They finally branch out into the atomic features or into target language equivalents in the bilingual dictionaries (terminal nodes, also called "leaves" of the tree).[6]

Treating dictionary entries as tree structures of atomic features respects the systematic distinction of macro- and microstructure. It also separates the form from the content (unlike pure typography) and helps to keep consistency. The different components (grammatical, stylistic and other features, definitions, equivalents, glosses, etc.) have primarily a *type* assigned (i.e. the system knows *what* they are) and the later presenta-

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[5]The minimal need to have several equivalents for one keyword is solved by having the single keyword repeatedly (several times) in the list. The "bilingual dictionary" can in that way still appear as a simple list of pairs of "equivalent words".

[6]See chapter 3.2 for examples.

tion of the different types of information (i.e. *how* they should look in the dictionary) is a secondary feature, which can be changed.

Constructing *tree*-structured entries is thus a modern approach to building large and quality dictionaries with detailed information also in larger teams of authors. Separation of *content* and their later *form* of presentation helps the linguists to concentrate on the content itself and to revise the data more reliably and the publisher to keep consistency across the whole work. It also allows for further reuse of the data, extension or even turning the direction of translation in bilingual dictionaries. The possibilities remain open, as long as the structured resource is archived. When the data is compiled into the linear form of a printed publication, the resulting dictionary becomes identical with the "novelistic" product and the original structure can be difficult or impossible to reconstruct. Only the original structured resource can be easily extended or further developed – the process of final compilation is usually one-directional and irreversible.[7] The resource, containing just the pure data, can also be used to publish the *content* in several different *forms* at once, e.g. using different media: both a printed paper dictionary and a digital (electronic) publication.

Usually, each project used to develop their own custom editing system for the creation of such a structured resource,[8] which becomes an intermediate product between the collection of data and the final compilation into the printed and/or electronic products. However, nowadays there are also several (commercial or academic) software packages available (generally called *Dictionary Writing Systems*) such as *TshwaneLex, IDM, iLex, OMBI,* etc.[9] Such systems are created universally for different purposes (different types of dictionaries and languages, allowing also user customization for particular projects) and should help authors with the whole process of data collection and dictionary preparation.

Tree structures are also typical for computational formalisms used in linguistics, especially in *unification-based grammars* and resources based on *feature structures* generally. Formal grammars such as *LFG* or *HPSG* usually require resources fitting a particular implementation of the grammar. There are also independent formalisms using feature structures for lexical descriptions such as DATR.[10] They are suitable for fully formalized descriptions, but quite difficult to imagine (if not impossible) for traditional lexicographical descriptions created for people.

2.1.4   Connecting networks

The most complex structures used in lexical description are networks (or maps) of relations (e.g. semantic-lexical relations between lexical units).

There are currently very few resources actively developed and used by linguists, using a structure of a *network*. The best known are *WordNet*[11] and *FrameNet*.[12] However, only the macrostructure of WordNet is a network – the items (nodes) themselves have usually only a very simple (linear) microstructure.

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[7]Unless a great effort is invested, of course, which can be more demanding than building a completely new resource from scratch.

[8]Cf. Schutz (1992); Zachariassen and Hansen (1995) (for bilingual dictionaries) or Degnbol et al. (1992).

[9]See `http://www.idm.fr/products/` for IDM, `http://tshwanedje.com/tshwanelex/` for TshwaneLex, `http://emp.dk/ilexweb/` for iLex.

[10]See Evans and Gazdar (1996) and for more details: `http://www.informatics.susx.ac.uk/research/groups/nlp/datr/datr.html`

[11]See Fellbaum (1998) and `http://wordnet.princeton.edu/`

[12]See Ruppenhofer et al. (2010) and `http://framenet.icsi.berkeley.edu/`

Nevertheless, a lexicon as a network of relations (a map, etc.) is a very old concept in linguistic theory (and especially lexicology). Lexical-semantic relations (hyponymy, partonymy, synonymy, antonymy, etc.) connect a network of relations between lexical units. These networks are unfortunately very seldom reflected in lexicographic practise. The theories have traditionally only been used as support methods for analysis, comparison and classification in the process of creating a dictionary, but seldom with some real application within the resulting dictionary itself.

The modern editing systems can also cross the border from pure tree-structures to simple networks. Especially the system OMBI is based on parallel monolingual dictionaries with cross-lingual links between equivalent senses, allowing for the creation of reversible bilingual (or multilingual) dictionaries.[13] Linking or referencing elements across the tree-structures can allow for a more complex network of relations.

A complex network-like structure is also a feature of the ISO standard *Lexical Markup Framework* (LMF, 2008) (successor to projects like EAGLES, SIMPLE/PAROLE and ISLE). The goal of *LMF* is to provide a standardized framework for *Natural Language Processing* lexicons[14]. Support for traditional dictionaries for people should be provided through the *Machine Readable Dictionary* extension. The framework is highly formalized and complex and its application in traditional lexicography is not trivial either and may not support all requirements of modern detailed bilingual lexicography (in its current version).[15] The framework and its predecessors are based on XML-technologies (XML, RDF, OWL ontologies, UML modelling, etc.) and closely bound to the *Data Category Registry* (DCR), a common standardized set of morpho-syntactic and syntactic data categories used in LMF for various languages, developed and maintained as a global resource by the same workgroup ISO-TC37.[16] There is already a lexicographic tool developed for the creation and management of LMF-compliant resources called *LEXUS*.[17]

2.2 The process of dictionary production

The process of creating the dictionaries is as much dependent on the target audience and type of the dictionary, as on other outer conditions like financing, qualification of participants, interests of the publisher, etc. Actually, when described by the lexicographers, most steps can be assigned to the process of proofreading, corrections and the preparation for publication generally, which is not in the focus of this study. Svensén (2009, 410) names just three other steps in the core process of the dictionary preparation: *data collection, data selection* and *production of draft manuscript*.[18] The typical work-flow then has the following structure: 1) *input* (data collection, analysis), 2) *processing* (data selection), 3) *output* (production, synthesis).

Atkins and Rundell (2008, 97) argue for a more indirect process with an intermediate product in the form of a pre-dictionary database containing data acquired from the corpora and (in the case of bilingual dictionaries) its translation into the target language. The whole process then has the following three stages (and intermediate products):

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[13]Cf. Martin and Tamm (1996); Maks (2007); Wijne et al. (1998)

[14]Francopoulo et al. (2006)

[15]Maks et al. (2008, Cf.)

[16]Francopoulo et al. (2008)

[17]LEXUS has been developed at the Max-Planck Institute for Psycholinguistics in Nijmegen, see `http://www.mpi.nl/tools/lexus`

[18]Other lexicographers present similar work-flow, cf. Hartmann (2001).

- corpus data *analysis* by a *database editor* and collection of a *lexical database*

- *transfer* of the data by a *translator* into a *translated database*

- *synthesis* of the data by a *dictionary editor* into the final *dictionary*

This approach allows the process to be split up among different specialists and helps to avoid many mistakes and unintentional omissions, because a comprehensive image of all the data is available for the last step (synthesis), when the selection of data relevant for the particular dictionary has to be done. The dictionary can thus retain a much higher level of completeness and consistency, without the need to return back to the raw corpus evidence during revisions. When composing the dictionary entries separately, one by one, directly from the corpus data, the editors do not necessarily have the idea of the whole dictionary and of the complex behaviour of the single headword in the corpus and its interaction with other (head)words, yet.[19]

The intermediate step of *processing* is not just a matter of subjective decision of one(?) lexicographer any more. The data from the input are collected in some resource and processed further by several people. They can be revisited and verified any time, by anyone. It is always possible to return to the intermediate database and re-create the output, if some inconsistency is found, either in the form or in the content of the output. The figure 2.1 shows a generalized scheme of such work-flow.
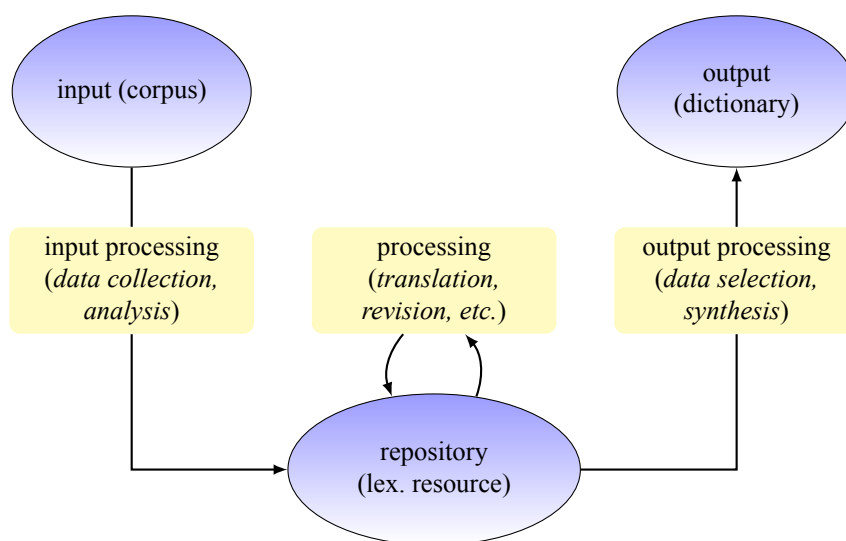
Figure 2.1: Work-flow of the lexicographic production

Actually, changes concerning *only* the *form* of the output, i.e. the *output processing* (the final selection and visual presentation) can be automatized and done by the machine only, possibly on demand of a particular user and his or her particular needs. Such functionality presupposes a well organized resource prepared (pre-selected) by the lexicographers and some clear rules for the final selection and presentation of the information for particular types of users and needs (situations).

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[19]In her former presentation, Atkins (1996) specifies even more processes for the compilation of a multi-purpose dictionary of the future.

Another key advantage of building an intermediate lexical resource with detailed data about the lexical items is the possibility of later *re-use* of the data for production of other types of dictionaries or even other types of products such as a grammar book or other reference resources.[20]

As already mentioned in the introduction (1.1.2), the process of creation of a comprehensive and detailed dictionary always requires the authors to fully analyze the behaviour and features of every headword and a lot of this information is then wasted during the selection of information relevant for the current particular dictionary only, while the rest of it could be useful for other types of resources. A lot of important data are also lost in the process of synthesis, when some information is encoded only *implicitly* into a suitable selection of lexicographic examples and other vague means of transmission of the information to the human audience – i.e. by means of *hints* rather than clear *explication*. The wasting of knowledge causes repeated efforts of the same kind (repeated acquisition of the same information) and therefore wasting of time, money and resources. Wasting of this kind is especially uneconomical in lexicography, which is an extremely time and resource consuming domain of applied science with minimal valorization and thus mostly without any real economic return at all (except for the few major languages of the world). Therefore, for any minor language, it should be a lexicographic priority to collect openly available re-usable and extensible academic resources[21] that could be used as a base for the production of different products (both academic and commercial). During the production of each new product, the newly acquired additional data can be added back to the common resource. However, the difficulties with establishing such a common resource are more or less obvious as well: they range from the very practical problems (different views and opinions, technical complications, implementation, financing, etc.) to legal reasons (the question of authorship, etc.).

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[20] Atkins and Rundell (2008, 100)
[21] Such as the RBN database in Netherlands. Cf. van der Vliet (2007).

Chapter 3

Analysis of dictionary article structure

The previous chapter showed us how useful it could be to use a general lexical database for collection of lexicographic data about words and other expressions as a resource for preparation of dictionaries or other resources. Like in the Dictionary Writing Systems, such a database can have the same structure as a general dictionary. It could be used as a kind of a 'scientific dictionary', a repository with exhaustive description of words and other expressions that could be further reduced and transformed into different kinds of dictionaries for more specific purposes. The final synthesis does not need to be always completely finished by the lexicographers. For many purposes, the synthesis of the final dictionary could also be finished automatically by the computer, if the database were well-structured or even prepared for different scenarios and types of output in advance. That would allow for example for customized generation of user-specific dictionaries on-demand: in an electronic dictionary, users could themselves influence the selection and form of presentation of the selected information relevant for themselves. In other words: the users could create their own dictionaries according to their own demands or at least choose from some pre-defined profiles (prepared by the lexicographers) what type of dictionary fits best their current needs (e.g. according to their mother tongue, level of experience with the source or target language, level of linguistic insight or particular purpose: comprehension, translation, etc.). Such process requires a strict separation of contents and form.[1] The same contents can be filtered and formed later (in different ways) on demand of a particular user or purpose. The most important requirement is a full *explicitness* of the data in the database and strict *typing* (i.e. each piece of information must have a concrete type assigned to it).

In order to find such a general structure for a comprehensive dictionary, it is necessary to look at real dictionaries and their structure. The previous chapter revealed that the most comprehensive dictionaries would probably have a basic structure of trees, but interconnected into a complex network through references and relations. The modern development of hyper-text technologies also reveals that trees are probably the most transparent (document) structures for humans, while they still do not exclude cross-references (links), building more complex networks between the documents and their components.

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[1]The data (contents) can also contain hints about their preferred form of presentation, e.g. their priority or importance for differently advanced users, if such information cannot be deduced from the data itself.

There are different types of structures involved in the constitution of a dictionary entry. The one relevant for the *contents* (and not the *form*) corresponds best to the structure called *addressing structure* by Hausmann and Wiegand.[2] The addressing structure determines also the scope of a statement within the entry.

The lexicographic theory admits that there is a hierarchy in the (addressing) structure of dictionary entries.[3] However, the structure is still being described as a linear sequence of *sections*, structured through special markers and labels (cf. Svensén, 2009, 344). The terminology of *addressing* is quite awkward and confusing, mainly because it tries to explain hierarchical principles in terms of the linear structure of the text (the form) rather than the *content*. The authors do not explain the concept very exactly either. A projection of the structure into a *tree*-structure of nodes could explain the principles much better, in the same way as dependency (or constituent) trees do in the syntactic theories.

In the terminology of tree-structured (directed) graphs, the lexicographer's terms *address* and *indication* could probably be defined in the following way:[4] *addressing* is a relation directed from a node called *indication* to the node called *address*; the indication *depends* on the address, meaning that the address is the *parent* of the indication, and the indication is the *child* of the address. The combination of a parent (address) and its children (indications) is called a *treatment unit*. The hierarchical structure means that a treatment unit can become an indication for another address (recursively). A tree-structure can have any number of levels, but every node can only have one (direct) parent, while every parent can have unlimited number of children. The node being the parent of all other nodes (and their children) is called the *root* of the tree. The terminal nodes having no further children are called *leaves* of the tree. As already mentioned in 2.1.3: in a typical bilingual dictionary, the root of every entry structure is the *lemma* and the leaves are the target language equivalents.

The traditional lexicography makes a distinction between two major types of structures in a dictionary which must be accounted for: microstructure and macrostructure.

3.1   Macrostructure vs. microstructure

The term *macrostructure* usually refers to the structure of entries (as whole units) in a dictionary. In most dictionaries it is an (alphabetically) ordered list. In thesauri and other special types of onomasiological dictionaries, the macrostructure can be realized as a tree-structure. The purpose of the macrostructure is to lead the users to the lemma they seek (Svensén, 2009, 368). However, the problem is the term *lemma* itself. In many dictionaries, lemmata (usually compounds or derivatives) can be *nested, clustered, niched* or *grouped* within the entries of other lemmata (Svensén, 2009, 371–376). Even dictionaries with a strict alphabetical order usually embed at least multi-word expressions (e.g. idioms) into the entries of single word lemmata.

The term *microstructure* can have slightly different meaning for different lexicographers.[5] Generally, it refers to the inner structure (structure of the contents, or *indications*) of a single dictionary entry. It is not always clear whether it includes the lemma itself (cf. Svensén, 2009, 344) and the status of nested or otherwise embedded sub-entries is not very clear either – visually they are part of the dictionary article (the

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[2] See Hausmann and Wiegand (1991); Hausmann and Werner (1991); Svensén (2009, 79)
[3] Hausmann and Wiegand (1991)
[4] As understood and explained by Svensén (2009)
[5] Svensén (2009)

entry) but in fact they are entries of their own and thus should be considered part of the *macrostructure*. The macrostructure thus builds a tree-structure even in the most simple dictionaries and visually fluently grows into the dictionary articles, otherwise expected to belong to the microstructure. The lemma or sub-lemma is the formal borderline between the macrostructure and the microstructure and binds both structures together. Therefore, it seems that there is actually just one common structure throughout the whole dictionary. The terms *microstructure* and *macrostructure* seem to be related rather to the form than to the contents.

The basic item to be described by every (onomasiological) dictionary can be just any *expression* with the function of a linguistic sign: a word, a multi-word expression or even just a morpheme (e.g. a prefix or suffix). The question which items (or lemmata) get their own independent entries (dictionary articles) and which will be grouped or nested belongs also to the domain of *form* (and not the *content*) – the decision can be changed any time before the dictionary is (physically) printed (or otherwise visualised).

3.2 The structure of a dictionary entry

Real examples of dictionary entries are the best starting point for the search for a generic structure of the contents of a dictionary. The pocket dictionaries have usually the most simple structure.

> **midte** -n, **midtpunkt** -et střed
> **midtveis** na půl cesty
> **mikse** (-et) míchat, smíchat
> **miksmaster** -en mixér
> **mikstur** -en směs
> **mil** -a/-en norská míle (*10 km*)
> **mild 1** mírný **2** jemný
> **mildne** (-et) zmírnit
> **milepael** -en *přen.* milník, mezník
> **militaristisk** militaristický
> **militaer**[1] vojenský
> **militaer**[2] -et vojsko, ozbrojené síly,
>   **vaere i militaeret** být na vojně
> **militaertjeneste** -n vojenská služba
> **militaernekter** -en *pl* -e branec odmí-
>   tající vojenskou službu
> **miljø** -et *pl* -/-er prostředí
> **miljøvern** -et ochrana životního pro-
>   středí
> **millionaer** -en milionář
> **milt** -en slezina
> **min** můj, moje
> **mindre** méně, menší

Figure 3.1: An example from the pocket Norwegian-Czech dictionary by Vrbová et al. (2005)

The figure 3.1 shows an outcrop from a pocket Norwegian-Czech dictionary. There are basic examples of various type of entries which can be classified according to the criteria explained in chapter 2:

- the structure of most entries is a simple list (see figure 3.2): there is one Norwegian lemma (with a grammatical indication of gender for nouns) and one Czech equivalent (translation by an equivalent word X, equivalent multi-word expression Y or just an explanation) assigned to it

- the very first entry is actually a (quite unusual) group of two lemmata with one common translational equivalent – they are very close synonyms and the grouping is thus just a space-saving solution of the form, while the content is still formed by two lemmata, each with an (one and the same) equivalent
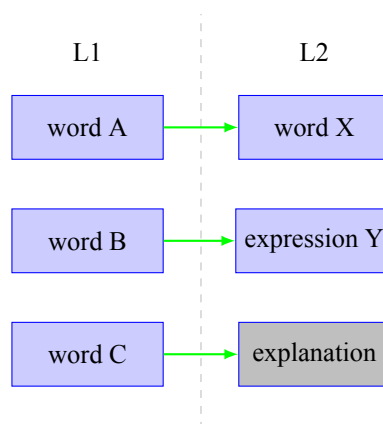
Figure 3.2: A simple list of equivalents

- the lemma *mild* has already a very simple tree-structured entry (see figure 3.3): it branches into two separate senses, each with one specific Czech equivalent: *mírný* and *jemný* (in English, the equivalents are *mild* and *gentle*)
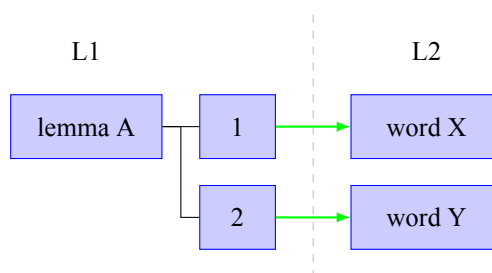
Figure 3.3: A simple tree-structure

- there are two lemmata with the ambiguous form *militær*: the first one is an adjective, the second one is a noun; they are two separate entries identified by a graphically identical lemma and they need hence an additional marking in the form of numbers in superscript

- the collocation *vaere i militæret* is part of the entry of the second homonym *militær*, but actually it behaves as a separate lemma with its entry being embedded into the entry of the lemma *militær* – this phenomenon belongs to the domain of the *form*, since in other types of dictionaries it could as well be presented as an independent lemma; from the point of view of the *content* it is thus just another lemma (entry), which is dependent on some other lemma just because of the fact that it is a multi-word expression (or possibly also because the expression is not a fully established idiom) and otherwise it would be (from practical reasons) difficult to find it in the dictionary

- in a few cases, some of the lemmata are provided with multiple equivalents; there are different reasons for that: the Czech equivalents *milník* and *mezník* are just two very close synonyms, the expression *ozbrojené síly* is a more official term

for *vojsko*, the forms *můj* and *moje* are just masculine/neuter and feminine form of one and the same pronoun, and the forms *méně* and *menší* are an adverb and an adjective, respectively (a distinction not shown in the common form of the Norwegian word *mindre*); the structure of the contents is a tree again, but the branches are not marked and serve very different purposes

The examples from the pocket dictionary show how thin the borderline between the microstructure and macrostructure is. Expressions can be nested, grouped or even joined into one common entry if it helps the user to find the searched lemma quickly and save space at the same time, without running the risk of a wrong interpretation by the user. It is also a common practice of English dictionaries not to make any difference between the use of some lemma as two different parts of speech (wordclasses) – not only that both types of use can be joined in one entry, but they can also be freely spread (mixed) among the senses (i.e. the distinction of part of speech is completely abandoned).[6]

Modern dictionaries prefer simple structures with a minimal number of levels. Usually, the lemma is just separated into a linear list of senses, which can be quickly scanned through even by users with a minimal or no linguistic insight. Nevertheless, as Svensén (2009, 360) shows, the dictionary entries can be split on three different major levels: homonymy (incl. part of speech distinction), syntactic sub-categorisation (e.g. transitivity for verbs) and polysemy. Older dictionaries used to be more systematic with respect to the linguistic categories and therefore made all the distinctions possible in order to help the (presumably) linguistically educated user to find the right information without the need to scan through long lists. One such example is the German-Norwegian dictionary by Sverdrup (1933) as shown in figure 3.4.

> hverandre. ⌣ziehen *st* I *vt* **1.** *trekke omkring, hit og dit*; *fig. opholde, lure*: einen mit falschen Versprechungen h.; **2.** *føre, anlegge, opføre*: einen Graben, eine Mauer um die Stadt h.; II *vi* (sein) **1.** *dra, marsjere omkring*; **2.** *trekke, flytte omkring, fra sted til sted*; **3.** *flytte over*: zu einem h. (*i nabolaget*); III *vr* sich h. **1.** *gå omkring, omgi*: eine Mauer zieht sich um die Stadt h.; **2.** *sich mit etwas h. 1. trekkes med noe, 2. gå og gruble på noe, ruge over noe*; herumziehend *a (prp) omvandrende, omreisende, nomadisk.*

Figure 3.4: An example of the lemma *herumziehen* from the German-Norwegian dictionary by Sverdrup (1933)

The figure shows the lemma *herumziehen*. The lemma is a member of a *nest*, but that is not important at the moment. Important is that it has a tree-structure with multiple levels:

- at the top level, the lemma '[herum] ziehen' is declared and marked (classified) by the 'st' label as a strong verb

- the second level, marked by Roman numbers, separates the three basic syntactic classes of this verb: verbum transitivum *(vt)*, verbum intransitivum *(vi)* and verbum reflexivum *(vr)*

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[6]Cf. Svensén (2009, 361) about the *COBUILD* dictionaries.

- at the third level, the senses for each of the three syntactic types are listed separately and numbered with bold Arabic numbers

- for the sense III/2, where the more specific valency frame with a prepositional phrase 'sich mit etwas h.' is defined, there is a fourth level of sub-senses numbered with Arabic numbers again, but now in italics; this section can also be interpreted as an embedded entry for the collocation or (fixed?) expression *sich mit etw. herumziehen*

- at the next level (fifth), the equivalents are listed

- at the end of the entry, the participle *herumziehend* is embedded with its own sub-entry

Such a deep tree-structure is more useful for a linguist who is able to distinguish between the transitive, intransitive and reflexive use of the verb very quickly. For a linguistically aware human user, the perspective is similar to the point of view of a word sense disambiguator written according to linguistic rules. The user can start at the root node (the lemma) and decide (according to the context) at each level which branches of the structure can be considered and which cannot. If the user knows that the verb is used transitively, he or she can ignore the (irrelevant) rest of the dictionary article and look only at the appropriate branch marked with the Roman number I. The user does not need to scan through a long linear list of senses and evaluate the relevance or each of them. In principle, even more levels of branching based on such decisions could be relevant: e.g. groups of meanings of a transitive verb with human, animate or inanimate subject or object, meanings associated with negative collocations (negative semantic prosody), etc. Such a dictionary entry would be probably too complicated in a printed, linearized form. However, that is just a problem of the *form* (the presentation or visualization) and not the *contents*. The structure of the contents is based on logical and linguistically relevant principles.

The tree structure of the sections in the entry of *herumziehen* is shown in figure 3.5.[7] The empty boxes represent *translational sub-senses*[8] which do not contain any other information (no labels or marks) than pointing to the equivalents in the target language. Sometimes, groups of equivalents with a slightly different meaning are separated by a semicolon (usually the single equivalents listed in one group are only separated by a comma); the semicolon marks a section border of two virtual sub-senses. In the entry of *herumziehen* the semicolon is used e.g. within the sense I/1: the two groups are even distinguished by the labels *[lit.]* and *fig.*, offering different sets of equivalents for the *literal* and *figurative* meaning within one and the same sense. The sense II/2 lists three different equivalent expressions of different type – this situation should (in principle) also be classified as three virtual translational sub-senses with three different equivalents, and therefore the rest of its (currently simplified) branch is drawn with the dashed line.

The scheme also shows that the structure reaches different depth in each of the branches: most of the senses have four levels only, but some of them make use of a fifth level. The distinctions made at different levels for different senses are not identical. A better classification can thus be achieved by assigning a *type* to each section. The top level section (root node) declares the lemma itself. Some sections declare real

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[7]Examples are excluded from the structure, because they must either be classified as atomic features of the units or as completely independent sub-entries (see 3.4).

[8]The term will be defined later in 3.3.

1st level	2nd level	3rd level	4th level	5th level	Norwegian
herumziehen *st*	I *vt*	1.	[lit.]		*trekke omkring*
					trekke hit og dit
			fig.		*opholde*
					lure
		2.			*føre*
					anlegge
					opføre
	II *vi* (sein)	1.			*dra omkring*
					marsjere omkring
		2.			*trekke, flytte omkring, fra sted til sted*
		3.			*flytte over*
	III *vr* sich h.	1.			*gå omkring*
					omgi
	2. sich mit etw. h.	*1.*			*trekkes med noe*
		2.			*gå og gruble på noe*
					ruge over noe
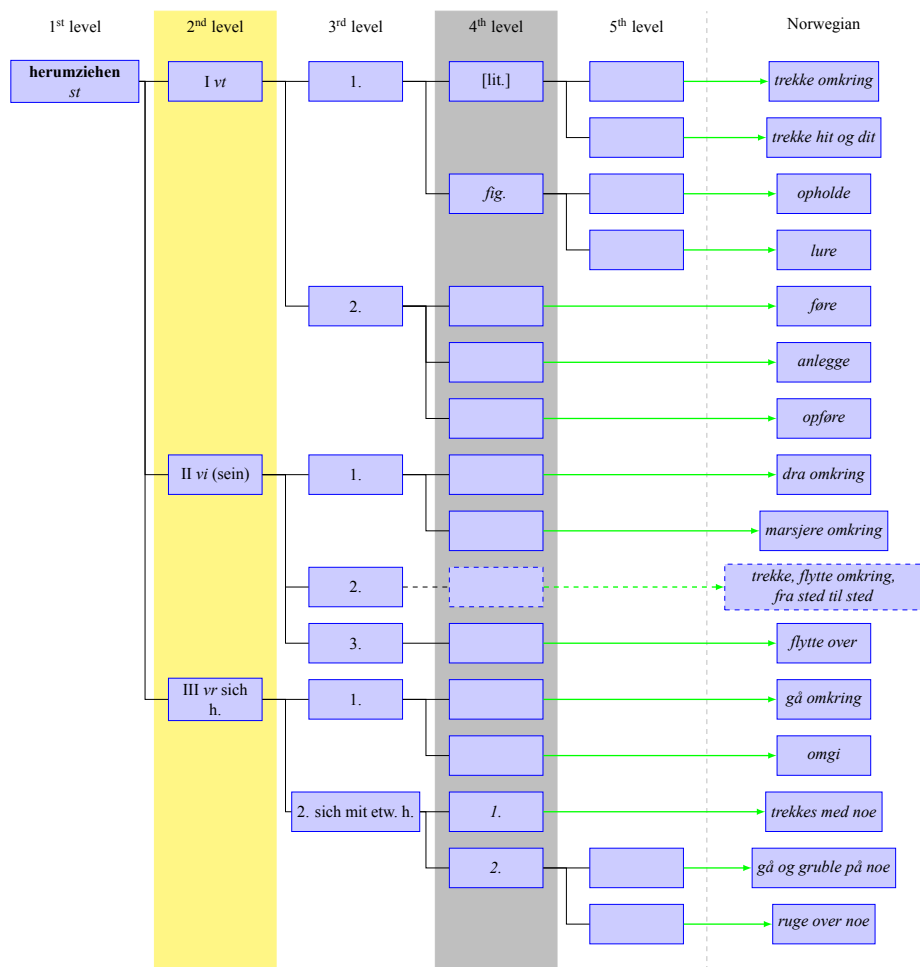
Figure 3.5: Scheme of the structure of the entry *herumziehen*

lexical-semantic senses and sub-senses of the lemma, some sections classify only abstract groups of senses (e.g. according to syntactical sub-categorisation and not purely semantic), and other sections are translational sub-senses referring to a particular equivalent in the target language. When the structure is stratified according to the different *types* of sections, the scheme will look like as shown in the figure 3.6.
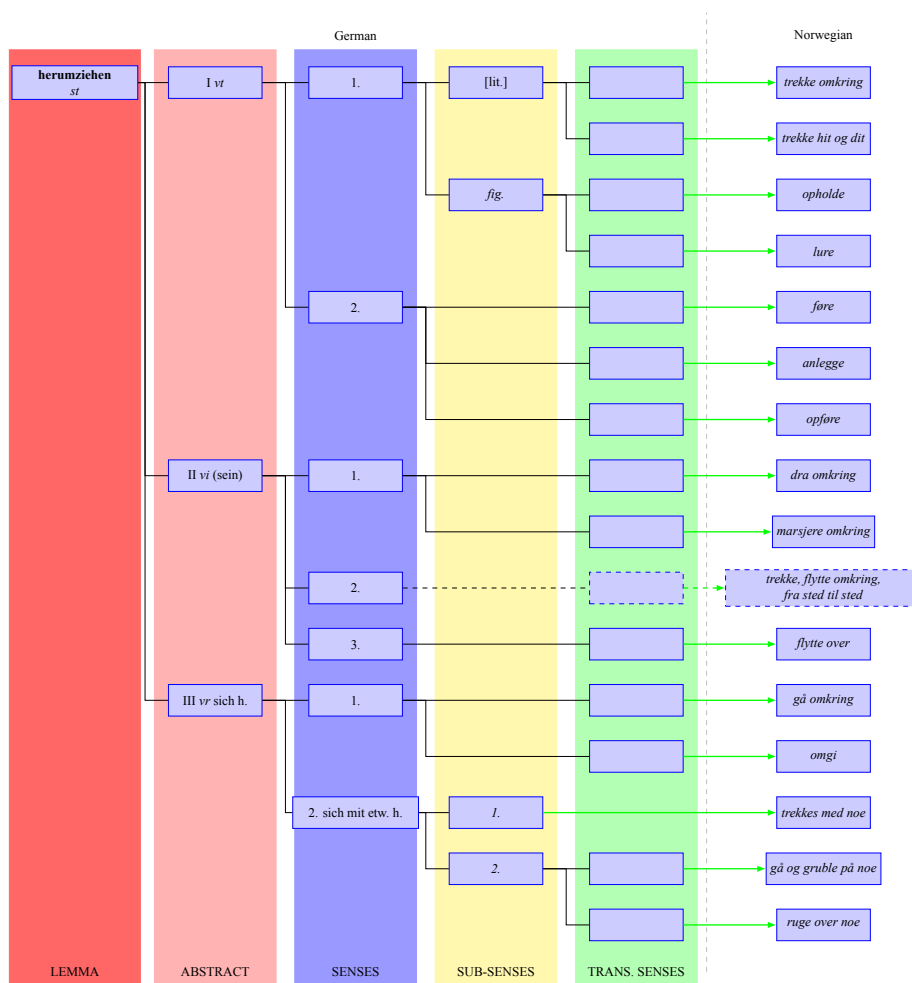
Figure 3.6: Types of sections in the entry for *herumziehen*

3.3   The task of entry sections

A dictionary entry can be separated into a hierarchy of sections, as shown in 3.2. The hierarchy corresponds roughly to the lexicographers' *addressing structure*: each section is an *indication* which *addresses* its parent section. The sections can be of different *type* (or *class*). They represent the lemma (use of it) in a particular meaning (sense) or context. The difference is the specificity of the meaning. At each level, the meaning is more and more specific.

The root section defines an expression – the lemma – as a linguistic sign at the level of pure Saussurean *langue*, without any context. The sign itself can refer to a wide variety of meanings, especially if the expression is polysemous.[9] The meaning cannot be determined without a context (unless the word is clearly monosemous). For ambiguous forms (homonyms), we cannot even determine the part of speech. The *senses* and *sub-senses* specify a particular meaning of the expression (as seen by a native speaker), but they also limit the possible set of contexts where it can occur (in this meaning). The *abstract* groups of senses and sub-senses also limit (specify) both the meaning and the possible set of contexts by some explicit *constraints* on the context, which are common for all the senses defined as its children. E.g. the whole group of senses in the *transitive* use of the verb *herumziehen* requires the verb to occur with a syntactic object. The context is thus limited syntactically by this requirement and the meaning is limited to the set of senses defined within the scope of the abstract 'transitive sense'. The translational equivalents represent the most specific meaning of the lemma. They are themselves semantic determiners (or constraints) of what is here called *translational (sub-)senses*. Translational (sub-)senses represent the set of particular occurrences (i.e. real contexts, at the level of *parole*) where the expression (the lemma) can be translated by the presented equivalent from the target language.

The direction of specification therefore means a move from *langue* in the direction towards *parole* (cf. figure 3.7). The level of parole itself cannot really be reached by a dictionary, however (see below). The lemma as a sign belongs to the *langue* (system) and with each level the user steps down closer to the particular occurrence in *parole* that he or she wants to find an equivalent for. The process of disambiguation of the most appropriate word sense according to some particular context means parsing the tree from the root node down to the most appropriate leave. The user needs to find the closest possible meaning resembling the context of the real occurrence (in parole) that is to be translated. He or she must compare the current context to the constraints defined for the different senses in order to come to the best fitting equivalent. At each level the comparison selects which nodes fit better and which do not fit at all. Then the comparison can proceed to the children of the fitting nodes, and so on until the leaves are reached. The process does not necessarily always find only one fitting path; the constraints do not need to be exclusive and absolute and the user can often only assign probabilities to each of the senses or sub-senses. The most probable interpretation is then considered as the right one, until it is excluded by some further additional information. The distinctions between some sub-senses can also be so subtle that it actually does not really matter which path is taken and the user can choose from different possible equivalents. In extreme cases (e.g. in fiction or poetry), some utterances can also be ambiguous on purpose.

Every new level in the structure *adds* new constraints to the ones already defined by the parents. The children thus *inherit* the constraints of their parent and add some additional ones. This principle of inheritance results from the principle of *scope* in the *addressing structure*: every *indication* can be *addressed* to all elements within its *scope*.[10] For example, once we define an abstract group of senses for transitive use of a verb, the constraint (indication) of transitivity applies to the *whole* group (section) and hence also to all the senses (sub-sections) declared within this section, or – in terms of the tree graph perspective – to all (sense-)nodes which are descendants of the abstract

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[9]In other words: words in a dictionary do not have meanings as such, they have rather *meaning potentials* (Hanks, 2000).

[10]See Svensén (2009, 81).

(grouping) node.[11]
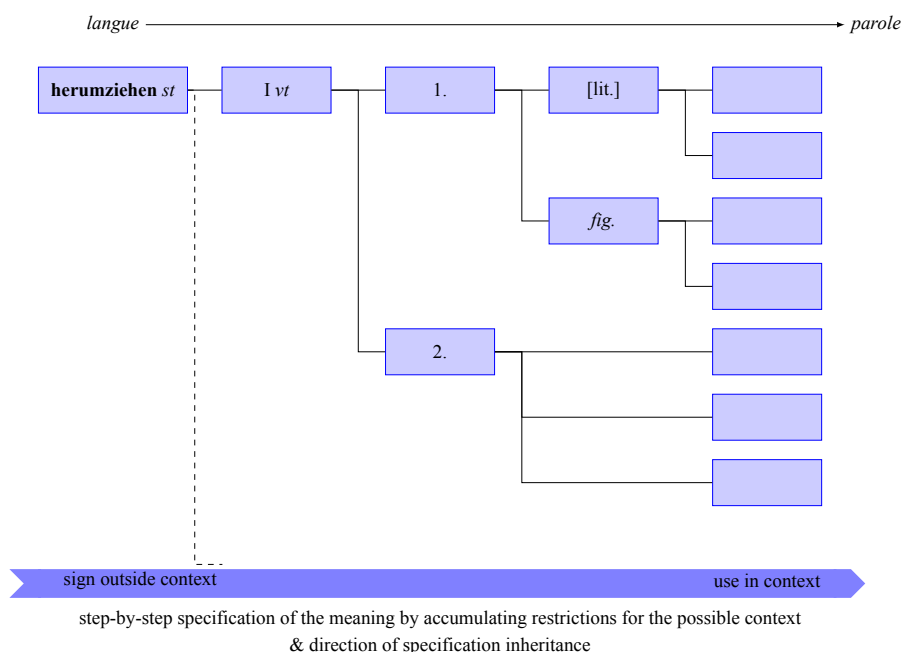
Figure 3.7: Specification of meaning in a dictionary entry

The dictionary can never be fully exhaustive. It would mean that the leaves were identical with *all the possible* real occurrences of the lemma in any possible text (i.e. *parole*). The leaves were actually concordances from a parallel (translational) corpus, but an infinite one. In such an ideal corpus, the user would find exactly the same utterance he or she wants to translate and its (ideal or just suggested) translation. But the dictionary cannot be infinite and so cannot be the tree structure either. The *translational senses* cannot reach the level of pure *parole*. They must group together the most prototypical types of use and suggest the best fitting translations for them.

The tree structure cannot be exhaustive *inside* its own scope either. There can be sub-senses defined for some sense, and the user may still not be able to choose any of them or – the other way around – several can be equally adequate at the same time. The right sense can be roughly identified, but not any of its more specific sub-senses. In other words: Sub-senses are nothing more than arbitrary subsets of some sense; they do not necessarily need to be disjoint sets and their union can still be just a subset of the sense.

The need of specification of sub-senses closer to the level of *parole* is a requirement especially specific for bilingual dictionaries, which excludes to some degree the use of approaches oriented solely at the system (*langue*) as such, such as Pustejovsky's

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[11]The principle of hierarchy with *scopes* (and thus also the *inheritance*) allows for the process called *extraposition* in lexicography (Svensén, 2009, 90). It means that one indication can address several treatment units at once, when it is placed within the parent of all the treatment units. It does not need to be repeatedly placed in each treatment unit, when all the units are part of the superordinate unit. They are all within the scope of the superordinate unit and they all inherit the indication. Extraposition occurs necessarily with indications of part of speech, pronunciation, inflection and the lemma itself – these indicators are not repeated for each sense.

Generative Lexicon (Pustejovsky, 1995; Pustejovsky and Boguraev, 2008) or other approaches exploring the regular polysemy. As explained in chapter 4.1.1, connecting (*linking*) equivalents between two languages requires passing (though just symbolically) the level of *parole*.

3.4   Sections and their contents as incarnations of lexical units

As declared in 3.3, the sections in a dictionary entry represent the lemma in a particular (more or less specific) meaning. Such specific union of form and meaning is usually called a *lexical unit*.[12] The dictionary entry can thus be represented by a *hierarchical tree-structure* of lexical units. The root unit defines the lemma and may include several more specific lexical units as its children, defining its senses and sub-senses. Within the hierarchy, the lexical units *inherit* the specifications defined by their parents, because of the principle of *scope*. The units can be of different type. Several types of lexical units have been identified in real lexical entries: lemma, abstract, sense, sub-sense, translational sense.

But the lexical units are not just containers for other lexical units (their more specific children). They have also other contents: different lexicographical indications in the form of atomic features, cross-references, glosses, etc. The indications are their children as well, and they address the unit as a whole, in the same way as the lexical units address other lexical units. Lexical units themselves are the most compact *treatment units*.

Since a lexical unit refers to some expression (lemma) in a particular meaning (sense), it must contain a definition of the lemma and some indications of its paradigmatic and syntagmatic features in the fields of morphology, syntax, semantics and pragmatics. The task of each lexical unit is to declare the constraints on the possible context by means of these features and bind them to the limits of the particular meaning. In printed dictionaries these features are indicated by different labels and signs, using also different typographical effects. The lemma is usually declared only once by the top-level (root) node and all the senses just refer to it (they inherit the lemma, actually). But they can also put constraints on the lemma: e.g. restrict it to plural forms only, particular case, etc. The lexical units can also constrain the possible valency patterns: selecting transitive or intransitive use of verbs, selecting particular prepositions used to connect the complements, or even imposing semantic constraints on the complements (e.g. a requirement of a human subject, inanimate subject, etc.) The constraints do not necessarily need to be strict; especially semantic constraints usually only have a power of *preferences* (e.g. semantic prosody). The unit needs to specify the meaning as well. In bilingual dictionaries, this is usually achieved by the target language equivalents. But other means can be necessary as well, the so called *sense indicators*.[13] Different types of constraints can be used as sense indicators: typical modifiers (e.g. adjectives), compound synonym, hypernym, synonym, subject or domain labels, typical collocators and the explicit syntactic constraints already mentioned. The lexical unit can also contain cross-references, examples, glosses, definitions, etc.

In printed dictionaries, compounds, derivatives or multi-word expressions (fixed expressions, idioms, etc.) may be formally included within the dictionary article of a

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[12]Cf. e.g. Cruse (1986, 49) and Atkins and Rundell (2008, 162)
[13]Cf. Atkins and Rundell (2008, 214)

lemma. As mentioned before, they are not considered to be part of the entry (microstructure) here. They are (structurally) independent entries nested only formally under the main keyword. They do not belong to the semantic structure of the lemma as described by the hierarchy of senses and sub-senses. They do not describe the form defined by the lemma, but some other (though closely related) form defined by themselves. They can also have their own hierarchy of senses and sub-senses.

Chapter 4

General prerequisites of a comprehensive lexical description

In the previous chapter, the structure of a dictionary entry has been analyzed and described in terms of general abstract principles, which seem to be common to every usual bilingual dictionary, if not every dictionary or reference work related to the lexicon. This chapter tries to shortly introduce specific problems of bilingual lexicography and technical principles which can be useful for their solution.

4.1 Balanced (symmetric) dictionaries and equivalence

4.1.1 Balanced dictionaries, linking and symmetry of equivalence

In the analysis of the structure of lexical units within a bilingual dictionary entry, one detail had not been explained in the previous chapter: The *translational sub-senses* of the source language pointed to some objects (translations) in the target language. These objects were not defined, but their role is crucial for a bilingual (or multilingual) dictionary. The target language objects are not lemmata, as the form of the equivalents in the dictionaries would suggest. A particular realization of some word in a context can in principle again be translated only by a particular realization of the target word in a corresponding equivalent context, i.e. in a particular sense.[1] It is not the words that are considered equivalent, but the particular utterances or texts – and eventually their meanings. The objects being pointed to by the translational senses of the source language are the most specific translational senses of the target language 'equivalent' lemma. The pair of interlinked senses should represent the two sets of all contexts (within the two different languages) where the two lemmata can be used as equivalents of each other, because they are used in equivalent meaning. It means that, in principle, we can assemble the same tree-structure of sub-senses and senses (just in a mirroring portrayal) on the side of the target language and come to the root (lemma) of the target language (see figure 4.1).

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[1]Cf. Atkins and Rundell (2008, 467–468); Adamska-Sałaciak (2010).
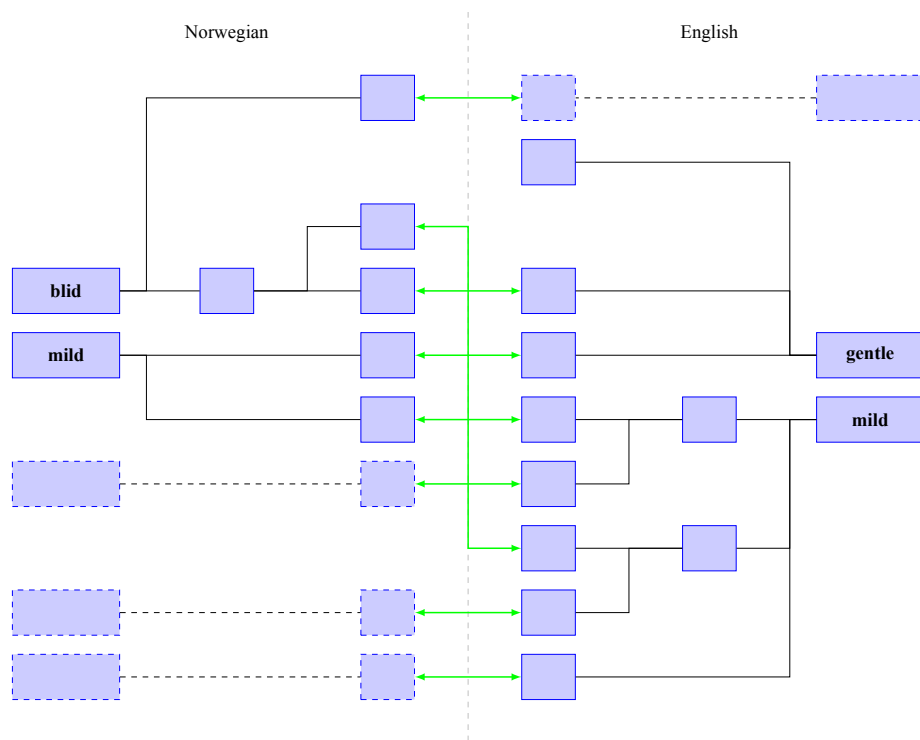
Figure 4.1: A balanced (symmetric) bilingual dictionary

The principle of linking specific senses (and not forms, the lemmata) between two equally detailed descriptions of lexical units in two (or several) languages, is nothing new in the world of lexicography. Experiments with reversion of bilingual dictionaries or their combining into multilingual dictionaries have been tried before[2]. The principle of creating independent lexical databases for two or more languages and "linking" their specific senses (instead of just "translating" the forms) by equivalence links has already been suggested (as a method for the future) by Atkins (1996) and more thoroughly described by (Martin and Tamm, 1996; Martin, 2002, 2007), finally implemented in the tool OMBI (Martin and Tamm, 1996; Wijne et al., 1998; Maks, 2007) and further proved in several lexicographical projects of CLVV.[3] Several monolingual lexical databases have been collected for different languages and linked together into bi-directional (or "reversible") dictionaries. Using the principle called "hub-and-spoke model" (Martin, 2002, 2007; Laureys, 2007) the databases have successfully been cross-linked into multilingual dictionaries. Since this principle requires collection of two (or more) equally detailed (symmetric as to the amount of information) descriptions of lexical units in both languages of the bilingual (or multilingual) dictionary, such dictionaries (or databases) can be called *balanced* or *symmetric* dictionaries/databases:[4] they offer the same amount of information about lexical units from both languages compared to each other.

Even though languages structure the conceptual (and semantic) space in different ways,[5] the task of translational sub-senses is to specify the common overlap of the two semantic worlds (by narrowing down the meaning of the lemmata on both sides) so that the equivalence of those narrow sub-senses is (ideally) full and thus bidirectional. The approach of linking equivalent (sub-)senses (rather than seemingly equivalent forms) significantly reduces the common problem of bilingual lexicography – distortion of the source language analysis by the pull of the target language equivalencies – and reduces this bias to the minimum (Martin, 2007, 231).

However, several other factors are involved in contributing to the differences between the meaning of corresponding expressions in two languages (as explained in 4.1.2) and the equivalence is usually never full, even when narrowed down to some particular context. It is therefore probable that the equivalence links between the two languages will not always be truly bi-directional (symmetrical) or otherwise neutral. There can still be stylistic, pragmatic or other differences between the two counterparts.

Some translations are possible in one direction, but not in the other one, i.e. they are asymmetric: e.g. translating a vulgarism by a more common expression is more acceptable than the other way. For this purpose, the OMBI system implemented procedures to compute the acceptance of the translation by comparing descriptions of the two parallel expressions (senses) and evaluating the allowed and disabled (compatible or incompatible) features of the equivalents. That means that for two properly described lexical units, the compatibilities and incompatibilities in their usage can be (in principle) derived just from the comparison of common and different features in their descriptions. Nevertheless, it is still probable that it will not be possible to define explicitly all the differences between the two lexical units in terms of features, or just that

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[2]Cf. Sciarone and Ahmadi (1996)

[3]*Commissie voor Lexicografische Vertaalvoorzieningen* (Committee for Interlingual Lexicographical Resources), cf. Martin (2007).

[4]The term *symmetric dictionaries* has a potentially dangerous side-effect of a misleading association with symmetrical structures of the lexical units. Besides, the term *symmetry* will also be used for the bi-directionality of translational links, here.

[5]The phenomenon is usually called *anisomorphism* of languages, cf. e.g. Svensén (2009, 253); Zgusta (1971, 294).

the two descriptions will not be as complete and detailed as necessary and the two translational senses as specific as necessary. Then, the equivalence link will need to specify ("comment on") the differences itself, i.e. to explicate the *equivalent differentiation* as described by Svensén (2009, 261). Even a balanced dictionary (database) may never be so perfectly balanced in order to define clear equivalence links between all its parallel (translational) sub-senses.

The computational techniques of separation of form and content and the technique of balanced (or symmetric) description may possibly offer a solution both to the problem of bi-directionality and to the problem of bi-functionality, which are long term desires of bilingual lexicography (cf. Marello (2003, 336); Čermák (1995, 246)). The problem of directionality of equivalence is not the only problem of a bilingual dictionary; another problem is the function of the dictionary: whether it will be used by the native speakers of the source language (i.e. for coding / translation in the target language) or by the native speakers of the target language (i.e. for decoding / comprehension).[6] The type of users (their native language) and their needs determine the form of presentation of many indicators in the dictionary (e.g. labels, sense indicators, etc.), but also their selection (depending whether they need more information about the source expression or the target equivalents). The separation of form and content makes it possible to present the same information to different users in different (their native) languages, while the balanced description allows to obtain the required detailed information equally about the source expression as well as about its equivalent.

4.1.2 Typology and problems of equivalence

The search for equivalents in two languages is similar to the search for synonyms in one language.[7] A truly full equivalence at word level (i.e. 1:1 equivalence) is as rare as full synonymy in one language, and usually it is limited to terminology (Čermák, 1995, 238). The early distinction of *translational (insertable)* and *explanatory (descriptive)* equivalents was first presented by Zgusta (1971, 319): the first ones must be real, established lexical units (at the level of *langue*) of the target language, which can be directly inserted into the fluent text, while the latter ones may be just any expression (at the level of *parole*) of the target language which can explain the meaning of the source expression.[8] Several other distinctions were later defined by other lexicographers[9] and Adamska-Sałaciak (2010) tries to unify them into four basic types of equivalents:

- (C) *cognitive* (semantic, systemic, prototypical, conceptual, decontextualized, notional)

- (E) *explanatory* (descriptive)

- (T) *translational* (insertable, textual, contextual)

- (F) *functional* (situational, communicative, discourse, dynamic)

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[6] Lexicographers use different terminology and sometimes even finer distinctions (based on the current needs of the user), but the principles are fairly common: see e.g. Čermák (1995, 233); Hausmann and Werner (1991, 2740 ff.); Svensén (2009, 14 ff.)

[7] Svensén (2009, 266)

[8] An ideal equivalent for a bilingual dictionary would be both a translational and a fully explanatory equivalent at the same time.

[9] Cf. Adamska-Sałaciak (2010, 392–397) or Svensén (2009, 253–261)

The *cognitive* equivalents are the most general ones, and closest to the level of language system (*langue*). They are the most typical equivalents as understood by the traditional lexicography. They are also the best candidates for symmetry (bi-directionality) at the word level. The *explanatory* equivalent bears also the cognitive equivalence, but it does not need to be an established expression in the language. It is (in principle) always possible to find an explanatory equivalent, but much more difficult to find a proper cognitive equivalent. The *translational* equivalent is a real equivalent as found in some particular context at the level of *parole*. As noted by Adamska-Sałaciak (2010, 398): "A bilingual dictionary could never give all type T equivalents of a given SL item, because it is impossible to predict all the contexts in which the item may occur."[10] The *functional* equivalent may not be a word level equivalent at all, but just any type or combination of (lexical, grammatical, pragmatical, etc.) means in the target language that incarnates the same function as the source expression.

However, even at the level of carefully specified translational sub-senses the equivalence may seldom be considered as truly *full*.[11] There are several levels of meaning inherent to each expression which cannot be separated from it by any constraints, restrictions or by setting it into a particular context. An expression will always carry e.g. a trace of all its meanings (all possible contexts) and associations, even when placed into a very particular and utmost specific context. Zgusta (1971, 27) defined the main three components of lexical meaning: the *designation*, the *connotation* and the *range of application*. There are hardly ever two expressions in two languages which have both a common designation, range of application and connotation at once. In addition to the purely semantic content, the equivalence may be required on several other levels, especially when translating some more demanding texts:[12]

- *phonetic or phonological:* rhythm, rhyme or onomatopoeic features may play an extremely important role for example in the translation of poetry

- *graphical:* visual aspect (the shape and number of letters) of some expression can be relevant in complex visual-textual artworks

- *morphological:* every complex expression (including compounds and derivatives) is affected by its components and their use in other (analogical) expressions or constructions (other compounds and derivatives of the same base)

- *grammatical:* otherwise equivalent expressions may have different grammatical features (e.g. gender)

- *syntactic:* equivalent expressions may have different valency

- *collocational:* frequent collocations affect connotations bound to every expression

- *distributional:* every expression determines the possible set of contexts where it can be used; it is never guaranteed that it will be acceptable in the same context where it was used in the source language

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[10]Cf. also Atkins and Rundell (2008, 468) and chapter 3.3.

[11]Adamska-Sałaciak (2010, 393) names three more reasons in addition to anisomorphism: interlexicality and contextuality of lexical items, the meaning potentials of words (as declared by Hanks (2000) and cognitive linguists) and the possibility that the target language uses grammatical means to express things that the source language expresses by lexical means.

[12]The list should not be considered complete.

- *frequency:* two equivalents may have entirely different frequency of use in the two languages

- *polysemic (or ambiguous):* one specific sense of some expression may be affected by the existence of other senses of the same expression; a word may even be used as ambiguous on purpose

- *paradigmatic:* every expression is also affected by the class of expressions it is semantically related to (synonyms, antonyms, hypernyms, hyponyms, etc.); two otherwise equivalent expressions may be part of dissimilar semantic clusters in two languages

- *pragmatic:* the expression may be bound to particular pragmatical function in the discourse (express indirect wish, desire or command, etc.)

- *stylistic:* two otherwise equivalent expressions may have different stylistic features, expressiveness or they may belong to different registers, etc.

- *cultural (or personal):* an expression may be stigmatized by unexpected associations arising from the history and experience of the particular culture, social group, generation or individual

Two expressions can be (more or less independently) 'equivalent' or non-equivalent on any of these levels. In translation of poetry, the 'phonetic equivalence' may be more important than the semantic one. In addition, all these factors contribute to the lexical meaning as well, by means of additional connotations and associations.

In order to be able to compare the (non-)equivalence of two expressions on all the different levels, the features of both parallel expressions must be described in detail at all the levels.

4.2 Lexical units and polysemy

The problem of polysemy and distinction of word-senses is one of the most discussed subjects within lexicology and especially lexicography. A common practice of lexicography is to distinguish different senses of every expression and describe (define or explain) them (in monolingual dictionaries) or to find appropriate equivalents for each of them (in bilingual dictionary). Different types of senses and detailed criteria (ambiguity tests) for their classification have been defined in theoretical lexical semantics.[13] It has also been noticed, that different sense distinctions are not of equal proportions (and importance): some distinctions are very clear and related to really different concepts, but others can be very subtle, difficult to distinguish in many contexts and possibly even irrelevant for the whole message. Cruse (2000) classifies also the smaller distinctions "between polysemy and monosemy" and more special *microsenses* (Cruse, 2001). A hierarchy of general (clearly distinct) senses and their more specific refinements, sub-senses with overlapping meanings and fuzzy borderlines[14] seems to be more practical than attempts at a linear enumeration of senses that can also be in a hyponymic relation.

Despite the systematic theoretical criteria of lexicologists, the practice of lexicography leads rather to appearance of articles with more or less desperate titles such as

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[13]Cf. especially chapter 6 and 7 in Cruse (2000).
[14]Cf. Svensén (2009, 211)

"Do Word Meanings Exist?" (Hanks, 2000) and "I don't believe in word senses" (Kilgarriff, 1997).[15] However hopeless the titles may sound, lexicographers do not give up. Hanks (2000) suggests the existence of *meaning potentials* in the form of prototypical meaning components, which can be activated in different combinations and intensity in particular contexts. Pustejovsky (1995) explored the regular patterns in polysemy and tried to systematize them and formally describe. Čermák (2010) presents a more corpus-driven approach to compilation of dictionaries. Kilgarriff (1997) demonstrates a corpus-driven approach to defining senses as well, based on clustering of real concordances (i.e. a bottom-up-approach, or right-to-left: against the direction of dictionary entry branching, as described in 3.3). Kilgarriff comes to the conclusion, that word senses only exist in a task-dependent context, i.e. relative to a set of particular interests. The lexicographers need some reason to define word senses of some word, and these reasons determine the criteria for their distinction and definition. The sense distinctions relevant for NLP may thus be different from distinctions made by a dictionary.

This purpose-oriented distinction of word senses is already well known from the dissimilarity of monolingual and bilingual lexicography. While monolingual dictionaries define senses solely from the perspective of the native speaker, bilingual dictionaries have to structure senses also according to the perspective of the target language, i.e. according to the existence and proportions of different equivalents (see Čermák (1995, 244) or Svensén (2009, 277)) and their respective coverage of the meaning of the source expression.

The question is, whether it is possible to integrate multiple perspectives in one single lexical database. Chapter 3.3 shows on the example of an older complex bilingual dictionary that clustering at different levels of resolution is possible and that it has actually been used in lexicography before, in a way. A tree-structured hierarchy of lexical units allows the co-existence of more and less specific senses of different types, based on different purposes. For example, the monolingual senses can be refined into more detailed *translational sub-senses* for the purpose of comparison against several possible equivalents in the target language. But they can also be clustered together into *translational abstracts* (see below for definition) covering several monolingual senses where the target language equivalent covers multiple (or all) senses of the source expression as well. Two expressions with equivalent polysemy can be linked directly at the highest level, the (root) lexical units of their lemmata without the need to define any senses or sub-senses at all. But the senses can still be defined for other purposes, e.g. for more detailed monolingual reference. It means that different types of senses can co-exist in the database at different levels, defined by their type. In the process of selection and visualization of the particular dictionary, only the appropriate level (or type) of senses can be selected (filtered out) and different types of dictionaries with differently structured senses can be generated from the same source. The translational links can connect lexical units at all levels, not only the lowest one, if there are appropriate *conceptual* equivalents (see 4.1.2) available in the target language. Only the *translational* equivalents need to be linked from the lexical units at the bottom level of the tree (the leave nodes).

An example of such a constellation is shown in figure 4.2. There are three monolingual senses defined, numbered as 1, 2 and 3, and three different bilingual senses defined as A, B and C. The figure illustrates a situation where there is one common equivalent available in the target language, covering the same senses 1 and 2 as in the source language (and referred to by the translational abstract A), but for the sense number 3 the

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[15]The latter title being a quotation of Sue Atkins' famous declaration.

target language must distinguish between two different equivalents, corresponding to the translational sub-senses B and C. The projection of a monolingual dictionary would only show the senses 1, 2 and 3, while the bilingual dictionary would show senses A, B and C.
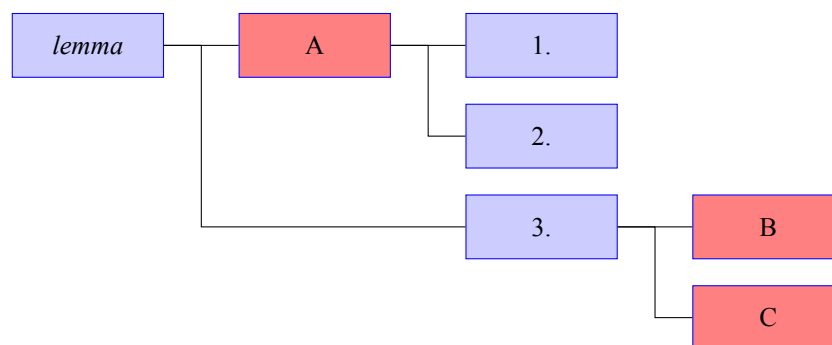
Figure 4.2: Combining sense distinctions of several dictionaries in one database

Translational abstract is a new type of lexical unit which has not been mentioned yet. Its task is to group monolingual senses in the same way as the abstracts of syntactic sub-categorisation do in chapter 3.2, but with a different purpose: to assign (by means of extraposition) a common translational equivalent, not a common syntactic behaviour, to several senses. This is one of the desires of efficiency (and space-saving) in bilingual dictionaries (cf. Svensén, 2009, 277).

The multiple-level definition of a polysemic structure is not a universal solution to all problems, though. The tree-structure only allows for a single hierarchical refinement of senses. It does not offer a possibility to cluster already defined senses partially. For example, if there are monolingual senses 1 and 2 defined for some expression, we cannot cluster the sense 1 and a part of the sense 2 into one translational abstract in order to define one partially common equivalent in the target language, while defining another one for another part of the sense number 2. Such a situation still has a solution which may often be more appropriate: to link the equivalent to the sense number 1 and then again to a special translational sub-sense of the sense number 2, while the other translational sub-sense of the sense number 2 will refer to the other equivalent. Despite the repeated reference to one and the same equivalent from different senses of the source expression, this solution might be more systematic and appropriate anyway.[16]

4.3   Templates and multiple inheritance

Besides the logical necessity of inheritance of definitions within the tree-structure of lexical units constituting a lexical entry,[17] the principle of inheritance can also be used as a tool for purely practical reasons: to systematize the description and improve its

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[16]A similar situation can be illustrated also by the figure 4.2: If there was one common equivalent available in the target language for the monolingual senses 1, 2 and partially also for the sense number 3, the translational abstract A and the translational sub-sense B could both link to one and the same equivalent in the target language, while the translational sub-sense C could link independently to some other equivalent corresponding partially to the rest of sense 3 not covered by B.

[17]See 3.3.

efficiency. In computational lexicography, *templates* are frequently used in order to unify description of analogical units.

There is actually much more information present in the dictionary article than what we can see at the first sight. In the entry *[herum]ziehen* (as shown in figure 3.4), the label *st* specifies that the lemma is a (strong) verb. That implies (a.o.) for example that the participle takes the auxiliary verb *haben* to construct past perfect by default. In the intransitive sense II, the verb *sein* is explicitly presented as the auxiliary verb used in the intransitive use of the verb. This new information at the second level of the tree structure *overrides* the default feature of verbs to use *haben* as the auxiliary verb for this purpose. The feature couldn't be 're-defined' (overridden) for the intransitive usage, if it weren't defined somewhere previously – probably in the grammar part of the dictionary – as a *default feature* of verbs (i.e. "it applies unless explicitly defined otherwise").

The label *vt* specifies that the verb is transitive (in the scope of the senses described under the *abstract* 'sense' I). That implies a minimal default valency frame with (at least) a direct object. It can also imply that the verb is able to have a passive form, etc. The classification of a transitive verb is thus not just another feature, but a whole set of implicit (default) features, bound to the transitive verbs generally. Since we may need to override these features later, we need to define them as default features of transitive verbs somewhere first.

Dictionaries frequently use codes to assign the lemma to some grammatical class (defined explicitly in the grammatical section of the dictionary) – usually an inflectional paradigm. The Norwegian monolingual reference dictionary *Bokmålsordboka* (Bokmålsordboka, 2006) uses codes such as *m1, m2, m3, f1, f2, n1, n2* or *n3* to indicate nouns and assign them to some inflectional paradigm of masculine, feminine or neutral gender at once. One of the most advanced systems of comprehensive and exact inflectional classification was developed by Helgi Haraldsson (Haraldsson, 2002) for Icelandic and Russian in his Russian-Icelandic dictionary (Haraldsson, 1996). The codes refer to the comprehensive grammatical reference part of the dictionary, where complex tables with inflectional paradigms and sub-paradigms are defined in full detail.

To achieve these effects in a formalized description, it is very practical to use templates defining default features for different classes of words (morphological, syntactic, semantic, etc.) and let the words – or rather their lexical units at all levels of the description – inherit these default features. We can eventually override them explicitly in order to show that there is an *anomaly* occurring in the use of the lemma.

Showing explicit *anomalies* (irregular, unpredictable features) is actually the most important task of a dictionary which is supposed to declare mainly features specific to single expressions.[18] Features common to whole classes of words are usually considered part of the grammar. The templates are therefore useful to define the generic, default features for each class of words, while the words can later specify only their own anomalies (exceptions from the generic rules) by explicitly overriding the default features that do not apply to them. This principle is called *default inheritance* (Daelemans et al., 1992; Daelemans and de Smedt, 1994) and it helps to improve the efficiency, integrity and consistency in several ways:

- the regular (analogy) is separated from the irregular (anomaly): the irregularities must be explicitly defined within the lexical units, while the regularities stay outside, in the templates

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[18]Cf. e.g. Svensén (2009, 143)

- the definition of default features enforces basic verification of completeness and consistency: once an expression is assigned to some class, the inherited default features appear as features of the lexical unit and the lexicographer can immediately check whether they apply and the expression really is a regular member of the class, or whether there are exceptions to be defined explicitly; as a result, exceptions will not be overlooked so easily

- new features can be added to (changed or deleted from) the whole classes of expressions just by adding (changing or deleting) them (the features) to the appropriate template representing the class

The templates can be seen as an extreme use of feature *extraposition* (see 3.3): the general features of whole classes of expressions are moved out of the dictionary entries. The features defined by templates are not expected to be shown to the user (at least not within the entries). Their main purpose is verification and enforcement of consistency against the grammar declared outside the list of entries. Nevertheless, they are still present as inherited features in the entries and can be presented to the user if necessary, so that the user is not forced to check the grammar if he or she is not sure about the general rules.

Every lexical unit already inherits features from its parent unit within the tree-structure of senses. If it is expected to inherit features also from other, external units (the templates), potential problems of *multiple inheritance* must be solved in advance: what happens if one and the same feature is inherited from multiple sources but with different values. It can be expected that the templates will be used for definition of different types of features and the conflicts will be avoided (this is called *orthogonal inheritance* in Daelemans et al. (1992)). However, this cannot be assured and therefore the strategy of *prioritized inheritance* should be used: the features are inherited from the templates in a fixed order in which the templates for the unit are defined. At each step, new features from the next template are able to replace (override) previously declared features. The features imported as last come from the parent unit, because the word specific information is considered the most important one. Finally come the features defined by the lexical unit itself, which is the most actual information being able to override all inherited (default) features. The only features which must be explicitly defined by every lexical unit is thus the information that is specific to this unit only and cannot be determined by its membership in any class. That is also the purpose of a lexicon: to assign every expression to all appropriate classes and define all exceptions that do not apply to it as one would expect (from its membership in the classes).

The templates can be organized in hierarchical tree-structures as well. For example, a general template for verbs can have different children defining templates for more specific transitive, intransitive and reflexive verbs (see figure 4.3). The general template can define default features common to all verbs and they will be inherited by its children (sub-classes), which only define features specific to each class separately (i.e. transitive, intransitive and reflexive verbs). Besides syntactic patterns, the templates can be very efficiently used to define inflectional paradigms for highly inflectional languages such as Czech: the root template can define features common to all nouns, its children can define specific features for nouns of different genders, and their children can define the main inflectional paradigms separately. All variation and specific sub-patterns can be defined as children of the main paradigms. They will only override the endings which differ from the main paradigm and do not need to specify again all the regular endings. A noun with inflection alternating between two paradigms can inherit
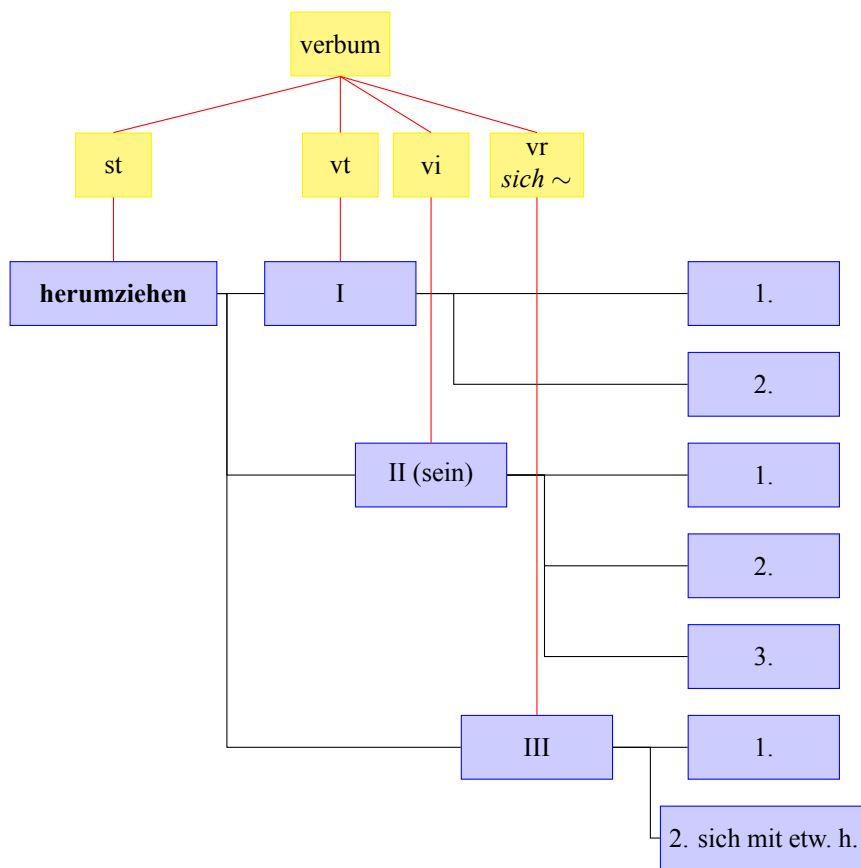
Figure 4.3: Use of templates in a lexical description

both of them and then specify the frequency, how often the alternative endings really are in use according to the corpus evidence (see for example description of the noun *moc* in 7.7.3).

4.4   Variability in language and diasystematic marking (usage)

Two lexical aspects mostly (if not completely) neglected in lexicography and especially in NLP are the variability in language and practical usage features on the border of pragmatics and extralinguistic context.

The consequences of variability for lexical description are that almost every feature and every type of information in the description can appear multiple times with different values. Such alternations effectively disqualify most formal frameworks[19] – which cannot handle alternative values or where such description enforces exhaustive complexity – in the task of a comprehensive description of linguistic reality. Even in case the framework is able to handle alternations, it is usually not able to handle the fact that those alternations are not equal. They can have very different frequency or distribution in different situations and contexts (e.g. style, register, etc.). Variability appears on all levels of language description: in phonology (pronunciation, orthography), morphology (inflection, word formation), syntax (valency), semantics and pragmatics.

The second aspect is closely bound to the first one. Dictionaries usually provide different kinds of *usage labels* indicating style, status, domain, register, etc. This kind of marking is related to several different factors on the border of linguistic and extralinguistic reality. There are different names used for this set of features: e.g. *labelling, vocabulary types* (Atkins and Rundell, 2008) or *(diasystematic) marking* (Svensén, 2009, 315). The term *usage* will be used here, even though it may be in conflict with some other lexicographers' terminology.

Usage labels represent a kind of restriction limiting the validity of other information provided in the dictionary.[20] They may address any other piece of information in the dictionary: the whole lemma, one of its senses, morphological features, pronunciation, some of its forms, valency patterns, etc. This is a good reason to qualify them as some kind of *metainformation* (or *meta-features*) to any other piece of information in a dictionary.[21]

As I have demonstrated in my master thesis[22] on the dictionaries by Einar Haugen (Haugen, 1996) and Tom Hustad (Hustad, 1984), this metainformation may occasionally itself be variable and restricted on a secondary level, creating the need for meta-metainformation (or second-level labelling).[23] E.g. stylistic features, frequency or expressivity of some expression may be perceived differently by different groups of speakers (in different regions, etc.); besides, these features are definitely changing in time (which is highly relevant for diachronic dictionaries mapping the development in language).

The metainformation may contain both very vague information (rough subjective classification) and very exact specifications (geographic coordinates, time span, fre-

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[19] E.g. those based on classical feature structures.

[20] Cf. Svensén (2009, 315)

[21] This is actually how this (meta)information has really been implemented in the project OMBI (Wijne et al., 1998).

[22] Vondřička (2003)

[23] See chapter 6.1.2 for a practical example.

quency in some particular corpus, etc.). The values of these specifications may also have a hierarchical structure or varying accuracy (e.g. geographical distribution in dialects or groups of dialects).

Chapter 5

Model for representation of lexical knowledge

This chapter tries to formalize the abstract principles described in previous chapters into a complete system of representation of lexical knowledge as necessary for bilingual dictionaries.

The previous chapters describe the structure of entries in a dictionary in terms of objects called *lexical units* with various features. It would suggest treating lexical units as *typed feature structures* and use some of the current advanced frameworks developed by mathematical linguists and logicians. However, the requirements of variability and metainformation (see chapter 4.4) impose stronger demands on a framework suitable to capture all the details of a bilingual dictionary without the need of excessive formal overhead. The framework will thus be defined in custom terms inspired by *object oriented programming* (OOP). Strict formality may be sacrificed for greater simplicity (linguistic transparency), flexibility and ability to describe the vagueness in language, where necessary.

Objects are *data structures* (logical containers) of some *class*, containing both atomic *attributes* (with *type* and *value*) and other objects. Features will be defined as objects, too. Definition of every class of objects includes the list of required and optional components (attributes and objects) and their types (classes). The basic classes necessary for every bilingual dictionary will be defined here. The configuration (contents and requirements) of the objects may depend on the particular type of dictionary or type of language described, but the basic set of generic classes should be sufficient for the needs of all current types of dictionaries and descriptions of various kinds. Many classes may be used for several different purposes. It may be necessary to define derived classes for some special purposes, though. More details on the dependence on particular languages and/or types of dictionaries will be discussed later.

The term *type* has not been distinguished from the term *class* until now. The term *class* refers to the *formal category* of objects, while *type* refers to some custom, arbitrary (sub-)classification needed for interpretation of the whole structure.

The set of general (language and dictionary independent) objects will thus be defined together with a more specific configuration. The configuration may need to be modified for languages of a type very different from the European languages or for dictionaries with special requirements, however.

The model does not specify explicitly the *order* of the contents (components) of

each object. The order is important for the form, but usually not for the contents. Where necessary, the order can be determined by the *type* of an object (e.g. for *slots* as ordered components of a complex expression realization) or more explicitly by an additional feature, if not deducible otherwise.

5.1   Objects and their configuration

5.1.1   Lexical unit (lunit)

Lexical unit is the basic class of objects in the dictionary structure, as explained in the previous chapters. It connects a particular form (expression) with some particular meaning, specifies its features and constraints (paradigmatic and syntagmatic) for its use in context and relations to other lexical units (intralingual as well as interlingual).

A lexical unit has three attributes:

- **type** – the basic types of lexical units were defined in chapter 3.4: *lemma, abstract, sense, subsense, trans(lational sense)* and *translational abstract* (as explained in 4.2); special types are reserved for *templates, morphemes* and eventually *examples* (in case a detailed description were necessary for them as well)

- **name** – an arbitrary, unique identifier of the lexical unit

- **includes** (any number, optional) – ordered list of names of templates being inherited by this unit

A lexical unit may contain the following objects (unspecified number, unless defined otherwise):

- **features** – objects defining elementary features

- **usages** – objects for diasystematic marking of the whole lexical unit

- **descriptions** – textual descriptions or definitions of the unit

- **expressions** – at least two types of expressions are used for a lexical unit:

    - type *core* – defines the expression being the lemma
    - type *phrase* – defines possible valency patterns for single word lemmata and whole constructions for multi-word lemmata

- **links** – various links to other lexical units

- **examples** – examples and/or concordances from corpus

- **notes** – textual editorial notes

- **lunits** – child lexical units (more specific sub-senses)

5.1.2 Feature (f)

Feature is the most elementary object used by all other structures, it is not a structure itself. It has only two attributes:

- **key** – the type of feature and eventually identifier of the object as well (see below)

- **value** – value of the feature

The *key* consists of two parts: the first one *(base)* determines the type of the feature and the second one *(variant)* is an arbitrary name distinguishing several features of the same type (see chapter 4.4). The *variant* is thus not obligatory if there is only one feature of the same type in a structure.

Because the features can be of very different type, it can be practical to classify them in a hierarchy of categories. There can be *grammatical, semantic* or *stylistic* features, features related to the *form* or *statistics* about the appearance of the form, etc. The base of the key can explicitly express the path in the hierarchy: e.g. 'gram/gen' for the grammatical feature of gender, 'sem/gen' for the semantic feature of gender, 'form/orth' for the feature defining the orthographical form of some expression, 'style/register' for the diasystematic marking of register, etc.

The classification of features can be practical for the interpretation of the data. In *unification based grammars*, a conflict of two features of the same type and different atomic values blocks the process of unification and the resulting combination of two structures is evaluated as impossible (incompatible) or ungrammatical. However, in real language usage the situation is not as simple. Ungrammatical constructions only arise if there is a conflict of *grammatical* features.[1] In case of *semantic* features, the incompatibility may only indicate use of metaphor or metonymy. Conflicts of stylistic (or other diasystematic) features may be an indication of irony or other rhetorical means. The distinction is therefore not a binary classification of *constraints* and *preferences*, as sometimes used in formal descriptions, but a scale of less and more important conflicts at different levels of the language system.

In the current configuration, the following simplified categories are used: *gram* for grammatical features, *sem* for semantic features, *form* for definition of the form and its statistical data (sub-category *form/stat*) such as absolute and relative frequencies, *style* for most diasystematic marking (except for statistics) and other specialized features mentioned below.

The categories are treated differently in the process of interpretation. A conflict of grammatical features of two expressions combined together will render the resulting combination grammatically invalid. A conflict of features in the category of *style* will mark the resulting combination as a form with *invalid usage* parameters. On the other hand, features of the type *form* are not compared at all, they are just updated by the new values (the orthographic form of the new combination, its specific frequency, etc.).

The *variant* identifier is being attached to the *base* and enclosed in square brackets. It can be any arbitrary name, but it can also be used to identify a particular theory (e.g. semantic role according to two different theories *X* and *Y* may be defined at the same time by features with the keys *sem/role[X]* and *sem/role[Y]*) or different sources used to acquire statistical data (e.g. *form/stat/freq[SYN2005]* vs. *form/stat/freq[SYN2010]* for different frequency values from the corpora *SYN2005* and *SYN2010*).

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[1] Besides, ungrammatical constructions can still appear in real text and a parser based strictly on unification may never be able to identify them.

5.1.3 Usage

Usage is just a container with metainformation[2] for any other structure (but not for a single *feature* and not for structure of the same type *usage* – it cannot be nested). It contains features (usually from the category of *style*, but not necessarily) with diasystematic marks that apply to the parent structure, i.e. the *usage* constrains the limits of validity of its owner (parent). It has only one obligatory attribute:

- **key** – any arbitrary name as identifier

Usage can contain the following objects:

- **features** – any features applied as metainformation (diasystematic marking)

- **constraint** (0 or 1) – constraints on the validity of the usage; used as the secondary metainformation or limits (meta-metainformation, see chapter 4.4); the features defined in the *usage* only apply if the features required by the constraint are satisfied

This objects roughly corresponds to the *pragmatic attributes* in the OMBI system (Wijne et al., 1998).

5.1.4 Expression (expr)

Expression is a general object defining some language expression. It is complementary with the object *realization* in building a recursive structure of *slots* and *fillers*. *Expression* is a slot which can have several *realizations*. An expression may be explicitly defined by enumeration of all the possible *realizations*, or the slot may be open and accept any form which fulfils particular constraints. The object has only one obligatory and one optional attribute:

- **key** – any arbitrary name as identifier; in the current configuration, the names 'core' and 'phrase' are reserved for the two types of expressions used in a lexical unit

- **include** (optional) – name (path) of another object (slot) which will be inherited by this object; represents a formal identification with (i.e. a cross-reference to) another slot (inside or outside the same lexical unit); for simplification the reference can point to a lexical unit as well, which is identical to reference to its 'core' expression (i.e. the lemma itself)

Expression may contain the following objects:

- **features** – any features of the slot; in the current configuration, only the features *slot/open* and *slot/optional* are used to define whether the slot is open and/or optional (see below for details)

- **constraints** – constraints on the possible fillers of open slots or on the forms selected from the paradigms offered by the defined realizations

- **realizations** – a set of possible (variant) realizations of the expression

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[2]Corresponding roughly to the (so called) "pragmatic contraints" in OMBI (cf. Wijne et al., 1998; Maks, 2007; Martin and Tamm, 1996).

A common problem of dictionaries is the fact, that they do not specify which slots (components of some construction) are open and which are closed and only can be filled by words or constructions from a limited set (e.g. semantic group). A very simple, minimal classification of three types is used in the current configuration:

- *closed slots* (default if there are any realizations defined) – the slot can only be filled by the explicitly defined *realizations*; if there are also *constraints* defined, only forms conforming to the constraints are selected from the paradigms defined by the realizations (e.g. particular grammatical case and/or number); in the visualisations of dictionary entries, the defined possible realizations are being listed separated by a slash-sign ('/')

- *open slots* (default if there are no *realizations* defined) – the slot can be filled by any form fulfilling the requirements defined in at least one of the defined constraints; if there are still any *realizations* defined while the slot is explicitly defined as open, the realizations are considered just examples of some typical fillers; in the visualizations, open slots are represented by an indication of type enclosed in the signs '<' and '>' (e.g. *<noen/noe>, <někomu/něčemu>, <someone/something>*, etc.), if there are examples of fillers available, they are listed as possible variants and followed by a slash-sign and three dots ('/...')

- *semi(-open) slots* – the slot is limited to some semantic group of fillers, but the complete list of the possible fillers is not (or cannot) be enumerated explicitly (usually some fillers are more typical, some are less typical and many others cannot be excluded in principle, but are hardly ever experienced); the group is defined by explicitly enumerating the most typical realizations; in the visualizations of dictionary entries, such slots are indicated by the signs '/etc.' at the end of the list of typical fillers

This classification can give the user minimal amount of information about which components of some construction presented in a dictionary are really necessary and the only possible components of the construction, which of them are just prototypical representatives of some semantic group (but may variate), and which are just random examples of the most frequent fillers of an otherwise open slot. Many dictionaries do not consequently make this minimal distinction at all and the user can only guess how much he or she (or it) can modify the given construction in a foreign language.

Optional slots do not represent an obligatory part of the construction and in the visualisation their contents are enclosed in parentheses.

5.1.5 Realization (real)

Realization is a complementary object to the *expression*. It represents one of the possible realizations of some (variable) expression. But the *realization* represents a whole paradigm, not just a single form. The *realization* represents a set of *forms* which can be either defined explicitly or generated by some regular language process from other components, where the components are defined in the form of *expressions* (slots) with several realizations, again.

The generation of *forms* from components is defined by some language specific function (a generator, which has to be implemented in some language specific module interpreting the data) and the components given to the generator as parameters.

For multi-word expressions, the generator is a pure concatenation of expressions defined as components. For morphological processes, the implementation will be more complicated, because concatenation of morphemes is often accompanied by various morphonological changes in their form.

If the *realization* uses both a generator and explicitly defined forms, the forms are added to the list of forms generated by the generator, or, if they have identical identifiers (keys), the generated forms will be updated with features defined explicitly. This principle allows to explicitly override and extend regularly generated forms with irregularities and exceptions.

A *realization* has three obligatory and one optional attribute:

- **key** – an arbitrary name (identifier)

- **type** – basic classification of the type of expression represented by the *realization*; currently used types are: *morpheme, word* and *phrase*[3]

- **gen(erator)** – the name of a language specific generator; e.g. *prefixation, suffixation, composition, inflexion* (as morphological generators) or *phrase*

- **include** (optional) – another *realization* which will be inherited; represents a cross-reference; the realization does not need to define already defined words or constructions, it can just refer to them; for simplicity it can point to some other lexical unit as a whole, which means that the realization of its 'core' expression will be used as reference

Realization may contain the following objects:

- **features** – the features will be applied to all forms defined or generated by the *realization*

- **usages** – the usages (diasystematic marks) that will be applied to all forms

- **components** – objects of the type *expression* used as components (parameters) for the generator; the generator *phrase* will concatenate any number of components (expressions) with arbitrary names; morphological generators may require a fixed number of components with specific names (e.g. *base* and *suffix* for suffixation)

- **forms** – explicitly defined forms which may be added to the list of generated forms or override/update them

The objects *expression* and *realization* may thus be nested recursively, building tree structures defining expressions of any complexity at different levels, e.g. compose words from morphemes, then concatenate the words into constructions and these constructions into more complex utterances, etc. The structure of composition is arbitrary and it may follow any morphological and syntactic theory based on tree structures as well, but it does not have to. The possibility of cross-references allows for definition of expressions composed of other expressions already defined as independent lexical units. The references may also be used just as a matter of identification of some explicitly defined form (in the same way as tagging in a corpus): a word form can be

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[3]The type *morpheme* actually refers to any expression smaller than a word and the type *phrase* to any multi-word expression. The technical types must not always correspond to the linguistic categories.

explicitly defined as one component of some complex construction, but the realization may still refer to the lexical unit of the appropriate lemma and specify the particular type of form (tag) as well; the interpreter (language module) does not need to search for the lemma and generate the form, but it knows which lemma and form it refers to and the form can be verified later, too.

The list of *expression* objects (slots) in a *realization* represents thus the syntagmatic dimension of the construction, while the *realization* objects, used as fillers of the slots, represent the paradigmatic dimension.

The components do not necessarily need to be linear components and the generators do not need to be based only on concatenation. Languages using introflexion (or other non-concatenative processes) may use generators taking different *layers* as arguments for composition of the resulting expression on some completely different principles (e.g. transfixation).

5.1.6 Form

Form is an object defining one particular form of some expression (e.g. a word form) and its features. It must define at least the orthographical form of the expression. In the current configuration, the form is defined by an obligatory feature of type *form/src* (and not by a special attribute). The only obligatory attribute is:

- **key** – the type and an identifier of the form (see below for details)

Form may also include the following objects:

- **features** – grammatical, formal and other features of the form; at least a feature defining the orthographic form is obligatory (see above)

- **usages** – diasystematic marks for the form

The key of the form may have two parts: *base* and *variant*. The principle is similar to the keys of *features* (see above). The *base* identifies the *type* of the form and should conform to some defined classification, e.g. an abbreviated morphological tag for inflected word forms. (For multi-word expressions and morphemes, it may be arbitrary.) The *variant* is an optional arbitrary specification for distinction of variant forms of the same type, again.[4]

5.1.7 Constraint

Constraint is a set of features that must be satisfied for some particular purpose. In this configuration, there are two ways of using the object *constraint*: it can constrain a *usage* for some specific situation, or it can constrain the forms which can be used as fillers of some slots (see the description of *expression*). It has one obligatory attribute:[5]

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[4]It is suggested to use numbers or (better) the particular orthographical forms as identifiers of the variants.

[5]In earlier versions of this project, a more complex system of constraints was proposed, containing an obligatory attribute expressing the type of inner logical relation of the features. The three types – 'AND', 'OR' and 'NOT' – represented the three logical operations necessary to define any possible combination of conditions (the necessity to satisfy all the declared features, the necessity to satisfy at least one of the declared features and the necessity to not satisfy any of the declared features). In addition, the object *constraint* was able to nest recursively other types of *constraint* objects as well. In that way it was possible to declare complex constraints such as "((case=nominativ AND number=singular AND gender=masculinum) OR (case=accusative AND number=plural AND NOT(gender=femininum)))" – a constraint that would require

- **key** – the identifier

Constraint may contain the following objects:

- **features** – the set features that must be satisfied

- **usages** – (for constraints of *expressions* only!) diasystematic marks specifying a particular variant of constraints (see below)

The *usages* may be practical e.g. when we want to define that a slot (*expression*) may be filled by different forms under different circumstances: e.g. by a nominal construction (phrase) in genitive case in standard language, but a dative case is possible in common spoken language, some dialect or other register.

5.1.8   Link

Link represents a cross-reference between two lexical units. The reference may be used for very different purposes, which may be classified in a way similar to the classification of *features* (see above): e.g. *sem* for lexical-semantic relations, *trans* for translational (interlingual) links to equivalents, *col* for linking lexical units which frequently collocate together, *comp* to link to compounds of the current lexical unit, *constr* to link to constructions using the current lexical unit, etc. Links may be used for any other kind reference as well (e.g. Lexical functions, references to external resources or databases). A link has two obligatory attributes:

- **key** – the type and an identifier of the form, with the same structure as keys for *features* and *forms*

- **ref(erence)** – the name (path) of the referred (target) unit

Link may contain the following additional objects:

- **features** – features specifying closer different attributes of the link

- **usages** – metainformation for the link (diasystematic marking)

- **map(pings)** – connecting different elements of the local and referred lexical unit, which in some way correspond to each other (e.g. different valency complements expressing the same element in the common concept of equivalents, converses or synonyms)

The features may be used to indicate additional specifics of the link, not indicated by its *type*, e.g. partial or unidirectional equivalence and the type of partiality, aspect and/or causativity for verbo-nominal collocations, etc.

Important for the use of *links* is the particular implementation of the whole framework. E.g. whether the links will be accessible only from the source unit (as one-way links) or from the referred (target) unit as well (as two-way links), i.e. whether a unit can easily track which other units refer to it. A similar question of implementation are all the other references realized as *include* attributes in the objects of *lexical unit, expression* and *realization*. If any unit can easily track all other units which refer to it in

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either masculine singular nominative forms or non-feminine plural accusative forms as fillers of some slot. The extension was abandoned because it did not seem to be useful for the most common situations or it could be replaced by other simpler solutions.

one or another way, many links are completely unnecessary: e.g. links to compounds, derivatives and constructions would be unnecessary, because the unit could just search all other units which *include* it in their definition of morphological or phrasal construction. The current implementation is not as advanced and therefore *links* will be used to explicitly connect all related compounds, derivatives and complex constructions (fixed expressions) as well.

5.1.9 Mapping (map)

Mapping is an elementary object used for indicating relations of some type between elements (of any type) of the linked units. The relation can be e.g. semantic identity of different syntactic complements. The identifier of *mappings* may be arbitrary or belong to some classification as well.

   Mapping has three obligatory attributes:

- **key** – an identifier and possibly a type of the mapping; it may have the same structure as keys for *features, forms* or *links*

- **loc(al)** – the name of the local element

- **rem(ote)** – the name of the target element

The names of the local and remote elements may be arbitrary identifiers or paths in the description, depending on the type of relation.

5.1.10   Other useful extensions (note, example, description)

Other objects can be used as derivatives of the simple and universal *feature*. In the current configuration, there is use for *notes, examples* and *descriptions*. They have two obligatory attributes:

- **key** – an identifier and possibly a type of the object; it may have the same structure as keys for *features, forms, links* or *mappings*

- **contents** – any arbitrary string

   Descriptions are used for simple descriptions of the lexical frames of every lexical unit, including relations to the elements (arbitrary semantic roles) of a more general conceptual frame (see chapter 7.1.2).
   Examples can be used to quote any useful examples (which do not need to be analyzed as lexical units), e.g. concordances from a corpus.
   Notes can be any useful notes of the lexicographer or editor. They may be used only for the process of preparation of data or for some special glosses for the user as well, if they do not fit any other category in the model.

5.2   Modular implementation at different levels

A practical solution for implementation is to separate the functionality into different modules at different levels of abstraction. The modules can take over tasks specific for a particular language or type of dictionary and the functionality can be separated from the general core. The stratification is illustrated by figure 5.1.
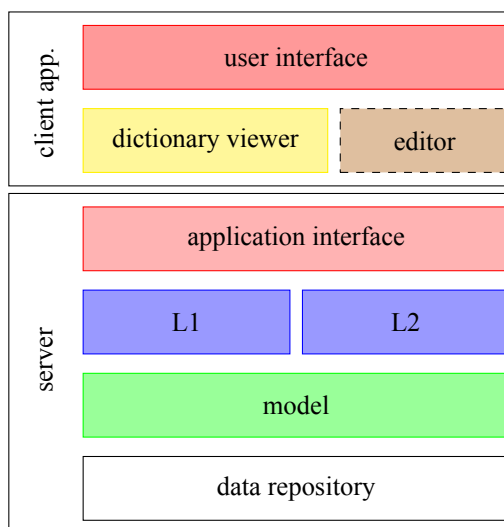
Figure 5.1: Suggested modularization of the implementation

Data repository stores the data and various existing solutions can offer different possibilities, advantages and disadvantages. Relational or object databases can be used as well as plain file system storage. In the current implementation, data are stored in plain XML files, where each defined object is represented by a single XML element and attributes are represented by XML element attributes (except of *includes* and *gen*erator, which are specified by their own sub-elements. Each single file (document) represents one root unit with all its descendants and their contents (a whole tree of lexical units).

The *model*[6] is actually separated into two layers: a generic implementation of objects with inheritance and the actual model with the particular configuration defined in this chapter. The model is relatively independent of particular language, but it may require modifications or extensions for some typologically special languages and for special requirements of more advanced or unusual dictionaries. In the current implementation, the two layers are implemented as two objects in the object oriented programming language Ruby.

Language modules[7] (L1, L2) must be implemented separately for each language, but typologically similar languages may share a great deal of functions. It takes care of interpretation of the data, including the morphological *generators* for the *realization* objects. The layer is currently implemented as a class of objects for specific languages, written in Ruby.

Application interface provides communication between the back-end (server) and a particular application or user interface (client). It has currently been implemented in two Ruby objects: an interpreter of a custom query language and a simple server interface.

Dictionary viewer[8] takes care of visualising a particular type of dictionary from

---

[6]The OMBI system is also stratified in a similar manner. The *model* corresponds roughly to the level of *universal deep structure* (UDS) in OMBI (Martin and Tamm, 1996, 676).

[7]*Language modules* correspond roughly to the level of *product specific deep structure* (PDS) in OMBI (Martin and Tamm, 1996, 676).

[8]The layers of *dictionary viewer, editor* and *user interface* correspond roughly to the layer *surface structure* (SUS) in OMBI (Martin and Tamm, 1996, 676).

the data acquired from the server. It can use various profiles or it can be customized according to the needs of a particular user and his or her demands. The testing viewer has been implemented in the form of a XSLT template.

Editor is necessary for the creation and maintenance of the resource. It has not been implemented in the last version of the project.[9]

User interface depends on the type of user and his or her requirements and relation to the resource (a dictionary user or an editor). It has currently been implemented in the form of a simple HTML web interface, using the PHP scripting language.

There can be several (different) *client applications* using a common back-end (server). Other types of interface can also be used as clients: e.g. modules generating resources for other more specific tasks (such as NLP tasks).

5.3 The specifications: categorization and dependency on language and dictionary types

The *configuration* of the allowed and required components of the objects (as defined in 5.1) is part of the model and its modification is usually not a big problem for most modern means of possible implementation. It may be pre-emptively extended to allow any combination of the declared objects. It is not necessary to use all the combinations, if not needed. The model (not necessarily in its current configuration) should thus be considered a generic framework independent of particular theory, language or dictionary type, even though it may need future modifications and extensions. It should be, in principle, able to describe any combination of features and relations, however its efficiency for different purposes may still be discussed.

However, the data stored in the model need to be of specific *types*, as mentioned in the description of the model (the *type* is usually specified in the *key* attribute of the objects). The interpretation of the data by the *language modules*, which are language, theory and dictionary-type dependent, depends on a systematic classification of the *types* of the data. The types should correspond to some linguistic categories.[10] It means, that the *categorization* (or *classification*) – and to some degree possibly also the configuration of the model (the lowest level of the framework) – are influenced by the requirements of the languages and eventually the type of dictionary (the higher levels of the framework).

The *categorization* (classification of *types*) of the data is hence closely bound to a particular language, theory (or set of theories) and belongs to the domain of the interpretation system in the *language modules* (and higher levels).[11] It would therefore need a much deeper linguistic, lexicographical and formal analysis in order to offer all general principles needed by particular language modules for description of different types of languages, and the language modules would need a similar elaboration of capabilities necessary to serve the requirements of various types of dictionaries (lexical resources).

---

[9]A simple command-based editing interface has actually been implemented within the query language interpreter of the *application interface*. A fully functional user interface for editing had also been implemented in the preliminary version of the implementation, but it is not compatible with the latest version.

[10]For example, the common types of *realization* objects for most languages will be *morpheme, word* and *phrase*, but the types of grammatical features may already vary significantly: some languages distinguish nominal case, some have two genders and others have three, four or none, etc.

[11]That is also the reason why this layer is called "product specific" (PDS) in OMBI and why the corresponding *Data Category Registry* for *Lexical Markup Framework* is managed separately from the standard itself (see chapter 2.1.4).

Such goal cannot be achieved within the scope of this project.[12] The categories presented in the second part are thus only examples suggested for the limited task carried out there.

---

[12]Some functionality currently (i.e. in the current testing implementation) provided by the modules at a lower level should probably also be moved upwards to the higher levels (language or dictionary specific).

Part II

From theory to practice

Chapter 6

Specifications for description of Norwegian nouns

This chapter shows an application of the model on the description of different aspects of Norwegian nouns. The description and classification is based mainly on the Norwegian reference grammar (Faarlund et al., 1997).

6.1 Morphology: inflection

6.1.1 Inflectional paradigms (templates)

The inflection of Norwegian nouns can be defined by a single function (generator) connecting two components: a word *base* (stem) and a set of inflectional *endings*. Each form can be described by a single three-letter code (tag) XYZ, where X is always 'N' for 'noun', Y can be 'S' for 'singular' or 'P' for 'plural' and Z can be 'I' for 'indefinite' or 'D' for 'definite'. These codes are used as names (keys) for the forms. The genitive forms are regular and not specific to particular word. Therefore they were not considered for inclusion because they can easily be handled by the grammar. In later descriptions, the letter 'G' is appended to the key of forms referring to genitive forms. In modern Norwegian, the synthetic genitive is increasingly being replaced by analytical prepositional constructions.

Templates have been defined for all basic inflection classes of Norwegian nouns. The templates include a definition of a word as a *realization* of the 'core' expression of the lexical unit. The *realization* has the generator *inflexion* specified and includes two components (slots): the *base* is not defined in the template, it has to be defined in the lexical unit; the *ending* is defined by the set of *realizations* with the inflectional endings (morphemes). These endings include grammatical features of number and definiteness, that the forms of the noun will inherit.

```
1  <lunit name="_tmpl_N" type="template">
     <exp key="core">
3      <real key="N" type="word">
         <gen>inflexion</gen>
5        <f key="gram/pos" value="subst"/>
         <exp key="base">
7        </exp>
         <exp key="ending">
9          <real key="SI" type="morpheme">
             <include>_morph_end_0_N:SI</include>
```

```
11        </real>
        </exp>
13      </real>
    </exp>
15  <!-- masc -->
    <lunit name="masc" type="template">
17    <exp key="core">
        <real key="N" type="word">
19        <f key="gram/gen" value="masc"/>
          <exp key="ending">
21          <real key="SD" type="morpheme">
              <include>_morph_end_en_N:SD</include>
23          </real>
          </exp>
25      </real>
      </exp>
27    <!-- m1 -->
      <lunit name="m1" type="template">
29      <exp key="core">
          <real key="N" type="word">
31          <f key="gram/inflclass" value="m1"/>
            <exp key="ending">
33            <real key="PI" type="morpheme">
                <include>_morph_end_er_N:PI</include>
35            </real>
              <real key="PD" type="morpheme">
37              <include>_morph_end_ene_N:PD</include>
              </real>
39          </exp>
          </real>
41      </exp>
      </lunit>
43    </lunit>
...
```

Listing 6.1: Template for masculine nouns

Listing 6.1 shows the beginning of the template structure for noun inflection. The general template _tmpl_N is defined (line 1) with a core expression (line 2) filled by a realization N (line 3) using the generator *inflexion* (line 4) with two components defined: the expression *base* (line 6) and the expression *ending* (line 8). The feature *gram/pos* (part-of-speech) is defined with the value *subst* (line 5) and one realization from the set of endings, the singular indefinite empty ending common for all nouns, as well (lines 9–11). A lexical unit (sub-template) with the name *masc* is then defined as its child at line 16. It adds the feature specifying the grammatical gender with the value *masc* to the core realization N at line 19. It also adds the ending of singular definite to the set of endings common for all masculine nouns (lines 21–23). The ending of singular indefinite is already implicitly inherited from the parent unit. The definition of sub-template for the first class of masculine nouns *m1* starts at line 28. It adds a feature indicating the particular inflectional class to the core realization (line 31) and the two last endings of plural indefinite (lines 33–35) and plural definite (line 36–38) forms. This template thus contains the whole paradigm of 4 inflectional forms (2 inherited and 2 explicitly defined).

The endings are not directly defined in the templates, but they are *included* (referred to) from their own lexical units defining the single grammatical endings as morphemes. The definition of the ending *-en* is shown in listing 6.2. The morpheme is actually defined as a form with two different functions: singular definite (lines 10–20) and plural definite (22–32). This is a controversial solution, because the two endings do not have much in common and should be probably defined as two completely independent (though homonymous) units.[1] The root unit declares (explicitly, without any *generator*) just the common orthographic form of the morpheme (4–6) and its two children

---

[1]However, nothing forbids declaration of two homonyms as two children of one common super-lemma

add the different features of grammatical number and definiteness to it. The template
for masculine nouns (in listing 6.1 then includes (inherits) the unit specified as singular
indefinite.

```
 1  <lunit name="_morph_end_en_N" type="morpheme">
 2    <exp key="core">
 3      <real key="morpheme" type="morpheme">
 4        <form key="morph">
 5          <f key="form/src" value="en"/>
 6        </form>
 7      </real>
 8    </exp>
 9    <!-- SD -->
10    <lunit name="SD" type="function">
11      <exp key="core">
12        <real key="morpheme" type="morpheme">
13          <f key="gram/gen" value="masc"/>
14          <form key="morph">
15            <f key="gram/num" value="sg"/>
16            <f key="gram/def" value="def"/>
17          </form>
18        </real>
19      </exp>
20    </lunit>
21    <!-- PD -->
22    <lunit name="PD" type="function">
23      <exp key="core">
24        <real key="morpheme" type="morpheme">
25          <form key="morph">
26            <f key="gram/num" value="pl"/>
27            <f key="gram/def" value="def"/>
28          </form>
29        </real>
30      </exp>
31    </lunit>
32  </lunit>
```

Listing 6.2: Definition of the ending *-en*

The standard Norwegian monolingual dictionary *Bokmålsordboka* defines three in-
flectional paradigms for masculine nouns, three for neutral and one for feminine nouns.[2]
Nouns that do not fit any of those categories are explicitly defined as irregular nouns
in the dictionary. According to the Norwegian reference grammar (Faarlund et al.,
1997), the classification may be slightly modified. Some of the inflectional classes
defined in *Bokmålsordboka* are just alternative combinations of other classes. Some
of the classes defined by Faarlund et al. (1997) concern so few nouns, that they are
described as irregular nouns in *Bokmålsordboka*. The amount of classes (paradigms)
that need to be defined depends on the size (and contents) of the particular dictionary
and on the target user. For most human users, fewer classes supplemented by the ex-
plicit description of the remaining irregularities are probably more preferable, but from
a computational (and formal) point of view, a proper system of classes with all their
modifications would be more rigorous. The problem of the user can be solved within
the output (dictionary visualisation): less common inflectional types can be explicitly
presented to a human user as irregularities and not as members of a complex sub-class
(paradigm), even though they actually are defined by a special class in the system. Most
non-professional human users (especially beginners) will only be able to keep in mind a
few basic paradigms, while the rest will be considered just as word-specific exceptions.

An example of such a specific class is inflection with umlaut (omlyd): e.g. *m1o*
is an inflection class derived from *m1*, but with additional umlaut of the root vowel
in plural. The umlaut in plural is defined as modified versions of the plural endings

---

either.

[2]Different editions may vary, however.

with a special character[3] indicating to the *generator* function that umlaut should be applied to the root vowel. An alternative solution would be to define special marks for the root vowels which can change in plural and adapt the generator to apply them when the root is combined with plural endings. The first solution is both more practical and linguistically plausible. This change (quite irregular in modern Norwegian) would still depend on the 'plural' feature, which is anyway bound to the endings. The first solution is also more natural from the historical point of view, because the umlaut was originally initiated by the endings. In a human readable dictionary, it is also easier to define the word as a member of some special class with umlaut than to describe the fact that the root changes in the plural in some other way. There are still exceptions where this vowel mutation does not follow the original (or regular) rules in modern orthography: e.g. *datter –- døtre*, or the word *tre*, which can (alternatively) have the plural form *trær*. In such cases, the forms have to be overridden (or added) by explicit definitions as exceptions (anomalies, irregularities).

```
   <lunit name='tre_N' type='lemma'>
2    <include>_tmpl_N:neut:n1</include>
     <exp key="core">
4      <real key="N" type="word">
         <exp key="base">
6          <real key="tre" type="morpheme">
             <form key="root">
8              <f key="form/src" value="tre"/>
             </form>
10         </real>
         </exp>
12       <form key="NPI[trær]">
           <f key="form/src" value="trær"/>
14         <f key="gram/num" value="pl"/>
           <f key="gram/def" value="indef"/>
16         <f key="form/tag" value="NPI"/>
         </form>
18       <form key="NPD[treene]">
           <f key="form/src" value="trærne"/>
20       </form>
       </real>
22     </exp>
   </lunit>
```

Listing 6.3: Irregular forms: definition of *tre*

The listing 6.3 shows one possible definition of the noun *tre*. It is assigned to the regular paradigm class *n1*, which generates the indefinite plural form *tre* and two definite plural forms, *treene* and *trea*. Beside the indefinite plural form *tre*, the noun can have an alternative form *trær*, which is defined at lines 12–17. The definite plural form *trea* is also acceptable, but not the form **treene*. We can thus update the orthographical form feature *form/src* of the latter one with the correct value *trærne* (see lines 18–20). An alternative solution would be to add the new form as a completely new object *NPD[trærne]* (like it happened with *NPI[trær]*) and mark the automatically generated form *NPD[treene]* as invalid. Possibly, the noun should not be assigned to any particular paradigm class at all, just to the general gender class, and all the plural forms should be defined explicitly.

Another possibility to handle root changes might be to define two alternative forms of the root, one for singular and one for plural forms, which is a solution well suitable for suppletive forms. It is not a practical solution for the noun *tre*, which has additional variable forms in plural. The interpretative system should neither unify a singular-marked root form with plural endings nor the other way. However, this solution could

---

[3]The slash-sign is used as the marker of umlaut-enforcing endings: *bonde + \er => bønder*, but *stol + er => stoler*.

contribute to problems in other derivations based on the same root, and it would also be difficult to present in a printed dictionary.

6.1.2 Alternative features: optionality of the feminine gender

A special problem of Norwegian *Bokmål* is that of feminine grammatical gender. *Bokmål* uses both a two gender system and a three gender system (de Smedt and Rosén, 1999b). All feminine nouns (e.g. *boka, jenta, kua, mora* in singular definite form) can alternatively be inflected as masculine (e.g. *boken, jenten, kuen, moren*) – the distinction of masculine and feminine gender is neutralized and the language understands it as one *united* gender, in the two-gender perspective. Singular definite is actually the only form making the difference between the masculine and feminine gender. In the grammar, it is nevertheless necessary to make the distinction between masculine and feminine forms due to agreement, even though only possessive pronouns and two adjectives still keep distinct feminine forms. Therefore, the masculine definite singular form has to be marked as *masculine* grammatical gender and the feminine form as *feminine* grammatical gender. Other forms can be assigned to both genders in the system, since two features with the same name are considered alternatives in the system. On the other hand, in the LFG grammar of Norwegian developed at the University of Bergen, these forms are marked with a single negative (false) value for a neuter gender feature.

```
1   <!-- fem -->
    <lunit name="fem" type="template">
3     <exp key="core">
        <real key="N" type="word">
5         <f key="gram/gen[f]" value="fem"/>
          <f key="gram/gen[m]" value="masc"/>
7         <exp key="ending">
            <real key="SD-en" type="morpheme">
9             <include>_morph_end_en_N:SD</include>
              <usage key="bm">
11              <f key="stat/norm" value="bm" />
                <f key="style/status" value="conservative"/>
13            </usage>
            </real>
15          <real key="SD-a" type="morpheme">
              <include>_morph_end_a_N:SD</include>
17            <usage key="bm">
                <constraint key="bm">
19                <f key="stat/norm" value="bm" />
                </constraint>
21              <f key="style/status" value="radical"/>
              </usage>
23          </real>
          </exp>
25        </real>
      </exp>
27    <!-- f1 -->
      <lunit name="f1" type="template">
29      <exp key="core">
          <real key="N" type="word">
31          <f key="gram/inflclass" value="f1"/>
            <exp key="ending">
33            <real key="PI" type="morpheme">
                <include>_morph_end_er_N:PI</include>
35            </real>
              <real key="PD" type="morpheme">
37              <include>_morph_end_ene_N:PD</include>
              </real>
39          </exp>
          </real>
41      </exp>
      </lunit>
```

```
43   ...
```

Listing 6.4: Template for feminine nouns

The listing 6.4 shows a continuation of the template for nouns from listing 6.1. The sub-template for feminine nouns specifies both genders, *masculine* and *feminine* as an alternative feature *gram/gen* of the noun (at lines 5–6). It defines two realizations of the singular definite ending: the included endings *-en* and *-a*. The listing 6.5 shows that the ending *-a* explicitly defines its gender as feminine. In the same way, the ending *-en* specifies explicitly the masculine gender as its feature. The other endings are gender neutral – they do not specify any gender at all, and so the resulting forms are assigned both genders defined by the template (in listing 6.4 at lines 5–6). But the endings *-a* and *-en* do already specify their gender and in the process of unification, the conflicting gender feature is removed (the features can still be unified, because there is always agreement at least in one of the alternatives). That means, that unlike all the other forms, the singular definite forms using the endings *-en* and *-a* will each have only one single gender assigned from the two alternatives: masculine for *-en* forms and feminine for *-a* forms.

```
1    <lunit name="_morph_end_a_N" type="morpheme">
       <exp key="core">
3        <real key="morpheme" type="morpheme">
           <form key="morph">
5            <f key="form/src" value="a"/>
           </form>
7        </real>
       </exp>
9      <!-- SD -->
       <lunit name="SD" type="function">
11       <exp key="core">
           <real key="morpheme" type="morpheme">
13           <f key="gram/gen" value="fem"/>
             <form key="morph">
15             <f key="gram/num" value="sg"/>
               <f key="gram/def" value="def"/>
17           </form>
           </real>
19       </exp>
       </lunit>
21   ...
```

Listing 6.5: Template for feminine singular ending *-a*

In addition to having a only one specific (different) gender assigned, the two alternative singular definite forms do also have different *usage labels*: the form with the ending *-en* is limited to *conservative* Bokmål only.[4] The form ending with *-a* belongs to *radical* Bokmål, but it is not limited to Bokmål only – it is also a regular form in *Nynorsk*. It means that the status of *radical* style is limited (constrained) to use in *Bokmål* only and does not apply in Nynorsk (cf. listing 6.6 showing the forms generated for the noun *evne*[5]). There are no usage labels concerning Nynorsk, where this form is completely regular and neutral. The practical use of second-level labelling/constraints (or meta-metainformation, see 4.4) is well illustrated by this example.

---

[4]Both Bokmål and Nynorsk are very variable norms with further sub-norms or styles: the most common distinction is made between a *radical* and a *moderate* or *conservative* style or sub-norm. The *radical* styles usually prefer forms which are common to both norms (i.e. where the norms overlap or stay closer to each other). The sub-norms in Bokmål were closer analyzed in the SCARRIE project (de Smedt and Rosén, 1999b,a).

[5]Each line starts with the name of the form, i.e. the morphological tag; there are two forms of NSD (singular definite): NSD[evnen] and NSD[evna]; the list of features and their values follows after the colon; features enclosed in parentheses are part of the *usage* object and the square brackets *[c:...]* delimit the *constraint* limiting the *usage*.

```
1  NSI: "evne" gram/gen[m]=masc gram/def=indef gram/inflclass=f1 gram/num=sg
       form/src=evne/ form/tag=NSI form/unit=word gram/pos=subst form/base=evne
       gram/gen[f]=fem
   NSD[evna]: "evna" ([c: stat/norm=bm] style/status=radical) gram/def=def
       gram/gen=fem gram/inflclass=f1 gram/num=sg form/src=evn/a form/tag=NSD
       form/unit=word gram/pos=subst form/base=evne
3  NSD[evnen]: "evnen" (style/status=conservative stat/norm=bm) gram/def=def
       gram/gen=masc gram/inflclass=f1 gram/num=sg form/src=evn/en form/tag=NSD
       form/unit=word gram/pos=subst form/base=evne
   NPI: "evner" gram/gen[m]=masc gram/def=indef gram/inflclass=f1 gram/num=pl
       form/src=evn/er form/tag=NPI form/unit=word gram/pos=subst form/base=evne
       gram/gen[f]=fem
5  NPD: "evnene" gram/gen[m]=masc gram/def=def gram/inflclass=f1 gram/num=pl
       form/src=evn/ene form/tag=NPD form/unit=word gram/pos=subst form/base=evne
       gram/gen[f]=fem
```

Listing 6.6: Forms generated for the feminine noun *evne*

The actual distribution of the variant forms in language does not only depend on the style, but also on the particular word (Rosén, 2000, cf.), and can be specified by additional frequency usage features for each single form.

6.1.3 Alternative orthography: Bokmål vs. Nynorsk

There are several ways how to treat orthographical variants of Bokmål and Nynorsk (also at once) in the system. According to my previous research (Vondřička, 2003), it is a difficult task to decide which words have to be described independently as separate lexical items (lemmata), and which can be considered orthographic variants of the same word (lemma) with the same meaning. There can always be subtle differences present in the meaning and actual use of the variants (e.g. in syntagmatic behaviour), either in the standard language or in the dialects. Pure orthographic variants can be described within one lemma. Two alternative orthographic forms of root can be defined like for the noun *hand/hånd* (see listing 6.7).

```
1  <lunit name='hand_N' type='lemma'>
     <include>_tmpl_N:fem:f1o</include>
3    <exp key="core">
       <real key="N" type="word">
5        <exp key="base">
           <real key="hand" type="morpheme">
7            <form key="root">
               <f key="form/src" value="hand"/>
9              <f key="form/base" value="hand"/>
             </form>
11           </real>
           <real key="hånd" type="morpheme">
13             <usage key="bm">
                 <f key="stat/norm" value="bm"/>
15             </usage>
               <form key="root">
17               <f key="form/src" value="hånd"/>
                 <f key="form/base" value="hånd"/>
19               </form>
             </real>
21         </exp>
           <form key="NPI[hænder]">
23             <f key="form/src" value="hend/er"/>
           </form>
25         <form key="NPD[hændene]">
             <f key="form/src" value="hend/ene"/>
27         </form>
         </real>
29     </exp>
   </lunit>
```

Listing 6.7: Definition of the lemma *hand/hånd*

The lexical unit defines two realizations of the *base* (root and stem) of the noun: *hand* and *hånd*. The first form is neutral and acceptable both in Bokmål and Nynorsk. The other form is only accepted in Bokmål, as defined by the usage at lines 13–15. The noun is inflected according to the first feminine paradigm with umlaut (f1o). The regular vowel change will create the plural forms *hender* and *hendene* based on the root *hand*, but it will also generate the forms *hænder* and *haendene*, which are not used in modern language and must be either invalidated or overridden with the modern orthographical forms *hender* and *hendene*, identical with those derived from the neutral base *hand*. The second solution is applied at lines 22–27, but the result are duplicate plural forms. The list of computed forms will then look like in the listing 6.8.

```
NSI[hand]: "hand" gram/gen[m]=masc gram/def=indef gram/inflclass=f1o gram/num=sg
    form/src=hand/ form/tag=NSI form/unit=word gram/pos=subst form/base=hand
    gram/gen[f]=fem
2 NSI[hånd]: "hånd" (stat/norm=bm) gram/gen[m]=masc gram/def=indef
    gram/inflclass=f1o gram/num=sg form/src=hånd/ form/tag=NSI form/unit=word
    gram/pos=subst form/base=hånd gram/gen[f]=fem
NSD[handen]: "handen" (style/status=conservative stat/norm=bm) gram/def=def
    gram/gen=masc gram/inflclass=f1o gram/num=sg form/src=hand/en form/tag=NSD
    form/unit=word gram/pos=subst form/base=hand
4 NSD[hånden]: "hånden" (style/status=conservative stat/norm=bm) gram/def=def
    gram/gen=masc gram/inflclass=f1o gram/num=sg form/src=hånd/en form/tag=NSD
    form/unit=word gram/pos=subst form/base=hånd
NSD[handa]: "handa" ([c: stat/norm=bm] style/status=radical) gram/def=def
    gram/gen=fem gram/inflclass=f1o gram/num=sg form/src=hand/a form/tag=NSD
    form/unit=word gram/pos=subst form/base=hand
6 NSD[hånda]: "hånda" (style/status=radical stat/norm=bm) gram/def=def gram/gen=fem
    gram/inflclass=f1o gram/num=sg form/src=hånd/a form/tag=NSD form/unit=word
    gram/pos=subst form/base=hånd
NPI[hender]: "hender" gram/gen[m]=masc gram/def=indef gram/inflclass=f1o
    gram/num=pl form/src=hend/er form/tag=NPI form/unit=word gram/pos=subst
    form/base=hand gram/gen[f]=fem
8 NPI[hænder]: "hender" (stat/norm=bm) gram/gen[m]=masc gram/def=indef gram/num=pl
    gram/inflclass=f1o form/src=hend/er form/base=hånd gram/pos=subst
    form/unit=word form/tag=NPI gram/gen[f]=fem
NPD[hendene]: "hendene" gram/gen[m]=masc gram/def=def gram/inflclass=f1o
    gram/num=pl form/src=hend/ene form/tag=NPD form/unit=word gram/pos=subst
    form/base=hand gram/gen[f]=fem
10 NPD[hændene]: "hendene" (stat/norm=bm) gram/gen[m]=masc gram/def=def gram/num=pl
    gram/inflclass=f1o form/src=hend/ene form/base=hånd gram/pos=subst
    form/unit=word form/tag=NPD gram/gen[f]=fem
```

Listing 6.8: Forms generated for the noun *hand/hånd*

While the forms *handen* and *hånden* are both limited to conservative Bokmål only, there is is difference between the variants *handa* and *hånda*. The form *handa* can be considered *radical*, but only within Bokmål; it is a neutral form in Nynorsk. On the other hand, the form *hånda* is limited always and only to the radical Bokmål. The base form *hånd* is limited to Bokmål only and so the constraint on *radicality* is always fulfilled; the whole form cannot be used outside Bokmål, unlike the ending itself. The system is able to compute combinations of second-order constraints with first level constraints or basic features of the objects.

6.1.4 Alternative inflection: Bokmål vs. Nynorsk

There are also several ways how to treat the problem of different inflection in Bokmål and Nynorsk. Common templates can be defined including all the endings for both Bokmål and Nynorsk together, or the lexical unit may include different templates or even declare two independent realizations of the lemma (based on two templates but the same base): one for Bokmål and one for Nynorsk. The first solution would be easier for words with homonymous forms in the two paradigms (for example neutral nouns

are quite regular in Nynorsk), but the latter solutions are still necessary for many words with various combinations of inflectional paradigms in Bokmål and in Nynorsk (e.g. different genders). The latter approaches will thus probably be more acceptable from a purely linguistic point of view as well, because they keep the two different language patterns separated.

```
<lunit name='vilje_N' type='lemma'>
  <include>_tmpl_N:masc:m1:bm</include>
  <include>_tmpl_nn_N:masc:m1</include>
  <exp key="core">
    <real key="N" type="word">
      <exp key="base">
        <real key="vilje" type="morpheme">
          <form key="base">
            <f key="form/src" value="vilje"/>
            <f key="form/base" value="vilje"/>
          </form>
        </real>
      </exp>
    </real>
  </exp>
</lunit>
```

Listing 6.9: Definition of the lemma *vilje*

The listing 6.9 shows a possible definition of the noun *vilje*, which follows two slightly different inflectional paradigms in Bokmål and Nynorsk. In *Bokmålsordboka* and *Nynorskordboka* they are both marked as *m1*, but the endings differ: Bokmål uses *-er/-ene* while Nynorsk uses *-ar/-ane*. Here we have a single realization of the core and its common base morpheme. But two different templates (paradigms) are imported: the *m1* descendant of the Bokmål masculine sub-template (actually its modified child *bm* restricting the plural endings to Bokmål only) and the *m1* descendant of the Nynorsk masculine sub-template. The singular forms generated are common to both standards, but the plural forms are distinct and marked for usage in the appropriate language standards (see listing 6.10).

```
NSI: "vilje" gram/gen=masc gram/def=indef gram/inflclass=m1 gram/num=sg
     form/src=vilje/ form/tag=NSI form/unit=word gram/pos=subst form/base=vilje
NSD: "viljen" gram/gen=masc gram/def=def gram/inflclass=m1 gram/num=sg
     form/src=vilj/en form/tag=NSD form/unit=word gram/pos=subst form/base=vilje
NPI[viljer]: "viljer" (stat/norm=bm) gram/gen=masc gram/def=indef
     gram/inflclass=m1 gram/num=pl form/src=vilj/er form/tag=NPI form/unit=word
     gram/pos=subst form/base=vilje
NPI[viljar]: "viljar" (stat/norm=nn) gram/gen=masc gram/def=indef
     gram/inflclass=m1 gram/num=pl form/src=vilj/ar form/tag=NPI form/unit=word
     gram/pos=subst form/base=vilje
NPD[viljene]: "viljene" (stat/norm=bm) gram/gen=masc gram/def=def
     gram/inflclass=m1 gram/num=pl form/src=vilj/ene form/tag=NPD form/unit=word
     gram/pos=subst form/base=vilje
NPD[viljane]: "viljane" (stat/norm=nn) gram/gen=masc gram/def=def
     gram/inflclass=m1 gram/num=pl form/src=vilj/ane form/tag=NPD form/unit=word
     gram/pos=subst form/base=vilje
```

Listing 6.10: Forms generated for the noun *vilje*

A more systematic approach would require a detailed study on the overlap of orthographic and inflectional forms between Bokmål and Nynorsk. An overview of the combinations and the frequency of their use would help with the decision about the optimal solution.

6.2   Morphology: word-formation

6.2.1   Compounding

The idea to keep the analytical morphological tree of the word base (stem) separate
from the inflectional endings had to be given up for compounds and derivations. The
compounding of whole words (or words with suffixes connected to a paradigm) seems
more practical than compounding of roots and affixes into stems and then adding the
inflectional ending. The realization of the compounding function (generator) requires
three components: two words, where the first one only provides the base form as the
first component and the second one provides the whole paradigm; the third component
can be the optional *connector* (binding morpheme) which can either be *-s-, -e-* or an
empty string in Norwegian.

   Compounding is anyway often described as 'word compounding', rather than 'mor-
pheme compounding'. If only word bases (stems) were used as components in com-
pounding and derivation, the inflection would have to be added for all compounds and
derivations individually, even though it is already determined by the last component.
That would also mean that all irregularities of the paradigms would need to be defined
again for all compounds with the same word (or suffix) as the second component. Nev-
ertheless, it is always possible to reconstruct the word stem from the description, if only
the stem is required for some further processing.

   The definition of the lemma *rødvinsflaske* (see listing 6.11) shows two types of
compounding at once: compounding without any connector *(rød-vin)* and with the con-
nector *-s- (rødvin-s-flaske)*.

```
1  <lunit name='rødvinsflaske_N' type='lemma'>
2    <exp key="core">
3      <real key="N" type="word">
4        <gen>composition_s</gen>
5        <exp key="comp1">
6          <real key="rødvin" type="morpheme">
7            <include>rødvin_N</include>
8          </real>
9        </exp>
10       <exp key="comp2">
11         <real key="flaske" type="word">
12           <include>flaske_N</include>
13         </real>
14       </exp>
15     </real>
16   </exp>
   </lunit>
```

Listing 6.11: Definition of the lemma *rødvinsflaske*

   The lemma *rødvinsflaske* is defined by the function of the language module called
composition_s with two components as parameters: the noun *rødvin* and the noun
flaske. The generator takes only the *base* from the first noun, but the whole paradigm
from the second noun. The noun *rødvin* is a compound as well and its definition is very
similar (see listing 6.12): the only difference is calling the generator function *compo-
sition* instead of *composition_s*.

```
1  <lunit name='rødvin_N' type='lemma'>
2    <exp key="core">
3      <real key="N" type="word">
4        <gen>composition</gen>
5        <exp key="comp1">
6          <real key="rød" type="morpheme">
7            <include>rød_A</include>
8          </real>
9        </exp>
```

```
          <exp key="comp2">
11          <real key="vin" type="word">
              <include>vin_N</include>
13          </real>
          </exp>
15      </real>
    </exp>
17 </lunit>
```

Listing 6.12: Definition of the lemma *rødvin*

There are also compounds that do not use the base form (singular indefinite) of the component, but rather some other inflected form, e.g. fedreland (see listing 6.13)

```
1  <lunit name='fedreland_N' type='lemma'>
    <exp key="core">
3    <real key="N" type="word">
        <gen>composition</gen>
5      <exp key="comp1">
          <constraint key="NPI">
7          <f key="form/tag" value="NPI"/>
          </constraint>
9          <real key="fedre" type="word">
            <include>far_N</include>
11         </real>
        </exp>
13      <exp key="comp2">
          <real key="land" type="word">
15          <include>land_N</include>
          </real>
17      </exp>
      </real>
19    </exp>
  </lunit>
```

Listing 6.13: Definition of the lemma *fedreland*

The slot for the first component explicitly specifies (by means of a *constraint* at lines 6–8) that one particular inflected form (namely *NPI*) should be selected from the forms provided by its realization (importing the whole paradigm of *far*), and not the default form.

Word compounding does not always connect only two independent words (e.g. ingenmannsland, "no-mans-land"; see listing 6.14). Besides compounds, there are also derivations that do not originate in a single independent word (e.g. tospråklig, "bilingual"). In both cases, the complete structure must be defined in a single tree (single unit).

```
  <lunit name='ingenmannsland_N' type='lemma'>
2   <exp key="core">
      <real key="N" type="word">
4       <gen>composition_s</gen>
        <exp key="comp1">
6        <real key="ingenmann" type="morpheme">
            <gen>composition</gen>
8          <exp key="comp1">
              <real key="ingen" type="morpheme">
10             <include>ingen_Pro</include>
              </real>
12          </exp>
            <exp key="comp2">
14            <real key="mann" type="morpheme">
                <include>mann_N</include>
16            </real>
            </exp>
18        </real>
        </exp>
20      <exp key="comp2">
          <real key="land" type="word">
22          <include>land_N</include>
```

```
              </real>
24        </exp>
        </real>
26    </exp>
</lunit>
```

Listing 6.14: Definition of the lemma *fedreland*

The generator *composition_s* takes two components again: the second one refers to the independent lemma *land* (lines 20–24), but the first one, the virtual compound **ingenmann*, is defined again as a compound (created on the place by the generator *composition*) from the components *ingen* and *mann* (line 6–18). The tree structure follows the logical structure of the composition: *ingenmannsland* is the *land* of *ingen mann*. The virtual expression (compound) **ingenmann* does not have a lexical unit on its own, because it does not exist as an independent expression in the language.

6.2.2   Derivation

The derivative function for *prefixation* connects a prefix with a full word paradigm. The derivative function for *suffixation* connects a word (its base) with a suffix. The suffix is a bearer of the inflection and it is therefore much more practical (and logical) to define it as a full word (though incomplete) with the whole paradigm. The listing 6.15 shows the definition of the suffix *-ing*.

```
1  <lunit name="_morph_suff_ing_N" type="morpheme">
     <include>_tmpl_N:fem:f1</include>
3    <exp key="core">
       <real key="N" type="morpheme">
5        <exp key="base">
           <real key="ing" type="morpheme">
7            <form key="suffix">
                <f key="form/src" value="ing"/>
9            </form>
           </real>
11        </exp>
       </real>
13    </exp>
</lunit>
```

Listing 6.15: Definition of the suffix *-ing*

The unit imports a standard template for feminine nouns, so that the suffix will get the whole paradigm of forms. But the unit is still typed as a *morpheme*, not a word.

The derivation of nouns with this suffix is then similar to the compounding. From the first component, only the base is taken, and then it is connected to the suffix with its full inflectional paradigm. This works well as long as the suffix really determines the inflection, which is the case in Norwegian.[6]

Actually, there is a competition between the seemingly alternative suffixes *-ing* and *-ning*: the first one is preferred in Nynorsk while the second one is more usual in Bokmål. Nouns derived by *-ing* are always feminine in Nynorsk, but nouns derived by *-ning* are mostly masculine in Bokmål, although feminine in Nynorsk as well. There must hence be at least two independent definitions of the two suffixes. The alternative derivations and acceptance in Bokmål or Nynorsk must be solved rather individually. Some deverbal nouns can be derived by both suffixes with the same meaning (usually *-ing* in Nynorsk and *-ning* in Bokmål), other nouns can only be derived by one of the two suffixes (and used both in Nynorsk and Bokmål), and some nouns can be derived

---

[6]There are exceptions to this rule as well, of course.

by both suffixes, but with different meanings (*-ing* usually referring to the process, *-ning* rather to its result). Besides, there are also denominal derivatives with the suffix *-(n)ing* or *-(l)ing*. They have to be defined as independent suffixes as well.

6.2.3 Shortening, abbreviation, etc.

Other functions may be required for other types of word formation. Some of them may have only a symbolic role. There are many ways to build abbreviations and other shortened forms generally and most of them are more or less irregular. The complete rules to build different kinds of shortened forms would be too complicated or completely impossible to define. It is probably easier to define (override) such derived forms explicitly. The most important role of the 'function' called here *short*[7] is hence to show the relation between the full expression and its shortened form, rather than to generate the forms.

The listing 6.16 shows the definition of the lemma *far* ("father"), which is a shortened version of the older form *fader* that is still used, but mostly in the language of church or in ironical meaning.

```
<lunit name='far_N' type='lemma'>
  <include>_tmpl_N:masc</include>
  <exp key="core">
    <real key="N" type="word">
      <exp key="base">
        <real key="far" type="morpheme">
          <gen>short</gen>
          <exp key="base">
            <real key="fader" type="word">
              <include>fader_N</include>
            </real>
          </exp>
          <form key="base">
            <f key="form/src" value="far"/>
            <f key="form/base" value="far"/>
          </form>
        </real>
      </exp>
      <form key="NPI">
        <f key="form/src" value="fedre"/>
        <f key="form/base" value="far"/>
        <f key="gram/num" value="pl"/>
        <f key="gram/def" value="indef"/>
        <f key="form/tag" value="NPI"/>
      </form>
      <form key="NPD">
        <f key="form/src" value="fedrene"/>
        <f key="form/base" value="far"/>
        <f key="gram/num" value="pl"/>
        <f key="gram/def" value="def"/>
        <f key="form/tag" value="NPD"/>
      </form>
    </real>
  </exp>
</lunit>
```

Listing 6.16: Definition of the lemma *far*

The generator *short* does not actually generate any forms at all. The *base* is explicitly defined as for all other nouns. The only meaning of the definition is to indicate that the word is a shortened form of the lemma *fader*.

---

[7]Usually different types of shortening and abbreviations are distinguished, but for the simple purpose of illustration, only one generic function is used here.

6.2.4 Compatibility of diasystematic marking

In the process of word formation, the compatibility of diasystematic marking must be considered as well as in the process of inflection. The deverbal noun *mening/meining* is derived from of the verb *å mene/meine* with two alternative orthographic forms. It is a feminine noun, which means that it can have variable endings as well. The definition is shown in listing 6.17.

```
1  <lunit name="mening_N" type="lemma">
     <exp key="core">
3      <real key="N" type="word">
         <gen>suffixation</gen>
5        <exp key="base">
           <include>mene_V</include>
7        </exp>
         <exp key="suffix">
9          <real key="suffix" type="morpheme">
             <include>_morph_suff_ing_N</include>
11         </real>
         </exp>
13     </real>
     </exp>
15 </lunit>
```

Listing 6.17: Definition of the lemma *mening*

The definition is very simple. It only states that the noun is constructed from the verb *mene* and from the suffix *-ing*. The two variable orthographic forms of the base are already imported from the definition of the verb. The suffix comes with a full inflectional paradigm. The *-en* ending of singular definite form comes with the usage label for *conservative Bokmål*, while the alternative *-a* ending comes with *radical* style feature constrained for use in Bokmål only. The base *mene* comes with the usage label for Bokmål only, and the base *meine* is marked as *radical* style constrained only for Bokmål, again. The resulting list of combinations created by the interpretation system is shown in list 6.18.

```
1  NSI[mening]: "mening" (stat/norm=bm) gram/gen[m]=masc gram/def=indef
       gram/inflclass=f1 gram/num=sg form/src=men|ing/ form/tag=NSI form/unit=word
       form/base=mening gram/pos=subst gram/gen[f]=fem
   NSI[meining]: "meining" ([c: stat/norm=bm] style/status=radical) gram/gen[m]=masc
       gram/def=indef gram/inflclass=f1 gram/num=sg form/src=mein|ing/ form/tag=NSI
       form/unit=word form/base=meining gram/pos=subst gram/gen[f]=fem
3  NSD[meningen]: "meningen" (style/status=conservative stat/norm=bm) gram/def=def
       gram/gen=masc gram/inflclass=f1 gram/num=sg form/src=men|ing/en form/tag=NSD
       form/unit=word form/base=mening gram/pos=subst
   #NSD[meiningen]: "meiningen" (# style/status=#invalid stat/norm=bm)
       form/usage=#invalid gram/def=def gram/gen=masc gram/inflclass=f1 gram/num=sg
       form/src=mein|ing/en form/tag=NSD form/unit=word form/base=meining
       gram/pos=subst
5  NSD[meninga]: "meninga" (style/status=radical stat/norm=bm) gram/def=def
       gram/gen=fem gram/inflclass=f1 gram/num=sg form/src=men|ing/a form/tag=NSD
       form/unit=word form/base=mening gram/pos=subst
   NSD[meninga]: "meninga" (style/status=radical stat/norm=bm) gram/def=def
       gram/gen=fem gram/inflclass=f1 gram/num=sg form/src=men|ing/a form/tag=NSD
       form/unit=word form/base=mening gram/pos=subst
7  NSD[meininga]: "meininga" ([c: stat/norm=bm] style/status=radical) gram/def=def
       gram/gen=fem gram/inflclass=f1 gram/num=sg form/src=mein|ing/a form/tag=NSD
       form/unit=word form/base=meining gram/pos=subst
   NPI[meninger]: "meninger" (stat/norm=bm) gram/gen[m]=masc gram/def=indef
       gram/inflclass=f1 gram/num=pl form/src=men|ing/er form/tag=NPI form/unit=word
       form/base=mening gram/pos=subst gram/gen[f]=fem
9  NPI[meininger]: "meininger" ([c: stat/norm=bm] style/status=radical)
       gram/gen[m]=masc gram/def=indef gram/inflclass=f1 gram/num=pl
       form/src=mein|ing/er form/tag=NPI form/unit=word form/base=meining
       gram/pos=subst gram/gen[f]=fem
   NPD[meningene]: "meningene" (stat/norm=bm) gram/gen[m]=masc gram/def=def
       gram/inflclass=f1 gram/num=pl form/src=men|ing/ene form/tag=NPD
       form/unit=word form/base=mening gram/pos=subst gram/gen[f]=fem
```

```
11   NPD[meiningene]: "meiningene" ([c: stat/norm=bm] style/status=radical)
        gram/gen[m]=masc gram/def=def gram/inflclass=f1 gram/num=pl
        form/src=mein|ing/ene form/tag=NPD form/unit=word form/base=meining
        gram/pos=subst gram/gen[f]=fem
```

<div align="center">Listing 6.18: Forms generated for the lemma *mening*</div>

The form *meninga* is necessarily a form of *radical Bokmål*, while the form *meininga* is also marked as *radical*, but only within Bokmål – it can also be a common neutral Nynorsk form. The form *meningen* is marked as form of *conservative Bokmål* only. However, one more form appears here: the form *meiningen* connects a (Nynorsk and) radical Bokmål base with an ending of the conservative Bokmål. This style clash is indicated by the values *#invalid* in the appropriate features and the whole form is preceded by the '#' symbol in the list, as an indication of an invalid form. Actually, in the Oslo corpus of tagged Norwegian texts[8] this form can be found in a single occurrence. Even though such forms are very rare, they can be useful for annotation systems and language parsers. The interpretation system should not discard such forms completely, but leave them marked for style clash.

The power of the system is well illustrated on the example of the noun *mulighet* in chapter 7.2.2, which consists of three morphemes and all of them are variable (not counting the inflectional endings). The system generates altogether 40 different inflectional forms, thereof 21 are valid (see listing 6.19). The definitions still do not distinguish the orthographical variability of the *e* in the *mog(e)-* morpheme, otherwise there would be 5 more valid and 11 more invalid forms (56 possible combinations, altogether).

```
1    NSI[mog(e)legheit]: "mog(e)legheit" (stat/norm=nn) gram/gen[m]=masc
        gram/def=indef gram/inflclass=f1 gram/num=sg form/src=mog(e)leg|heit/
        form/tag=NSI form/unit=word form/base=mog(e)legheit gram/pos=subst
        gram/gen[f]=fem
     #NSI[mog(e)leghet]: "mog(e)leghet" (# stat/norm=#invalid) form/usage=#invalid
        gram/gen[m]=masc gram/def=indef gram/inflclass=f1 gram/num=sg
        form/src=mog(e)leg|het/ form/tag=NSI form/unit=word form/base=mog(e)leghet
        gram/pos=subst gram/gen[f]=fem
3    NSI[mulighet]: "mulighet" (stat/norm=bm) gram/gen[m]=masc gram/def=indef
        gram/inflclass=f1 gram/num=sg form/src=mulig|het/ form/tag=NSI form/unit=word
        form/base=mulighet gram/pos=subst gram/gen[f]=fem
     NSI[mulegheit]: "mulegheit" (stat/norm=nn) gram/gen[m]=masc gram/def=indef
        gram/inflclass=f1 gram/num=sg form/src=muleg|heit/ form/tag=NSI
        form/unit=word form/base=mulegheit gram/pos=subst gram/gen[f]=fem
5    NSI[mog(e)ligheit]: "mog(e)ligheit" (stat/norm=nn) gram/gen[m]=masc
        gram/def=indef gram/inflclass=f1 gram/num=sg form/src=mog(e)lig|heit/
        form/tag=NSI form/unit=word form/base=mog(e)ligheit gram/pos=subst
        gram/gen[f]=fem
     NSI[muligheit]: "muligheit" (stat/norm=nn) gram/gen[m]=masc gram/def=indef
        gram/inflclass=f1 gram/num=sg form/src=mulig|heit/ form/tag=NSI
        form/unit=word form/base=muligheit gram/pos=subst gram/gen[f]=fem
7    #NSI[mog(e)lighet]: "mog(e)lighet" (# stat/norm=#invalid) form/usage=#invalid
        gram/gen[m]=masc gram/def=indef gram/inflclass=f1 gram/num=sg
        form/src=mog(e)lig|het/ form/tag=NSI form/unit=word form/base=mog(e)lighet
        gram/pos=subst gram/gen[f]=fem
     #NSI[muleghet]: "muleghet" (# stat/norm=#invalid) form/usage=#invalid
        gram/gen[m]=masc gram/def=indef gram/inflclass=f1 gram/num=sg
        form/src=muleg|het/ form/tag=NSI form/unit=word form/base=muleghet
        gram/pos=subst gram/gen[f]=fem
9    #NSD[mog(e)ligheta]: "mog(e)ligheta" (# style/status=radical stat/norm=#invalid)
        form/usage=#invalid gram/def=def gram/gen=fem gram/inflclass=f1 gram/num=sg
        form/src=mog(e)lig|het/a form/tag=NSD form/unit=word form/base=mog(e)lighet
        gram/pos=subst
     #NSD[mog(e)ligheten]: "mog(e)ligheten" (# style/status=conservative
        stat/norm=#invalid) form/usage=#invalid gram/def=def gram/gen=masc
        gram/inflclass=f1 gram/num=sg form/src=mog(e)lig|het/en form/tag=NSD
        form/unit=word form/base=mog(e)lighet gram/pos=subst
```

---

[8] http://www.tekstlab.uio.no/norsk/bokmaal/

```
11  #NSD[mog(e)legheiten]: "mog(e)legheiten" (# style/status=conservative
        stat/norm=#invalid) form/usage=#invalid gram/def=def gram/gen=masc
        gram/inflclass=f1 gram/num=sg form/src=mog(e)leg|heit/en form/tag=NSD
        form/unit=word form/base=mog(e)legheit gram/pos=subst
    NSD[mulegheita]: "mulegheita" (stat/norm=nn) gram/def=def gram/gen=fem
        gram/inflclass=f1 gram/num=sg form/src=muleg|heit/a form/tag=NSD
        form/unit=word form/base=mulegheit gram/pos=subst
13  NSD[mog(e)ligheita]: "mog(e)ligheita" (stat/norm=nn) gram/def=def gram/gen=fem
        gram/inflclass=f1 gram/num=sg form/src=mog(e)lig|heit/a form/tag=NSD
        form/unit=word form/base=mog(e)ligheit gram/pos=subst
    #NSD[mulegheten]: "mulegheten" (# style/status=conservative stat/norm=#invalid)
        form/usage=#invalid gram/def=def gram/gen=masc gram/inflclass=f1 gram/num=sg
        form/src=muleg|het/en form/tag=NSD form/unit=word form/base=muleghet
        gram/pos=subst
15  #NSD[muligheiten]: "muligheiten" (# style/status=conservative stat/norm=#invalid)
        form/usage=#invalid gram/def=def gram/gen=masc gram/inflclass=f1 gram/num=sg
        form/src=mulig|heit/en form/tag=NSD form/unit=word form/base=muligheit
        gram/pos=subst
    #NSD[mulegheiten]: "mulegheiten" (# style/status=conservative stat/norm=#invalid)
        form/usage=#invalid gram/def=def gram/gen=masc gram/inflclass=f1 gram/num=sg
        form/src=muleg|heit/en form/tag=NSD form/unit=word form/base=mulegheit
        gram/pos=subst
17  #NSD[mog(e)ligheiten]: "mog(e)ligheiten" (# style/status=conservative
        stat/norm=#invalid) form/usage=#invalid gram/def=def gram/gen=masc
        gram/inflclass=f1 gram/num=sg form/src=mog(e)lig|heit/en form/tag=NSD
        form/unit=word form/base=mog(e)ligheit gram/pos=subst
    NSD[muligheten]: "muligheten" (style/status=conservative stat/norm=bm)
        gram/def=def gram/gen=masc gram/inflclass=f1 gram/num=sg
        form/src=mulig|het/en form/tag=NSD form/unit=word form/base=mulighet
        gram/pos=subst
19  #NSD[mog(e)legheta]: "mog(e)legheta" (# style/status=radical stat/norm=#invalid)
        form/usage=#invalid gram/def=def gram/gen=fem gram/inflclass=f1 gram/num=sg
        form/src=mog(e)leg|het/a form/tag=NSD form/unit=word form/base=mog(e)leghet
        gram/pos=subst
    #NSD[mog(e)legheten]: "mog(e)legheten" (# style/status=conservative
        stat/norm=#invalid) form/usage=#invalid gram/def=def gram/gen=masc
        gram/inflclass=f1 gram/num=sg form/src=mog(e)leg|het/en form/tag=NSD
        form/unit=word form/base=mog(e)leghet gram/pos=subst
21  NSD[mog(e)legheita]: "mog(e)legheita" (stat/norm=nn) gram/def=def gram/gen=fem
        gram/inflclass=f1 gram/num=sg form/src=mog(e)leg|heit/a form/tag=NSD
        form/unit=word form/base=mog(e)legheit gram/pos=subst
    NSD[muligheita]: "muligheita" (stat/norm=nn) gram/def=def gram/gen=fem
        gram/inflclass=f1 gram/num=sg form/src=mulig|heit/a form/tag=NSD
        form/unit=word form/base=muligheit gram/pos=subst
23  #NSD[mulegheta]: "mulegheta" (# style/status=radical stat/norm=#invalid)
        form/usage=#invalid gram/def=def gram/gen=fem gram/inflclass=f1 gram/num=sg
        form/src=muleg|het/a form/tag=NSD form/unit=word form/base=muleghet
        gram/pos=subst
    NSD[muligheta]: "muligheta" (style/status=radical stat/norm=bm) gram/def=def
        gram/gen=fem gram/inflclass=f1 gram/num=sg form/src=mulig|het/a form/tag=NSD
        form/unit=word form/base=mulighet gram/pos=subst
25  #NPI[mog(e)legheter]: "mog(e)legheter" (# stat/norm=#invalid) form/usage=#invalid
        gram/gen[m]=masc gram/def=indef gram/inflclass=f1 gram/num=pl
        form/src=mog(e)leg|het/er form/tag=NPI form/unit=word form/base=mog(e)leghet
        gram/pos=subst gram/gen[f]=fem
    NPI[muligheiter]: "muligheiter" (stat/norm=nn) gram/gen[m]=masc gram/def=indef
        gram/inflclass=f1 gram/num=pl form/src=mulig|heit/er form/tag=NPI
        form/unit=word form/base=muligheit gram/pos=subst gram/gen[f]=fem
27  #NPI[mog(e)ligheter]: "mog(e)ligheter" (# stat/norm=#invalid) form/usage=#invalid
        gram/gen[m]=masc gram/def=indef gram/inflclass=f1 gram/num=pl
        form/src=mog(e)lig|het/er form/tag=NPI form/unit=word form/base=mog(e)lighet
        gram/pos=subst gram/gen[f]=fem
    NPI[mog(e)ligheiter]: "mog(e)ligheiter" (stat/norm=nn) gram/gen[m]=masc
        gram/def=indef gram/inflclass=f1 gram/num=pl form/src=mog(e)lig|heit/er
        form/tag=NPI form/unit=word form/base=mog(e)ligheit gram/pos=subst
        gram/gen[f]=fem
29  NPI[mulegheiter]: "mulegheiter" (stat/norm=nn) gram/gen[m]=masc gram/def=indef
        gram/inflclass=f1 gram/num=pl form/src=muleg|heit/er form/tag=NPI
        form/unit=word form/base=mulegheit gram/pos=subst gram/gen[f]=fem
    NPI[mog(e)legheiter]: "mog(e)legheiter" (stat/norm=nn) gram/gen[m]=masc
        gram/def=indef gram/inflclass=f1 gram/num=pl form/src=mog(e)leg|heit/er
        form/tag=NPI form/unit=word form/base=mog(e)legheit gram/pos=subst
        gram/gen[f]=fem
```

```
31  #NPI[mulegheter]: "mulegheter" (# stat/norm=#invalid) form/usage=#invalid
        gram/gen[m]=masc gram/def=indef gram/inflclass=f1 gram/num=pl
        form/src=muleg|het/er form/tag=NPI form/unit=word form/base=muleghet
        gram/pos=subst gram/gen[f]=fem
    NPI[muligheter]: "muligheter" (stat/norm=bm) gram/gen[m]=masc gram/def=indef
        gram/inflclass=f1 gram/num=pl form/src=mulig|het/er form/tag=NPI
        form/unit=word form/base=mulighet gram/pos=subst gram/gen[f]=fem
33  #NPD[mog(e)lighetene]: "mog(e)lighetene" (# stat/norm=#invalid)
        form/usage=#invalid gram/gen[m]=masc gram/def=def gram/inflclass=f1
        gram/num=pl form/src=mog(e)lig|het/ene form/tag=NPD form/unit=word
        form/base=mog(e)lighet gram/pos=subst gram/gen[f]=fem
    NPD[mog(e)legheitene]: "mog(e)legheitene" (stat/norm=nn) gram/gen[m]=masc
        gram/def=def gram/inflclass=f1 gram/num=pl form/src=mog(e)leg|heit/ene
        form/tag=NPD form/unit=word form/base=mog(e)legheit gram/pos=subst
        gram/gen[f]=fem
35  #NPD[mog(e)leghetene]: "mog(e)leghetene" (# stat/norm=#invalid)
        form/usage=#invalid gram/gen[m]=masc gram/def=def gram/inflclass=f1
        gram/num=pl form/src=mog(e)leg|het/ene form/tag=NPD form/unit=word
        form/base=mog(e)leghet gram/pos=subst gram/gen[f]=fem
    #NPD[muleghetene]: "muleghetene" (# stat/norm=#invalid) form/usage=#invalid
        gram/gen[m]=masc gram/def=def gram/inflclass=f1 gram/num=pl
        form/src=muleg|het/ene form/tag=NPD form/unit=word form/base=muleghet
        gram/pos=subst gram/gen[f]=fem
37  NPD[muligheitene]: "muligheitene" (stat/norm=nn) gram/gen[m]=masc gram/def=def
        gram/inflclass=f1 gram/num=pl form/src=mulig|heit/ene form/tag=NPD
        form/unit=word form/base=muligheit gram/pos=subst gram/gen[f]=fem
    NPD[mulegheitene]: "mulegheitene" (stat/norm=nn) gram/gen[m]=masc gram/def=def
        gram/inflclass=f1 gram/num=pl form/src=muleg|heit/ene form/tag=NPD
        form/unit=word form/base=mulegheit gram/pos=subst gram/gen[f]=fem
39  NPD[mog(e)lighetene]: "mog(e)lighetene" (stat/norm=nn) gram/gen[m]=masc
        gram/def=def gram/inflclass=f1 gram/num=pl form/src=mog(e)lig|heit/ene
        form/tag=NPD form/unit=word form/base=mog(e)ligheit gram/pos=subst
        gram/gen[f]=fem
    NPD[mulighetene]: "mulighetene" (stat/norm=bm) gram/gen[m]=masc gram/def=def
        gram/inflclass=f1 gram/num=pl form/src=mulig|het/ene form/tag=NPD
        form/unit=word form/base=mulighet gram/pos=subst gram/gen[f]=fem
```

Listing 6.19: Forms generated for the lemma *mulighet*

6.3 Valency and collocability

In order to describe the valency of some word, a syntactic theory is necessary and there are many different theories suited for different purposes. In traditional printed dictionaries for human users, the valency frames er often given in the form of a general (example) phrase, such as *to give someone something* or *to give something to someone*. Various types of basic syntagmatic and paradigmatic information about the possible collocates is implicitly given in such description: there are two arguments of the verb (not counting the subject, which is not mentioned), the argument represented by the pronoun *something* is usually realized as an inanimate thing, while the argument represented by *someone* or *to someone* is often realized grammatically as a prepositional phrase with *to* and semantically usually as a human being.

In the formalized system, this expression (phrase) can be described in the same way as the lemma, but now the task of the function (generator) of the *realization* object would be just to connect words into phrases. The example phrase can be described linearly as a single realization with three or four components: the verb (within the *lexical unit* object a local reference to the 'core' *expression* object is sufficient), a direct object represented by an open slot *(expression)* preferring realizations in the form of inanimate noun phrases, alternatively the preposition *to* (a reference to its *lexical unit* in the database) and an indirect object represented by an open slot preferring realizations in the form of noun phrases referring to humans.

A more structured syntactic description (in the form of a tree) would be preferred by most syntactic theories. For example, the representation of the construction *to give something to someone* would rather have three components defined: the *core* (verb) and two argument components (slots), where the second one would be realized by another realization referring to the *lexical unit* of the preposition *to*, actually to its valency frame (prepositional phrase). The question is where to put selectional preferences (and maybe grammatical constraints, if there were any) for the realization of the indirect object in this structure. They can either be defined as constraints for the primary slot (component expression) 'indirect object' in the main valency frame of the verb, or they can be defined as a modification (specification) of the valency slot in the referred prepositional phrase frame. The first place may be preferred in situations where several grammatical realizations of the slot are possible, because these preferences will probably be common to all the possible realizations (if not, it is preferable to speak about two different valency frames). The interpretation system then has to apply these preferences to the particular type of realization and thusto its open slot consequently (the preference of *human beings* does not concern the preposition *to* itself, but its complement). Besides, the realization (filler) of the 'indirect object' slot by a prepositional phrase does not need to be explicitly declared as a *realization* object referring to the particular prepositional phrase definition: the choice of prepositional phrase realization (filler) can also be enforced by the grammatical constraints in the slot – they can explicitly require realization by an expression classified as a *prepositional phrase with to*. The first solution is more natural for the perspective of traditional lexicography, however.

All components in the phrase (both open slots and fixed components) can be marked by their syntactic and semantic roles with an unspecified number of labels for different syntactic theories. These labels (in the form of features) can help to reconstruct the syntactic structures of the phrase even when it is defined as a linear structure only.

The possibility to distinguish fixed components from open slots and semi-open slots has already been discussed in chapter 5.1.4.

Nouns do not have arguments which are obligatory in the surface realization like verbs do. However, they can have (semantically obligatory) arguments as well, especially deverbal nouns. The Norwegian reference grammar (Faarlund et al., 1997) only describes the general structure of a noun phrase as consisting of four general components: *determiners, pre-modifiers, the core, post-modifiers*. These components can have different (and multiple) realizations, especially the last one. From the syntactic point of view, only the case of quantity nouns (e.g. *masse, flaske*) is discussed in more detail. These nouns can appear in construction consisting of two nouns, where it is not clear which one should be considered the core (syntactic head) and which is the modifier. This problem depends rather on particular syntactic theory. It is not specific to particular words and therefore not so much relevant for a dictionary. However, the concerned nouns should be marked by a special feature in the dictionary, at least. There are two types of quantity nouns in Norwegian: *primary* and *secondary quantifying* nouns. The first group is quite small and these nouns can even build phrases with other (secondary) quantifying nouns (e.g. *en masse flasker vin, et antall kasser epler*). They differ also in other small details that can play important role in the syntactic structure (agreement or paraphrases). Therefore it is important to distinguish between the two types.

The reference grammar also mentions that (deverbal) nouns can have prepositional phrases as objects. They usually use the same preposition as the corresponding verb (but not always, e.g. *håpe på* vs. *håp om*). These complements are word-specific and have to be defined in the dictionary.

For this purpose, there is a second *expression* object defined in the current model configuration for every lexical unit (see chapter 5.1.1). The object is identified by the key 'phrase'. *Realizations* of this *expression* object are the possible realizations of the valency frame of the lexical item. The listing 6.20 shows the (shortened[9]) definition of the possible valency patterns (the 'phrase' *expression* object) for the noun *makt* ("power") in the sense of some "ability".

```
1   <exp key='phrase'>
2     <real type='phrase' key='til_Comp'>
3       <gen>phrase</gen>
4       <exp key='core'>
5         <include>@THIS/core</include>
6         <f key='sem/label' value='CAP'/>
7       </exp>
8       <exp key='til_PP'>
9         <include>til_Pre/phrase</include>
10        <real type='phrase' key='PP'>
11          <gen>phrase</gen>
12          <exp key='Comp'>
13            <f key='sem/label' value='GOAL'/>
14            <constraint key='VinfP'>
15              <f value='VinfP' key='form/cat'/>
16            </constraint>
17            <constraint key='NP'>
18              <f value='NP' key='form/cat'/>
19              <f value='false' key='sem/human'/>
20            </constraint>
21          </exp>
22        </real>
23      </exp>
24    </real>
25    <real type='phrase' key='over_Comp'>
26      <gen>phrase</gen>
27      <exp key='core'>
28        <include>@THIS/core</include>
29        <f key='sem/label' value='CAP'/>
30      </exp>
31      <exp key='over_PP'>
32        <include>over_Pre/phrase</include>
33        <real type='phrase' key='PP'>
34          <gen>phrase</gen>
35          <exp key='Comp'>
36            <f key='sem/label' value='PAT'/>
37            <constraint key='NP'>
38              <f value='NP' key='form/cat'/>
39            </constraint>
40          </exp>
41        </real>
42      </exp>
43    </real>
44  </exp>
```

Listing 6.20: Definition of the valency patterns for the noun *makt*

There are two realizations of the *phrase*: one with the prepositional phrase using *til* (lines 2–24) and one using *over* (25–43). Both *realizations* are using the *phrase* function (generator), indicating that the resulting expression is a multi-word construction. Both *realizations* have two components: the noun itself (by means of local reference[10] to the 'core' *expression* of the unit, i.e. to the lemma itself; lines 4–7 and 27–30) and a slot for a prepositional phrase (lines 8–23 and 31–42). The latter slots import the definitions of valency frames (phrases) from the units defining the prepositions *til* and *over*. The prepositions have valency patterns realized as phrases with two components again: the first one referring to the preposition itself and the second one to its complement. These patterns are imported as realizations of the slots for the prepositional

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[9]Frequency information has been removed.

[10]The symbol *@THIS* refers to the current lexical unit.

phrases, and they are further modified by the locally defined partial expressions with the key *PP*, in order to specify more closely the possible complements in the prepositional phrases (the expressions of type 'Comp' at lines 12–21 and 35–40); the slots referring to the prepositions themselves are not mentioned at all, because there is nothing to modify there and they will just be imported. But for the complements, the constraints on their fillers must be specified: the prepositional phrase with *til* can have complements in the form of an infinitive construction (constraint defined at lines 14–16) or a generic noun phrase (lines 17–20). The noun phrase should preferably refer to an *inanimate* entity (as specified by the feature at line 19). The prepositional phrase with *over* can only have complements in the form of a noun phrase (only one constraint for the slot defined at lines 37–39). The animacy or humanity of the complement is not specified any more, because the complement can be of two types: human being or a group of them (as a community) or some geographical area, where someone's power is effective. There are also features (of type *sem/label*) defining which semantic roles are expressed by the components.[11] In both valency patterns, the noun *makt* refers to the element labelled as *CAP* (=capability, lines 6 and 29). The complements of the prepositional phrases have slightly different roles, however: the complement following the preposition *til* refers to the conceptual element labelled as *GOAL*, while the complement of the preposition *over* refers to the element labelled as *PAT* (=patient).

A problem can arise if the database is created for different kinds of dictionaries at the same time. For some purposes, a word in a particular sense can have more valency frames that are virtually equivalent. But for some other purpose (e.g. translational sub-senses), some kind of semantic difference can be necessary to distinguish between the usage of some of the two (or more) valency frames defined at a higher level. A similar situation can arise any time there are different valency patterns defined for the lexical unit, but there are particular tendencies indicating the preference of one of the frames in one sub-senses and another one in other sub-sense of the word – it may often be a more or less strong preference (tendency), if not really a clear distinction.

In such a case, the more specific sub-senses would need to inherit only one of the patterns defined by the parent or to invalidate the other ones (i.e. the inheritance principle should be broken). In real word, these sub-senses become more important for the particular dictionary and the parent plays no important role any more. The parent will not be shown in the dictionary at all, and the information extrapositioned into its lexical unit must be distributed back among its children.[12] In such a case, there must either be a way to invalidate inherited objects or the interpretation must only consider inherited frames that are explicitly confirmed by the child. In the current implementation a modified approach to the last mentioned one was chosen: the inherited frames are considered valid for the children by default as long as there is no explicit declaration (in the form of a special feature) listing the frames preferred in the more specific meaning. Otherwise, only the listed frames are considered as relevant contexts for the unit. This solution also fits better the second type of situation, where there is really just a preference of a particular valency pattern, but the preference is rather a tendency than an exclusive indication of the particular sub-sense. If the valency patterns really have the ability to accurately disambiguate the meaning, they should be always defined within the specific sense (unit).

---

[11] These are arbitrary semantic roles used in the descriptions of the lexical frames as explained in chapter 7. They do not refer to any particular theory.

[12] It means that from the point of view of the particular dictionary, the inheritance is not broken, because the extrapositioned definition of the patterns is irrelevant, the common unit (parent) should be ignored and the definitions transferred to the proper sub-senses.

One example is the definition of the noun *sjanse* ("chance", see chapter 7.4.2). Both the prepositions *til* and *for* are used to introduce the complement of the noun and at first sight, the semantic difference seems to be very small. But the corpus data shows a strong tendency to use the preposition *for* in the meaning closer to "probability of some situation occuring / achieving some goal", but the preposition "til" in the meaning closer to "favourable conditions / opportunity to achieve some goal". It is not a sharp distinction in the sense of "either-or", however. Actually, the two meanings cannot be clearly distinguished in all cases. The tendency is just a *preference*. The two valency patterns are thus defined at the top level, within the unit of the lemma itself. The two (sub-)senses each select one of the patterns as their preference, but the use of the other one is not completely excluded. The vagueness is kept. In an ideal dictionary, the preference would also be quantified, of course.

A shortened definition of one sub-sense of the noun *sjanse*, identified by the key 'anledning' is shown in listing 6.21.[13] It inherits both valency patterns from its parent, the lexical unit of the lemma, but it explicitly selects the realization with the key 'til_Comp' as its preferred realization of the complement (line 2). This inherited realization is also closer specified (modified) by the sub-unit (lines 4–17). The modification has only one goal: to specify the semantic roles of the components. The noun itself is here identified with the conceptual element *COND* (=conditions, circumstances; at line 7) and the complement as the element *GOAL* (at line 13). The rest of the structure is just a copy of the obligatory definitions to match the inherited one and locate where to put the new information into the inherited structure.

```
   <lunit name='anledning' type='subsense'>
2    <f key='select/phrase' value='til_Comp'/>
     <exp key='phrase'>
4      <real type='phrase' key='til_Comp'>
         <gen>phrase</gen>
6        <exp key='core'>
           <f value='COND' key='sem/label'/>
8        </exp>
         <exp key='til_PP'>
10         <real type='phrase' key='PP'>
             <gen>phrase</gen>
12           <exp key='Comp'>
               <f value='GOAL' key='sem/label'/>
14           </exp>
           </real>
16         </exp>
       </real>
18     </exp>
   </lunit>
```

Listing 6.21: Definition of the first sub-sense of the noun *sjanse*

6.4 Multi-word expressions

For multi-word expressions (constructions and collocations of all types), it may often be difficult to distinguish between the 'lemma' (i.e. some fixed core of the construction) and the 'valency pattern' (i.e. some complements). A partially fixed collocations such as *en tanke for / flakket / skjøt gjennom <ens> hode, la <noen> få viljen <sin>, prokázat velkou / větší / mimořádnou / pozoruhodnou odvahu <něčím>* or *vzít / brát <někomu> chuť do <něčeho / k <něčemu>* may have less and more variable components as well as completely free slots. In terms of the defined framework, they are

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[13]See appendix for the full listing.

constructions consisting of a sequence of slots: some of them are fully fixed, some are
more or less modifiable and some are completely open (the complements). There is no
point in using the 'core' *expression* object of the lexical unit; the whole pattern can be
declared at once as a realization of the 'phrase' *expression*.

The listing 6.22 shows the full definition of the fixed expression *påtvinge noen sin
vilje* ("impress one's will upon somebody"; Czech: "vnutit někomu svou vůli").

```
1   <lunit name='påtvinge_vilje_MWE' type='lemma'>
      <exp key="phrase">
3       <real key="VP" type="phrase">
          <gen>phrase</gen>
5         <exp key="V">
            <real key="påtvinge" type="word">
7             <include>påtvinge_V</include>
            </real>
9         </exp>
          <exp key="ADDR">
11          <constraint key='NP'>
              <f value='NP' key='form/cat'/>
13            <f value='true' key='sem/human'/>
            </constraint>
15        </exp>
          <exp key="PAT">
17          <real key="NP" type="phrase">
              <gen>phrase</gen>
19            <exp key="poss">
                <real key="sin" type="word">
21                <include>sin_Pro</include>
                </real>
23            </exp>
              <exp key="N">
25              <real key="vilje" type="word">
                  <include>vilje_N</include>
27                <form key="NSI">
                    <f key="form/src" value="vilje"/>
29                  </form>
                </real>
31            </exp>
            </real>
33        </exp>
        </real>
35    </exp>
      <link key='trans/cs' ref='ůvnutit_vli_MWE'/>
37  </lunit>
```

Listing 6.22: Definition of the fixed expression *påtvinge <noen> sin vilje*

The multi-word lemma defines only the *expression* object 'phrase' with one *realiza-
tion*. The *realization* has three components (slots): the first one (lines 5–9) has a fixed
realization by the verb *å påtvinge* (its particular form is not constrained, however); the
second slot (lines 10–15) is an open slot expressing the addressee of the action, con-
strained to a noun phrase (line 12) referring to some human being (line 13); the third slot
is fixed again, realized by the noun phrase *sin vilje*. The realization of the expression
sin vilje has two components: the first one is realized by the (reflexive) possessive pro-
noun *sin*, which is not constrained in form, but must agree with the noun *vilje* in gender
and with the subject of the verb in person (rules on agreement are not encoded in the
description, of course); the second slot is filled by the noun *vilje*. The tree-structure of
the description hence follows a basic principle of syntactic clustering.

6.5 Polysemy

The principles of dividing polysemy on different levels of specificity has already been
explained in detail in chapter 3 and more generally in 4.2. Three types of *lexical units*

related to senses have been defined on the base of the most general classification: *sense, sub-sense* and *translational sense*. Their role is different by their purpose: *senses* are (merely) clearly distinct senses, usually easy to distinguish from each other (i.e. where the rules defined by Cruse (2000) apply); *sub-senses* are more specific meanings which can overlap a lot and sometimes they are only results of modifications enforced by the context; *translational senses* are the finest meaning distinctions which are not distinguished by native speakers, until translation (and contrast with another language) is necessary. In addition, two abstract types were defined, which do not represent senses, but clusters of senses: general *abstracts*, usually used for clustering senses with common formal behaviour (same syntactic class, valency, etc.), and *translational abstracts*, clustering senses which have a common equivalent in the other language and the distinction of (monolingual) senses is not necessary (e.g. in a pocket dictionary).

The listing 6.23 shows only the skeleton of lexical units in the tree structure building the entry for the noun *kraft* (see chapter 7.6.3 for details). Only the links to Czech equivalents are kept.

```
1  <lunit name='kraft_N' type='lemma'>
     <lunit name='energi' type='abstract'>
3      <lunit name="egenskap" type="trans-abstract">
         <link key='trans/cs' ref='síla_N:kvalita:vlastnost'/>
5        <lunit name='evne' type='sense'>
         </lunit>
7        <lunit name='effekt' type='sense'>
         </lunit>
9      </lunit>
       <lunit name='vesen' type='sense'>
11       <link key='trans/cs' ref='síla_N:kvalita:bytost'/>
       </lunit>
13   </lunit>
     <lunit name='gyldighet' type='sense'>
15     <link key='trans/cs' ref='platnost_N'/>
     </lunit>
17 </lunit>
```

Listing 6.23: Definition of the tree structure of lexical units for the lemma *kraft*

The root unit of the lemma (named *kraft_N*) has two sub-units: the second one (named *gyldighet*) is the special sense bound to the juristic domain, attributed to nouns such as *law* or *rule* and corresponds to the Czech noun *platnost*; the first one (named *energi*) is an abstract cluster of three senses, but the first two of them are yet again clustered in a translational abstract, linking them both to the corresponding sense of the Czech noun *síla*, while the third sense is separately linked to another sense of the Czech noun *síla*.

In practice, the distinction of the different types is often classified merely arbitrarily or intuitively than on the base of clear rules, which are not always applicable. The types are rather of theoretical interest than a real practical utility. But they could play an important role in a possible process of reducing the structure into some limited type of dictionary, where some types of distinctions are relevant, but other irrelevant. The classification then must be clearly aimed at such particular goals, though.

6.6 Semantics, relations and references

There are different theories on how to describe the meaning of words, but none of them is able to solve the problem completely yet. Most theories rely either on specific semantic features classifying the meaning by some elementary qualities (for nouns the basic difference between countable and mass nouns is usually made), (lexical-semantic)

relations between the meanings of the words, or relations between the meaning and some conceptual structures, ontologies or other systems of knowledge representation. The basic semantic qualities can be defined by simple features. But features do not even allow for building a dynamic hierarchy of their values, as ontologies do. Therefore an alternative method for connecting the lexical units to each other and to any more complex external resources is necessary.

The meaning of an expression can also be described by relations to other expressions (antonymy, synonymy, hyponymy, etc.). This traditional type of relations is often used in printed dictionaries. The translational relation is not only the main purpose of a bilingual dictionary, but also a way to describe meaning.

One of the important features of every database, and especially a lexical database, are cross-references or relations of any kind – in the case of a lexical database relations between lexical units. A general *link* object (see definition in 5.1.8) can be used for all the different purposes: tracking lexical-semantic (paradigmatic) relations, interlingual equivalence (translational relations), but also syntagmatic relations (e.g. collocations). The *link* can be used to refer to external resources as well.

6.6.1 Lexical-semantic relations

There are not enough entries in the current database to build a reasonable semantic network. However, the senses in a dictionary can be often very easily and intuitively distinguished by a semantic relation. The Norwegian noun *vann* has two major senses: "water" and "lake". The sense "water" can be quickly identified by a hyponymic relation to the noun *væske* ("liquid"), while the sense "lake" can be recognized in the same way by a relation of synonymy (e.g. to the word *innsjø*). This information is extremely efficient for human users, and therefore it is frequently used in the form of *glosses* or *sense indicators* in dictionaries.[14] It would be probably insufficient for a NLP system that might need more detailed information or more extensive relations between concepts.

In the current description there are a few nouns which are – in some of their particular meanings (senses) – synonymous with another noun. For example, the two sub-senses of the noun *sjanse* (see chapter 7.4.2) can be quickly identified (and in most contexts easily substituted) by the synonymous nouns *anledning* ("opportunity") and *sannsynlighet* ("probability"). The noun *sjanse* joins both aspects, but in some contexts it overlaps more with the meaning of the first synonym, while in other contexts it overlaps more with the meaning of the other synonym. The lexical unit of the first sub-sense thus contains the link object `<link key="sem/syn" ref="anledning_N"/>` and the lexical unit of the second sub-sense contains the link `<link key="sem/syn" ref="sannsynlighet_N"/>`.

The relation of synonymy is so general, that it may need a closer specification of which aspects of the two expressions are synonymous and which aspects are not synonymous. The *link* object can contain features and such information may be provided by them.

6.6.2 Translational (equivalence) relations

Translational links are expected to link senses (lexical units) between two languages which closely correspond to each other, so that they can be considered (more or less

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[14]Both monolingual and bilingual. See Atkins and Rundell (2008, 444 and 511) or Svensén (2009, 214, 262)

equivalent). The links can connect meanings expressed by differently complex constructions: morphemes, words or multi-word expressions. In the same way as lexical-semantic relations, (sub-)senses can be linked at different levels of depth. The link must hence describe the full path to the target *lexical unit* from its root unit, because the names are only expected to be unique in the scope of one parent unit. The names are separated by a colon, so that the equivalence link `<link key='trans/cs' ref='síla_N:kvalita:bytost'/>` within the personified sense of the Norwegian noun *kraft* (see 7.6.3) links to the equivalent personified sense (unit) with the name 'bytost' ("being"), a child of the abstract group (unit) named 'kvalita' ("quality"), a child of the lemma (root lexical unit) 'síla_N'.

It may be necessary to link to some particular form of some lemma as well. The proper systematic solution would be to create a special translational sub-sense of the target lemma, restricted just on the particular form of the lemma for the purpose of translation. But for simplification within the limited requirements of the current analysis, the possibility to symbolically link to some particular inflectional form of the target unit has been defined as well. The collocation *med makt* ("by force") corresponds to the use of instrumental case of the Czech nouns *síla* or *násilí* (see chapter 7.7.2). The lexical unit *med_makt_MWE* thus contains two translational links: `<link key='trans/cs[silou]' ref='síla_N/NS7[silou]'/>` and `<link key='trans/cs[násilím]' ref='násilí_N/NS7[násilím]'/>` — they refer directly to the inflectional form of singular instrumental, named 'NS7'.

The translational links may also contain features, which can be used to specify closer the type of equivalence, e.g. in case when it is a partial equivalence and there is a possibility to define in which aspect it is partial: for example that the target equivalent is in a hyponymic or hyperonymic relation to the source expression, that there is some significant stylistic, pragmatic or other difference, etc. Even though such differences should theoretically be derivable from detailed balanced descriptions (see chapter 4.1), in practice it may not always be the case. This possibility has not yet been used in the limited scope of the current analysis, though.

The differences between the two units may be of a relational type as well. In cases where the two units are not described according to the same syntactic theory, their complements may be labelled differently and it may be necessary to specify, which complements are equivalent to each other (play the same role in the concept). It may also happen, that the two lexical structures use different perspectives on the same conceptual structure and if the common deeper conceptual structure is not defined, it may be necessary to link the parallel elements of the two lexical structures together. This will be the case where the complements are only labelled according to their surface syntactic function, e.g. as *subject* or *object* of some verb. For example, the Czech reflexive verb *líbit se* corresponds to the Norwegian verbs *å like* ("to like"), but their surface syntactic arguments have their deeper roles interchanged: the subject of the Czech verb refers to the same conceptual element as the object of the Norwegian (and English) verb, and vice versa. If the common deeper roles of the complements are not labelled using the same theory (identical labels), they cannot be matched. In such a case, the *map*ping object can be used as a parameter of the translational link. An example of such link from the lexical unit of the verb *líbit se* to the lexical unit of the verb *å like* can be illustrated by the listing 6.24.

```
1  <link key="trans/no" ref="like_V">
     <map key="sub" loc="subject" rem="object"/>
3    <map key="obj" loc="object" rem="subject"/>
   </link>
```

Listing 6.24: Mapping of arguments from the verb *líbit se* to the Norwegian verb *å like*

This capability has not been used in the current analysis, because only consistent labels of conceptual elements are used for all elements.[15]

6.6.3 Collocations as links

Links can be used to specify the syntagmatic behaviour of some expression as well. The only limitation is, that a *link* can connect two lexical units only – more complex collocations cannot be described by simple links. In case of Norwegian nouns, collocations with frequent adjectives (as attributes) and support verbs can be very important for the description of the behaviour of the noun, as well as its meaning (the common context where it is used). The collocational links share a common category *col*, with currently used subtypes: *col/Vsup* for support verbs, *col/Aatr* for adjectival attributes and *col/Natr* for nominal (genitive) attributes.

The collocations can also be more closely specified through the features (or usage) of the link. Frequency or any other statistical value can be recorded to indicate the relevance of the collocation. For support verbs, the link can also specify features such as the temporal *aspect* or *causativity* of the whole verbo-nominal construction. The listing 6.25 shows a definition of the link between the lemma *behov* (as the *node*) and the verb *å skape* (as its collocate).

```
<link key='col/Vsup[skape]' ref='skape_V'>
2   <f key='sem/aspect' value='inch'/>
    <f key='sem/caus' value='true'/>
4 </link>
```

Listing 6.25: Collocational link from the noun *behov* to the verb *å skape*

The collocation *skape behov* ("create demand") is possibly a good candidate for a fixed expression or a term from the domain of economy. The features in the presented example indicate at least, that the collocation has an *inchoative* aspect (line 2) and that it is *causative* (line 3), too.

6.6.4 Mapping to external resources and other theories

The collocational link in the previous section does not indicate one important feature of the collocation *skape behov*: that the noun becomes (most frequently) the syntactic object of the verb, and not for example its subject. This relation can be declared by a feature, or more generally by a mapping element. Mapping can provide links between several elements and this feature can be used to link the expressions to external resources, too. The listing 6.26 shows a link from the noun *možnost* ("possibility") to the verb *dát* ("to give"). It also provides mapping to *Vallex* lexicon of valency of Czech verbs at the same time.

```
<link key='col/Vsup[dát]' ref='dát_V'>
2   <map key='self' loc='#self' rem='PAT'/>
    <map key='poss' loc='POSS' rem='ADDR'/>
4   <f key='sem/aspect' value='inch'/>
    <f key='sem/caus' value='true'/>
6 </link>
```

Listing 6.26: Collocational link from the noun *možnost* to the verb *dát*

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[15]Actually, there may be multiple role labels used to refer to the (principally) identical conceptual elements in the analysis (chapter 7) and this identity is not explicitly defined anywhere, yet. So, the *map*pings would actually be appropriate in some cases.

The link defines that the noun itself becomes the PAT (patient) argument of the verb, while the local element POSS (*possessor* of the *possibility* and [Actor] of embedded modal proposition, see chapter 7) is mapped to the ADDR (addressee) argument of the verb. Mapping the *possessor* (and [Actor]) is important, because this element is the controller for the possible infinitive construction complementing the noun.

Syntagmatic links can also be defined in the form of *Lexical Functions*.[16] E.g. the lemma *možnost* can define the relation to the verb *mít* ("to have") as the Lexical Function *Oper1* by a link `<link key='LF/Oper1' ref='mít_V'/>`. However, this approach has not been used here, since linking to an existing and established resource (*Vallex*) was preferred.

6.7 Examples

The problem of examples has already been mentioned in 3.2: examples in dictionaries serve different purposes and they must be treated according to their purpose. Examples presenting actually some fixed expressions (though just partially fixed) have their own meaning and must be treated as independent lexical units (lemmata), even though they may be nested under some other entry in the resulting dictionaries. Random examples with the only purpose to illustrate the use of the given lemma (possibly in a particular sense) may only be recorded as a kind of *features* with longer string contents. For this purpose, a special object type *example* has been defined (see 5.1.10), but it has only been used for demonstration in the description of the lemma *mulighet* (see chapter 7.2.2), where it is used to list some typical concordances from the corpus, illustrating the different sub-senses of the lemma.

In lexicographical practice, examples are used to indicate indirectly (implicitly) some other features of the lemma, e.g. its typical valency, collocability, semantic prosody, register, etc.[17] As already mentioned before, this is against the principle of explicitness: the dictionary relies purely on the user and his (magical?) ability to guess, which parts of the example should indicate some typical use (valency, collocability or just semantic prosody) and which parts are completely random in order to complete the example or to show that its components are not fixed and can be freely modified. The requirement of explicitness demands a more formalized, explicit definition of such features as individual and clearly typed *features* or relations *(syntagmatic or paradigmatic links)* of the lexical unit.

In cases where the examples still have to be used (or are demanded for some types of dictionaries) and the features cannot be defined otherwise, the description in the form of a separate lexical unit should be used as well, defining the string within its 'phrase' *expression* component and defining for each slot (word or other component) the role thereof: a random component, a prototypical representative of some semantic (or syntactic) class, etc.

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[16]Cf. Kahane (2003); Wanner (1996).
[17]Cf. Atkins and Rundell (2008, 453 ff.) and Svensén (2009, 285 ff.)]

Chapter 7

Contrastive description of selected nouns

7.1 Selected nouns and methods of description

To illustrate the basic possibilities and limits of the framework, a list of selected nouns has been analyzed and described within the framework: the model (defined in 5) and its current implementation based on the specifications from chapter 6. The entries should present a possible solution for basic requirements of a bilingual dictionary and a monolingual description that would give a speaker of a foreign language basic idea about the use of the selected word, including valency patterns, the most typical (and possibly unexpected) collocations and more or less fixed expressions and idioms. In order to stay within reasonable limits, the collocations and fixed expressions have been described in a simplified way only, but hints about further possibilities of more detailed description have been given.

The purpose of this chapter is not to present complete and exhaustive dictionary entries for the given words, but to illustrate the possibilities of the framework and solutions to common problems. The descriptions may therefore break consistency in some cases, in order to illustrate additional or alternative possibilities on suitable examples, where such opportunities appear. The same applies to more general problems outreaching the scope of this limited study. The model offers usually several different possibilities how to solve some problem and describe one feature, and the solutions presented here may thus not always be the best ones when considered in a wider context.

The methods used are relatively conservative: mostly manual evaluation of corpus concordances compared with information from existing reference works (monolingual and bilingual dictionaries).

7.1.1 Selected nouns

A group of 20 Norwegian "modal nouns" was selected for the description, together with 20 of their closest Czech counterparts. This group of nouns was chosen for their relative compactness in semantic and syntactic behaviour, limited amount and rich characteristics especially in the field of verbal collocability (taking part in the so called "Support-Verb-Constructions", SVC) and valency - the nouns frequently take infinitive constructions as their complement and use different prepositions to connect the

complements. Because the term *modal nouns* is not well established (and for many it may seem even contradictory), it needs a closer explanation:

Although there is no clear definition of *modality* that everyone would agree on (cf. Palmer, 1986; Nuyts, 2005, 2006 and especially Boye, 2005, 49 and 53 ff.),[1] nouns are hardly ever mentioned as participants in this field.[2] There are both logical, grammatical and semantic approaches to modality, but the phenomenon generally seems to point also into the field of pragmatics, since modality operates above the level of pure proposition.[3] A wide definition of modality has been given by Rescher as a qualification[4] of a (subjected) proposition, which becomes itself a new proposition (Palmer, 1986, 12). However, tense and aspect are usually excluded from this wide field as their own categories (Nuyts, 2006, 1; Nuyts, 2005, 5; Palmer, 1986, 12). De Haan, taking a typological approach to modality, considers an element to be modal if it has modal meanings (de Haan, 2006, 28). But there is no consensus as regards the delimitation of modal meanings either. Most scholars, however, accept the main modal meanings covered by the traditional categories of dynamic, deontic and epistemic modality, sometimes excluding some of their subcategories or delimiting their domains in different ways.[5] Modality is then only being defined as a cover term for (or a listing of) more specific semantic categories (Nuyts, 2005, 7). Lately, Boye (2005) tried to describe a conceptual structure common to all the commonly accepted modal categories, which offers a more unified method for description of the semantic principles behind modality. His approach is similar to the one used here to describe the conceptual frames.

Nouns themselves cannot operate on the level of the whole proposition they take part in. But they can denote the abstract concepts behind modality and their different elements. In constructions with verbs (usually verbs with more or less auxiliary function, building verbo-nominal constructions or SVCs), such nouns can even replace modal verbs. As part of a prepositional phrase (syntactically free, adverbial adjunct), they can replace modal adverbs. An important and exclusive feature of such nouns is the ability to take infinitive constructions or even embedded clauses as complements. In such a case these nouns usually play two roles: 1) they refer to the proposition as whole (in an anaphoric manner similar to pronouns), and 2) they project modality (the type denoted by their meaning) into the proposition, at the same time. If the proposition is given only in the form of an infinitive construction, the subject of it is also being controlled by the noun. These nouns make it also possible to embed the given proposition (which becomes a modal proposition with their assistance) one level deeper, into another proposition. Even when they stand alone and without an explicit complement, there is still some implicit proposition they refer to. It may remain underspecified, though. Underspecification of the participants in the embedded proposition (concept) is in fact a quite common feature of such nouns as well, unlike their verbal counterparts that usually require their complements to be explicitly specified. On the other hand, the nouns usually specify very exactly the type of modality they refer to (unlike the verbs).

This group of nouns has been previously mentioned in Czech linguistics. Šmilauer

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[1] "One result of this is that the term has lost its value as a tool for linguistic research. Whenever you want to use it, you have to define it anew." (Boye, 2005, 53)

[2] Nuyts (2005, 15) mentions also adjectives in predicative use, but not nouns which can play a very similar role in such context.

[3] Sometimes modality is almost identified with grammatical categories like mood, sometimes such categories are more or less excluded from modality because of their grammatical nature. (cf. Nuyts, 2006; Palmer, 1986, 8; Palmer 1986, 21–23)

[4] Or "modification", hence the term *modality*. (Boye, 2005, 50)

[5] Questionable is e.g. the status of "volition" (Nuyts, 2006, 9) or the situational type of dynamic modality (Nuyts, 2006, 4).

(1947, 185–186) tried to collect a list of them and classify them into different semantic groups in his monograph on modern Czech syntax. He also called them "modal nouns" (in the widest sense of the term). The collection is based on their exclusive ability to take infinitive as its attribute. (Svoboda, 1962, 100–105) wrote a whole chapter about the use of infinitive as attribute in his monograph on infinitive. The problem of control in these constructions has been thoroughly analyzed by Panevová (2011).

While the group still has no clear borders and a relatively large number of possible members, a further more limited group of nouns was selected from the range of nouns referring to situations and conditions allowing or motivating (from inside, not by outer force) someone to some action. In the classification of Šmilauer (1947), those nouns belong mostly to the classes: *Possibility*, *Ability* and *Will*. The preference was given to nouns from the language core, having at least a slightly different meanings. Synonymic derivatives of different synonymic adjectives [6] have been avoided.

The main emphasis is on the description of the Norwegian nouns, but in the interest of creating really comparable, symmetrical descriptions, the Czech nouns have been analysed and described in the same way. The specifications for the description of Czech nouns have not been developed into such a detail and completeness as in the Norwegian part (cf. chapter 6), but basically the same principles can be used for both languages.

7.1.2 Conceptual frames

The description of conceptual frames is inspired by the ideas of Sowa (1993) and frame semantics (e.g. the FrameNet project[7]). However, the frames of the analyzed nouns (or related concepts) defined in the FrameNet[8] were not found very suitable and useful for the current task. Another approach was therefore taken, which is based on ideas similar to the approach of Boye (2005): all the analyzed nouns refer to some relation between an *actor*, a *goal* that the actor wants to achieve (or avoid) and some *conditions* that allow (or even motivate) the actor to realize the *goal*. These three basic elements can be related to each other in different configurations, and they can be seen from different perspectives (e.g. time, event, situation, etc.). Even one single noun can change the perspective slightly in different contexts.

The point of the conceptual analysis is to help to specify the elements of the conceptual frames, their identification with the noun itself and its complements, the possibilities of shifting perspective of the noun or even its reference to the different elements (i.e. metonymical shift). This analysis helps to identify and distinguish different senses and sub-senses of the nouns and their different valency patterns.[9] The frames are not supposed to be formalized here or used for other purposes – their role is solely to help with the lexical analysis and comparison.

The elements of the valency frames are named according to the need of this analysis (and comparison) and do not correspond to any particular established theory (of semantic roles). Element names are enclosed in brackets and start with a capital letter. For the purpose of simplification, the names have been generalized, unified and reduced in number as much as possible. Different semantic perspectives of one element were still assigned multiple labels where relevant for the meaning.[10] The [Actor] is always

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[6]E.g. the simple Norwegian noun *mot* has several potential synonyms derived from different adjectives referring to courage: *dristighet, djervhet, tapperhet,* etc.

[7]See e.g. Fillmore et al. (2003); Johnson and Fillmore (2000) and Ruppenhofer et al. (2010).

[8]As found in the database at `http://framenet.icsi.berkeley.edu/` in spring 2010.

[9]The utility of this approach was well demonstrated e.g. by Fillmore and Atkins (1994).

[10]See e.g. the conceptual frame for the noun *anledning* in 7.3, where the common element of favourable

the primary participant in the embedded proposition where the modality applies, independent of whether he or she is active or passive (experiencer, etc.) or how he or she is expressed in the current utterance (subject, object, possessor, beneficiary, etc.). The permissive or favourable conditions [Cond] can refer to some special situation, abilities or even own will of the [Actor]. The final [Goal] can be a real intention of the [Actor] or just a potential. The [Actor] can often be generalized or underspecified and in that way the [Goal] becomes just some passive (e.g. natural) event or incident that is desired, discussed or feared by someone else. The list of nouns includes also nouns referring to imagined events only, where the [Image] itself replaces the *conditions* and determines the [Goal]. The [Image] can thus become the [Force] that motivates the [Actor] to achieve the [Goal]. A fourth element can also come into play: it can either play role of an instrument [Instr] necessary to reach the [Goal] or an object (patient [Pat]) of the activity being the [Goal]. So, the elements can appear in slightly different configurations and can be seen from different perspectives. The descriptions of conceptual frames are therefore influenced by the particular lexical frames of the particular Norwegian and Czech noun.[11]

7.1.3 Monolingual description

The monolingual description refers to monolingual dictionaries available for Norwegian and Czech. Their description will be compared to the evidence acquired from the corpora.

For Norwegian, the dictionaries *Bokmålsordboka* (Bokmålsordboka, 2006), *Norsk Riksmålsordbok* (Knudsen et al., 1995) and *Norsk ordbok* (Guttu, 2005) are used as reference works, in their electronic form available at the site of the University of Oslo[12] and at the website Ordnett.no.[13] The older dictionary *Norsk Riksmålsordbok* does not reflect the real modern language very well any more, but it is the largest dictionary and can be compared to the information provided by the newer dictionaries, which seem to be (at least) inspired by it (as the comparisons show). The dictionaries *Bokmålsordboka* and *Nynorskordboka* (Nynorskordboka, 2006) are used as the primary reference works, especially since they reflect the current orthography and are being updated regularly.

For Czech language, the only extensive dictionary available is the obsolete *Slovník spisovného jazyka českého* (SSJČ),[14] which unfortunately contains a lot of very outdated information, while missing important updates at the same time. It has been digitalized at the Masaryk University in Brno and the electronic edition has been used in this analysis.[15] In rare cases, the smaller *Příruční slovník jazyka českého*[16] (PSJČ) dictionary (available from the same electronic source) is referred as well.

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conditions [Cond] can be closely connected to some [Event] and/or point in [Time] (of the *event*), or where the [Event] can be understood even as some kind of motivating [Cause].

[11]The frames for the Czech and Norwegian noun can differ as well, see e.g. the nouns *sjanse* and *šance* (7.4).

[12]*Bokmålsordboka* (and *Nynorskordboka*) is freely available in the electronic edition by *Dokumentasjonsprosjektet* at `http://www.dokpro.uio.no/ordboksoek.html`. The current edition corresponds to the printed edition is from July 2005, but it has been updated in 2006.

[13]See `http://ordnett.no`. The service is provided commercially by the Norwegian publishing house *Kunnskapsforlaget*.

[14]Havránek et al. (1971)

[15]The dictionary is freely (non-commercially) available to registered users by the Center of Natural Language Processing of the Faculty of Informatics, Masaryk University in Brno. See `http://deb.fi.muni.cz/debdict/`.

[16]Havránek et al. (1957)

The descriptions from the monolingual dictionaries have been freely paraphrased into English. Original words are quoted only where appropriate (e.g. when the dictionaries refer directly to the other nouns analyzed here, as to the synonyms of the described noun).

A comment on the morphological structure or origin of the nouns has rarely been provided where it can be of any interest. Most of the words are implicit or explicit derivatives, but even those with a very productive suffix do not have their stem (base) significantly semantically influenced by other related words. All the analyzed nouns are well established lexical items, central to the language.

7.1.4   Valency patterns and distribution

The valency patterns have been classified on the base of a detailed manual corpus analysis. For both languages, the most current (as of the time of the analysis, i.e. spring 2010) and complete corpora have been used. The Norwegian data have been acquired from *Leksikografisk bokmålskorpus*[17] (LKB or LBK)[18], which is a corpus under development and at the time of writing contained around 40 mil. words. The data for Czech have been acquired from SYN2005,[19] a 100 mil. word reference corpus, through the web-interface *Bonito2*.

The frequency of all the valency (and important collocational) patterns was acquired and presented both in absolute and relative numbers. The appearance of singular and plural forms of the noun has been examined for most of the patterns as well, but usually it does not say much about the semantics and abstractness of the noun; except of special fixed constructions, even the most abstract meanings can be used in plural, e.g. when the noun refers to repeated (or generalized) appearance of the favourable *conditions* (situation) for achieving some *goal*. A general preference of singular form in connection with infinitive as complement can be noticed and probably explained semantically and pragmatically: The verbs usually refer to some one-time (perfective) action or goal, while nominal complements often refer to more general, abstract or repeated goals (events).

The prepositions (and complements generally) are usually searched on the position immediately following the noun. The Norwegian infinitive particle *å* (as an indicator of a following infinitive construction) is usually searched both on the first and the second position following (after the preposition), because free sentence adverbs (or particles) can be placed in front of them. This search has a more limited effect in Czech, which is a language with a very free word order and where the complements can stay almost anywhere in the sentence. More exact statistics could therefore be acquired from a treebank only.

The question of substantive valency is quite problematic because of the fact, that no nominal complements are actually (on the surface) obligatory (cf. Panevová, 2000, 2002). The tests for semantic obligatoriness[20] seem to be still useful, but in real usage the semantic arguments can be generalized, specified by anaphoric or contextual means or underspecified. Unfortunately, the current research on substantive valency is mostly

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[17]Leksikografisk bokmålskorpus (2010). Provided freely to registered users by Tekstlaboratoriet, University of Oslo, at `http://www.hf.uio.no/iln/tjenester/sprak/korpus/skriftsprakskorpus/lbk/`.

[18]The official name of the corpus has changed, therefore both abbreviations, LKB and LBK, can be seen.

[19]SYN2005 (2005). Provided freely to registered users by the Institute of the Czech National Corpus, Faculty of Philosophy, Charles University in Prague, at `http://www.korpus.cz`.

[20]As defined by Panevová (1974).

focused on deverbal substantives only. This study shows, that semantically obligatory arguments can often be expressed (or hinted at) also by free, generic adjuncts. The border between obligatory complements and free adjuncts hence becomes very unclear.

The selection of the controller of the subject for the infinitive complement is not further discussed here[21] (nor recorded in the framework). The possibilities are in principle similar for all the analyzed nouns: the controller corresponds to the element called [Actor] in the conceptual frames defined here and can be expressed by different means: grammatical, lexical or contextual. Primarily, it can be expressed as the *possessor* of the *possibility, ability* or *will*:

- by a *possessive pronoun* (e.g. *his possibility / hans mulighet / jeho možnost*)

- by a *(possessive) genitive attribute* (e.g. *father's possibility / fars mulighet / možnost otce*)

- by a *possessive adjective* (in Czech: *otcova možnost*)

It can be expressed indirectly as some kind of *beneficiary*[22] in the whole proposition as well. In such a case, it is expressed by the complements (or adjuncts) of the verb. The semantics of the verb determines which complement can be the beneficiary, and so the possessor of the *possibility, ability or will*:

- the subject of most verbs (e.g. *to have a possibility / å ha en mulighet / mít možnost*)

- the addressee of some verbs (e.g. *to give someone the possibility…/ å gi noen muligheten…/ dát někomu možnost…*)

- the generic adjunct of *beneficiary* (e.g. *(it was) a possibility for him / (det var) en mulighet for ham / (to byla) pro něj možnost*)

In cases, where the beneficiary (and so the *possessor* of the noun) is not the subject of the verbs, the collocational *link* can specify it explicitly (see chapter 6.6.4 for example).

The last option shows one of the border cases between adjuncts and complements of the noun: if the preposition *for / pro* introduces some passive action, it is both the *beneficiary* (and *possessor* of the possibility) and the *goal* of it at the same time. Or: if there is some possibility for a *realization of some goal*, then the *realization of the goal* itself *has* the possibility to happen. In this case it will be classified as a complement.

Other examples are the prepositions *i* and *mot* appearing with the Norwegian noun *anledning* ("opportunity"). They introduce in principle generic adjuncts, but those adjuncts imply some more or less general goals of the *opportunity* (in the form of particular implicit verbs as the semantically obligatory complements of the noun).[23] Because of the semantic non-compositionality of such constructions (they include implicit semantic information beyond the sum of the meanings of their components), they can currently only be treated in the same way as idiomatic expressions.

The prepositions *i* and *for* appear also with the nouns referring to some *capabilities*, in a closer sense of extraordinary capabilities within some special area (or field).

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[21] It has been thoroughly described e.g. by Panevová (2011)

[22] In the widest meaning of the term, not necessarily bound to any particular semantic role in any particular theory.

[23] See chapter 7.4.2, section "Collocations and idioms", for details.

They still bear the features of general adjuncts expressing some kind of *location* (in a metaphorical way) and *beneficiary*, but they are also required by the semantics of the noun. In this case, there is no specific [Goal] implied by the construction[24] and thus no point in defining it as an idiomatic expression. It behaves as a valency pattern specific for the particular meaning of the noun.

Generally, the prepositional phrases often lie on the borderline between generic adjuncts and more specific complements of the noun. The prepositions themselves are not completely semantically empty either. The question is whether they should be considered different realizations of the valency patterns for different sub-senses of the noun, or whether they really contribute to the meaning of the whole expression, themselves; i.e. whether it is the specific meaning of the noun which determines the selection of the preposition, or whether it is the meaning of the preposition which contributes to the meaning of the whole construction (and so specifies more closely the meaning of the noun, too). The analysis suggests rather the latter interpretation, but at least for the noun *mulighet* the first interpretation was demonstrated: two slightly distinct sub-senses of the noun were defined in the description for the purpose of distinguishing the preference of the prepositions *til* and *for*, based on the meaning of the noun itself.

The ambiguity of realizations of the complements is even more complicated in Czech, where the complements can be expressed also by a direct attribute in genitive case. The genitive can be used to express either one of the semantic arguments or the possessor of the noun. This makes the correspondence of form and meaning even more complicated and resistant to any quantitative analysis of the distribution. The distinction cannot be made on the base of the form. In addition, the same complements can also be expressed by a prepositional phrase (or several, like in Norwegian), so that there is competition of the different realizations of the complements (valency patterns). The use of a particular valency pattern can have very subtle consequences for the meaning or the style of the whole utterance.

The main difference between valency patterns in Czech and Norwegian is the fact that only nominal phrases can follow a preposition in Czech, while Norwegian uses prepositions also to connect infinitive constructions or subordinate clauses. Those follow the noun directly in Czech. Czech prepositions also require a particular case of the nominal phrase, which is a necessary part of the valency pattern.

Generally, subordinate attributive clauses (as realizations of the complements in the form of full embedded propositions with their own subject) are usually not in focus of this study. Attributive clauses can either be connected by *že* in Czech and *at* in Norwegian (corresponding to "that" in English) or by a question word. The frequency of *at* appearing in Norwegian was analyzed regularly, but otherwise the subordinate clauses were mostly ignored because of very rare occurrence. In a few cases where they play a relatively important role (i.e. they have significant frequencies), also the clauses introduced by question words have been mentioned.

7.1.5 Polysemy

The distinction of senses defined in the monolingual dictionaries is compared to the corpus evidence. The reference to different elements of the conceptual frame, use of different valency patterns and possibly different lexical relations (e.g. synonymy) are the main criteria to define different senses of the nouns. Distinctions of senses with very

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[24]Actually, the potential *goal* is implied by the particular complement (the *field*), but it is still underspecified.

unclear borders (i.e. lot of undecidable examples in the corpus) that cannot be bound to different perspectives in the conceptual frames and that do not have any clear projection in the valency patterns either, have been abolished. Senses are only distinguished where there is some regular evidence of a distinct use of the word and it is not limited to some very limited group of fixed expressions or idioms.

7.1.6   Collocations and idioms

Collocations are analyzed mainly on the base of pure frequency, but preference is given to the more exclusive collocations with words that themselves have limited collocability.[25] The main three types of words to search for are verbs, adjectives and possibly head prepositions. More fixed or idiomatic expressions are of great interest as well. In the Czech corpus, the functionality of Word Sketches[26] has been used to help to identify the more typical collocations. In the Norwegian corpus, the collocational analysis is not well settled yet and the reported results (especially the frequencies) do not seem to be reliable at the moment.

Besides the monolingual dictionaries, other Norwegian bilingual dictionaries[27] from the publisher *Kunnskapsforlaget*, available in electronic form at Ordnett.no, are used to find useful collocations and fixed expressions as identified by other lexicographers. For Czech nouns, the *Slovník české idiomatiky a frazeologie*[28] (SČFI) dictionary is used for comparison and as source of further collocations and fixed expressions. Both its parts (nominal and verbal expressions) are used for reference. The idiomatic expressions listed in this dictionary are sometimes provided with their English translations; in such a case these original translations are quoted as well.

No classification of idiomaticity or fixedness is used in this analysis. The term *fixed expression* refers to any frequently occurring (recurring) collocation with more or less limited inner variability (stableness); although there have been attempts to classify these expressions (e.g. Čermák, 2001), collocations can be fixed to any degree, from purely frequently occurring syntagmata to fully established idioms. Fixed expressions thus refer generally to the whole scale, but the more general term *collocation* is preferred for the (semantically and syntactically) regular and less fixed expressions at the level of *parole*, while the more specific term *idiomatic expression* is used for the other end of the scale, the most fixed expressions having already their own independent meaning, often semantically non-compositional. A *fixed expression* hence implies at least some integration in the language system *(langue)*, as opposed to the general *collocation*.

7.1.7   Translation

The equivalents presented by the (pocket) *Czech-Norwegian / Norwegian-Czech dictionary* (Vrbová et al., 2005) are mentioned and compared to the data and examples acquired from the parallel (translational) Norwegian-Czech corpus collected within the

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[25]This behaviour is partially indicated by Word-Sketches in the Czech National Corpus, but especially for the Norwegian side this had to be decided rather subjectively, through introspection. The collocability of the collocates has been manually verified in rare cases only.

[26]Cf. Kilgarriff and Rundell (2002) and Kilgarriff et al. (2004). See `http://www.sketchengine.co.uk/` for details.

[27]Norwegian-English (Engelsk ordbok, 2010), Norwegian-Spanish (Nilsson, 2010), Norwegian-German (Paulsen, 2010) and Norwegian-French (Jacobsen, 2010).

[28]Čermák et al. (1983)

project InterCorp,[29] containing (at the time of analysis) about 2 mil. of tokens (in about 21 texts, mostly novels) in each language. The direction of the translation has not been considered. Besides, the corpus contains also texts translated from third languages. Generally, the translation is hence often very free, without direct word-to-word correspondences.

Examples of collocations and fixed expressions and their equivalents were excerpted from the parallel corpus where they can be interesting to illustrate the different (not necessarily always the most prototypical) possibilities of equivalence between the languages. Some of them can be directly used as equivalent constructions suitable for a dictionary, the others show at least how the expressions can also be expressed by dissimilar means (possibly grammatical or other non-lexical), illustrating the semantics of the expression by contrasting it to another language. The collocations and fixed expressions mentioned in the section "Collocations and idioms" were especially sought, but often no examples were found or they had no plausible correspondence in the other language. Where possible and appropriate, the collocations are quoted in their basic form (infinitive for verbs, nominative singular for nouns, etc.).

7.1.8 Dictionary entry

The example entry shows the possibilities of the proposed framework for lexical description to record (represent) and present the (most important) data acquired in the analysis. There are often several solutions to every problem, but the most systematic ones have been chosen. In some cases, slightly different approaches have been chosen for different nouns to illustrate the possibilities. Some minor features are only recorded in the framework, but not visually presented in the final entry. The full XML data structures of the main entries are listed in the appendix.

Morphological analysis

The Norwegian morphological analysis should be complete, including references to independent units created for every single morpheme which is still productive or meaningful in modern language (except of the roots). The focus of this work is limited to the Norwegian *Bokmål* mostly, but examples of the variable orthography are given where appropriate, to show the ability of the framework to describe and compute automatically the possible orthographical variants of the given words, based on the variable orthography of their single components (morphemes). Only the acceptable combinations are shown in the entry, marked for the norm they belong to and possibly the stylistic features. The superscript symbols used in the printed dictionaries by Haugen (1996) and Hustad (1984) are used: "+" for forms accepted in *Bokmål* only and "*" for forms accepted in *Nynorsk*. In addition, the letters "R" and "C" are used to indicate *radical* or *conservative* style (sub-standard) within the two Norwegian written standards. For example, the superscript label "+R" indicates a form of radical *Bokmål*. The stylistic attributes with a secondary constraint are enclosed in parentheses and the constraint is marked in red (at the level of secondary superscript). For example, the label "+dial." used by Hustad for forms appearing in both *Bokmål* and *Nynorsk*, but classified as *dialectal* in *Bokmål* (while being standard and neutral in *Nynorsk*) corresponds roughly to the label "(+R)" in the entries, indicating that the form is considered *radical*, but in the context of *Bokmål* only (otherwise it is neutral, i.e. in *Nynorsk*).

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[29]InterCorp (2010) is a project of multilingual parallel (translational) corpora of the Institute of the Czech National Corpus. See `http://www.korpus.cz/intercorp`.

The Czech morphological analysis is only partial. Only the main derivation suffixes are defined independently. Otherwise, the stems (bases) are defined explicitly in the entry without any reference to single morpheme units, even though they might be possibly further decomposed as well. The inflectional paradigms have been created only for the nouns described and do not fit any particular framework. The base for the classification and inflectional paradigms is the grammar by Cvrček et al. (2010). The star "*" sign is used with Czech forms not accepted by the norm, but used frequently in the commonly spoken language.

Multi-word expressions (fixed expressions)

Unlike the lexical units of the basic lemmata, the units for multi-word expressions (complex collocations and idioms) are defined in a simplified way only. This has both the effect of illustrating the simplified creation of a dictionary without the need to define every single component of some compound expression immediately (see the requirement of *scalability* in chapter 1.2), and saves the computational complexity and time when composing the entry. All the words in the expression are explicitly defined as *form*s of the *realization* objects. The *realization*s still refer to the (mostly virtual, undefined) lexical units of the single words, and so the words in the expression are lemmatized (in the same way as in a corpus). The forms are also named accordingly to the particular forms they represent, so that they are morphologically tagged as well. The system does not need to generate and search all the appropriate word forms from their separate lexical descriptions, but it can just take the forms given. Later, the forms can be verified, when the lexical entries are really defined. The unit therefore represents directly the string of words, but unlike in usual dictionaries, the single words are lemmatized and tagged and can be associated with particular lexical units or even sub-units (i.e. specify a particular sense, in which the word is used in the expression).

Within the scope of this work, it was not possible to analyze the variability (and fixedness) of the multi-word expressions. The units therefore do not say, whether their components can only be used in the given form, whether they can be inflected or modified by adjectives or adverbs, etc., even though the framework allows to define such features easily by means of constraints and features on the slots (*expression* component objects). Such description would require an elaborated, language dependent system such as the one developed by Cinková[30] for Swedish (and Czech) Support Verb Constructions.

Multi-word expressions (fixed expressions) and compounds or derivatives have been selected for description where the equivalence is not easily predictable (i.e. the Czech and Norwegian constructions are not parallel in their structure) and especially where the equivalence still concerns constructions containing nouns from the limited analysed group.

Collocations

Useful verbal and adjectival collocations have been recorded for all the nouns. The collocations are given in the form of links to another lexical units (mostly virtual, currently undefined units) and do not contain all the detailed features which would be required for a proper dictionary of collocations. Many collocations on the border to fixed expressions (e.g. collocations with support verbs) would need a closer specification of

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[30]Cinková and Žabokrtský (2005b); Cinková and Kolářová (2005); Cinková and Žabokrtský (2005a); Cinková (2009)

the restrictions, like the other multi-word expressions. A special translation would be sometimes appropriate as well, because the collocations would be translated in specific ways, different from the union of translations of the two words. They can also have different senses or stylistic features, but then they should be described by their own lexical units, like the other multi-words expressions (idioms).

Collocations and multi-word expressions are actually nearly identical phenomena described in two different ways: collocations as *links* between two words and multi-word expressions (i.e. fixed expressions) as complete, independent units. This dichotomy is probably not very lucky and should be solved in some more general way. Currently the distinction is very pragmatical: where the collocation consists of two words only and does not necessarily require a special translation, restrictions on the valency patterns, etc., it is defined as a simple *link* (although the link can in principle also include additional features, stylistic labels, constraints and even its own translational links); independent multi-word expression units are created for collocations of more than two words and collocations with clearly idiomatic meaning, which requires a special translation in the target language. Both collocational links and multi-word expression units (mostly) do not present any information on their frequency, stylistic features or restrictions.

However, the verbal collocations are classified at least into the most basic categories of aspect, distinguished already by the SSJČ dictionary: *inchoative, durative* and *terminative*. The feature of *causativity* is marked separately and presented in the interface by a small subscript letter "c" behind the verbs in the list of verbal collocates. The distinction of three aspects only is very rough,[31] but many verbs do not fit well this classification, anyway – they have no aspect assigned at all.

The distinction whether the noun is taken as subject or object of the particular verb is recorded by *map*ping the noun to one of the arguments of the verb – the arguments are identified by the *functors* used in the Vallex[32] lexicon of Czech verbs. Links to verbs taking the noun as its subject have the feature `<map key="self" loc="#self" rem="ACT"/>` and links to verbs taking the noun as its object have the feature `<map key="self" loc="#self" rem="PAT"/>`. In the same way, the links can also specify which complement of the verb becomes the *possessor* for the noun and in that way the controller ([Actor]) for their embedded concepts: e.g. `<map key='poss' loc='POSS' rem='ADDR'/>` maps the possessor ([Actor]) of the noun and controller for its infinitive complement to the ADDRessee of the verb (see chapter 6.6.4).[33] In the same way, the slots (*expression* or *component* objects) of multi-word expressions are named according to the functors used in Vallex for the particular, where they describe whole verbal phrases.

An alternative solution how to record these relations and features in a more synthetic way would be to link the collocates in the way of particularly assigned *Lexical Functions* (see chapter 6.6.4). Linking to an existing and established computational valency lexicon of Czech verbs has been found more meaningful, though. The adjectival collocates are not classified in any way, however.

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[31] E.g. both the constructions "to miss an opportunity" and to "use the opportunity" are classified as *terminative* by SSJČ, but their meaning is contrary.

[32] The lexicon (Lopatková et al., 2006) is available on-line by the Institute of Formal and Applied Linguistics, Faculty of Mathematics and Physics, Charles university in Prague, at `http://ufal.mff.cuni.cz/vallex/2.5/doc/home.html`. The latest version is 2.5.

[33] The particular valency frame from Vallex is currently not specified in most cases.

Valency patterns

The valency frames of the noun are presented in the entry in the form of a list numbered by capital letters enclosed in a box. The background color of the box indicates the relative frequency, i.e. how often the particular frame is used compared to the occurrence of the noun itself. The numbers are rounded to the closest multiple of 10%, and the colour changes from very light yellow (0%) to dark orange (100%).[34] Completely white background means "no information available". Open slots in the patterns are presented within the <…> symbols. The possible types of realizations (fillers) of the slots are indicated by pronouns (for nominal phrases), the infinitive particle *å...* in Norwegian or by *INF* in Czech (for infinitive constructions as fillers) or by the subjunctions (*at, že, aby,* etc. for subordinate clauses). The possible types of fillers have coloured backgrounds too, indicating their relative frequency (distribution) in the pattern.[35]

The lexical units may have sub-units describing sub-senses of the noun. These sub-senses may select preferred valency patterns or preferred forms of the noun, which are typical for the particular sense (see chapter 6.3). The preferences are currently realized through special features of the units (e.g. "select/phrase" to select the preferred valency patterns), but they could also be defined in some more sophisticated way, such as through constraints (see e.g. the "Dictionary entry" of *evne* in 7.5.2).

Descriptions of lexical structure

Each (sub-)unit has a short definition describing in natural language the particular lexical frame (structure) related to the unit.[36] The words referring to the elements of the conceptual frame (i.e. having a particular semantic role) are labelled accordingly:[37] e.g. `COND.{conditions} permitting ACT.{someone} to achieve GOAL.{something}` links the word "conditions" to the conceptual element COND (written as [Cond] in the analysis), the word "someone" to the element ACT ([Actor][38]) and the word "something" to the element GOAL ([Goal]). The visual form of the entry does not show the labels (unless the mouse pointer in the web interface is pointed at the words), but it shows colour codes as the background of the marked words. The colours are also used to mark the open slots of the valency patterns, where the corresponding conceptual elements are realized. Often, a slot of one surface pattern can be used to express different conceptual elements and therefore the semantic role (conceptual element) is not assigned in its primary definition in the main unit of the lemma, but the valency frames are updated with this information in the more specific sub-units. The role is also defined for the lemma itself (the *core*), as a participant of the pattern definition. But it is expected that it is identical with the first label appearing in the description (definition).[39]

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[34]It seems that a logarithmic scale would be more useful than the linear.

[35]The frequency of nominal phrases in the valency patterns is not available anywhere, because it is difficult to acquire. The numbers are therefore calculated as the rest of cases not realized by the other types. This category thus includes all the cases not classified in any way, including those where the preposition appears at the end of the sentence and is not followed by anything at all (e.g. when the complement is topicalized).

[36]These definitions are not supposed to represent proper definitions as understood by the monolingual lexicography. They may be also circular, etc.

[37]In the same way as in the FrameNet project.

[38]I.e. [Actor] from the conceptual frame, not the actor as functor ACT from Vallex!

[39]The colours of the frame elements and the colours indicating relative frequencies overlap, which may be confusing at the first sight, but the colours indicating the semantic role cover the whole slot and are much more variable, while the colours indicating the relative frequency cover only the single possible realizations within the slot and belong to one single scale of colours (light yellow to dark orange). Different shades of yellow are used for some of the semantic roles as well, however.

Equivalents

Only real *translational* equivalents are presented in the entries, not *explanational* ones. Where no clearly fitting equivalent was found and/or proved by the corpus data, no equivalent is present at all (this concerns some alternative senses of the nouns, which are not in the focus of this analysis from the semantic point of view).

7.2 Mulighet – možnost (possibility)

7.2.1 The conceptual frame

The conceptual frame of *possibility* includes the following three elements: 1) [Actor]: a participant, who is expected to perform an action and change some state of affairs, 2) [Goal]: the (un)desired action / change, 3) [Cond]: (a situation with) circumstances or conditions that allow the action (change) to be performed or to happen (can also be abilities or will of the participant, seldom external permission). The noun can also be used to refer to [Sit]: the whole situation (a possible world), where the action is performed and/or the new state of affairs is already realized (with the help of favourable circumstances and including all the consequences of such a new state of affairs), as opposed to other possible worlds where this is not the case. The concept also allows for some kind of measurable probability (favourableness of the conditions) that the (un)desired action will happen, but this secondary meaning does not seem to play a clearly distinct and independent role in the semantic space and real usage of the noun, neither in Norwegian nor in Czech.
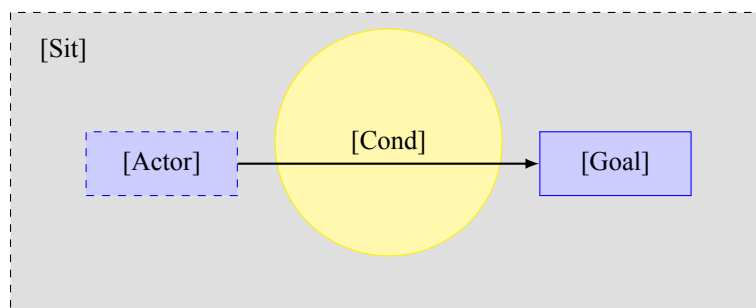
Figure 7.1: The conceptual frame of *mulighet*

7.2.2 Norwegian: *mulighet*

Monolingual description

The Norwegian noun *mulighet* is derived from the corresponding adjective *mulig* ("possible"). *Norsk Riksmålsordbok* lists three senses of this noun: 1. something possible that: a) can be realized or b) can be imagined to happen; 2. some conditions that (seem to) allow something; a prospect, chance; 3. a situation that can be imagined; an eventuality. *Norsk ordbok* follows the same structure, but simplifies the sense descriptions: 1 (to "st. possible") and 2 (to "prospect"). The problem of this division is mainly the definition of sense number 1, which is so general and abstract that it can basically cover

the other two senses as well, so that there is hardly any clear distinction. *Bokmålsord-boka* mentions just the general description "st. possible" and all synonyms in one row. It makes no distinction of senses.

Valency patterns

In Norwegian, the relation of the noun to the elements of the conceptual frame determines the use of the particular valency pattern:

(1) when denoting the favourable **circumstances** [Cond] (or abilities) that permit some participant [Actor] to perform the action or the action to happen, the prepositions *til* or *for* are used to connect the complement [Goal]

   a) the preposition *til* is used in an active meaning when the participant [Actor] is known (and/or the speaker believes that there is such a participant) and he or she wants to perform the action or change the state of affairs – usually the participant is the subject of the sentence or the speaker himself

   b) the preposition *for* is used in a passive and/or more hypothetical situation, when the speaker wants to remain neutral and does not want to imply that there is necessarily any particular participant willing to perform the action ([Actor] is often generic) – the speaker just wants to passively address circumstances favourable for the action to happen or be realized

(2) when denoting the whole possible **situation** [Sit] (the particular possible world), where circumstances are favourable for the action and the (un)desired state of affairs is realized (usually in order to discuss / imagine / evaluate / be afraid of it and its consequences), the noun *mulighet* takes a definite form and the complement (a proposition defining the situation [Sit], referred by the noun) is connected by the prepositions *for* or *av*

(3) when denoting one of the possible situations [Sit] or **actions** (or states of affairs) [Goal] that can be realized under the current (or otherwise given) circumstances, it is possible to use a plain apposition or copular construction – the referred action is not a syntactic complement of the noun in this case and therefore no preposition is used

However, the use of the preposition *av* and the use of apposition or a copular construction are rather exceptional. In the spoken language, the prepositions *for* and *til* are sometimes omitted as well. In all cases, the complement can be either an infinitive construction, an object clause (connected by *at* "that" or a question word) or a noun phrase.

   The realizations (2) and (3) do not really belong to two distinguishable senses – they both refer to the possible situations [Sit], which are built upon the possible actions [Goal] (which is always in the main focus). The difference is in the definitness: number (2) refers to some particular possible situation, while number (3) only introduces some situation (or action) as one of the eventualities, possibly already accessible under the current circumstances. The realizations number (1) and (2) correspond roughly to the semantic senses number (2) and (3) as defined by the *Norsk Riksmålsordbok* and *Norsk ordbok*. However, the examples in the dictionaries do not follow this formal distinction at all, since distinctions based just on semantics are very vague and depend on personal interpretation of the utterance.

Distribution

The distribution of different valency patterns and complement realizations is uneven. In LKB, there was found a total of 8956 occurences of the lemma *mulighet* (autumn 2009), thereof 5044 forms of singular (56.3%).

The preposition *til* follows immediately in 2920 cases, but there are 47 more cases where it was preceded by a free adjunct specifying the beneficiary by the preposition *for* (e.g. "Den gir en ypperlig mulighet for forskerne til å sammenlikne store mengder data."[40]), which makes altogether 2967 occurences (33.1%), thereof 2216 cases of singular form of the noun (74.7%). The preposition *til* was followed by an inifitive in 2545 cases (85.8%) and by a subordinate clause connected by *at* in only 5 cases (0.2%). This corresponds to the fact, that the preposition *til* is usually used in order to connect the noun to an action, whose subject is controlled externally. When noun phrases follow the preposition, they usually include deverbal nouns.

The preposition *for* follows in 2842 cases (31.7%), but it is not possible to automatically distinguish situations when it is really used to connect the complement [Goal] and when it is used to introduce the beneficiary.[41] In 1640 cases (57.7%) it is used with a singular form. An infinitive still follows in 1173 cases (41.3%) and a subordinate clause only in 242 cases (8.5%). The participant [Actor] is often generic or – when expressed – potential (the speaker does not want to express the participant's determinantion to really realize the action [Goal], e.g. "Jeg har jo mulighet for å si nei ."[42]). In many cases this construction is also used in negative context, excluding the potential (hypothetical) possibility to realize something (e.g. "Vi har ingen mulighet for å realisere idealsamfunn."[43]).

The use of the preposition *av* is by many native speakers considered generally bad style. But it appears sometimes also in respected works of literature, in fiction or translations of it. In LKB, there were found 107 occurences (1.2%), thereof 38 (35.5%) with infinitive and another 38 with a subordinate clause. All occurrences were in definite form, which agrees with the usage limited to realization of type (2), as defined above.

Polysemy

The different senses of the noun *mulighet* described in some dictionaries are very vague. The formal and conceptual analysis can distinguish two different types of use (somewhat similar to the senses distinguished in dictionaries) with two subtypes, though. Therefore, the main lexical unit for the lemma should include two abstract lexical subunits corresponding to the types of realization defined above as number (1) and number (2), the latter one joined with (3) into one sense; eventually with two more abstract sub-subunits (use of *til* vs. *for*) distinguished for type (1), in order to describe the preferred choice of preposition in different situations.

Synonyms can closer specify some of the types as well: for type (1), the noun *mulighet* is synonymous with the nouns *anledning, sjanse*, incl. *evne* ("ability") for some specific cases of subtype (1a); for type (2), the closest synonym is *eventualitet*.

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[40]"That gives an excellent possibility to the researchers to compare great amounts of data."

[41]The number excludes at least the 47 mentioned cases of use preceding the preposition *til*.

[42]"But I have a possibility to say 'no'."

[43]"We have no possibility to realize an ideal society."

Collocations and idioms

The noun appears most frequently in connection with the support verbs *å ha* ("to have"), *å få* ("to get") and *å gi* ("to give"). These verbo-nominal constructions adopt the function of modal verbs (or other modal verbal constructions) like *can, to be able to* or *to allow*. This use is most frequent in combination with the preposition *til*, which implies an active meaning with an explicit participant.

Common verbs used with the noun as subject are e.g. *å være, å finnes*. It is also a common object for the following verbs: *å se, å øke, å holde, å utnytte, å gripe, å forspille, å vurdere, å skape, å utrede, å benytte, å diskutere, å bruke, å miste, å frata, å forutse, å ødelegge*. The following adjectives are frequent attributes of the noun *mulighet*: *stor, ny, god, liten, lik, unik, enestående, begrenset, realistisk, teknisk, enkelt, reell, fantastisk, økonomisk, uendelig, sist, alternativ, glimrende*.

The dictionaries mention a few useful collocations: *(å ligge) innenfor/utenfor mulighetens grense, la hver mulighet stå åpen, tenke seg muligheten (av noe), mulighetenes land, forspille alle muligheter, gripe (enhver) mulighet, blind for mulighetene, ...* Not all of them are really common in the corpus, but it reveals some new ones as well: *å holde (alle) mulighetene åpne, mulighetene står åpne*.

Translation

The Norwegian-Czech pocket dictionary names just the Czech noun "možnost" as an equivalent of *mulighet*. Other dictionaries list translations of some more Norwegian synonyms of *mulighet* as further equivalents, mainly equivalents of *anledning* ("opportunity"), *sjanse* ("chance"), *eventualitet* ("eventuality"), *utsikt* ("prospect"), *alternativ* or *valg(mulighet)* ("option"), *potensial* ("potential") and *risiko* ("risk"). A dynamic dictionary can, however, find the translations of the synonyms automatically, as long as they are linked to the entry.

The Norwegian-Czech parallel corpus shows multiple nominal equivalents of the noun *mulighet*, but only *příležitost* (∼*anledning*, "opportunity") and *naděje* (∼*håp*, "hope") are more frequent (the latter one being rather an interpretation specific to one text only). It shows as well that the negative form *umulighet* does not directly correspond to the Czech negative form *nemožnost* as one would expect. It is rather translated by sentences with negative modal verbs or by other means. The corpus offers further examples and collocations: *mulighetene åpner seg – možnosti se otevírají (jedna za druhou); en mulighet jeg måtte overveie – možnost, kterou jsem musel vzít v potaz; Jeg måtte ta også dette i betraktning som en mulighet...– I tohle jsem musel vzít v úvahu jako možnost.; utelukke enhver mulighet for smitte – vylučovat každou možnost nákazy; mulighetene er uendelige – možností je nepřeberné množství; ...(bare) avgjør mulighetenes grenser – ...udává (pouhé) meze možností; regne med muligheten for at...– počítat s tím, že...; det utelukket muligheten for...– to vylučovalo, aby...; Dette gir oss store muligheter til aktivt arbeid. – Pro naši práci se otvírají široké obzory.; Jeg fikk min siste mulighet for å forstå...– Měl jsem poslední příležitost pochopit...; jeg ville heller ikke gå av veien for den andre muligheten – nevyhýbala bych se ani druhé možnosti; gripe muligheten – využít příležitosti; men en mulighet er det – ale možnost tady je; det er gode muligheter for...– je určitá naděje, že...; grenseløse muligheter – neomezené možnosti.*

+mulig|het, *mulig|heit, *mog(e)lig|heit, *muleg|heit, *mog(e)leg|heit

+mulighet: *sg. indef.* +mulighet ; *sg. def.* +Cmuligheten, R+muligheta ; *pl. indef.* +muligheter ; *pl. def.* +mulighetene
*mulighet: *sg. indef.* *muligheit ; *sg. def.* *muligheita ; *pl. indef.* *muligheiter ; *pl. def.* *muligheitene
*mog(e)ligheit: *sg. indef.* *mog(e)ligheit ; *sg. def.* *mog(e)ligheita ; *pl. indef.* *mog(e)ligheiter ; *pl. def.* *mog(e)ligheitene
*mulegheit: *sg. indef.* *mulegheit ; *sg. def.* *mulegheita ; *pl. indef.* *mulegheiter ; *pl. def.* *mulegheitene
*mog(e)legheit: *sg. indef.* *mog(e)legheit ; *sg. def.* *mog(e)legheita ; *pl. indef.* *mog(e)legheiter ; *pl. def.* *mog(e)legheitene

FREQ: 8956 (LKB), sg: 56.3%

Morphemic analysis

mulighet *(word)*

suffixation		
base		suffix

mulig *(word)* — base

suffixation			suffix

base: **mu** *(morpheme)*, **mog(e)** *(morpheme)*

suffix: **lig** *(morpheme)*

inflexion — base: **lig** *(morpheme)*, **leg** *(morpheme)* ; ending

suffix: **het** *(morpheme)*

inflexion — base: **het** *(morpheme)*, **heit** *(morpheme)* ; ending

Valency patterns

A ~ til <*noe/å…/at…*>
B ~ for <*noe/å…/at…*>
C ~en av <*noe/å…/at…*>

Collocations and constructions

Verbs: - inchoative: *få, gi*c *(POSS->ADDR), skape*c - durative: *ha* - terminative: *frata*c *(POSS->ADDR), gripe, bruke, utnytte, benytte, forspille, miste, ødelegge*c - (other): *vurdere, diskutere, se, øke, tenke_seg*

Adjectives: *unik, enestående, glimrende*
Fixed expressions: mulighetenes grenser *hranice (lidských/svých/etc.) možností*; ligge/være innenfor/utenfor mulighetenes grenser *(být) v rámci (daných) možností / (být) v mezích možností*; mulighetene står åpne *(všechny) možnosti jsou otevřené*; holde (alle) mulighetene åpne *nechat (všechny) možnosti otevřené*; mulighetenes land *země neomezených možností*

Translation

cs: *možnost*

Semantics

1. vilkår som tillater en hendelse

   Synonyms: anledning, sjanse

   Valency patterns

   A ~ til <*noe/å…/at…*>
   B ~ for <*noe/å…/at…*>

   a. vilkår som tillater at noen realiserer en hendelse

   Preferred constructions: A

   Examples

   Jeg har ikke mulighet til å konsentrere meg .
   Her var det plutselig en mulighet til flukt !
   Gard ser sin mulighet til å bli venner med pappa .
   lærergjerningen var viktigere , den gav ham mulighet til å bruke seg selv i samfunnets tjeneste .

   b. vilkår som tillater at en hendelse blir realisert (av noen)

   Preferred constructions: B

   Examples

   Jeg har jo mulighet for å si nei .
   Vi har ingen mulighet for å realisere idealsamfunn
   Det er jo en liten mulighet for at jeg kan finne et spor der
   Her var det mulighet for større utfoldelse.

2. en mulig situasjon (med gunstige vilkår), hvor en hendelse blir realisert (av noen)

Preferred constructions: B , C
Synonyms: eventualitet

Valency patterns

B ~ for *<noe/å.../at...>*

C ~en av *<noe/å.../at...>*

Examples

Har du tenkt på muligheten for at du er gravid ?
man regner med muligheten for feil i programvare .
Han hadde tenkt seg muligheten av at de kanskje hadde hørt ham
motstandsbevegelsen som så for seg muligheten av en sovjetisk okkupasjon
Statoil vurderer muligheten for å legge en ny gassledning
Jeg kalkulerer alltid med muligheten for å tape penger
Hun avviser muligheten for å bestille en bestemt krokodillefarge .

Figure 7.2: The entry for *mulighet*

Dictionary entry

The noun *mulighet* (figure 7.2) offers a possibility to demonstrate the power of morpho-logical composition with usage constraints, because it consists of multiple morphemes with variable orthography. Some of the variants are only acceptable in *Bokmål* and some only in *Nynorsk*. Some forms are acceptable in both, but with different conse-quences for the stylistic features. Defining the variants for all the single morphemes, with appropriate stylistic features, forces the system to generate all combinations and compute their stylistic usage. The resulting five acceptable canonical forms (one for *Bokmål* and four for *Nynorsk*) correspond to the forms listed in Bokmålsordboka and Nynorskordboka. The system generates also all the other combinations, but those are marked as invalid and not shown in the interface.[44]

For each of the acceptable variants of the lemma, the full list of (valid) forms is shown in the header as well. There are two singular definite forms of the variant *mu-lighet* with different stylistic labels: *muligheten* marked for *conservative Bokmål* and *muligheta* marked for *radical Bokmål*. Other forms (not shown in the interface) are marked as invalid, because of their stylistic inconsistency (incompatibility of their com-ponents), but that does not mean that they cannot appear in the language (e.g. in some dialect). Therefore, no forms are discarded completely by the system.

The section with *morphological analysis* shows the composition of the lemma, with all the variants of the single morphemes. It is defined as a derivation (suffixation) of the adjective *mulig* with the suffix *het*. The adjective itself is defined as a derivative of the root *mu* (with a *Nynorsk* variant *mog* or *moge*[45]) using the common adjectival suffix *lig* (with a *Nynorsk* variant *leg*). The nominal suffix *het* does also have a diphtongized *Nynorsk* variant *heit*. The nominal suffix is also the bearer of the inflective paradigm and therefore includes all the necessary endings. Again, there are two variants of the definite singular ending: *-en* is typical for *conservative Bokmål* (which does not make any difference between masculine and feminine gender) and *-a* is typical for *Nynorsk*, but also acceptable (as a rather radical style) in *Bokmål*. All *Nynorsk* base forms can therefore combine only with the ending *-a* (ignoring its stylistic features, which have ef-fect only in *Bokmål*), while *Bokmål* can take both variants, but with appropriate stylistic marks.

The list of valency frames shows the three possible prepositional complements. The background colour of the labels *A, B* and *C* already indicates their frequency: *A* (prepo-sition *til*) and *B* (preposition *for*) are both much more common than *C* (preposition *av*). The colours also indicate that the preposition *til* is mostly followed by an infini-tive construction, while the complements of the other two prepositions are much more equally distributed among the three types (infinitive, nominal construction and attribu-tive clause).

The classification of support verbs is based on the classification from the Czech SSJČ dictionary. The list of collocating adjectives names only three selected adjec-tives, which do not belong to the common language core and might not be expected by every user. The list of fixed expressions mentions some of the most common idiomat-ic constructions with their closest Czech equivalents. The construction *ligge/være in-nefor/utenfor mulighetenes grenser* is actually a three-level construction: the expression

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[44]For completeness, it would be extremely useful to include statistics about the real usage frequency of the different variants (especially all the variants accepted in *Nynorsk*), but that would require better language resources for *Nynorsk*.

[45]The two variants are written in a single simplified form with the optional *e* in parentheses just to save space for another additional variant. For a fast string matching software application, it would need to be expanded sooner or later anyway.

mulighenes grenser can appear as a standalone fixed expression, its combination with the preposition *innenfor* (or *utenfor*) builds an adverbial expression, which collocates also with specific verbs (*ligge* or *være* in Norwegian, but only *být* in the equivalent Czech construction). There are multiple possibilities how to describe such situation: The preposition could be defined as a typical collocate *(head preposition)* of the core expression *mulighetenes grenser*, but in the current system it would be quite difficult to define the verb(s) as next-level collocates *(support verbs)* for the whole new construction. The constructions could also be described in three different units, the prepositional construction including the core expression, and the verbal construction including the whole prepositional construction. For simplicity, we have now constructed two completely independent units, containing the complete verbal construction and the nominal collocation only. In the verbal construction, the three levels are reflected in the three nested levels of the tree of *expression* and *realization* objects. The problem arises in contrast with Czech, which can use the same noun (i.e. the direct semantic equivalent of the Norwegian noun *grense*, "border") for the *limits* of the possibility when only the core expression *mulighetenes grenser* is used, but different nouns when the whole prepositional (or verbal) construction is used. Therefore this solution is satisfactory for the moment, even though it is not efficient.

The generic Czech translation *možnost* is given at the topmost level (the root unit), because the nouns have very similar structure of meaning. No other translational equivalents are linked anywhere else in the whole entry, because they would be just translations of the synonyms, which are already defined at the lower levels of more specific sub-senses. Such equivalents can be acquired through the synonyms anyway.

The structure of senses is divided according to the previous suggestion. The sub-senses also define how the noun itself and the complement correspond to the elements of the conceptual structure. This cannot be defined at the top-most level, because at least the construction with the preposition *pro* can introduce either the complement [Goal] (in sense number 1) or the complement describing the situation [Sit] (in sense number 2). The sub-senses select the prepositional constructions that they prefer and they also link to the more specific synonyms as mentioned before. The distinction of senses has no interlingual (translational) relevance here, because both the Czech and the Norwegian noun behave in a similar way. The relevance is therefore purely monolingual and the sub-units are only classified as "abstract".

This dictionary entry also includes some direct examples from the corpus, which are not given in the other entries. They would hardly find place in a traditional dictionary, but they can give a better idea of the meaning to the user of an electronic dictionary.

7.2.3   Czech: *možnost*

Monolingual description

The Czech noun *možnost* is derived from the adjective *možný* ("possible") (by the most common abstract suffix *-ost*), being itself a derivate of the modal verb *moci* ("can / be able to").

The *SSJČ* dictionary provides four senses: 1. set of conditions allowing st. to happen; 2. a possible case, eventuality; 3. ability; 4. (archaic or dialectal) wealth. The first two senses correspond to the senses found in Norwegian, the third sense is a special subtype of sense number 1, where the conditions are determined by the nature (capabilities) of the [Actor] himself.

Valency patterns

The noun is almost always connected with a complement in genitive case (without any preposition) or with an infinitive construction (or an attributive clause connected by *že* ("that") or a question word). In rare cases, the prepositions *k* or *pro* can be used to connect a nominal phrase and focus the meaning on the circumstances (or conditions) only (separately from the action expressed by the complement), and then the choice of preposition is very similar to the use of the Norwegian prepositions *til* and *for* respectively: *k* is used with active meaning, usually with perfective actions (punctual, but also iterative), while *pro* is used passively, rather with imperfective and more abstract changes (durative) like improvement, development, usage, etc.[46] The collocational profiles of the two prepositions and the genitive complement are not very different, however. The tendencies noted above are therefore quite subtle, not crucial. But the use of a preposition is not possible in Czech, when the noun refers to the whole possible situation (corresp. to type (2) of the Norwegian noun *mulighet*).

Unlike the Norwegian noun *mulighet*, the direct use of genitive or infinitive complement is always possible, while the prepositional phrases are rare and only possible with nominal complements. This makes the conceptual and formal distinction made for the Norwegian noun very difficult to apply in real Czech examples, although it (in principle) would apply for the Czech noun as well. The fine distinction is in most cases rather ambiguous and usually not of such a big importance for the understanding of the whole utterance. Only when a preposition is used, this subtle semantic distinction becomes tangible as well. Therefore, the Czech entry should be structured in the same way.

Distribution

In SYN2005, there were found 40565 occurences of the noun *možnost*,[47] thereof 26358 (64.9%) in singular form.

An infinitive follows in 8008 cases (19.7%), thereof 7423 (92.7%) after singular form of the noun. A noun phrase in genitive case follows in 14519 cases (35.8%), thereof 9421 (64.9%) after singular form. No formal distinction can be made between the complement [Goal] and the possessor ([Actor]) in genitive, but the latter seems to be rather infrequent. In 1042 cases (2.6%), a subordinate clause follows, connected by the conjunction *že* ("that"), and in 1430 cases (3.5%) a clause connected by *jak* ("how"). A clause connected by *aby* follows in 310 cases[48] (less than 0.8%). Other types of clauses depending directly on the noun are rare.

The preposition *k* follows in 226 cases (0.6%) only, thereof in 90 cases (39.8%) after singular. The preposition *pro* follows in 400 cases (1%), thereof in 97 cases (24.3%) after singular. These numbers includes also the cases when it is used to introduce the beneficiary and the complement, but such cases seem to be rather infrequent again.

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[46]Aspect of the action is a much more obvious feature in Czech, because it is an inherent lexical quality of the verb and it is also being kept by the deverbal noun. The Norwegian infinitive does not tell us directly so much about the aspect itself. Otherwise, the semantic context determining the selection of preposition is basically the same.

[47]The Czech tagging includes also occurrences of the negative derivate form *nemožnost*.

[48]This number includes necessarily also some adverbial clauses of purpose (final clauses), in addition to the relative (attributive) clauses.

Polysemy

The Czech noun, like its Norwegian counterpart, is not really polysemous. It's semantic field seems to be even more abstract and difficult to divide into subsenses connected clearly to some formal features, as the relatively free choice of valency pattern shows. In many cases the complement can take the form of either genitive or a prepositional phrase with either of the prepositions, without having any great influence on the meaning of the sentence. The fact that the noun refers frequently to a multiplicity of favorable conditions or to repeated or multiple opportunities (favorable situations with favorable conditions), is probably reflected in the higher use of plural form with the prepositions. On the other hand, the use of infinitive is prevalently connected to the singular form of the noun, suggesting that it refers either to the whole possible situation [Sit] (type (2) for *mulighet*) or at least to some favorable situation (set of conditions) as a whole (type (1)). The distinctions found with the Norwegian counterpart are therefore still relevant for the Czech noun, but their borders are even fuzzier.

Collocations and idioms

The Czech noun appears as a complement of a much wider variety of verbs. The most frequent are still *mít* ("to have") and *být* ("to be"), but the ways to express "giving" or "getting" the possibility are wide. The frequent verbs taking *možnost* as object are: *nabízet/nabídnout, využít, dát, získat, dostat, poskytovat/poskytnout, vyloučit, otevřít/otevírat, znamenat, zvažovat,...* Frequent is also the verb *existovat* taking the noun as subject. It is also the most frequent complement of the verb *skýtat* and one of the most common complements of the verbs *naskýtat/naskytnout (se)*, which have a very limited collocability.

The following adjectives are frequent modifiers of the noun: *omezený, jediný, jiný, velký, reálný, (ne)tušený, další, finanční, výrazový, nový, technický, jedinečný, různý, druhý, poslední, aplikační, široký, alternativní, teoretický, časový, technologický*. The list is also similar to the Norwegian one.

The Norwegian collocations of the noun *mulighet* with the verbs *å forspille* and *å gripe* would be rather more typical for the Czech synonym *příležitost* (~anledning, "opportunity"): *promarnit (každou) příležitost, chopit se (každé) příležitosti*. The collocations with the adjective *otevřený* (~åpen, "open") are very similar, but the support verb *å stå* would be completely avoided. The expression *innenfor mulighetenes grenser* corresponds to the Czech expression *v rámci možností*, which is usually used just with the plain verb *být* ("to be"), unlike the Norwegian one that connects rather to the verb *å ligge* ("to lie").

The *SSJČ* dictionary names – in addition to the idiomatic expression *v rámci možností* (and a plenty of common collocations) – also the related collocations *hranice lidských možností* and *to je nad možnosti jednoho člověka*. The *SČFI* dictionary adds *v mezích možnosti/-í* as an alternative to *v rámci (daných) možností* ("within the bounds of possibility"), and the collocations: *holá nemožnost* ("utter/total impossibility"), *neomezené / netušené / nedozírné / nekonečné možnosti* ("endless scope; unimagined possibilities; limitless possibilities"), *země neomezených možností* ("the land of opportunity") corresponding to Norwegian *mulighetenes land, zacházet do nemožností* ("take things to extremes"). It also lists the common support verbs used with the noun: *dostat, získat* (inchoative); *mít* (durative); *ztratit / pozbýt, využít* (terminative); *poskytnout / dát někomu* (causative-inchoative); *nechat někomu* (causative-durative); *vzít někomu možnost / zbavit někoho možnosti* (causative-terminative); *být, existovat, naskytnout se* (subject).

Translation

The Czech-Norwegian pocket dictionary list both the general *mulighet* and the more specific *anledning* as equivalents of *možnost*. The Norwegian-Czech parallel corpus reveals the fact, that many different synonyms of *mulighet* are actually used in Norwegian texts as equivalents of the Czech noun *možnost*, but not the other way. The most frequent one is *sjanse*, followed by *anledning, valg* and *måte*. The Czech noun seems to be more frequent and used in a wider scale of meanings than its Norwegian counterpart, which is often substituted by its more specific synonyms.

The corpus does not reveal any special interesting translations of collocations, beside those named under the Norwegian noun *mulighet*. Constructions with modal verbs and other paraphrases are usually used in Norwegian where Czech uses fixed collocations with the noun *možnost*.

Dictionary entry

The entry for *možnost* (figure 7.3) is almost identical to the entry for *mulighet*. The main difference are the valency frames of the Czech noun, which only uses preposition to connect nominal complements, and still only rarely. In most cases, nominal complements use genitive case without a preposition.

Although the noun can collocate with the same intensifying adjectives, other ways (adjectives) are more natural for Czech and they are listed in the collocations.

7.3 Anledning – příležitost (opportunity)

7.3.1 The conceptual frame

The conceptual frame of *opportunity* is very similar to the concept of *possibility*, but here the focus is on the situation or (even more) the particular time moment [Time], which offers some favorable conditions [Cond] or circumstances for some participant [Actor] to realize some action [Goal] or for the action to happen. The favorable moment [Time] can also be connected to some special event [Event] which is happening at the moment [Time]. The circumstances [Cond] can also be seen as an active cause for the action to happen.[49] Therefore the label [Cause] will be used here for this perspective, since some dictionaries distinguish it from the plain passive conditions. It refers to the same element, however. The participant [Actor] is very often generic and not expressed in the utterance.

7.3.2 Norwegian: *anledning*

Monolingual description

Bokmålsordboka presents surprisingly four different senses of the noun *anledning*: 1. a favorable moment, opportunity; 2. favorable circumstances for something; 3. (time moment of) an event; 4. a cause, reason, connection. The senses also refer roughly to the different elements of the conceptual frame, on which the noun can focus its meaning: 1. for [Time], 2. for [Cond], 3. for [Event] and 4. for [Cause]. The examples in the last sense actually refer exclusively to fixed expressions with the head preposition *i*,

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[49] Anyway, there seems always to be present a presupposition of the participant's own will (or a tendency of the action to happen) as the primary cause of the action, waiting just for the favourable conditions to occur.

možn|ost

možnost: *sg.:* N možnost; G možnosti; D možnosti; A možnost; V možnosti; L možnosti; I možností; *pl.:* N možnosti; G možností; D možnostem; A možnosti; V možnosti; L možnostech; I možnostmi, [*]možnostma

FREQ: 40565 (SYN2005), sg: 64.9%

Morphemic analysis

možnost *(word)*		
suffixation		
base	suffix	
	ost *(morpheme)*	
	inflexion	
	base	ending
možn *(morpheme)*	ost *(morpheme)*	

Valency patterns

A	~ *<něčeho>*
B	~ *<INF>*
C	~ *<, jak.../, že.../etc.>*
D	~ *<, aby...>*
E	~ k *<něčemu>*
F	~ pro *<něco>*

Collocations and constructions

Verbs: - inchoative: *dostat, získat, dát$_c$ (POSS->ADDR), poskytnout$_c$ (POSS->ADDR)* - durative: *mít, nechat$_c$ (POSS->ADDR)* - terminative: *ztratit, pozbýt, využít, vzít$_c$ (POSS->ADDR), zbavit$_c$ (POSS->ADDR)* - (subj.): *být, existovat, naskytnout_se*

Adjectives: *neomezený, netušený, nedozírný, nekonečný*

Fixed expressions: (být) v rámci (daných) možností *ligge/være innenfor/utenfor mulighetenes grenser*; (být) v mezích možností *ligge/være innenfor/utenfor mulighetenes grenser*; hranice (lidských/svých/etc.) možností *mulighetenes grenser*; (všechny) možnosti jsou otevřené *mulighetene står åpne*; nechat (všechny) možnosti otevřené *holde (alle) mulighetene åpne*; země neomezených možností *mulighetenes land*

Translation

no: *mulighet*

Semantics

1. podmínky umožňující realizaci nějaké události

   Preferred constructions: B , A , D

   Synonyms: příležitost, šance

Valency patterns	
A	~ *<něčeho>*
B	~ *<INF>*
D	~ *<, aby...>*
E	~ k *<něčemu>*
F	~ pro *<něco>*

   a. podmínky vhodné k tomu, aby někdo realizoval nějaký čin

      Preferred constructions: E

   b. podmínky vhodné pro to, aby nějaká událost byla realizována (někým)

      Preferred constructions: F

2. možná situace (s příznivými podmínkami), kde je nějaká událost realizována (někým)

   Preferred constructions: B , A , C

   Synonyms: eventualita

Valency patterns	
A	~ *<něčeho>*
B	~ *<INF>*
C	~ *<, jak.../, že.../etc.>*

Figure 7.3: The entry for *možnost*
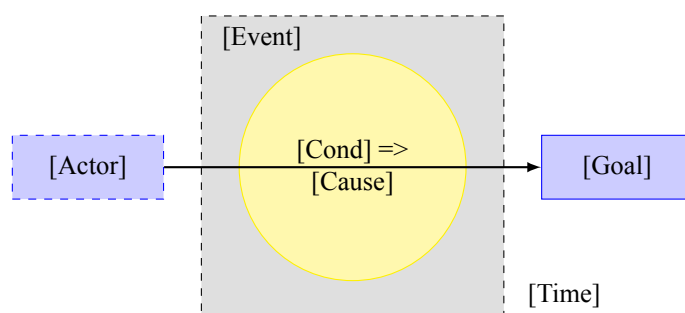
Figure 7.4: The conceptual frame of *anledning*

behaving either as a compound preposition (*i anledning (av)*) or an adverbial (*i sakens anledning/i den anledning*).

Norsk riksmålsordbok lists three senses: 1. circumstance/cause of st. (usually in expressions *gi anledning til*); 2. conditions that make something possible or appropriate; 3. a favorable moment to realize st., arrange an event, etc. Again, the senses refer roughly to the frame elements: 1. for both [Cause] and [Event], 2. for [Cond] and 3. for [Time].

Norsk ordbok does not make any sense distinctions, but uses simply the nouns "possibility; (outer) conditions, cause" as a definition.

Valency patterns

The noun uses the preposition *til* to connect a complement (the [Goal]). The preposition *for* is very rarely used to express the beneficiary (as a free adjunct) or figuratively the [Goal], but this pattern cannot be compared to the use of the construction *mulighet for*, which is already well established. Here, the preposition *for* is not a serious competitor of *til*, yet.

Distribution

The noun *anledning* appears 2404 times in LKB, thereof 1691 occurences (70.3%) are in the singular form. In 1130 cases (47%), the preposition *til* follows, with 956 occurences (85.7%) of an infinitive construction. In 15 cases, the prepositional phrase using *til* is preceded by the free adjunct prepositional phrase using *for* to introduce a beneficiary. This adjunct phrase is also used in 5 additional cases without the complement introduced by *til*.

In 5 cases only, the prepositional phrase with *for* is used to connect the complement [Goal] in the form of a noun phrase. In one single case this complement is even preceded by another prepositional phrase with *for* introducing also the beneficiary ("I tillegg er det en fin anledning for teamet og fastlegen for konkret dialog og tverrfaglig samarbeid…"). There are two additional cases where the preposition *for* is followed by an infinitive, but the combination *for å…* can often be understood as the conjuction *for* connecting a subordinate final clause expressing a goal of the whole main clause, as another example shows.

The noun appears in 490 cases (20.4%) with the head preposition *ved*. In 332 cases (13.8%) it appears with the head preposition *i*, followed in 38 (11.4%) cases by the preposition av. In 39 cases (11.7%), the fixed expression *i sakens anledning* is used

and in 66 cases (19.9%) the expression *i den anledning*. In 116 cases (4.8%) the head preposition *for* occurs.

Polysemy

As the monolingual dictionaries show, the semantic space of the noun can be divided into as many as 4 different senses, which can be supported by the focus on different elements of the conceptual frame. This is, however, not a reason plausible enough to speak about polysemy of 4 really different senses. The borders between the senses are very fuzzy: there is seldom any clear formal distinction of the senses and the synonyms are also mostly the same ones. Even the conceptual frame cannot make a clear distinction among the four elements – they are rather three additional perspectives oriented at different aspects of the same element [Cond]: namely some special external event [Event], moment [Time] when the favourable circumstances occur, or the (inevitable) causal aspect [Cause] of the special conditions [Cond] or of the event [Event]. The noun can refer to several aspects at the same time without a real need to disambiguate one particular focus.

The semantic differences are connected to the formal distinctions in the following way:

- The valency pattern *anledning til noe* covers the central perspectives – the conditions [Cond] and/or the moment [Time]. The element of an event [Event] can be present externally as some cause, but it is not in the main focus of the noun itself. Here, the noun is usually part of a verbo-nominal construction with some of the frequent support verbs. (e.g. "Etter jeg flyttet, fikk jeg anledning til å dyrke min interesse for jakt og fiske.")

- The head preposition *ved* evokes the most general meaning of the temporal aspect [Time]. No direct complement is possible, since the action [Goal] is actually the contents of the whole sentence. (e.g. "Ved en anledning slapp Andy Cole fri…")

- The constructions *i anledning (av)* and *i den/sakens anledning* refer to some causal connection [Cause] (can be an [Event], too). The former one takes the cause as direct complement, the latter one refers to some external cause mentioned in context. (e.g. "Lars Horntveth fikk et bestillingsverk i anledning Festspillene…" and "Vi ønsker også å se hva Sverige og Danmark gjør i sakens anledning.")

- The construction *for anledningen* refers to some external cause [Cause] (can be an event [Event]), requiring some special action for some special moment [Time]. The causal apect (as well as the temporal) seems to be stronger and more direct here than in the expressions *i den/sakens anledning*, which seem to give a little bit looser, more abstract connection. (e.g. "Den ble for anledningen pyntet med granbar…")

Collocations and idioms

Besides of the common support verbs *å få, å ha, å gi*, the noun occurs frequently as object of the verb *å benytte*. Other common verbs are: *å bruke, å gripe*. It appears also as a frequent subject of the reflexive verb *å byde seg*, which has a limited collocability. Bilingual dictionaries on Ordnett.no mention also the collocations *forsømme anledningen* and *la anledningen gå fra seg*.

Common modifying adjectives are: *god, sen, rikelig, spesiell, høytidelig, full, tidlig, stor, festlig, passende, sjelden, rik, kjærkommen, enestående, ...* They also show that the noun is frequently used to refer to somehow special (usually social) events.

The preposition *ved* is commonly used as head preposition and it evokes the temporal perspective of the meaning: *ved [flere/et par/en senere/en annen/en rekke/denne/slike/...] anledning(en/er)*. The whole construction has function of a temporal adverbial referring to some particular opportunity, several opportunities, or just some arbitrary points in time. No additional syntactic complement is possible. It can therefore also be considered a kind of semi-fixed expression with a range of variable modifiers.

The preposition *i* is mostly used as head preposition in fixed expressions. The expression *i anledning (av)* behaves as a compound preposition introducing some special social event (usually some anniversary, wedding, etc.) as a temporal and often also causal adverbial in the sentence. The preposition *av* is optional in this construction. The expressions *i sakens anledning* and *i den anledning* have mostly the function of adverbials expressing some kind of cause or connection, referring to some previously mentioned entity. The preposition *i* is therefore rarely used as a competitor of the general head preposition *ved*.

The preposition *for* is used to build the fixed expression *for anledningen*. It is used as an adverbial, referring to the [Cause] (something previously mentioned) for the temporary change or the action [Goal] happening. Like for the other expressions (with a head preposition) mentioned, no further complement is possible, because the [Goal] is expressed by the whole sentence.

Translation

The Norwegian-Czech pocket dictionary names the Czech noun *příležitost* as the only equivalent of *anledning*. It mentions the use of prepositional complement *k něčemu* as the equivalent of the Norwegian complement using *til noe*, too. The idiomatic expression *i ∼ (av noe)* is translated by the corresponding Czech expression *u příležitosti (něčeho)*. The common collocation with the head preposition *ved* is illustrated by the example *ved denne ∼*, translated as *při této příležitosti*. These examples cannot give information on the more limited variability of the first expression and the more open variability (of modifiers) in the second expression, but they give at least some basic clues.

In the Norwegian-Czech parallel corpus, *příležitost* is the most common nominal equivalent of *anledning*. Verbo-nominal constructions using support verbs *å få / ha* are often substituted with modal verbs or completely ommited in Czech. Adverbial constructions *ved ...anledning* are frequently substituted by common simple adverbs *jednou, dvakrát, několikrát, později*, etc. ("once, twice, several times, later"), or the noun *případ* ("case") is used (e.g. Norwegain: "ved noen (få) anledninger" , Czech: "v několika případech"). The expression *for anledningen* is once translated as *pro tuto příležitost*, but otherwise it has no lexical correspondence in the Czech text. The Norwegian noun seems to go much further in the direction of semantically empty usage than its Czech counterpart.

There is no direct translation of the Norwegian constructions *i den anledning* and *i sakens anledning*. Although some literal translations (using some other nouns, e.g. the English "in that connection/matter/respect") would be possible, they are not used in such a general and semantically empty contexts in Czech, as the expressions in Norwegian. A Czech translation would therefore usually use grammatical constructions such as *kvůli tomu* ("because of that"), if acceptable in the particular context.

Dictionary entry

anledning

anledning: *sg. indef.* anledning ; *sg. def.* [+C]anledningen, [(*R)]anledninga ; *pl. indef.* anledninger ; *pl. def.* anledningene

FREQ: 2404 (LKB), sg: 70.3%

Morphemic analysis
anledning *(word)*

inflexion	
base	**ending**
anledning *(morpheme)*	

Valency patterns

A ~ til <*noe/å...*>

Collocations and constructions

Verbs: - inchoative: *få, gi$_c$ (POSS->ADDR)* - durative: *ha* - terminative: *benytte, gripe, bruke, forsømme* - (subj.): *byde_seg*

Adjectives: *enestående, festlig, sjelden, spesiell, høytidelig*

Fixed expressions: ved (<*noen*>) anledning *při <nějaké> příležitosti*; i anledning (av) <*noe*> [form.] *u příležitosti <něčeho> / při příležitosti <něčeho>*; i den anledning ; i sakens anledning ; for anledningen *pro tuto příležitost / pro ten účel*; la anledningen/sjansen gå fra seg *nechat si ujít příležitost*

Translation

cs: *příležitost*

Semantics

situasjon (f.eks. begivenhet ved et tidspunkt) med passende vilkår eller som grunn for noen til å realisere en handling

Figure 7.5: The entry for *anledning*

The description of the noun *anledning* (figure 7.5) is very simple. There is only one valency pattern, the preposition *til* with a strong preference of infinitive complements, and no reasonable distinction of senses is possible, although the noun can take different metonymical perspectives of reference to the common conceptual element of conditions suitable (or motivating) for some action to be taken or to happen. The noun can take special roles in different idiomatic expression with different head prepositions, but those are defined as independent entries of the dictionary and they have their own translations.

The expressions *i den anledning* and *i sakens anledning* have no direct Czech equivalents at all. They could be described by constructions such as "v této věci/záležitosti", "v souvislosti s tím" or just any final conjuction (e.g. "proto"), but in real language those expressions would only very rarely be used and other means (than lexical) would be usually used to express the causal-final connection. Nevertheless, a dictionary has to give the user some hint about the possibilities of translation and it cannot waste place with long descriptions. The Czech paraphrases must therefore be given, but with some indication that they are (semantic) paraphrases and not another suitable equivalent constructions. There are two simple possibilities how to define such things in the current system:

- to write the paraphrases as special features of the Norwegian unit, for example `<f key="trans/paraphrase/cs">v této věci/záležitosti</f>`, but such solution would exclude such an expression to be analyzed (and possibily reused) within the Czech part of the dictionary

- to create special multi-word-expression units defining the paraphrases, that would

be classified as such (and not just as any other ordinary dictionary units), and link them to the unit, possibly also with a different type of translational link than the common one

The presentation of such "explanational phrases" to the user can be realized by different means, e.g. by putting such expressions into quotation marks (and mentioning this mark and its meaning in the dictionary guide section).

7.3.3 Czech: *příležitost*

Monolingual description

The Czech noun *příležitost* is derived from the adjective *příležitý* ("opportune, seasonable"). The adjective is, however, very unusual and its stem seems to be derived from the prefix *při* and the verbal root *ležet*, giving a meaning of something "lying near/close to st." or (metaphorically) "belonging to st.".

The *SSJČ* dictionary declares three senses: 1. a favorable opportunity; 2. carriage (driving in a suitable direction); 3. appurtenances. The latter two senses seem to be alien to modern Czech, however.

Valency patterns

The valency patterns of the noun *příležitost* are very similar to the valency of *možnost*. Either a direct genitive or infinitive is used, or a prepositional phrase using either the preposition *k* (with dative case) or *pro* (with accusative case). The distinctions in meaning are the same as for *možnost* and overlap in most cases again: the preposition *k* is used in active meaning (and mainly with perfective actions) to introduce participant's opportunity to realize some action, the preposition *pro* is used for passive opportunities for some type of action to be realized or happen. The use of infinitive and genitive is general again, but the corpus examples show that the use of plain genitive complement is very rarely used to connect the complement [Goal], as it is mostly (in more than 80%) used in constructions with the head preposition *při* to express the conditions [Cond] or [Event] (i.e. the genitive complement can be seen as complement of the compound preposition), or, otherwise, it is used in the generic way to express the participant [Actor] as a possessor of the opportunity.

The noun is also frequently followed by a subordinate adverbial clause of purpose (final clause), introduced by the conjunction *aby*. The clause can be sometimes interpreted both as a relative clause (complement of the noun) or an adverbial (final) clause.

Distribution

The noun *příležitost* occurs 14152 times in SYN2005, thereof 10678 (75.5%) in singular. An infinitive follows in 2005 cases (14.2%), thereof 1861 (92.8%) after a singular form. A noun phrase in genitive case follows in 1282 cases (9.1%), thereof 1192 (93%) after singular form. However, only in 252 cases (19.7%) the genitive phrase is not used as a part of the complex expressions *u / při příležitosti…*.

The preposition *k* follows in 1148 cases (8.1%), thereof 898 (78.2%) after a singular form. The preposition *pro* follows in 523 cases (3.7%), thereof 284 (54.3%) after a singular form. A subordinate clause connected by *jak* ("how") follows in 235 cases (1.7%). Other types of clauses depending directly on the noun are infrequent.

The head preposition *u* occurs 936 times (6.6%), in 919 cases (98.2%) building the fixed expression (complex preposition) *u příležitosti (+GEN)*. The head preposition *při* appears 2133 times (15%), only in 396 cases (18.6%) building the fixed expression (compound preposition) *při příležitosti (+GEN)*.

Polysemy

The semantic space of the noun *příležitost* is very similar to its Norwegian counterpart. The different perspectives of favorable conditions [Cond], i.e. some event [Event], a moment [Time] or the causal perspective [Cause], can all be present here as well, but the borders are very fuzzy again. It seems that the very abstract aspect of time moment, without a connection to some special circumstances or event, is less common in Czech than in Norwegian.

Collocations and idioms

The most common support verb of the noun *příležitost* is *mít*, followed by *využít/využívat, dostat, naskytnout (se), poskytnout/poskytovat, nabízet (se), dávat, najít*. The noun is the most typical subject of the verb *naskytnout se*, the most typical object of the verbs *chopit/chápat se, promarnit, propásnout, vycítit, promeškat* and the idiomatic expression *nechat si ujít*, and a frequent object of the verbs *poskytnout, využít*.

Typical adjectives used as modifiers are: *pracovní, nový, velký, dobrý, vhodný, slavnostní, různý, poslední, jediný, jedinečný*. It shows that the noun refers frequently to some positive and special opportunities.

The head preposition *u* is used to construct a fixed expression *u příležitosti*, used as a compound preposition with a complement in genitive. It introduces some special social event as a temporal and often also causal adverbial in the sentence, corresponding to the Norwegian expressions *i anledning (av)*.

The head preposition *při* is used to build a temporal adverbial constructions in a sentence, correponding to the Norwegian constructions with the preposition *ved*. In many cases, it is also used as a less formal competitor to the preposition *u*, building an alternative compound preposition *při příležitosti* with a complement in genitive.

A special idiomatic verbal expression used in Czech is *chytit/popadnout příležitost za pačesy* (translated by the *SČFI* dictionary as "make hay while the sun shines, seize the opportunity, strike while the iron is hot"). The noun is used in the common proverb *příležitost dělá zloděje* as well.

The *SČFI* dictionary lists some further common collocations: *nejbližší/první (vhodná) příležitost* ("the earliest/first (suitable) opportunity; a fitting moment"), *jedinečná/ nebývalá příležitost* ("a unique opportunity"), *promarněná příležitost/ šance* ("waste opportunity"), *pro každou příležitost* ("(clothes) for every occasion"); *při té příležitosti* ("take/use the opportunity/occasion; at the same time; while one is at/about it"); *vyložená příležitost / šance* ("a superb chance (of a goal); (a giveaway)"); *vítaná příležitost* ("a welcome opporunity"); *chápat se / využít každé příležitosti (k něčemu / aby); nechat si ujít příležitost* ("miss one's chance"); *nenechat si ujít žádnou příležitost; použít první příležitost (k něčemu / aby); zahodit (pěknou) příležitost* ("throw away / waste a good chance / the opportunity"). It also lists the common verbal collocations: *dostat / vytvořit si* (inchoative); *mít* (durative); *chopit se příležitosti / využít příležitost; promeškat / promarnit; ztratit* (terminative); *dát / poskytnout někomu* (causative-inchoative); *vzít* (causative-terminative); *naskytnout se, nabízet se, minout* (subject).

Translation

The Czech-Norwegian pocket dictionary offers *anledning* as the only Norwegian equivalent, adding also one example of prepositional use: *při této příležitosti*, translated as *ved denne anledningen*. The Czech proverb *příležitost dělá zloděje* is here also translated as *leilighet gjør tyv*.

The Norwegian noun *anledning* is the most common equivalent of *příležitost* in the Norwegian-Czech parallel corpus, but the noun *sjanse* is also very common. The nouns *mulighet* and the more specialized *snitt* (as part of the idiomatic verbal expression *å se sitt snitt* corresponding to the much less fixed Czech construction "vidět/spatřit (v něčem) (svou) příležitost") appear in a few cases as well.

Dictionary entry

příležit|ost

příležitost: *sg.:* N příležitost; G příležitosti; D příležitosti; A příležitost; V příležitosti; L příležitosti; I příležitostí; *pl.:* N příležitosti; G příležitostí; D příležitostem; A příležitosti; V příležitosti; L příležitostech; I příležitostmi, *příležitostma

FREQ: 14152 (SYN2005), sg: 75.5%

Morphemic analysis

příležitost *(word)*		
suffixation		
base	suffix	
	ost *(morpheme)*	
	inflexion	
příležit *(morpheme)*	base	ending
	ost *(morpheme)*	

Valency patterns

A ~ *<něčeho>*
B ~ *<INF>*
C ~ k *<něčemu>*
D ~ pro *<něco>*

Collocations and constructions

Verbs: - inchoative: *dostat, dát$_C$ (POSS->ADDR), poskytnout$_C$ (POSS->ADDR)* - durative: *mít* - terminative: *promeškat, promarnit, propásnout, ztratit, pozbýt, chopit_se, využít, vzít$_C$ (POSS->ADDR)* - (subj.): *naskytnout_se, nabízet_se* - (other): *vycítit*

Adjectives: *pracovní, vhodný, slavnostní, jedinečný, promarněný, vítaný, nejbližší*

Fixed expressions: form. u příležitosti *<něčeho> i anledning (av) <noe>*; při příležitosti *<něčeho> i anledning (av) <noe>*; při *<nějaké>* příležitosti *ved (<noen>) anledning*; vidět/spatřit (v *<něčem>*) (svou) příležitost *se sitt snitt*; nechat si ujít příležitost *la anledningen/sjansen gå fra seg*; chytit/popadnout příležitost/šanci za pačesy ; příležitost dělá zloděje *leilighet gjør tyv*

Translation

no: *anledning*

Semantics

situace (např. událost v čase) s vhodnými podmínkami či důvodem k tomu, aby někdo realizoval nějakou činnost

Figure 7.6: The entry for *příležitost*

The entry for *příležitost* (figure 7.6) is very similar to the entry of *anledning*, except of the greater variety of valency patterns and their more even distribution. The idiomatic expression "popadnout příležitost za pačesy" has no Norwegian translation given, because no full equivalent was found. However, it could always be translated

by the equivalent of the synonymical simple verbal collocation "chopit se příležitosti", i.e as "å gripe en anledning". This could be realized in several ways:

- the more requiring solution would be to link the idiomatic expression just to the synonymic expression (or even just the collocation link) in the same language and then let the interpreter to show the equivalence as an approximate translation or a paraphrase

- the idiomatic expression could have a translational link pointing to the noun *anledning*, but requiring the collocation with the verb *å gripe* by some additional feature, which would need another extension of the interpreter as well

- the most simple solution would be just a simple link pointing to a new construction made of the collocation of the verb "å gripe" and the noun *anledning*, but that would make the collocation link from the noun *anledning* to the verb *å gripe* superfluous

7.4   Sjanse – šance (chance)

7.4.1   The conceptual frame

The conceptual frame for *chance* will be similar to that of *anledning* and *mulighet*. Here, the central aspect is the (by default high) probability [Prob] of some situation [Sit] to occur. The situation contains some conditions [Cond] that allow a participant [Actor] to successfully realize the action [Goal]. The special conditions can again be limited to some special moment in time [Time]. In addition, the concept for the Norwegian noun *sjanse* includes also the aspect of some special risk [Risk] of failure in the realization of the action [Goal]. The risk can be seen as some "negative probability", i.e. a (not negligible) probability of the (fatal) failure with further negative consequences. The failure can be seen either as a "negative [Goal]" (i.e. an undesired [Goal]) or as some negative, inseparable alternative result connected closely to the positive [Goal].
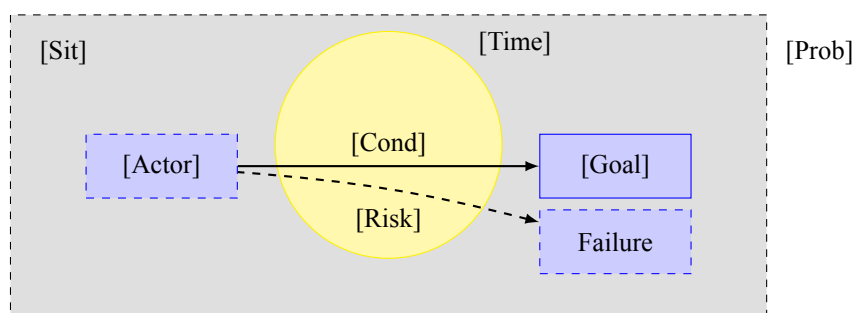
Figure 7.7: The conceptual frame of *sjanse*

7.4.2   Norwegian: *sjanse*

Monolingual description

The lemma *sjanse* does not appear in *Norsk Riksmålsordbok*, but it is listed there in its conservative form *chance*. The definition does not distinguish any senses, but refers to

"prospect" and "possibility" to achieve something, e.g. an advantage, profit, etc.

The definition in *Norsk ordbok* lists three different senses: 1. a prospect to achieve something, favourable or random possibility, probability; 2. an opportunity; 3. a risk. The last sense seems to be connected to the verbo-nominal construction with the support verb *å ta*.

Bokmålsordboka does not distinguish any senses either. In addition to the general definition, similar to the one in *Norsk Riksmålsordbok*, it mentions the idiomatic expressions *ta en sjanse / sjansen / sjanser* with the definition "to dare/venture at something tied to danger".[50]

Valency patterns

The preposition most frequently used with the noun *sjanse* is *til*. The complement is the (un)desired action [Goal]. It is mostly used in the sense synonymous to opportunity, but sometimes it is used to evaluate the probability, too. It is in most cases part of a verbo-nominal expression with modal meaning, using a support verb (usually *å ha/få/gi*) or the existential verb *å være* (usually in the form "st. is someone's chance to do st.").

The preposition *for* is often used, too, but as the LKB corpus shows, almost exclusively in the meaning "probability". It is almost always used either with the verbs *å øke/reducere* ("to increase/reduce") or with adjectives *stor/liten* ("great/little"). The complement is then a whole proposition, the situation [Sit]. According to the corpus, if the complement has a form of a noun phrase, the expression is mostly the free adjunct expressing a beneficiary and not the complement of the noun expressing the [Goal].

The preposition *på* is used as well, but mostly only in the fixed verbo-nominal expression *å ta sjanse på noe*. It can also (in rare cases) appear without the support verb, but the construction seems to have idiomatic meanings as well: either "the probability of getting someone as lover/partner" or more generally "the probability of getting/achieving something". In the latter case, the meaning can generalize and compete with the use of the preposition *til*. But when the preposition *på* is used, the verb expressing the desired action remains usually underspecified and belongs to a limited semantic field.

Distribution

The noun *sjanse* occurs 2107 times in LKB, thereof 1647 times (78.2%) in singular. In 29 additional cases it takes the alternative colloquial form *sjans*.

The preposition *til* follows in 508 cases (24.1%), thereof 444 times (87.4%) after singular form. An infinitive complement follows in 436 cases (85.8%), a subordinate clause connected by *at* in 1 case only.

The preposition *for* follows in 364 cases (17.3%), thereof 262 times (72%) after singular form. An infinitive complement follows in 148 cases (40.7%), a subordinate clause connected by *at* in 142 cases (39%).

The preposition *på* follows in 196 cases (9.3%), thereof 189 times (96.4%) after singular form. An infinitive complement follows in 91 cases (46.4%), a subordinate clause connected by *at* in 31 cases (15.8%).

There are other prepositions following the noun in a few cases: *i* in 42 cases, *mot* in 15 cases and *ved* in 9 cases.

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[50]Unfortunately, the structure of the article suggests this meaning is valid also for the expression *la sjansen gå fra seg*, which is wrong. It is a typical example of the problematic linearization of the tree-structured lexical description in 'printed' dictionaries.

Polysemy

The noun *sjanse* is not really polysemous, but the general meaning seems to make two relatively clear distinctions in Norwegian, connected to the valency patterns: in the meaning of "opportunity" corresponding to *anledning*, i.e. to the element [Cond], or more specifically the moment [Time], the noun prefers using the preposition *til* to introduce the complement [Goal]; in the meaning corresponding to "probability" [Prob], it prefers (even though not exclusively!) the preposition *for* to connect the complement expressing the whole situation [Sit], whose probability of realization is evaluated. In the latter case the complement refers usually to an independent proposition as the more frequent use of subordinate clauses shows (unlike the prepositional phrase with *til*, where a subordinate clause occurs only once in LKB).

The meaning of "risk" is specific to the idiomatic expression *ta sjanse (på noe)* and should therefore be handled separately. The semantics of the noun can also include some more specific meanings when used with particular prepositions, as the next section on idiomatic constructions shows.

Collocations and idioms

The noun *sjanse* is often used with the support verbs *å ha/få/gi*. The verb *å ta* has still the highest frequency, since it builds the idiomatic expression *ta sjanse*. Other special frequent verbs include *å benytte, å gripe* (for the meaning "opportunity") and *å øke, å redusere* (for the meaning "probability"). The Norwegian-Spanish dictionary mentions also the collocation with the verb *å forspille*, but another common support verb (with terminative aspect) would be *å miste*. Other bilingual dictionaries mention the fixed expression *la sjansen gå fra seg* and other typical collocations: *ha gode/små sjanser, ikke ha noen sjanse, sitt livs sjanse, ta sjanse på noe / ta sjanser / ta de sjanser livet tilbyr*

The most common adjectives used as modifiers of *sjanse* are: *stor, liten, god, sist, mange, unik,....* Here, we can see adjectives typical for "opportunity" as well as adjectives indicating the measure of probability. The adjectives thus support the distinction of two abstract sub-senses of the noun *sjanse*.

The specific use of the noun in the expression *ta sjanse på noe/noen* could be considered another, third meaning of the noun *sjanse*, but it should be rather classified as a completely independent idiomatic verbo-nominal expression with its own meanings "to risk" or just "to try". A different problem is the use of the preposition *på* independently of the verb *å ta* (mainly in colloquial language): in this case the preposition either competes with the preposition *til* or rather has its own, idiomatic meaning, implying some generic verb (usually "to get/achieve") as the [Goal], which would take the complement of the preposition as its own object (e.g. "Vi ville ikke hatt en sjanse på *(å få)* denne kontrakten hvis..."). The implicit verb would (in the form of an infinitive construction) itself become the complement of the preposition *på* instead.

There are other prepositions that collocate more regularly with the noun, introducing adjuncts, which can be considered constituents of fixed or idiomatic expressions as well. The preposition *i* can introduce some field, where the participant has a chance (probability) *to succeed* (in some underspecified way). The preposition *mot* can introduce some opponent of the participant, in order to evaluate the participant's chance (probability) *to win in a competition with* the opponent. The preposition *ved* is often used in connection with the expression *ta sjanse*, in order to introduce an adverbial of matter, how the participant runs a risk (i.e. the dangerous action, e.g. "I dommen heter

det videre at han bevisst har tatt en sjanse ved å kjøre uten forsikring.”). Unlike the preposition *på*, the preposition *ved* only introduces a risky (meaningless) action without any specific [Goal]. But the preposition *ved* can also be used generally to introduce an adverbial of matter into the sentence.

Translation

The Norwegian-Czech pocket dictionary lists three Czech nouns as equivalents of the Norwegian *sjanse*: *možnost, příležitost, naděje*. The Czech noun *šance* is not mentioned at all. This indicates some important difference in the use of the two nouns. The dictionary shows the idiomatic use of the expression *ta sjanse* in form of the example *vi tar sjansen*, translated as *zkusíme to, riskneme to* (lit. “we try it, we risk it”).

The Norwegian-Czech parallel corpus confirms that the Norwegian noun is seldom (in about 18 cases out of 153, less than 12%) translated by its Czech counterpart *šance*. The equivalent *možnost* occurs 36 times (24%), *příležitost* occurs 31 times (20.4%) and *naděje* in 14 cases (9.2%). The verbs *riskovat/risknout* occur in 21 cases as equivalents of the idiomatic expression *ta sjanse* and once more as an equivalent of the collocation *gripe sjanse*. In 4 cases, the noun *čas* is used as a direct reference to the conceptual aspect of [Time], and in another 4 cases the noun *pravděpodobnost* (“probability”) as a direct reference to [Prob].

Dictionary entry

The entry (figure 7.8) defines the two main sub-senses with corresponding valency preferences, different synonyms and even the different collocating verbs and different (additional) translational equivalents. The equivalents *možnost* and *šance* cover generally both the meanings, but *příležitost* corresponds closely to the the meaning of “opportunity”, while *pravděpodobnost* and *naděje* correspond more closely to the meaning “probability”. The support verbs defined in the root unit of the lemma would actually also probably mostly fit the meaning of “opportunity”, but such statement would require closer analysis.

The idiomatic expression *ta sjanse (på)* is defined as an independent unit with its own valency and data on frequency (448 occurrences altogether, thereof 150 (33.5%) with the preposition *på*, thereof 83 (55.3%) with an infinitive construction and 23 (15.3%) with a subordinate clause connected by *at*). The two most common forms of this expression are actually defined as alternative realizations of the expression: the concrete expression *ta sjanse (på)*, requiring a complement (at least an implicit one), and the generic expression *ta sjanser*, which only refers to the habit of “often taking risk” without any specific complement. Two equivalent Czech verbs (“to risk” and “to try”) are assigned to the unit, although the difference between their meanings would possibly be a good reason to define two slightly distinct senses of this expression. In addition, the translational links include a mapping feature identifying the complement of this verbo-nominal expression with the PAT complement (Patient) of the Czech verbs.

The expression *la sjansen gå fra seg* is actually identical with the expression *la anledningen gå fra seg* and they have therefore been defined as one single expression with a variable noun. The single Czech equivalent *nechat si ujít příležitost* is sufficent as well, because this expression is very rarely used with the noun *šance*.[51]

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[51]The ratio is 91:3 in SYN2005, while for the Norwegian pair it is exactly 9:9 (according to LKB).

sjanse

sjanse: *sg. indef.* sjanse ; *sg. def.* sjansen ; *pl. indef.* sjanser ; *pl. def.* sjansene

FREQ: 2107 (LKB), sg: 78.2%

Morphemic analysis

sjanse *(word)*

inflexion		ending
base		**ending**
sjanse *(morpheme)*		

Valency patterns

A ~ til *<noe/å…>*

B ~ for *<å…/at…>*

Collocations and constructions

Verbs: - inchoative: *få, gi$_c$ (POSS->ADDR)* - durative: *ha* - terminative: *forspille, miste* - (subj.): *byde_seg*

Fixed expressions: la anledningen/sjansen gå fra seg *nechat si ujít příležitost*; ta sjansen (på *<noe/å…/at…>*) / ta sjanser *riskovat (Comp->PAT) / zkusit (Comp->PAT)*; sjanse i *<noe>* *šance v <něčem>*; sjanse mot *<noen/noe>* *šance proti <někomu/něčemu>*

Translation

cs: *možnost; šance*

Semantics

1. vilkår som tillater (noen å realisere) en hendelse

   Preferred constructions: A

   Synonyms: anledning

   Valency patterns

   A ~ til *<noe/å…>*

   Collocations and constructions

   Verbs: - terminative: *benytte, gripe*

   Translation

   cs: *příležitost*

2. sannsynlighet at en situasjon (hvor noen realiserer en hendelse) skjer

   Preferred constructions: B

   Synonyms: sannsynlighet

   Valency patterns

   B ~ for *<å…/at…>*

   Collocations and constructions

   Verbs: - (other): *øke, redusere*

   Translation

   cs: *pravděpodobnost; naděje*

Figure 7.8: The entry for *sjanse*

The collocations *sjanse i noe* and *sjanse mot noen/noe* are defined as separate fixed expressions as well, currently without any further gloss or explanation, but with links to the corresponding Czech expressions, which have the same meaning.

7.4.3   Czech: *šance*

Monolingual description

As in other languages, the noun *šance* is a local adaptation of the French noun *chance*. However, as the comparison reveals, it is still less commonly used (or in rather more specific situation) in Czech language (compared to its broad use in Norwegian) and the traditional local synonyms are usually preferred in the more general meaning.

The *SSJČ* dictionary lists two homonyms of the noun: *šance I* meaning "wall, rampart, mound", and *šance II* meaning "prospect, hope for success or good result". No more separate senses are distinguished. For this study, the first homonym is irrelevant.

Valency patterns

The Czech noun *šance* is commonly used with a direct complement in the form of verbal infinitive, or with noun phrases connected using the prepositions *na* (with a noun phrase in accusative) or *k* (with a noun phrase in dative). The preposition *k* evokes an active meaning of opportunity to realize some action (often perfective), while the preposition *na* suggests rather the meaning of probability or hope. The preposition *pro* mostly occurs as part of the free adjunct introducing the beneficiary, but in a few cases it also competes with the other two prepositions, introducing the [Goal] of the opportunity (again the meaning is more passive here), or situation [Sit] whose probability is evaluated.

The very different frequency of the two propositions (*na* and *k*) shows that the main difference is not the particular meaning, but probably rather a personal preference. The preposition *na* can be in most cases used instead of the preposition *k*, since it gives a more general meaning.[52]

In rare cases, a direct noun phrase complement in genitive case can express the [Goal] when the noun refers to the probability [Prob] of reaching the [Goal]. In most cases, the genitive phrase is used to express the [Actor], however.

Distribution

The noun *šance* occurs 12975 times in SYN2005, thereof 9795 times (75.5%) in singular. An infinitive follows in 2493 cases (19.2%), in 2328 cases (93.4%) after singular form. A noun phrase in genitive case follows in 585 cases (4.5%), mostly referring to the [Actor].

The preposition *na* follows in 1643 cases (12.7%), thereof 1240 (75.5%) after singular form.

The preposition *k* follows in 105 cases (0.8%), thereof 81 (77.1%) after singular form.

The preposition *pro* follows in 233 cases (1.8%), thereof 185 times (79.4%) after singular form.

---

[52]The difference can also indicate a stylistic preference.

Polysemy

The meaning of the noun *šance* seems to be much more limited in Czech than in Norwegian. It is used in the core meaning, as some special opportunity with high probability of success, usually given to the participant [Actor] by some external participant or occuring at some very exactly defined time stretch or moment. It can refer both to the "opportunity" ([Cond] or [Time]) or to the probability [Prob]. Often it is difficult to distinguish the two aspects (only adjectives or the verb can specify it) and it does not seem to have a prevalent influence on the choice of the particular preposition.

The extended meanings of some risky situation or of trying something is completely alien to the Czech noun *šance*. On the other hand, the Czech noun is very frequently used in sports commentary and reports, and takes part in special collocations in the description of sport games.

Collocations and idioms

The noun *šance* is a common subject (besides of the general nouns *být, existovat*) of the verbs *naskytnout se, existovat, rýsovat se, nabízet se, zrodit se, růst, zvyšovat se,...* It appears as a common object of the verbs *využít, chopit se, dávat, vytvořit, dostat, promarnit, propást, zahodit, vycítit*. A special idiomatic expression used in sports is the verbo-nominal construction *proměnit šanci*, meaning "to use some (very favorable) opportunity to score/win in a (collective) sports game".

Adjectives commonly used as modifiers of the noun *šance* are: *velký, další, poslední, malý, žádný, dobrý, jediný, první, nový, vyložený, reálný, stejný,...*

The cooccurrence of the preposition *v* (with noun phrase in locative), introducing some field, where the participant can (not) succeed, corresponds to the Norwegian use of the preposition *i*. The use of the preposition *proti* corresponds to the Norwegian *mot*, introducing an opponent for the participant [Actor], in order to evaluate the probability of the actor's triumph in some competition with the opponent.

The noun can also appear in the collocation *chytit šanci za pačesy*, which is most typical for the noun *příležitost*, but the whole analysis shows that the Czech noun *šance* is a very close synonym to *příležitost* and can often compete with it, being still more common in more colloquial style and especially in the domain of sports. The use in the idiomatic expression *chytit šanci za pačesy*, and probably the use of the preposition *k*, can also suggest influence of the noun *příležitost*, but such statements would have to be verified by a diachronic corpus.

The Word-sketch analysis of differences between the nouns *příležitost* and *šance* confirms the orientation of the latter one on the meaning of probability and on the domain of sports, and it can probably also suggest a more colloquial style: the modifiers used more frequently with the noun *příležitost* are e.g. *jedinečný, ideální, rovný, skvělý, nový, mimořádný*, but surprisingly also *brankový*. The modifiers used most frequently with the noun *šance* are e.g. *malý, velký, vyložený, gólový, promarněný, stoprocentní, sebemenší, životní*. The verbs used more frequently with the noun *příležitost* are e.g.: *naskytnout se, poskytnout, využít, chopit se, vytvářet, nabízet, skýtat*. The verbs used more frequently with the noun *šance* are often more general verbs like *dávat/dát, vidět, dostat, existovat*, but also *zahodit, vytvořit, ztratit, cítit*. The actions [Goal] being exclusive complements of the noun *šance* are usually represented by infinitives of the verbs *uspět, přežít, vyhrát, prosadit se, postoupit, uniknout, obstát, skórovat,...*, while for the noun *příležitost* the exclusive infinitives are of less dynamic and practical and rather more intellectual verbs *zhlédnout, prohlédnout, shlédnout, pozorovat, navštívit,*

zamyslet se, setkat se,naučit (se),.... Preferences within the list of infinitives occurring with both nouns show the same tendency.

The *SČFI* dictionary lists two collocations with adjectives common to the nouns *šance* and *příležitost*: *promarněná příležitost/šance* ("waste opportunity") and *vyložená příležitost/šance* ("a superb chance (of a goal); (a giveaway)").

Translation

The only Norwegian equivalent of *šance* given by the Czech-Norwegian pocket dictionary is the noun *sjanse*. The fact that it is not mentioned in the opposite direction at all shows the asymmetry in usage, confirmed by the corpus analysis.

The noun *šance* appears only 24 times in the Czech-Norwegian parallel corpus, and with the exception of 5 cases, the noun *sjans(e)* is always used on the Norwegian side.

Dictionary entry

šance

šance: *sg.:* N šance; G šance; D šanci; A šanci; V šance; L šanci; I šancí; *pl.:* N šance; G šancí; D šancím; A šance; V šance; L šancích; I šancemi, *šancema

FREQ: 12975 (SYN2005), sg: 75.5%

Morphemic analysis

šance *(word)*

inflexion	
base	ending
šance *(morpheme)*	

Valency patterns

A ~ *<INF>*

B ~ na *<něco>*

C ~ k *<něčemu>*

Collocations and constructions

Verbs: - inchoative: *dát$_c$ (POSS->ADDR), dostat* - terminative: *chopit_se, využít, promarnit, propást, zahodit,* $^{sport.}$ *proměnit* - (subj.): *naskytnout_se, existovat, rýsovat_se, nabízet_se, zrodit_se, zvyšovat_se, růst* - (other): *vycítit*
Adjectives: *gólový, životní, promarněný, vyložený, reálný*
Fixed expressions: šance v *<něčem>* sjanse i *<noe>*; šance proti *<někomu/něčemu>* sjanse mot *<noen/noe>*; chytit/popadnout příležitost/šanci za pačesy

Translation

no: *sjanse*

Semantics

situace s velkou pravděpodobností / vhodnými podmínkami k tomu, aby se někomu podařilo realizovat nějakou činnost

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Figure 7.9: The entry for *šance*

The entry for the noun *šance* (figure 7.9) is much simpler than the entry for the Norwegian counterpart. No sub-senses are defined, although the noun also reflects both the meanings of "opportunity" and "probability". However, it's usage is much more limited and compact and the two semantic aspects are seldom clearly separable even in particular contexts (unless a specific adjective is used as disambiguator, e.g. "jediná šance" vs. "větší šance").

It would be useful to indicate the general preference of this word in colloquial language and especially in the domain of sports, but it is not exclusive enough, except of very specific fixed expressions. As an example, the collocation with the support verb "proměnit" is marked for the domain of sports – other verbs (e.g. *promarnit, zahodit,* etc.) may be typical for this domain as well, but not completely exclusive.

7.5   Evne – schopnost (capability)

7.5.1   The conceptual frame

The conceptual frame of *capability* is basically the same as the frame for *possibility*. The only difference is the nature of the favorable conditions, which have origin solely in the inherent qualities of the [Actor][53] and not external circumstances. The conditions can therefore get a more appropriate label as capabilities [Cap]. The nouns can also point to some disposition for some not closely (or explicitly) specified type of goals within some field [Field].
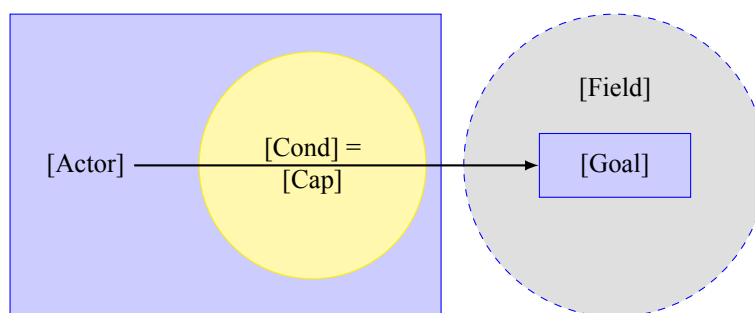
Figure 7.10: The conceptual frame of *evne*

7.5.2   Norwegian: *evne*

Monolingual description

The Norwegian noun *evne* (figure 7.11) is of Old Norse origin. *Bokmålsordboka* defines two senses of the noun: 1. a quality to manage something, power/strength, (economical) capacity; 2. a gift, talent. *Norsk ordbok* follows the same distinction, speaking about "inherent possibility; power, capability" and "inherent characteristic/quality". *Norsk Riksmålsordbok* does only mention two historical types of uses and then, as a third sense, the general meaning as described by the other dictionaries.

Valency patterns

The noun *evne* uses the preposition *til* to connect a complement expressing the [Goal] (which can be general or potential as well). Only infinitive and noun phrases have been found as complements in the LKB, as expected. The actor is part of the noun's conceptual reference and can hardly be separated from it into some external proposition.

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[53]The inanimate "actors" or subjects of passive events would rather be classified differently by theories making finer semantic distinctions at this deeper syntactic-semantic level.

The prepositions *for* and *i* appear extremely rarely. They introduce the general field [Field] (the preposition *i*) or some very general (potential) [Goal] (the preposition *for*) to the meaning "talent". In these cases, the noun appears always in plural, suggesting that it refers to some general, unique and complex set of dispositions or qualities of the [Actor] that allow him or her to be actively involved in the processes defined by the complement. The low frequency cannot tell us whether these patterns belong to the general usage or whether they are just deviations, however. It is also difficult to tell whether they should be considered part of the valency: they express rather the type of the capabilities, and only indirectly some particular goal they can be used for.

Distribution

The noun *evne* appears 2783 times in LKB, thereof 2292 times (82.4%) in singular. The preposition *til* follows in 1978 cases (71.1%), thereof 1910 times (96.6%) after singular form. An infinitive complement follows in 1608 cases (81.3%).[54]

The word *for* follows in 11 cases, but only three occurrences represent the use of the preposition *for* introducing a complement to the noun itself. The noun refers in all cases to the meaning of "talent" and is used in plural form.

The preposition *i* follows in 17 cases, but only about 4 of them can be considered as phrases introducing some field of subject's special talent. The plural form is always used, in those cases.

Polysemy

There are two main distinctions of sense, which can be distinguished for the noun *evne*: the plain capability to do something, and some general talent or dispositions of some kind. There is no clear border, however. The senses refer to the same conceptual element and the only difference is the greater generality and abstractness of the [Goal] and the complexity of the capabilities [Cap]. There seems to be some minor reflection in the collocational realization of the senses, however: the common capability refers to a particular [Goal] through the prepositional phrase with *til*, while the special talents and dispositions define only a field [Field] of possible goals by means of adjectival attributes or the preposition phrases with *i* or *for* and usually the noun appears in plural form.

Collocations and idioms

The noun is a frequent object of the verbs *å ha, å miste, å mangle, å utvikle* and *å bruke*. The commonly used adjective modifiers are e.g. *god, stor, økonomisk, intellektuell, skapende, spesiell, enestående, liten, kunstnerisk*. The special capabilities are also specified using adjectives like *overnaturlig, synsk, mental, særlig, sjelden, fabelaktig*.

The other bilingual dictionaries mention the collocations *etter evne, etter beste evne, etter fattig evne, intellektuelle evner, leve over evne, over evne*. According to LKB, the construction *ligge i ens evne* has the antonymous constructions *ligge utenfor ens evner* as well as *ligge hinsides ens evner*. The collocation *etter evne* seems to be (according to the corpora) mostly used in the quotation of communism's main ideal *yte etter evne, få etter behov*.

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[54]The word form *at* is used in 3 additional cases, but always being the obsolete variant of the infinitive particle *å* (i.e. introducing infinitive).

Translation

The Norwegian-Czech pocket dictionary lists the noun *schopnost* as an equivalent of *evne*, but in addition the nouns *síla* and *moc* as well. It also translates the common collocations *etter beste evner* as *ze všech sil*, and *ha gode evner til noe* as *mít schopnosti k něčemu*.

The noun *schopnost* is used as equivalent of the Norwegian noun *evne* in about 85 cases out of 157 (54.1%) in the Norwegian-Czech parallel corpus. Other nouns – *smysl, dar, moc, síla* – appear about 4-6 times each. The expression *není v mých/našich silách* appears as equivalent of the Norwegian collocations *det ligger hinsides mine evner, det overstiger våre evner*. The expression *over evne* appears two times translated by the adverb *nadmíru* or the verbal expression *přehnal (to)*. The idiomatic expression *etter beste evne* seems to correspond also to the expression *jakž takž* or the collocation *jak mohl*.

Dictionary entry

The main unit of the entry defines only the (very frequent) valency pattern with the preposition *til* and link to the general Czech equivalent *schopnost*. The definition of the first sense adds the other possible Czech translations *síla* and *moc*. The second sense adds also the translation *dar* ("gift") and the two additional (controversial) valency patterns *evner for noe* and *evner i noe*.[55]

While the first sense indicates the preference of the first valency pattern, the second one indicates the preference of plural form of the noun *evne*. This requires the addition of a new unit feature of type *select/gram/num* (analogical to *select/phrase*). A more general scheme for indicating formal preferences would be e.g. the use of an additional *constraint* structure on the *core*, but the difference of the relative preference and an absolute constraint would have to be declared somehow anyway.

The idiomatic expressions *etter evne* and *etter beste evne* have different meanings and very different equivalents in Czech: *podle schopností* and *ze všech sil*. There wasn't enough evidence to identify one general equivalent for the collocations *(leve) over evne*. The opposite expressions *ligge i ens evne* and *ligge utenfor/hinsides ens evner*[56] differ both in the preposition and the form of the noun while their Czech equivalent uses just a plain negation of the main verb. This fact is currently not explicitly shown in the interface, but it could be indicated within the *link* element as some kind of partial equivalency, which requires the other side to remove some of the variants (e.g. by a constraint), or simply by checking some common feature indicating negation.[57]

7.5.3   Czech: *schopnost*

Monolingual description

The Czech noun *schopnost* is derived from the adjective *schopný* ("able, capable"). The noun cannot be found in the *SSJČ* dictionary as an independent lemma. The dictionary

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[55]Without any frequency information, because of the negligible appearance in LKB.

[56]The opposite meaning of the two expressions is also indicated by the link *sem/ant*.

[57]The Czech expression now defines the negative form of the verb simply as its alternative. The definitions currently provide at least a feature *sem/neg* which could be potentially used to identify the correspondence within the 'variants' of the whole construction. Formalization of general aspects like negation is question of the whole conception of grammar within the dictionary – in this case handling of negation – and cannot be solved universally within the limited scope of this work.

evne

evne: *sg. indef.* evne ; *sg. def.* ^{+C}evnen, (^{*R})evna ; *pl. indef.* evner ; *pl. def.* evnene

FREQ: 2783 (LKB), sg: 82.4%

Morphemic analysis

evne *(word)*	
inflexion	
base	**ending**
evne *(morpheme)*	

Valency patterns

[A] ~ til <*noe/å…*>

Collocations and constructions

Verbs: - inchoative: *utvikle* - durative: *ha, mangle* - terminative: *bruke, miste* - (other): *overstige*

Adjectives: *økonomisk, kunstnerisk, intelektuell, skapende, enestående, sjelden, spesiell, overnaturlig, synsk, særlig, mental, fabelaktig*

Fixed expressions: etter evne *podle schopností*; etter beste evne *ze všech sil*; over evne ; ligge i *<ens>* evne *být/nebýt ve schopnostech <někoho> / být/nebýt v silách/moci <někoho>*; ligge utenfor/hinsides *<ens>* evner *být/nebýt ve schopnostech <někoho> / být/nebýt v silách/moci <někoho>*

Translation

cs: *schopnost*

Semantics

1. personlig egenskap som tillater eieren å realisere en hendelse

   Preferred constructions: [A]

   Valency patterns

   [A] ~ til <*noe/å…*>

   Translation

   cs: *síla; moc*

2. spesiell personlig begavelse som tillater eieren å bli vellykket i et felt

   Preferred forms: plural

   Valency patterns

   [B] ~er for <*noe/å…*>

   [C] ~er i <*noe*>

   Translation

   cs: *dar*

Figure 7.11: The entry for *evne*

describes only the adjective. However, the dictionary distinguishes two basic senses of the adjective corresponding to the senses defined for the Norwegian noun *evne*. In the *PSJČ* dictionary, the noun is mentioned and the second sense of "talent" is associated with the plural form of the noun *schopnost*. This indication corresponds also to the behaviour of the Norwegian noun *evne* as found in the valency patterns with the prepositions *for* and *i*.

Valency patterns

The noun often connects directly with an infinitive expressing the [Goal]. Noun phrase in genitive can also be used with deverbal nouns (or other nouns referring to some activity), but often it is just used to express the [Actor]. Prepositions are used very rarely. They help to separate the capability (as some kind of condition: predisposition or potential) from the practical target [Goal] or the field [Field] of possible goals, and their (potential) realization. Again, the preposition *k* (with noun phrase in dative case) is used in a directional, active meaning of disposition to perform some particular action, the preposition *pro* (with noun phrase in accusative case) in a passive meaning of disposition for some (type of) activities, both a more specific [Goal] or a more general [Field]. The semi-valency pattern using the preposition *v* (with noun phrase in ablative case) defines the field [Field] of potentially possible goals [Goal] (dis)allowed by the dispositions of the [Actor].

Distribution

The noun appears 16964 times[58] in SYN2005, thereof 11235 times (66.2%) in singular form. An infinitive follows in 5197 cases (30.6%), thereof 4898 times (94.2%) after singular form. A noun phrase in genitive case follows in 4154 cases, but most of them express the [Actor] or they are not complements of the noun at all.

The preposition *k* follows the noun in 94 cases only (0.6%). However, in about 25% of the cases it is not a complement of the noun. The same applies also to the preposition *pro*, which appears 47 times, but in more than 36% of cases it can not be attributed directly to the noun or the exact interpretation is ambiguous. The preposition *v* seems to be a little bit more frequent – it appears 172 times (1%), but it can be attributed to the noun in only about 20% of the cases. Neither the meaning of "talent" nor the exclusive use of plural forms can be connected to the use of any of the prepositions according to the corpus data, however.

Polysemy

The meaning of the noun *schopnost* has similar aspects as the meaning of its Norwegian counterpart. The two senses can be identified, but the border between them is unclear. The plural often suggests the more abstract meaning of some very special talent, but it can also be used to refer to any set of qualities or skills. It cannot be attributed to any formal distinction.

Collocations and idioms

The most frequent verbs occurring with the noun *schopnost* are *mít, prokázat, využít/ využívat, ztratit/ztrácet, rozvíjet/rozvinout, dokázat*. More specific verbs are e.g. *ob-*

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[58]In 1099 cases (6.5%), it is the negative form *neschopnost*.

dařit, nadat, vyznačovat se, disponovat, vynikat, vládnout, oplývat, vymykat se. A common collocation is also *být nadán schopnostmi*.

Typical adjectives used as modifiers are e.g. *pracovní, mimořádný, rozlišovací, vypovídací, změněný, rozumový, rozpoznávací, vyjadřovací, konkurenční, nadpřirozený, tvůrčí, intelektuální, vůdčí,* etc.

The *SČFI* dictionary lists the following verbal collocations: *nabýt / získat / vypěstovat si s.; osvědčit / projevit s.* (inchoative); *mít s.; pěstovat s.* (durative); *ztratit / pozbýt s.* (terminative). It also mentions the durative expression *být ve schopnostech někoho*.

Translation

The Czech-Norwegian pocket dictionary only mentions the noun *evne* as a Norwegian equivalent of the Czech noun. It also translates the collocation *podle schopností* as *etter evne*.

The Czech-Norwegian parallel corpus confirms the noun *evne* as a major equivalent of *schopnost*. Other synonyms appear only occasionally.

Dictionary entry

schopn|ost

schopnost: *sg.:* N schopnost; G schopnosti; D schopnosti; A schopnost; V schopnosti; L schopnosti; I schopností; *pl.:* N schopnosti; G schopností; D schopnostem; A schopnosti; V schopnosti; L schopnostech; I schopnostmi, *schopnostma

FREQ: 11235 (SYN2005), sg: 66.2%

Morphemic analysis

schopnost *(word)*		
suffixation		
base	**suffix**	
	ost *(morpheme)*	
	inflexion	
schopn *(morpheme)*	**base**	**ending**
	ost *(morpheme)*	

Valency patterns

A ~ *<INF>*
B ~ k *<něčemu>*
C ~ pro *<něco>*
D ~ *<něčem>*

Collocations and constructions

Verbs: - inchoative: *nabýt, získat, vypěstovat_si, osvědčit, projevit, obdařit$_C$ (POSS->ADDR)* - durative: *mít, pěstovat, vyznačovat_se, disponovat, vynikat, vládnout, oplývat* - terminative: *ztratit, pozbýt* - (other): *prokázat, využít, rozvíjet, vymykat_se*

Adjectives: *pracovní, mimořádný, [tech.] rozlišovací, rozumový, vyjadřovací, vypovídací, nadpřirozený, tvůrčí, intelektuální, vůdčí*

Fixed expressions: podle schopností *etter evne*; být/nebýt ve schopnostech *<někoho> ligge i <ens> evne / ligge utenfor/hinsides <ens> evner*

Translation

no: *evne*

Semantics

vlastnost (něčí) potřebná k tomu, aby byla realizována nějaká činnost (v rámci nějaké oblasti/oboru)

Figure 7.12: The entry for *schopnost*

The entry for *schopnost* (figure 7.12) is simplified in comparison to the Norwegian one. The definition of two senses was abandoned, because the distinction is even more difficult than in Norwegian: neither the form nor the valency pattern used can be clearly associated with the meanings of "common capability" and some "special talent".

Despite the principle not to go deep into the description of the collocates, at least the adjectival collocation *rozlišovací schopnost* has been marked as a *technical* expression.

7.6 Styrke/kraft – síla (strength/force)

7.6.1 The conceptual frame

The conceptual frame of *styrke* is almost identical with the conceptual frame of *ability*. *Strength* is a special kind of *ability* of some subject [Actor] to withstand physically or mentally some resistance (obstruction) [Obstr] in order to perform some action [Goal]. The *strength* is measurable ([Quant]), giving the subject ability to withstand less or more powerful resistance. The [Goal] can also be passive ability of the subject [Actor] to just resist some outer force without suffering damage (e.g. "styrker til å forsvare landet").
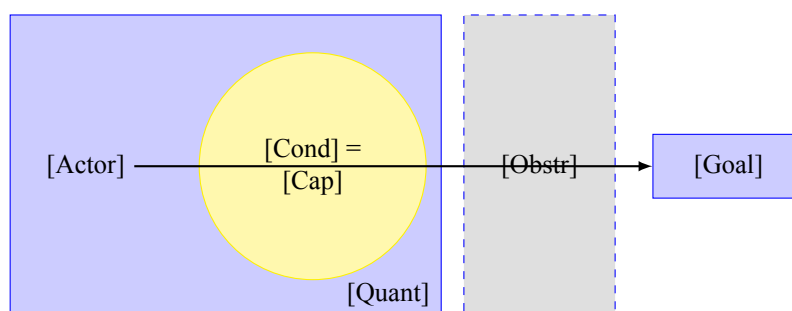
Figure 7.13: The conceptual frame of *styrke*

The main difference between the nouns *styrke* and *kraft* is the fact that the second one is semantically much more independent – it is usually seen as the subject (or semantic actor), i.e. as the [Force] itself. Even when used by some participant (a possessor [Poss] of the force) to achieve his own will (identical with [Goal]), this participant seems to be rather external to the concept of *force*, which performs the action itself. The *force* [Force] is not necessarily an inherent and permanent capability of the possessor. Even in case of the (frequent) complete identification of the force with some (human) subject in the form of personification, the personified force can be controlled by some higher (external) will [Poss]. The borderline between the force and its possessor becomes most unclear when the possessor is underspecified, unknown or generally abstract (e.g. the meaning of (super)natural forces). However, if there is some explicit, external possessor [Poss], it is also the controller, i.e. the subject [Actor] of the complement (the infinitive construction).
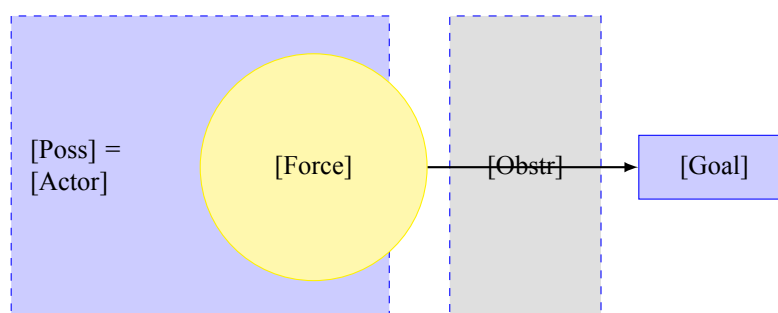
Figure 7.14: The conceptual frame of *kraft*

7.6.2   Norwegian: *styrke*

Monolingual description

The noun *styrke* has two very clearly distinct senses, as defined by *Bokmålsordboka* and *Norsk ordbok*: 1. the capability of being strong; 2. an organized group of people, forces (army, police, etc.). *Norsk Riksmålsordbok* tries to define finer senses by distinguishing the strength of some material to withstand some power, physical and mental strength of people, and strength as a measure of intensity of some natural phenomenon (wind, el. current, etc.). Even finer distinctions are made by 2-3 subsenses for each sense.

Valency patterns

The noun *styrke* does not appear so often with a complement, but if there is a complement expressing the [Goal], it is connected by the preposition *til*. It mostly connects with the infinitive construction.

   The preposition *i* can be used either to connect a specification of the special capability [Cap] or [Cond][59] giving the subject [Actor] some special power, or it can be used to connect the subject [Actor] itself when the noun is used in the sense of measure of the strength (or power) of some artefact or phenomenon (e.g. *styrke i motoren / tonen / bergarten /* etc.). In the first case, the complement can express some extraordinary feature, a field where the subject has some special capabilities (e.g. "har sin styrke i et pussig landskapsmaleri") or even a whole proposition describing the feature or method that the [Actor] uses to get some special advantage (e.g. *...har kabel-TV bransjen en vesentlig styrke i at de har bredbånds aksessnett helt ut til abonnenten.*; *som har sin styrke i å skjerme ballen noen sekunder til de får støtte bakfra*).[60] It is a closer specification of the type of strength of the [Actor]. This use is mostly connected to the

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[59]There is an obvious semantic connection between the otherwise general usage of the preposition *i* to introduce a free adjunct of location and its use to specify the 'location' of the special power consisting in some specific feature or extraordinary capability of the [Actor].

[60]There is even an interesting example of a border case in LKB: In the sentence *"innflytelse en juridisk forfatter skal få, beror dels på styrken i hans argumentasjon"* the "argumentation" can be seen as the phenomenon whose strength is measured, i.e. a semantic subject [Actor], possessor of the capability [Cap] (a force) which performs the goals of its owner (in the second instance), the syntactic subject of the sentence; or it can be seen straightly as the special capability [Cap] of the real syntactic subject of the sentence, the "author" *(forfatter)* which can give him the power to reach his [Goal]. The first interpretation seems to be more plausible here, because the inner proposition involving the noun *strength* only evaluates the measure of this phenomenon, which is then later used as an argument for the verb "å bero" in the higher proposition, where the central noun is *innflytelse* and the actor is the "author".

collocation *å ha sin styrke i noe*.

The preposition *på* can be used to specify the measure of either the power of some natural phenomenon (on a particular scale: "jordskjelvet hadde en styrke på 7,2 på Richters skala") or the number of members in some social force (e.g. troops in an army: "å sende ut en styrke på 3500 soldater"). It can obviously also connect the phenomenon [Actor] itself, whose strength is in discussion (e.g. *styrke på (sol)lyset / solvinden / virkemiddelbruken*). It concerns only the natural phenomena – forces whose strength or power (i.e. quantity [Quant]) is measured on some scale. On the other hand, the preposition *i* can be also used to connect the general inanimate [Actor] whose (relative) qualities are considered. In this area, there is some competition between the prepositions when the meanings overlap, i.e. the [Actor] is identical with (or inseparable from) the force and it is therefore identified with the capability [Cap] (e.g. *styrken i det første jordskjelvet, styrken i bergarten* vs. *styrken på bergartene*).

Distribution

The noun *styrke* appears 2476 times in LKB, thereof 1665 times (67.2%) in singular form. The preposition *til* follows in 119 cases, thereof 82 times after singular form. An infinitive construction follows in 53 cases. Almost all the other types actually do not represent a complement of the noun.

The preposition *i* follows in 236 cases, but most of them are free adjuncts of location. Only a few introduce a complement. The preposition *på* follows 73 times, but a great part of the instances are not complements of the noun, again.

Polysemy

The noun seems to have three different senses, considering the conceptual differences: 1. the physical or mental capability (quality) of some subject [Actor] to withstand some adverse force in order to perform some action [Goal] or just to avoid damage by the outer adverse force; 2. a personification of the first sense: some social forces in the form of an organized group of people with capability to perform the goals (it can be just protection, again) of some closed community (usually a state); 3. the measure (quantity) of the capability of some natural phenomena (forces themselves as [Actor]) to have some effect, i.e. to perform some (un)desired goal. Sense number 2 appears mostly in plural form (but not exclusively).

The sense number 1 can have two different sub-senses depending on the type of the subject [Actor]: a) for human (or generally animate) subjects, the strength can be physical or mental capability, depending on the type of the adverse force; 2) for physical objects, the strength is their own ability (quality) to withstand physically the adverse forces from outside.

Collocations and idioms

The noun *styrke* is not such a frequent constituent of verbo-nominal constructions as the other nouns. However, it still occurs quite often with the verbs *å ha, å gi* or *å vise*. The verb is very common in combination with the preposition *til* and in the collocation *å ha sin styrke i noe*.

The most common adjectives (and participles) *norsk, militær, væpnet, tysk, russisk, britisk, internasjonal, israelsk, fredsbevarende,* etc. show the frequent use of the sec-

ond sense of (military) "forces". The use of the first sense (some inherent qualities) is indicated by frequent adjectives like *indre, fysisk*.

The noun is also often used in adverbial constructions with the head preposition *med*: *med stor / fornyet / dobbel / full /...styrke*. It is also a frequent intensifier for the verb *å hevde* ("to assert, claim"): *å hevde noe med styrke*.

The dictionaries mention some other frequent collocations: *å øke / tilta / avta i styrken, gjenvinne styrken, måle styrke med noen, prøve styrke med…, overvurdere sin styrke, konvensjonelle styrker, stående styrke*.

Translation

The Norwegian-Czech pocket dictionary lists two Czech nouns as equivalents of the noun *styrke*: *síla* and *moc*. The second sense of the noun is illustrated by the collocation *de væpnede styrker*, translated as *ozbrojené síly*.

The Norwegian-Czech parallel corpus shows the noun *síla* as the prevalent equivalent of the Norwegian noun *styrke*, at least in the first sense. In the second sense of "military forces", there are multiple additional counterparts, depending on the context: *vojsko, armáda, oddíl,* etc. A few fixed expressions appear in the corpus as well: *på full styrke* corresponding to the Czech adverb *naplno*,[61] or *med styrke* with various implicit translations and one explicit adverb: *naléhavě*.

Dictionary entry

The entry (figure 7.15) defines five different valency patterns. The preposition *til* introducing the [Goal] is closely associated with the meaning of strength as a human capability. The prepositions *i* and *på* are not so clear – they refer both to the capability and its quantity at once and the type of the possessor is (theoretically) not restricted. There are two patterns with the preposition *på*: one specifying the intensity ([Quant]) of some force and one specifying the origin ([Actor]) of the force.

The collocations are distributed among the senses, where appropriate. The general Czech equivalent is the noun *síla*, but the senses are linked separately to its specific senses (marked in brackets). Translation for the collocations *å øke/tilta/avta/etc. i styrken* is not currently defined, but they would probably correspond best to the Czech verbs *zesílit/zeslabit*. A single general and stylistically correct equivalent of the expression *ha sin styrke i noe* would be very difficult to find and probably a paraphrase would be appropriate.

Among the collocations, there are two compound nouns presented as an example: *vindstyrke* corresponding to the Czech collocation *síla větru* and *viljestyrke* corresponding to *síla vůle*. The latter one is actually on the border of senses [1] and [2], because it can refer both to the intensity of the will (as a force) or to the actor's special capability in the form of his will.

7.6.3   Norwegian: *kraft*

Monolingual description

Bokmålsordboka defines the following 7 senses of the noun *kraft* with multiple subsenses: 1. a physical force; 2. power / energy; 3. physical or mental strength; working

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[61] The context concerns always the volume of music playback.

styrke

styrke: *sg. indef.* styrke ; *sg. def.* styrken ; *pl. indef.* styrker ; *pl. def.* styrkene

FREQ: 2476 (LKB), sg: 67.2%

Morphemic analysis

styrke *(word)*

	inflexion	
	base	**ending**
styrke *(morpheme)*		

Valency patterns

A ~ til *<å…>*
B ~ på *<noe>*
C ~ på *<noe>*
D ~ i *<noe>*

Collocations and constructions

Verbs: - inchoative: *gi$_c$ (POSS->ADDR)* - durative: *ha* - (other): *vise, gjenvinne, overvurdere*

Fixed expressions: ha sin styrke i *<noe/å…/at…>* ; på full styrke *naplno*; øke/tilta/avta/etc. i styrken ; måle/prøve styrke/krefter med *<noen> měřit si síly s <někým>*

Semantics

1. egenskap (med målbar kvantitet) som tillater sin eier å overvinne motvirkende krefter og nå et mål

    Translation

    cs: *síla [1a]*

    a. fysisk eller mental egenskap til et menneske (med målbar kvantitet) som tillater sin eier å overvinne motstand og nå et mål

       Preferred constructions: A

       Collocations and constructions
       Adjectives: *indre, fysisk*

    b. fysisk egenskap til et materiale (med målbar kvantitet) som tillater materialet å motstå motvirkende krefter

2. kvantitet/intensitet til en kraft

    Collocations and constructions
    Compounds: vindstyrke *síla větru*; viljestyrke *síla vůle*

    Translation
    cs: *síla [2a]*

3. organisert gruppe av mennesker (med målbar antall medlemmer) som tillater sin organisator å overvinne motstand og nå et mål

    personification of [1]
    Preferred forms: plural

    Collocations and constructions
    Adjectives: *militær, norsk, tysk, internasjonal, fredsbevarende*
    Fixed expressions: de væpnede styrker *ozbrojené síly*

    Translation
    cs: *síla [1b]*

Figure 7.15: The entry for *styrke*

ability, health (of human); 4. a leader, personality; co-worker, crew / team; a (hidden) force / factor; 5. an inherent ability, strength; 6. force / validity (of law); 7. a broth.

Norsk ordbok lists only 5 senses, lumping together the senses 1 with 2, and 4 with 5. It also mentions the modern meaning of "capacity" in compounds like *datakraft*.

Norsk riksmålsordbok separates three main types of meaning and then defines the senses for each of them: A. force or power as a property or ability; B. personification of force or power; C. broth. For type A, there are 6 different senses with multiple sub-senses: 1. physical or moral strength (of human), ability to work; 2. procreative powers; 3. the power / effect of some organ or active substance; 4. some higher or supernatural force; 5. the power of human body, electricity, machine or other energy; 6. the force of some law or rule. For type B, there are 4 different senses (with multiple subsenses): 1. a person(ality) of special physical or mental power, manpower; 2. a team member; 3. military force; 4. angels (biblical).

Valency patterns

The noun *kraft* appears rarely with its own complements. The [Goal] of the force can be connected by the preposition *til*.

Distribution

The noun *kraft* appears 4471 times in LKB, thereof 2230 times (49.9%) in singular.

The preposition *i* follows in 413 cases, but in all cases it can be classified as free adjunct giving some location. In a few cases the location can be interpreted as a specification of the powerful feature of the subject (e.g. when talking about muscles, limbs, particular components of some system, etc.), but the phrase does not really specify, modify nor restrict the type of the force, it only specifies its location and the force is not identified with it (unlike the expressions with the noun *styrke*).

The preposition *til* follows 234 times, in 125 cases followed by an infinitive. In many cases (especially those not connecting an infinitive), the phrase is not complement of the noun, however.

The preposition *på* appears 155 times after the noun, but all the occurrences belong either to the valency of the verb or build an adjunct (adverbial) of location or manner / means.

Polysemy

The noun *kraft* has a rich polysemy on different levels of semantic specificity. Considering the fact that *Bokmålsordboka* limits the morphological features for the meaning of "broth" to masculine foms only, while the noun generally can also be inflected as feminine, there is a good reason to separate this meaning as a homonymous form with a separate entry (lexical unit) a ignore it in the current description. For the rest, it seems to be very reasonable to separate the sense of force or validity of some law from the meaning of "energy": it is both limited (semantically) to a particular domain and (formally) to a few particular collocations or fixed expressions (not to speak about the translation).

The first meaning of "energy" has three main sub-senses: a) the abstract phenomenon of force as a quality of animate beings, b) the personification in the form of a human being playing some important role in some process or system, c) natural force or inherent capability (quality) of some inanimate thing or substance to have some effect.

The meaning of "energy" (a) is closely related (partly synonymical) to the first sense of the noun *styrke*. However, it covers a much wider spectre of independent forces. The force as a physical or mental quality of some entity (animate or inanimate) is common to both nouns. The reference to a natural phenomenon seems to be common to both nouns as well, but the noun *styrke* refers rather to the measure (quantity) of the quality, while the noun *kraft* refers to the force (quality) itself. This concerns also the references to force as a quality of humans, machines or other entities. The sense of some supernatural force (or even just some unspecified, hidden forces) is actually already a personification and belongs to the sub-sense (c).

The type (b) can also distinguish a few finer senses, but those are quite fine semantic distinctions which do not play any important role in the syntagmatic behaviour of the noun. The only difference is the particular role of the person and the type of collective or situation where the role has such importance (physical work, artistic engagement, social or political engagement, military, etc.).

However, there are common syntagmatic features (collocations and fixed expressions) typical for the type (a) and (c), resulting from the common reference to some abstract quality. On the other hand, the personification is more concrete and therefore behaves as any human entity in the text (it can act). Therefore, it seems reasonable to join the types (a) and (c) into one common abstract sub-sense and differentiate it, as a quality of some entity, from the sense of its personification, which is an (acting) entity in itself.

Collocations and idioms

The noun *kraft* is not a such a frequent component of verbo-nominal constructions either, but it appears in some very specific fixed expressions. The most frequent verb used in collocation with the noun is *å tre*, which appears in the idiomatic expression *tre i kraft* ("come into force") used about laws and rules. Other common verbs are: *å bruke, å ha, å sette, å samle, å trå, å måle, å ta, å gi.* All of them construct more or less fixed expressions with the noun. The adjectives specify either the quantity (*stor, frastøtende, sterk,* etc.) or the type of the force (*elektrisk, politisk, magnetisk, revolusjonær,* etc.).

The most frequent fixed expressions appear in the sense of the force of some law or rule. Here, we can find the intransitive expressions *tre i kraft* and *tre ut av kraft*, and transitive (causative) expressions *sette i kraft* and *sette ut av kraft*.[62] A specific modifier in this sense is also the participle *tilbakevirkende.*The collocation *i kraft* seems to be already an idiom itself: the Norwegian morphological tagger (Oslo-Bergen taggeren) classifies this collocation as 'one word'.

The verb *å sette* is also used in the expression *sette all kraft / alle (sine) krefter inn (på noe).* The verb *å ha* is typical for the construction with a complement [Goal]: *ha kraft / krefter til noe.*

The dictionaries also mention other typical collocations and idiomatic expressions: *i kraft av loven, i kraft av (kunnskap og erfaring), av alle krefter, bærende / ledende / drivende kraft, ha krefter som en gamp, skjulte / overnaturlige krefter, prøve / måle krefter (med noen), samle krefter, spare på kreftene, tid og krefter, være i sin ungdoms fulle kraft, komme til krefter, det er sterke krefter i sving (for å),* etc. The noun is also a frequent constituent of compounds: *tyngdekraft, drivkraft, vannkraft, hestekraft, dømmekraft,* etc.

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[62]Even the transitive expressions are mostly used in passive form.

Translation

The Norwegian-Czech pocket dictionary distinguishes two senses of *kraft*: 1. translated by *síla* or *energie*; 2. translated by *vývar* ("broth") and specified as belonging to the domain of cooking. The sense number 1 also gives a few examples of typical collocations: *samle krefter* translated as *sbírat síly*; *det tar på kreftene* translated as *je to vysilující*; *tre i kraft* (marked as figurative) translated as *vstoupit v platnost*.

In the Norwegian-Czech parallel corpus, the noun *síla* is by far the most frequent equivalent of *kraft*, but several times the noun *moc* appears as well, mainly in the sense of some higher power or supernatural force. The noun *energie* appears a few times, too. The equivalent "vývar" is used for the meaning "broth".

There are many examples of common collocations, compounds and fixed expressions in the corpus as well. Here are some of them with their Czech equivalents: *med full kraft – naplno, prudce, v plné síle; av all kraft – vší silou; av alle krefter – ze všech sil; samle på kreftene – sbírat síly; spare kreftene – šetřit síly; med stor kraft – s velikou námahou, silou, mocně; med voldsom kraft – prudce; i kraft av – v síle, silou (če-ho),* and other indirect paraphrases; *dømmekraft – soudnost, úsudek; drivkraft – hnací síla* or *organizátor; har ikke krefter igjen – nezbývají (mu) síly; tyngdekraften, gravitasjonskraften – (zemská) přitažlivost, gravitační síla; skaperkraft – tvořivá / tvůrčí síla, umění; innbilningskraft – síla představivosti / fantazie; produktivkrefter – výrobní síly; kjøpekraft – kupní síla; motstandskraft – odolnost; naturkreftene – přírodní síly; naturkraft – živel; spådomskraft – schopnost věštby; en overlegen kraft – přesila; overnaturlig kraft – nadpřirozená síla; livskraft – vitalita,* etc.; *arbeidskraft – pracovní síla; med en kraftanstrengelse – s námahou; i sin ungdoms kraft – v nejlepších letech,...; kraftanstrengelse – námaha, úsilí; med sine siste krefter – z posledních sil; lover er i kraft – zákony platí; kreftene minket – ubývalo sil; krafttak – vzepětí (sil), vypětí (vůle); viljekraft – vůle, síla vůle; frata kraft – zbavit moci.*

Dictionary entry

The inflection of the noun *kraft* (figure 7.16) is not trivial because of the vocal shift (umlaut) in plural *(kraft – krefter)*. The noun has been assigned to a modified class *f1o* applying the change of root vowel in plural.

The entry presents just one single valency pattern, but the semantic structure of senses is quite complex: On the highest level, the senses of "energy" (1) and validity of law (2) are separated. The first sense has two sub-types: (a) the union (translational abstract cluster) of the sub-senses of natural force (or energy) and force as a quality of some human being; (b) the energy personified into some active entity. The collocations and fixed expressions are distributed among the senses as much as possible, but only a limited selection from the long list of found expressions is described. The preference was given to expressions with equivalents within the limited group of nouns described here and their frequent collocations. A few examples from the rich multitude of compounds have been defined as well and linked to the corresponding fixed expressions in Czech.

There is a separate general equivalent given for the second sense, together with the four most typical fixed expressions. The causative expressions *sette ...i kraft* and *sette ...ut av kraft* need some syntactic object, which must be the noun "law" or some other close synonym from the legal domain. Therefore the slot is defined as *semi-open* and semantically specified by the prototypical noun *en lov*.

kraft

kraft: *sg. indef.* kraft ; *sg. def.* [+C]kraften, [(*R)]krafta ; *pl. indef.* krefter ; *pl. def.* kreftene

FREQ: 4471 (LKB), sg: 49.9%

Morphemic analysis

kraft *(word)*

	inflexion	
base		**ending**
kraft *(morpheme)*		

Valency patterns

[A] ~ til *<noe/å…>*

Semantics

1. energi som tillater å (overvinne motstand og) nå et mål / en effekt

   Collocations and constructions
   Verbs: - inchoative: gi_c (POSS->ADDR), samle - durative: ha - terminative: ta_c (POSS->ADDR), bruke
   Adjectives: *frastøtende, stor, sterk, skjult*
   Compounds: drivkraft *hybná síla / hnací síla*
   Fixed expressions: ha kraft/krefter til *<å…/noe>* ; sette (alle) (sine) krefter inn på *<å…/noe>*

   a. energi som egenskap

      Translation
      cs: *síla [1a]*

      1. fysisk eller mental egenskap til et menneske som tillater sin eier å (overvinne motstand og) nå et mål

         Collocations and constructions
         Compounds: kjøpekraft *kupní síla*
         Fixed expressions: måle/prøve styrke/krefter med *<noen> měřit si síly s <někým>*; av all kraft *vší silou*; av alle krefter *ze všech sil*

      2. naturlig energi (i en materie) som tillater å nå et mål / en effekt

         Collocations and constructions
         Adjectives: *elektrisk, magnetisk*
         Compounds: tyngdekraft *gravitační síla*; gravitasjonskraft *gravitační síla*

   b. menneske/medlem/vesen - energi (som man kan/må regne med) med et bestemt mål

      personification of [a]

      Collocations and constructions
      Adjectives: *politisk, revolusjonær, overnaturlig, bærende, ledende, drivende*
      Compounds: arbeidskraft *pracovní síla*

      Translation
      cs: *síla [1b]*

2. virkning/gyldighet til en lov

   Collocations and constructions
   Adjectives: *tilbakevirkende*
   Fixed expressions: tre i kraft *nabýt právní moci*; tre ut av kraft *pozbýt právní moci*; sette en lov/etc. i kraft ; sette en lov/etc. ut av kraft

   Translation
   cs: *platnost*

Figure 7.16: The entry for *kraft*

7.6.4   Czech: *síla*

Monolingual description

The *SSJČ* dictionary lists the following 6 senses of the Czech noun *síla*: 1. physical or mental ability to perform some action, linked to overcoming some resistance or obstructions; power, energy; 2. a bearer of such ability, workers, soldiers or supernatural powers; 3. a collective power, military forces; 4. intensity (of some phenomenon); 5. thickness (of a layer, wall, etc.); 6. great amount of st, plenty of (obsolete meaning).

Valency patterns

The noun can connect directly with an infinitive construction expressing the [Goal]. A direct noun phrase in genitive case can express the subject [Actor] in the sense of measure of intensity or thickness, or it can give the value of the measure itself. The value of the measure can also be presented by a (numeric) value in nominative case.

The preposition *k* can be used to connect the [Goal] when it is being expressed by a noun phrase and not an infinitive construction.

The preposition *na* is used mainly in verbo-nominal expressions with the verb *mít* (and a few others) to express the [Goal]. Again, the meaning is more passive than when using the preposition *k* and this preposition is mainly used in negative context (typically *nemít sílu na něco, nezbývá sil na něco*). In many cases, the preposition can be attributed to the valency of the verb (as a complement or adjunct) rather than the noun (e.g. *načerpat sílu na něco, šetřit síly na něco, vynaložit síly na něco,* etc.).

The preposition *pro* can sometimes be used in similar situations as the preposition *na*, but it does not necessarily prefer the negative context so much. It appears in collocations like *být hybnou / motivační silou pro něco*. The meaning seems to be even more passive and independent from the [Goal] (i.e. expressing a potential). It is very close to the generic free adjuncts expressing beneficiary and its role of complement is spurious. In most cases, it can be attributed to the valency of the verbs, like the preposition *na* (e.g. *nabírat, sbírat, šetřit, shromažďovat, spojit, čerpat,* etc.).

Unlike the Norwegian side, the Czech corpus reveals also a few examples where the preposition *proti* can only be attributed to the noun (e.g. "Spojenecká síla proti HZDS se vytratila…", "Ó naplň mne silou proti těm, kteří…"). It refers to the obstruction [Obstr].

Distribution

The noun *síla* appears 37590 times in SYN2005, thereof 20632 times (54.9%) in singular. An infinitive follows in 1024 cases (2.7%), thereof 627 after singular form (61.2%). A genitive noun phrase follows in 5687 cases (15.1%), thereof 4287 (75.4%) after singular form.

The preposition *k* follows in 370 cases (1%), thereof 219 (59.2%) after singular form. But many of those occurences are not complements of the noun.

The preposition *na* follows in 703 cases, thereof 262 times after singular form. However, it can be attributed to the noun in a few cases only.

The preposition *pro* follows in 148 cases, but only few of them can be considered complements of the noun.

Polysemy

The Czech noun *síla* has all the meanings of both the Norwegian nouns *styrke* and *kraft*, except of the meaning "broth" and the meaning of force / validity of some law or rule. It can refer both to the quality (property) of some entity and its measure (intensity) and to the personifications of all kinds. In addition to the meaning of intensity, it can also refer to the thickness of some flat shaped material or layer.

Collocations and idioms

Typical verbs collocating with the noun *síla* are e.g.: *mít, (z)měřit, působit, nabrat/nabírat, ubývat, čerpat, ztrácet, dodávat, disponovat, (z)mobilizovat, šetřit, vyčerpat, vynaložit, vyvinout, plýtvat, mrhat.* Most of those verbs use the plural form as their object, referring to gaining or losing ones powers.

The most frequent adjectives are: *pracovní, ozbrojený, vojenský, politický.* Other most typical modifiers are e.g.: *kupní, odstředivý, hnací, hybný, gravitační, tažný, kvalifikovaný, nadpřirozený, vzdušný, námořní,* etc. All these adjectival collocations are actually common fixed expressions or rather technical, economical or political terms.

The *SČFI* dictionary lists four fixed expressions using the noun *síla*: *dějinná síla* ("force(s) of history"), *hybná síla* ("driving force", corresponding to the Norwegian compound *drivkraft*), *pracovní síla* ("labour", corresponding to the Norwegian compound *arbeidskraft*) and *síla zvyku* ("force of habit").

Translation

Th Czech-Norwegian pocket dictionary gives both Norwegian nouns, *kraft* and *styrke*, as equivalents of the Czech noun *síla*. In addition, it lists some useful compounds and collocations with suitable translations: *hnací síla – drivkraft; koňská síla – hestekraft; kupní síla – kjøpekraft; pracovní síla – arbeidskraft; ozbrojené síly – de væpnede styrker; síla větru – vindstyrke; ze všech sil – av alle krefter; síla zvyku – vanens makt.*

The Czech-Norwegian parallel corpus reveals *kraft* and *styrke* as the major equivalents, but the noun *makt* appears in a few cases as well. In addition to the fixed expressions named in the description of the Norwegian nouns, further equivalent expressions can be found here: *ze všech sil – alt en kan, så godt en kan, som best en kan, etter beste evne; udělám / učiním , co bude v mých silách – jeg skal / vil gjøre mitt beste / ytterste, jeg skal gjøre hva jeg kan / det jeg kan; vlastními silami – på egen hånd; být na konci sil – orke ikke mer; poměr sil – styrkefohold; měření sil – styrkeprøve; s velkým vypětím sil – ved å spenne alle sine krefter til det ytterste; síla vůle – viljestyrke; vše, co bylo v jeho silách – alt som stod i hans makt; není v mých silách – det ligger hinsides mine evner, det overstiger mine evner; z posledních sil – med et siste krafttak, med sine siste krefter; vydat se z posledních sil – bruke sine siste krefter; na konci sil – helt utmattet; až do konce svých sil – så langt hans styrke rekker; vší silou – med hele sin styrke / kraft.*

Dictionary entry

The inflexion of the noun *síla* (figure 7.17) is quite challenging for any morphological description and there are several ways how to solve the problem in the framework. The noun follows the main feminine inflectional paradigm, but there is an optional shortening of the root vowel in five grammatical cases: instrumental singular and genitive, dative, locative and instrumental plural. In modern Czech, the shortening in the noun

síla

síla: *sg.:* N síla; G síly; D síle; A sílu; V sílo; L síle; I [sílou], silou; *pl.:* N síly; G ~~síl~~, sil; D ~~sílám~~, silám; A síly; V síly; L ~~sílách~~, silách; I ~~sílami~~, silami, *sílama, *silama

FREQ: 37590 (SYN2005), sg: 54.9%

Morphemic analysis

síla *(word)*

inflexion	
base	**ending**
síla *(morpheme)*	

Valency patterns

A ~ *<něčeho>*

B ~ *<několik>*

C ~ *<INF>*

D ~ k *<něčemu>*

E ~ proti *<něčemu>*

Semantics

1. kvalita/vlastnost

   Preferred constructions: A , C , D , E

   Collocations and constructions

   Fixed expressions: hnací síla *drivkraft*; hybná síla *drivkraft*; být/nebýt v silách/moci *<někoho>* stå (ikke) i *<ens>* makt / ligge i *<ens>* evne / ligge utenfor/hinsides *<ens>* evner

   a. fyzická nebo mentální vlastnost člověka, přírodního jevu nebo věci, která mu umožňuje (překonat nějaký odpor/překážku a) dosáhnout nějakého cíle

      Collocations and constructions

      Verbs: - inchoative: *nabrat, čerpat, mobilizovat, vyvinout* - durative: *působit, disponovat, mít, šetřit* - terminative: *ztrácet, vyčerpat, vynaložit, plýtvat, mrhat, ubývat (POSS->PAT)* - (subj.): *ubývat (POSS->PAT)*

      Fixed expressions: gravitační síla *gravitasjonskraft / tyngdekraft*; kupní síla *kjøpekraft*; ze všech sil *av alle krefter / etter beste evne*; vší silou *av all kraft*; měřit si síly s *<někým> måle/prøve styrke/krefter med <noen>*

      Translation

      no: *styrke [1]; kraft [1a]*

   b. nositel zvláštní vlastnosti/energie, které mu umožňuje (překonat nějaký odpor/překážku a) dosáhnout nějakého cíle

      personification of [a]

      Collocations and constructions

      Adjectives: *politický, vojenský, kvalifikovaný, nadpřirozený, vzdušný, námořní*
      Fixed expressions: pracovní síla *arbeidskraft*; ozbrojené síly *de væpnede styrker*

      Translation

      no: *styrke [3]; kraft [1b]*

2. kvantita

   Preferred constructions: A , B

   a. intenzita nějakého fenoménu/energie

      Collocations and constructions

      Fixed expressions: síla zvyku *vanens makt*; síla větru *vindstyrke*; síla vůle *viljestyrke*

      Translation

      no: *styrke [2]*

   b. tloušťka nějakého plochého předmětu či vrstvy

Figure 7.17: The entry for *síla*

síla occurs (almost) always in plural and regularly (>90%) in instrumental singular, according to Cvrček et al. (2010, 172). The current solution is a special marker in the grammatical endings of the selected cases of the paradigm, combined with alternative forms defined as the root (base) of the noun. There are two alternative forms of the stem: one with a fixed long vocal *í* and one with an *í* marked as a vowel liable to shortening when combined with the specific endings. The framework therefore generates identical forms for most of the cases, but in the selected cases where the root liable to shortening is combined with an ending causing the shortening, it generates pairs of alternative forms. The automatically generated forms are then updated in the definition of the noun with information on their respective frequency. Actually, only the non-shortened forms are marked with an average frequency according to the category as defined in Cvrček et al. (2010, 150), i.e. 5% for the non-shortened instrumental singular and 0.5% for the other cases. The frequencies are labelled with their source, so that it is obvious that they are not real corpus frequencies but some approximate values. In the presentation of the entry, the rare forms (<10%) are enclosed in square brackets and the (nearly) non-existent ones (<1%) are struck.

The semantic field of the noun is divided into two abstract types of senses: (1) referring to the quality and (2) referring to the quantity. The first group covers the senses: (a) physical or mental quality of a human, natural phenomenon or some thing and (b) the bearer of such extraordinary quality. The second group covers the senses of (a) intensity of some phenomenon or energy and (b) thickness of some material or layer. The senses are linked to their corresponding senses of the nouns *styrke* and *kraft*. No equivalent is currently defined for the sense of thickness. Collocations with specific adjectives forming fixed expressions corresponding to the Norwegian compounds are defined as real multi-word expressions and not just by collocational links, as usually.

The five different valency patterns are associated to the particular senses, although the possibilities can well be guessed from their semantic labels and the descriptions of the particular senses: the patterns *C, D* and *E* referring to the [Goal] or [Obstr] can hardly be used in the senses related to the quantity. The pattern *B* will probably not fit very well to the senses related to the quality, even though its quantity can also be specified.[63] The pattern *A* (genitive complement) can refer either to the [Actor] or to the quantity [Quant]. This time, there is only one single valency frame defined (unlike in the description of the Norwegian noun *styrke*) with two variable semantic labels, which means that the alternatives cannot be indicated in the interface by the background colour.

The collocation *síla vůle* is difficult to assign to any special meaning: like its Norwegian counterpart, it can be understood both as the quantity of the will (as a force) or as someone's special quality in the form of his will.

7.7 Makt – moc (power)

7.7.1 The conceptual frame

The *power* (*makt*) is a semantic actor [Force] in itself, but it can be possessed and used by some external participant [Poss], who becomes the syntactic subject [Actor] of the infinitive construction. The *power* in itself is not an inherent and permanent capability of the possessor, even though the possessor may gain it thanks to his or her other inherent capabilities. *Makt* is much more abstract and indirect (having influence by its

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[63]In theory, at least. But then the noun would necessarily refer to both the quality and its quantity at once.

potential, rather than direct action), compared to *kraft*. It also excludes any possibility of resistance (of comparable legitimacy or strength, at least). It can either be used to reach some particular [Goal] or as a plain potential of action or influence on some patient(s) [Pat] within some field. The latter generalization is an extension to the basic, target oriented structure.
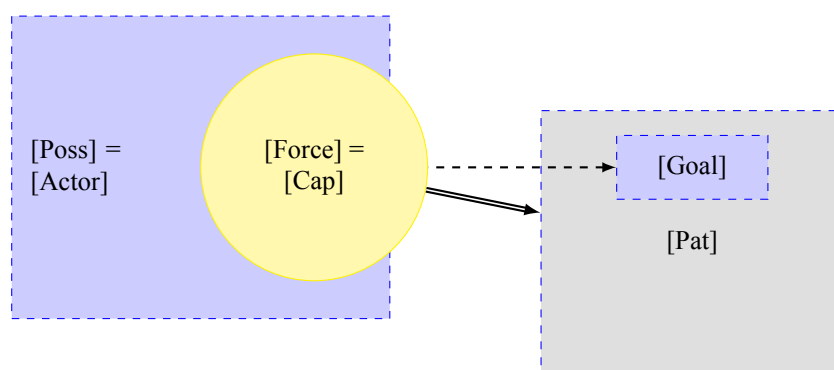
Figure 7.18: The conceptual frame of *makt*

7.7.2 Norwegian: *makt*

Monolingual description

Bokmålsordboka lists six different senses of the noun *makt*: 1. force, strength, ability, wealth, richness; 2. violence, coercion; 3. dominion, rule, authority; strong influence; 4. someone having power, powerful factor; state; 5. powers of war; 6.(supernatural) being.

Norsk ordbok lists only 4 senses, joining together senses no. 1 and 2, and 4 and 5 as defined in *Bokmålsordboka*.

Norsk riksmålsordbok tries to distinguish 6 senses corresponding generally to the senses defined in *Bokmålsordboka*.

Valency patterns

The noun can take an expression of the [Goal] as complement, expressed by the prepositional phrase with *til*. It appears mostly (but not excusively) in verbo-nominal constructions *ha makt til noe* and *gi (noen) makt til noe*.

The noun can also take a complement referring to the whole area, field or particular patient(s) [Pat], which are subject to the influence of the power. In that case, the preposition *over* is used.

Distribution

The noun *makt* occurs 3966 times in LKB, thereof 3794 times (95.7%) in singular form. The plural form is almost exclusively used in the senses "state", "army", "natural powers" or "supernatural powers".

The preposition *til* follows in 234 cases (5.9%), as a complement always after singular form. Many of the prepositional phrases are not complements of the noun, however,

especially those not connecting an infinitive, as well as the two only cases where the phrase follows a plural form of the noun. The prepositional phrase appears mostly in combination with the verbs *å ha* and *å gi* and an infinitive construction as complement.

The preposition *over* appears 199 times (5%), always (100%) after singular form.

The preposition *i* appears 288 times, but all the occurrences can be considered just free adjuncts of location. In rare cases the phrase refers to an entity that can be interpreted as the possessor of the power as well (e.g. "Det er makten i filmen").[64]

Polysemy

The noun has at least an abstract meaning of some ability or potential to perform some action (often underspecified or very generalized) and an additional possibility of personification. The personification can take the form of a particular physical entity (or group of entities), a social entity (a state, army or more abstract rule) or a (super)natural entity. In the latter meanings, the border between the personification and the abstraction of its ability to perform some action can be very thin and unclear.

The distinction between the existence (and necessity) of complementation of [Goal] and patient(s) [Pat] can be base for two sub-senses of the primary, abstract sense.

Collocations and idioms

The most common verbs collocating with the noun *makt* are *å ha, å (over)ta, å gi, å få, å bruke,* and the more specific verbs *å utøve, å gripe*.

Common adjectives appearing as modifiers are e.g. *politisk, utøvende, økonomisk, fremmed, militær, lovgivende, liten, reell, symbolsk, dømmende, høyere, fysisk,* etc. They reflect the different meanings of the noun.

The dictionaries suggest some more common or fixed collocations: *bruke makt for å…, kunnskap er makt, ta i av all makt, stå ved makt, gjøre alt som står i ens makt for å…, det står ikke i min makt å…, rå makt, sette makt bak ordene sine, komme til makten, ta makten (i landet), ta noe(n) med makt, sitte med/ved makten, få/ha noe(n)/ordet i sin makt, ingen makt på jord…, gode og onde makter, ta noe med vold og makt, hvis du med vold og makt vil, makten rår / ter seg, (gjøre noe) med makt, sette makt bak sine ord, språk er makt, rane seg til makten, maktens tinde, (kjempe) av all makt.* In addition, there are mulitple common compounds and terms: *dømmende / utøvende / lovgivende makt, vanens makt, eksempelets makt, væpnet makt, overnaturlige makter, fremmed makt, storkmakt, supermakt, krigsmakt, våpenmakt, atommakt, himmelske / himmelens makter, allmakt, avmakt, velmakt.*

Translation

The Norwegian-Czech dictionary lists both the Czech nouns *moc* and *síla* as equivalents of the noun. It also mentions the common collocation *med makt* translated as *silou, násilím*.

The most frequent equivalent of the noun *makt* in the Norwegian-Czech parallel corpus is indeed the Czech noun *moc*, but in some cases the noun *síla* is used as well. In a few cases the nouns *vláda* or *mocnost* (in the meaning *stormakt*) are used. In addition, the corpus can supply some equivalents of common collocations, compounds and fixed expressions: *avmakt – mrákoty, bezmoc(nost); de som sitter ved makten –*

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[64]Analogically to the noun *styrke*.

mocní; sansenes avmakt – třeštění smyslů; den guddommelige allmakt – božská všemo-
houcnost; Guds allmakt – všemoc / všemohoucnost boží; høyere makt – vyšší moc; få
makten over noen – získat nad někým moc; maktbalanse – rovnováha sil; stormakt –
velmoc; maktutfoldelse – rozmach moci; maktfordelingsprinsippet – princip rozdělení
moci; lovgivende / dømmende / utøvende makt – zákonodárná / justiční / výkonná moc;
vanens makt – síla zvyku; utøve makt – vykonávat moc, vládnout; med (/ved) makt –
násilím, silou; sitte ved makten – být u moci; det står (ikke) i min makt – je (/není)
v mých silách / rukou / v mé moci; overmakt – převaha; komme til makten – dostat
se k moci; fullmakt – zplnomocnění; maktovertagelse – převzetí moci; velmaktsdager
– časy rozkvětu; vinne makt over noen – získat nad někým nadvládu; komme til makt
og velde – povstat v moci; få makt over noe – zmocnit se něčeho; vanmakt – mdloba;
ved våpenmakt – zbraněmi; ta makten – uchvátit moc; ta makten over noen – přemoci
někoho; nå høyden av sin makt – dosáhnout vrcholu (své) moci.

Dictionary entry

The entry (figure 7.19) shows two senses of the noun. The valency frames are defined
within the first sense only, together with most of the common collocations. For the first
time, there is a special translational sub-sense defined in order to separate the specific
meaning of physical superiority (and its (ab)use), which corresponds rather to the Czech
noun *síla* than the general equivalent *moc*. If the links were bidirectional, it would
require a specification of a translational sub-sense within the sub-sense [1a] of the noun
síla as well. That sub-sense would separate the more specific meaning of physical
powers (and possibly the association with its abuse) and link it back to the Norwegian
noun *makt*.

   The translational sub-sense of physical power is also closely bound to specific col-
locations: the adjective attribute *fysisk*, the support verb *å bruke* (unlike the verb *å utøve*
which implies a legitimate and non-physical influence) and the fixed expression *med*
makt. The noun also appears in translations of some other fixed expressions, but those
have nothing to do with the meaning of physical force.

   The fixed expression *med makt* brings another new requirement to the framework:
its equivalent in Czech are instrumental forms of the standard nouns *síla* and *násilí*. If
we do not want to specify special sub-senses of these nouns limited to their instrumental
forms only, we need the possibility to link to particular forms of some noun only, not to
the whole lemma. The link can, of course, specify the restriction for a particular form
in different ways: by means of some special feature or directly by using some special
format of the reference attribute in the link. The latter solution is currently used because
of its simplicity.[65]

7.7.3   Czech: *moc*

Monolingual description

The *SSJČ* dictionary gives 7 senses of the noun *moc*: 1. natural ability to have some
effect; capability, force, influence; 2. physical or mental ability, capability to do some-
thing; strength/force, possibility; 3. a gained possibility to control someone, supported
by some power, or to have some influence, ability to decide or govern; 4. authority /

---

[65]The link can also provide the particular form directly, in order to save the system from the need to
calculate the form and the editor from the need to have the target lemma already created (defined) at the same
time.

makt

makt: *sg. indef.* makt ; *sg. def.* [+C]makten, [(+R)]makta ; *pl. indef.* makter ; *pl. def.* maktene

FREQ: 3966 (LKB), sg: 95.7%

Morphemic analysis

makt *(word)*

inflexion	
base	**ending**
makt *(morpheme)*	

Collocations and constructions

Adjectives: *politisk, militær, økonomisk*

Compounds: fullmakt *plná moc*

Fixed expressions: lovgivende makt *zákonodárná moc*; dømmende makt *soudní moc*; utøvende makt *výkonná moc*

Semantics

1. egenskap eller vilkår som tillater sin eier å nå et/hvilken som helst mål innenfor en område

   #### Valency patterns

   A ~ til *<å.../noe>*

   B ~ over *<noen/noe>*

   #### Collocations and constructions

   Verbs: - inchoative: *få, ta, gi_c (POSS->ADDR), gripe* - durative: *ha, utøve*

   Adjectives: *symbolsk, reell*

   Fixed expressions: vanens makt *síla zvyku*; sitte ved makten *být u moci*; stå (ikke) i *<ens>* makt *být/nebýt v silách/moci <někoho>*

   #### Translation

   cs: *moc [1]*

   a. overlegne fysiske egenskaper som tillater sin eier å nå sitt eget mål til tross for andre

      #### Collocations and constructions

      Verbs: - durative: *bruke*

      Adjectives: *fysisk*

      Fixed expressions: med makt *silou / násilím*

      #### Translation

      cs: *síla [1a]*

2. stat, myndighet eller annen autoritet som har spesielle egenskaper til å nå sine bestemte mål

   personification of [1]

   #### Collocations and constructions

   Adjectives: *høyere, overnaturlig, fremmed*

   Compounds: stormakt *velmoc*

   #### Translation

   cs: *moc [2]*

Figure 7.19: The entry for *makt*

competence for some action; 5. collective bearer of the possibility to control someone, enforce its will or influence (army, state, etc.); 6. supernatural power; 7. a quantity of st.

The senses roughly correspond to the meaning of the Norwegian noun *makt*, with some differences: here, a distinction is made between the abstract power of some inanimate thing and the more concrete power of humans, but the distinction has very thin borders even in the given examples; the meaning of violence is completely missing (it is more associated with the noun *síla* in Czech); there is an additional meaning of some quantity or multitude of st., but it seems to be rather obsolete in modern Czech.

Valency patterns

The complement expressing [Goal] can follow directly in the form of an infinitive construction.

Preposition *k* can also be used to connect a nominal expression of the [Goal], but it is rare and mostly limited to the term *plná moc* ("letter/warranty of attorney") or to the collocation *mít moc k něčemu*.

In rare cases, the preposition *pro* is also used with the term *plná moc*.

The preposition *nad* corresponds to the Norwegian preposition *over* and connects complements referring to the patient(s) [Pat] (field of influence).

Distribution

There is a serious problem giving any quantification of the distribution of the noun: it conflicts with its homonym, the adverb *moc* (meaning "much, a lot (of)"), which is much more frequent. The disambiguation of these two lemmata is unfortunately not reliable. There are 17994 tokens (out of 51417) identified as forms belonging to the noun. However, not all of them are really nouns (it is also possible that some nouns are tagged incorrectly as adverbs).

An infinitive follows a word identified as noun in 217 cases. Still, in many cases the token is an adverb or the infinitive does not belong to the noun but to the verb.

The preposition *k* occurs in 81 cases after a word form tagged as noun, but most of them are rather complements of the verbs (e.g *využívat, zneužívat*, etc.). In many cases the prepositional phrase is a complement of the fixed expression (term) *plná moc*. In other cases it is mostly used in the collocation *mít moc k něčemu*.

The preposition *nad* follows in 103 cases a word tagged as the noun *moc*.

Polysemy

The Czech noun has again both the sense of some abstract power (effect of some entity or the strength of humans) and the sense of its personification in different forms, individual and collective, as well as supernatural, underspecified or generalized. It is missing the explicit sense (or association) of violence (although it does not exclude it completely). The special meaning of quantity or multitude is uncommon in the modern language.

The scope of the meaning of the Czech noun *moc* seems to be a little bit more limited to the abstract meaning than for its Norwegian counterpart. When associated with the physical power (especially abuse of it), the Czech noun *síla* is preferred. In the meaning of some state possessing some special power (economical or military influence) the more specific synonyms *mocnost* or *velmoc* are used. The noun *vláda* (also having

the more specific personified meaning of "government") is preferred in the meaning of legitimate political authority or rule, while the noun *moc* does not necessarily imply legitimacy. This exclusion of both the extreme associations of the violent force and a full legitimacy gives the noun a more neutral (but also often very questionable) meaning closer to the meaning of "influence" or indirect power.

The distinction between the existence (and necessity) of complementation of [Goal] and patient(s) [Pat] can be base for two sub-senses of the basic, abstract sense.

Collocations and idioms

The verbs most frequently collocating with tokens identified as the noun *moc* are *mít* and *dostat*. Typical verbs collocating with the noun are *nabýt, vládnout, disponovat, dávat, náležet, ztělesňovat, představovat, převzít, rozdělovat, zneužívat, vykonávat, ujmout se, chopit se, uchvátit, soustředit, upevnit, podrobit se,* etc.

The most typical adjective modifiers are: *politický, státní, právní, výkonný, zákonodárný, veřejný, vojenský, světský, léčivý, nadpřirozený,* etc. They correspond to the different meanings of the noun.

Some special fixed expressions and terms constituted with the noun *moc* are e.g. *plná moc, výkonná / zákonodárná / soudní moc, etc.* Special compounds do exist as well: *bezmoc, všemoc*.

The *SČFI* dictionary suggests further fixed expressions: *být v lidské moci; být v moci někoho; chtít něco živou mocí / mermomocí; mít / dostat / dát někomu plnou moc; dostat někoho do své moci* ("get so. under one's control, get a hold on so."); *dostat se do moci někoho* ("fall into so.'s power"); *dát někomu něco pod moc / do moci* ("entrust so. with st., empower so. to do sth"); *jíst / dělat něco přes moc; mít něco v moci; mít někoho ve své moci; mít se v moci; udělat něco z moci úřední; branná moc* ("military force(s)"); *mocí mermo* ("at all costs"); *neomezená moc* ("unlimited powers; carte blanche"); *ozbrojená moc* ("armed forces"); *plná moc* ("so.'s (written) authority"); *světská moc* ("secular authority"); *vyšší moc* ("vis major; force majeure; act of God; a higher authority"); *vší mocí* ("1. with all one's might 2. with all the power"); *z moci úřední* ("(officialy)"); *zlá moc* ("the powers of evil; evil forces"); *živou mocí* ("1. for all one is worth 2. for the life one"). It also lists the common support verbs used with the noun in two different senses – in the sense of general influence, power or control of some patient(s): *získat, dostat, nabýt* (inchoative); *mít* (durative); *pozbýt / ztratit* (terminative); *dát někomu* (causative-inchoative); *nechat někomu* (causative-durative); *zbavit někoho moci, vzít někomu moc* (causative-terminative); in the sense of "rule, government": *získat / dobýt moc, dostat se k moci* (inchoative); *mít moc, být u moci* (durative); *dostat někoho k moci* (causative-inchoative); *nechat někoho u moci* (causative-durative); *zbavit někoho moci, vzít někomu moc* (causative-terminative).

Translation

In the Czech-Norwegian dictionary, the noun *moc* is divided into two distinct senses: 1. in the general sense the noun is translated solely as *makt*, and additional collocations are given (*branná moc – væpnet makt, krigsmakt*; *léčivá moc – legende makt*); 2. the juristic meaning is separated and the fixed expressions are translated individually: *plná moc – fullmakt*; *dát plnou moc k něčemu – gi fullmakt til noe*; *nabýt právní moci – tre i kraft*.

It is difficult to find the noun among all the adverbs in the parallel corpus, again. But the general equivalent seems to be the noun *makt*. In a few cases, the Norwegian

noun *myndighet* appears in the meaning of (legitimate) rule or mandate.

The noun *kraft* appears in some cases in the meaning of some power with a more direct and concrete effect on something.

Dictionary entry

<table>
<tr><td colspan="2">moc</td></tr>
<tr><td colspan="2">moc: sg.: N moc; G moci, <s>moce</s>; D moci; A moc; V moci; L moci; I mocí; pl.: N <s>moce</s>, moci; G mocí; D mocem, mocím; A moci, <s>moce</s>; V moci, moce; L mocech, mocích; I mocemi, <s>mocmi</s>, *mocema, *mocma</td></tr>
</table>

Morphemic analysis

moc *(word)*

	inflexion	
	base	**ending**
moc *(morpheme)*		

Collocations and constructions

Adjectives: *politický, vojenský, státní*

Fixed expressions: plná moc *fullmakt*; zákonodárná moc *lovgivende makt*; soudní moc *dømmende makt*; výkonná moc *utøvende makt*

Semantics

1. vlastnost člověka nebo věci umožňující dosáhnout libovolného cíle v nějaké oblasti

   Valency patterns

   A ~ *<INF>*

   B ~ k *<něčemu>*

   C ~ nad *<někým/něčím>*

   Collocations and constructions

   Verbs: - inchoative: *získat, dostat, nabýt, chopit_se, ujmout_se, uchvátit, převzít, dát$_c$ (POSS->ADDR)* - durative: *vládnout, vykonávat, zneužívat, ztělesňovat, představovat, náležet (ACT->PAT), mít, disponovat, nechat$_c$ (POSS->ADDR)* - terminative: *ztratit, pozbýt, vzít$_c$ (POSS->ADDR), zbavit$_c$ (POSS->ADDR)* - (other): *rozdělovat, podrobit_se*

   Adjectives: *léčivý*

   Fixed expressions: být u moci *sitte ved makten*; být/nebýt v silách/moci *<někoho> stå (ikke) i <ens> makt / ligge i <ens> evne / ligge utenfor/hinsides <ens> evner*; nabýt právní moci *tre i kraft*; pozbýt právní moci *tre ut av kraft*

2. stát, bytost či jiná entita se zvláštními vlastnostmi, umožňujícími ovládat (velké) množství lidí

   personification of [1]

   Collocations and constructions

   Adjectives: *nadpřirozený, vyšší*

   Derivates: velmoc *stormakt*

Figure 7.20: The entry for *moc*

The Czech noun *moc* (figure 7.20) has an interesting inflexion, because it varies between two different feminine paradigms. Most of their endings are identical, but some are different. According to Cvrček et al. (2010, 181) the noun *moc* follows (almost) always the paradigm of type *kost* in genitive singular and nominative and accusative plural. The forms of dative and locative plural are generally rare, but both types occurs. On the other hand, in instrumental plural the noun follows (almost) only the type *píseň*. This situation can be easily solved by assigning two paradigms (two templates) to the noun – it will inherit all the endings, but most forms will just overlap; double forms

appear only where the paradigms differ. We can define the frequency of the concurrent forms like for the noun *síla*. In the final entry presented by the interface, the uncommon forms are struck, again.

The noun has the same structure as its Norwegian counterpart, but without the additional translational sub-sense. The most important collocations have been selected from the great amount of expressions found in the corpora and dictionaries. Fixed expressions corresponding to those already defined for previous nouns have been selected from the great amount of interesting fixed expressions and idioms.

7.8   Mot – odvaha (courage)

7.8.1   The conceptual frame

The conceptual frame of *mot* is similar to the conceptual frames of *styrke* or *evne*. *Courage* is a special kind of mental *strength* of some subject [Actor] to withstand his own fear of some danger or some adverse circumstances [Obstr] in order to perform some action [Goal]. The *courage* is measurable, giving the subject ability to overcome less or more powerful adverse circumstances. These circumstances [Obstr] appear primarily in the form of the actor's own fear, but usually there is some real (outer) danger or social inconvenience as a trigger.
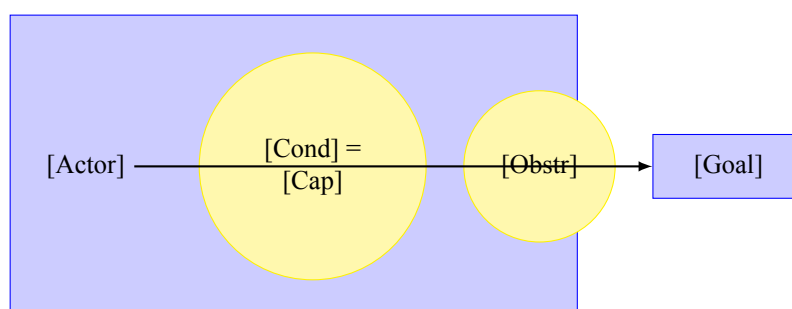
Figure 7.21: The conceptual frame of *mot*

7.8.2   Norwegian: *mot*

Monolingual description

Bokmålsordboka declares two senses of the noun *mot*: 1. mood / spirit, humour, esp. in fixed expressions: *være ved godt mot; hvordan er du til mote?; være vel / ille til mote*; 2. to be courageous, fearless; ability to overcome fear in a dangerous situation, mental strength to dare something; self-confidence. The second sense is the meaning that is in the centre of our interest. The dictionary declares that this meaning comes from German, while the word (in its first meaning) is of Old-Norse origin. The noun has also a homonym with the meaning of *crossroads* (originally any meeting) in Norwegian.

Norsk ordbok and *Norsk Riksmålsordbok* make the same distinction.

Valency patterns

The noun *mot* can take a complement expressing the [Goal] in the form of a prepositional phrase using the preposition *til*.

The dictionaries (*Bokmålsordboka* and *Norsk Riksmålsordbok*) mention also the preposition *på*, but only in connection with the collocation *ha mot på noe*, havin a meaning similar to *ha lyst til*. Only one such occurrence was found in LKB ("Ja, du har godt mot på livet, August").

Distribution

There are only 573 occurrences of the lemma *mot* tagged as noun in LKB. 100 of the occurrences are tagged as plural forms, but none of them is really a plural form. On the other hand, some of them are occurrences of the preposition *mot*, and many occurrences tagged as the preposition are actually occurrences of the noun. The additional distinction of the homonymous noun cannot be made at all, but it can be expected that the homonym will be very infrequent. Any statistics based on the tagging are therefore quite meaningless.

The preposition *til* follows the lemma in 221 cases, and while 130 of them are not tagged as nouns, all but two of them seem to be occurrences of the noun *mot*. An infinitive construction follows in 104 cases. 67 cases are occurrences of the fixed expression *ta mot til seg*.

Polysemy

Excluding the homonym with the meaning of crossroads (or meeting), the noun has two basic senses: the original sense of "mood" and the newer sense of "courage". The first one probably only survives in fixed expressions today.

Collocations and idioms

The noun frequently collocates with the verbs *å ha, å miste, å holde, å få* and the previously mentioned verb *å ta*. Other typical verbs are *å svikte, å gjenvinne, å hente (fra), å kreve*.

In addition to the fixed expressions used with the first sense of the noun, the dictionaries mention some typical collocations for the second sense as well: *ha mot til å gjøre noe; fatte nytt mot; holde motet oppe; mist ikke motet!; ta mot til seg; motet sviktet henne; friskt mot!; ha sine meningers mot; ha mot på noe* (being close to *ha lyst til*); *vise mot; drikke seg mot til; manns mot; miste / tape motet; hente (nytt) mot fra; holde mot i noen; sette mot i;* and some compounds: *heltemot, livsmot, kampmot, mannsmot, pågangsmot*.

Norsk ordbok lists some of the fixed expressions under the first sense, suggesting that they are at the border to the second meaning: *være ved godt mot; sette mot i en; ta fatt med frisk mot*.

Translation

The Norwegian-Czech dictionary mentions the Czech noun *odvaha* as the only equivalent of the noun *mot*.

Because of the homonymy with the extremely frequent preposition, it is very difficult to find the noun *mot* in the currently untagged Norwegian-Czech parallel corpus.

However, there are 91 occurrences of the noun appearing with *odvaha* as its equivalent. A few translations of the collocations can be found: *gi mot – dodat odvahu; (noen) miste(t) motet – odvaha opustila (někoho) / ztrácet odvahu / ztratit odvahu; motet svik-tet – opustila mě odvaha; fatte mot – sebrat odvahu / najít odvahu; ta mot til seg – sebrat odvahu / dodat si odvahy; gi (noen) mot til…– poskytnout někomu odvahu; ta motet fra (noen) – připravit (někoho) o odvahu; samlet alt sitt mot – sebrat odvahu; oppvise mot utover det vanlige – projevit mimořádnou odvahu; …hvor hun skulle få mot fra – …, kde by vzala odvahu; holde motet oppe – zachovat si odvahu; mønstre alt sitt mot – sebrat odvahu; sette mot i noen – povzbuzovat někoho*.

At least the preposition *til* seems to be a reliable indicator of the noun and can help to find some more interesting translations: *ta mot til seg – vzmužit se / sebrat kuráž; jeg hadde ikke mot til det – nenašla jsem tu sílu; samlet febrilsk mot til…– těžce se odhodlával*. The noun *kuráž* appears altogether 9 times as equivalent of the noun *mot* and once as equivalent of the compound *pågangsmot*.

The expression *være ved godt mot* appears 4 times in the corpus, corresponding to *být dobře naložen* and *vzmužit se*. Twice in the imperative form with equivalents *jen doufej!* and *buďte veselí!*

The fixed expression *til mote* appears 33 times in the parallel corpus, mostly in the form *ille til mote* corresponding to: *(být) nesvůj; (být) v rozpacích; děsit, nemít rád, být (někomu) nepříjemné, (pociťovat) trýzeň; snášet úzkostně; být (někomu) nepříjemné; nebýt (něčím) ve své kůži; být někomu všelijak;* or to adjectives or adverbs like *úzkostlivý / znepokojený / skleslý; rozpačitě*. Other collocations of this type (together with their Czech equivalents) are e.g. *føle seg bedre til mote – uklidnit se / nálada stoupá; lystige til mote – rozjařili se; vel til mote – pohodlně*.

Dictionary entry

The entry (figure 7.22) defines the two basic senses: the first one related to the Czech noun *odvaha* and the second one to the Czech noun *nálada*. Collocations and fixed expressions are defined separately for each of them. Translations are offered only for the expressions which have straightforward and/or proved equivalents in Czech.

The classification of verbal collocations by aspect and syntactic function at once does not seem to be very practical: the verb *å svikte* is both a verb taking the noun *mot* as subject and building a terminative construction. The verb *å kreve* ("to require") takes the [Goal] as its subject and the noun mot as its object.

7.8.3   Czech: *odvaha*

Monolingual description

The *SSJČ* dictionary does not distinguish any senses for the Czech noun *odvaha*. The description is based on synonyms corresponding to the second sense of the Norwegian noun *mot*.

Valency patterns

The noun can take a complement expressing the [Goal] in the form of a direct infinitive construction or prepositional phrase using the preposition *k* (with noun phrase in dative case).

mot

mot: *sg. indef.* mot ; *sg. def.* motet ; *pl. indef.* mot ; *pl. def.* motene, ([+R])mota

Morphemic analysis

mot *(word)*

inflexion	
base	**ending**
mot *(morpheme)*	

Semantics

1. mental styrke som tillater sin eier å nå et mål til tross for fysisk eller psykisk fare

    Valency patterns

    Ⓐ ~ til *<å…/noe>*

    Collocations and constructions

    Verbs: - inchoative: *få, gjenvinne* - durative: *ha* - terminative: *miste, tape, svikte (POSS->PAT)* - (subj.): *svikte (POSS->PAT)* - (other): *kreve (GOAL->ACT)*

    Fixed expressions: ta mot til seg *dodat si odvahy / sebrat odvahu / vzmužit_se*; sette mot i *<noen> povzbuzovat*; ha mot på *<noe> mít_chuť*; fatte mot *sebrat odvahu*; holde motet oppe *zachovat si odvahu*; holde mot i *<noen>* ; hente mot fra *<noe>*

    Translation

    cs: *odvaha*

2. stemning som en er i

    Collocations and constructions

    Fixed expressions: ved godt mot *být_dobře_naložen*; være vel/ille/etc. til mote

    Translation

    cs: *nálada*

Figure 7.22: The entry for *mot*

Distribution

The noun *odvaha* appears 4526 times in SYN2005, thereof 4195 times tagged as singular form. However, it does not seem that there is a single real occurrence of the noun in plural form and all the 331 occurrences tagged as plural forms are just homonymous forms of singular genitive.[66]

An infinitive construction follows immediately in 746 cases (16.5%). The preposition *k* follows in 175 cases (3.9%).

Polysemy

The noun has only one single core meaning. The noun can (like its Norwegian counterpart) be used both to refer to the (current) mental strength of the [Actor] to achieve some particular [Goal] or to his or her general quality to overcome fear, Both in Czech and Norwegian, there are also synonyms specifically aimed at the latter meaning (usually adjectival derivatives like *tapperhet, dristighet, djervhet,* etc.).

Collocations and idioms

The most frequent verbs collocating with the noun *odvaha* are *mít, dodat / dodávat, najít, sebrat / sbírat, ztratit*. They are also typical support verbs of the noun and the constructions can be considered fixed expressions (*dodat někomu odvahy; najít / sebrat / ztratit odvahu*). Other typical collocations are *nabýt odvahy* and *prokázat (velkou / větší / mimořádnou / pozoruhodnou) odvahu; prokázat trochu / hodně / víc / větší dávku / notnou dávku odvahy*.

There are no special adjective modifiers that would frequently appear with the noun, except of quantifications expressing sufficiency of courage or the lack of it.

Translation

The Czech-Norwegian dictionary mentions two Norwegian equivalents of the noun *odvaha*: *mot* and *tapperhet*. Translations are also suggested for the common collocations: *sebrat odvahu – samle mot*; *dodat si odvahy – ta mot til seg*.

The Norwegian noun *mot* is an almost exclusive equivalent of the noun *odvaha* in the Czech-Norwegian parallel corpus. In a few cases, the noun *dristighet* is used. Some interesting translations of the common collocations are: *dodat (někomu) odvahu – gi (noen) mot / ta seg sammen; ztrácet / ztratit odvahu – miste motet; mít odvahu – å tørre / å våge / være modig (nok) til…/ ha mot til…/ ha et dristig hjerte; nemít odvahu – å ikke våge; nenašel odvahu – greide ikke; odvaha (někoho) opustila – motet sviktet (noen) / motet forlot (noen); sebrat odvahu – fatte mot / ta mot til seg / samle (alt sitt) mot / å mønstre mot nok til å våge…; připravit někoho o odvahu – ta motet fra noen; prokázat notnou dávku odvahy – være skikkelig modig; najít odvahu – finne motet / ta mot til seg; zachovat si odvahu – holde motet oppe; nabývat odvahy – få mot av….*

Dictionary entry

The Czech noun *odvaha* (figure 7.23) has only one single meaning corresponding to the sense [1] of the Norwegian noun *mot*.

---

[66]Anyway, a context using the noun in plural is quite difficult to imagine.

odvaha

odvaha: *sg.:* N odvaha; G odvahy; D odvaze; A odvahu; V odvaho; L odvaze; I odvahou; *pl.:* N odvahy; G odvah; D odvahám; A odvahy; V odvahy; L odvahách; I odvahami, *odvahama

FREQ: 4526 (SYN2005), sg: 100%

Morphemic analysis		

odvaha *(word)*		
inflexion		
base		ending
odvaha *(morpheme)*		

Valency patterns

A ~ *<INF>*

B ~ k *<něčemu>*

Collocations and constructions

Verbs: - inchoative: *dodat$_C$ (POSS->ADDR), najít, nabýt* - durative: *mít, prokázat* - terminative: *ztratit, opustit (POSS->PAT)* - (subj.): *opustit (POSS->PAT)*

Fixed expressions: sebrat odvahu *fatte mot / ta mot til seg*; dodat si odvahy *ta mot til seg*; zachovat si odvahu *holde motet oppe*

Translation

no: *mot [1]*

Semantics

duševní síla umožňující svému nositeli dosáhnout cíle navzdory fyzickému či duševnímu nebezpečí

Figure 7.23: The entry for *odvaha*

7.9   Vilje – vůle (will)

7.9.1   The conceptual frame

The *will* (*vilje*) can either be an inherent general capability [Cap] of some possessor [Poss] to achieve his or her goals (desires) generally (with a measurable strength to overcome resistance in the form of an opposing will of some other entities), or a temporary [Force] based on a decision or desire to achieve some particular goal [Goal].
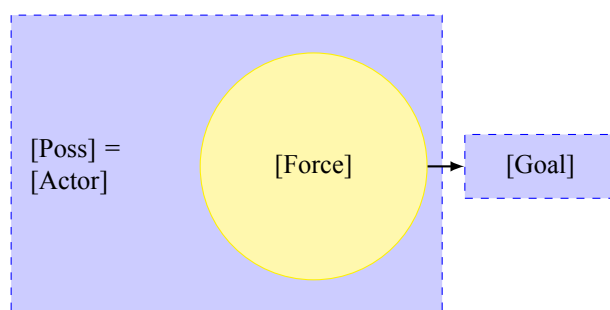
Figure 7.24: The conceptual frame of *vilje*

7.9.2   Norwegian: *vilje*

Monolingual description

Bokmålsordboka lists four senses of the noun *vilje*: 1. ability of conscious action or behaviour; 2. order, wish; 3. intention, purpose; 4. the fact of being willing, volition. The sense number 2 also mentions the meaning of "testament" for the fixed expression *siste vilje*, but according to further analysis, it does not seem to be as much fixed in Norwegian as it is in Czech.

Norsk ordbok declares 5 senses, dividing sense number 1 of *Bokmålsordboka* into two senses: the general ability to act (free will) and the will as a personal mental strength to enforce something.[67]

Norsk Riksmålsordbok defines even 9 senses with a multitude of sub-senses, making very fine (psychological) distinctions.

Valency patterns

The noun can have a complement in the form of prepositional phrase using the preposition *til*. The phrase refers to the [Goal].

Distribution

The noun *vilje* appears 2044 times in LKB, thereof 2028 times (99.2%) in singular form. The preposition *til* follows in 604 cases (29.5%), always after a singular form. An infinitive construction then follows in 446 cases (73.8%).

Polysemy

The meaning of *vilje* can be surely partitioned into an almost arbitrary number of fine senses. But the borders would be very vague and distinctions often dependent just on personal interpretation. Only a few senses can be distinguished with the help of formal distinctions – some of the mentioned distinctions are actually bound to more or less fixed expressions.

The meaning of intention or purpose is closely connected to the collocation *(gjøre noe) med vilje*, having a function of an adverbial.

Another collocation does also evoke a separate meaning: *fri vilje*. *Norsk ordbok* does mention it as sense number 2, defined as an ability to act independently of outer circumstances.

Distinctions based on the type of the possessor are also very vague: there is often a very fuzzy border between normal humans and higher or supernatural entities, especially when talking about the will of some underspecified abstract (powerful) group of people or society.

One possible distinction can be made on the basis of the valency and conceptual structure: the will as a general mental strength (quality) of some (human) being, which does not require any particular [Goal] (it is completely generalized) and can be measured or compared, and the pure volition associated to some particular [Goal] (even though the goal may be still underspecified or very widely generalized), which does

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[67]The dictionaries sometimes present examples that do not really fit very well the definition. E.g. *Norsk ordbok* mentions the example *mot sin vilje måtte han innrømme at hun hadde rett* under sense number 5, defined as "intention / purpose". However, the noun has hardly any meaning of purpose in this case.

not necessarily include the ability or strength to enforce the action [Goal]. Still, there will be many border cases.[68]

Collocations and idioms

The most frequent verb collocating with the noun *vilje* is the verb *å få*. The collocation can be in most cases addressed to the fixed expression: *få viljen sin ((i)gjennom)*. Other frequent verbs are: *å ha, å vise, å mangle*.

The most frequent adjective modifiers are: *fri, god, manglende, politisk, sterk, stor, liten, sist,* etc. The collocation *Guds vilje* is also very frequent.

The head preposition *med* is used to construct the fixed expression *med vilje*. It is also used in the collocation *med sin beste vilje*. Other common collocations with prepositions are: *av egen (fri) vilje*, or *mot ens vilje*.

The dictionaries offer further typical collocations and fixed expressions: *ha sterk / svak vilje, (den avdødes) siste vilje, vise vilje til noe, vise god / ond vilje, drive / få / sette / trumfe sin vilje igjennom, la barna få viljen sin, han fikk sin vilje med henne, være en til viljes, det skjer ikke med min gode vilje, gå bare på viljen*.

Translation

The Norwegian-Czech dictionary translates the Norwegian noun *vilje* solely with its Czech equivalent *vůle*.

The Norwegian-Czech parallel corpus reveals the Czech noun *vůle* as the prevalent equivalent of *vilje* as well. It also lists some interesting parallel collocations: *med vilje – schválně, naschvál, úmyslně, záměrně; av ond vilje – ve zlém úmyslu; Guds vilje – vůle Boží; fri vilje – svobodná vůle; siste vilje – poslední vůle; viljestyrke, viljekraft – síla vůle; med min beste vilje – při nejlepší vůli; av egen (fri) vilje – dobrovolně, svobodně, z vlastní (svobodné) vůle; sette (hele) sin vilje på noe – upnout (všechnu) svou vůli k něčemu; ikke med god vilje – nerad, ne dobrovolně; om jeg fikk viljen min – kdyby bylo po mém; fast vilje – pevná vůle; være etter ens vilje – být někomu po vůli; lar ham få sin vilje – (žena) povolí jeho vůli; gjøre noen til viljes – poddávat se něčí vůli; sette seg imot ens vilje – odporovat něčí vůli*.

Dictionary entry

The entry (figure 7.25) has been divided into the two most obvious sub-senses mentioned above. The other two meanings are bundled to the fixed expressions *fri vilje* (the general ability of conscious action) and *god/ond vilje* (intention). The most common but structurally different collocations with direct equivalents were selected as examples for description.

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[68]Even *Guds vilje* would probably fall under the latter sense, since it is virtually always used in reference to something happening, rather than evaluating or measuring the strength of "God's will" (which is considered rather absolute). Two excellent border cases are examples from *Bokmålsordboka*: (1) *løperen var tom for krefter, og de siste rundene gikk bare på viljen* – while here the reference seems to be clearly pointing to the mental strength of the runner, the goal (to finish the competition) is very evident and concrete; (2) *viljen til å overleve* – the [Goal] is even explicitly given here, but the meaning still refers rather to the general mental strength, while the complement is only a specification of the general kind of will.

vilje

vilje: *sg. indef.* vilje ; *sg. def.* viljen ; *pl. indef.* *viljar, +viljer ; *pl. def.* *viljane, +viljene

FREQ: 2044 (LKB), sg: 99.2%

Morphemic analysis

vilje *(word)*

	inflexion	
base		**ending**
vilje *(morpheme)*		

Collocations and constructions

Verbs: - durative: *ha, vise, mangle*
Compounds: velvilje *dobrá vůle*
Fixed expressions: fri vilje *svobodná vůle*; god vilje *dobrá vůle / dobrý_úmysl*; ond vilje *zlá vůle / zlý_úmysl*; med *<ens>* beste vilje *při nejlepší vůli*

Translation

cs: *vůle [1]*

Semantics

1. bestemmelse (til noen) til å nå et mål

   Valency patterns

   A ~ til <*å…/noe*>

   Collocations and constructions

   Adjectives: *politisk*
   Compounds: velvilje *dobrá vůle*
   Fixed expressions: med vilje *úmyslně / schválně / naschvál*; siste vilje *poslední vůle*; få viljen sin (igjennom) *prosadit svou vůli / být_po_něčím*; påtvinge *<noen>* sin vilje *vnutit <někomu> svou vůli*; sette (hele) sin vilje på *<noe/å…> upnout (všechnu) svou vůli k <někomu/něčemu>*; Guds vilje *vůle Boží*

2. mental styrke som tillater sin eier å overkomme psykisk motstand og nå alle sine mål

   Collocations and constructions

   Adjectives: *sterk, svak*
   Compounds: viljestyrke *síla vůle*

Figure 7.25: The entry for *vilje*

7.9.3 Czech: *vůle*

Monolingual description

The *SSJČ* dictionary defines 9 different senses of the noun *vůle*. The first four seem to correspond roughly to the meaning of the Norwegian noun *vilje*: 1. (human) ability to act according to own decision or intention; 2. effort to achieve some goal; 3. result of some decision: demand, request, wish, command, intention; 4. possibility of free decision, free action; personal freedom. The sense number 5 is a technical term corresponding to English "clearance". Further three senses are specific to the fixed expressions *dobrá / zlá vůle*: 6. good intention, effort, willingness / bad intention, malice; 7. good relation, harmony / bad relation, hostility; 8. good humour / –. The sense number 9 has the meaning of "permission", corresponding to the sense defined as number 9 in the Norwegian *Norsk Riksmålsordbok*. All the additional senses (compared to the senses of the Norwegian counterpart) are rather uncommon in modern colloquial Czech, however, except of the technical meaning (number 5) and (to a certain extent) the basic meaning of *dobrá vůle* in sense number 6.

Valency patterns

The noun can take a complement expressing the [Goal] using a direct infinitive construction or using the preposition *k* (with noun phrase in dative case). Less frequently, the preposition *po* can be used as well (with noun phrase in locative case). Both prepositional complements are also mentioned in the *SSJČ* dictionary as specific for the sense number 2.

Distribution

The noun *vůle* appears 9183 times in SYN2005, thereof 8995 times (98%) in singular form. In most cases the indicated plural forms are just wrongly tagged singular forms, however. In 619 cases (6.7%) an infinitive construction follows.[69]

The preposition *k* follows in 362 cases (3.9%), the preposition *po* in 96 cases (1%) only. In a few cases the preposition *po* does not introduce a complement to the noun, however.

Polysemy

The definitions in the *SSJČ* dictionary follow the formal distionctions better than the Norwegian ones. The sense requiring a complement is clearly defined as number 2. Still, there are 3 general senses not requiring a complement: the first sense referring to the mental strength as human quality, number 3 and 4 referring to the volition, like number 2, but without any particular [Goal]. The sense number 4 of "freedom of decision" (as given in the dictionary) is actually also quite obsolete in modern colloquial language and (according to the given examples) does not correspond directly to any of the general senses defined for the Norwegian noun, because it is not identical with the fixed expression *fri vilje* nor its Czech equivalent *svobodná vůle*; it corresponds roughly to the use in some of the Norwegian fixed expressions (e.g. *la noen få viljen sin*). It seems also to be bound to a few rather fixed collocations in Czech as well (like *ponechat něco někomu na vůli, mít na vůli,* etc.). The meaning is hence close to "decision", but

---

[69]In 10 cases the noun before the infinitive is marked as plural form, but all those tags are actually wrong. The noun is always in singular form.

some decision is usually impulse (and presupposition) for just any kind of will (with a particular goal).

Collocations and idioms

There is a wide variety of verbs used with the noun *vůle*, but some of the most typical ones are: *mít, projevit, ztratit, najít, podléhat, podřídit se, podvolit se, poddat se, odporovat, protivit se, odevzdat se,* etc. There are also verbs typical for the meaning of the fixed expression *poslední vůle*: *sepsat, plnit, respektovat, zpochybnit,* etc.

The most frequent adjective modifiers are e.g.: *dobrý, boží, poslední, svobodný, politický, silný, lidský, velký, pevný, zlý.* Besides of the fixed collocations *dobrá / zlá vůle* and *svobodná vůle*, the idiomatic expressions *poslední vůle* is also a candidate for its own definition.

The *SČFI* dictionary gives some more fixed expressions for consideration: *být bez vlastní vůle, být nástrojem (vůle) někoho, dělat něco ze své (vlastní) vůle, odevzdat se do vůle boží, rozhodnout se ze svobodné vůle, (všichni) lidé dobré vůle, boží vůle, dobrá vůle, vůle bohů, z dobré vůle.*

Translation

The Czech-Norwegian dictionary mentions the Norwegian noun *vilje* as the equivalent of the Czech noun *vůle*, but it also offers translation for a few fixed expressions and collocations: *dobrá vůle – velvilje, poslední vůle – testament, o své vůli – med vilje*; *proti své vůli – mot sin vilje, síla vůle – viljestyrke* and *zlá vůle – ond vilje*.

The Czech-Norwegian parallel corpus confirms the Norwegian noun *vilje* as the general equivalent of Czech *vůle*. A few additional equivalent collocations can be found: *prosadit svou vůli – ta sin vilje, få sin vilje; poslední vůle – testament; z vlastní vůle – frivillig, fritt; dobrá vůle – velvilje, godvilje, god vilje; vnutit někomu svou vůli – påtvinge noen sin vilje; podle své (vlastní) vůle – som en vil; má silnou vůli – han er sterk i viljen*.

Dictionary entry

The entry for the Czech noun *vůle* (figure 7.26) should first separate the technical sense from the original meaning, which is then divided into the same sub-senses as the Norwegian noun: the force based on some decision to achieve some particular goal and the capability to overcome difficulties when achieving some goals generally.

7.10 Lyst – chuť (appetite/urge/desire)

7.10.1 The conceptual frame

The conceptual frame of *lyst* is similar to the concept of *vilje*. The noun has not the meaning of a special capability, but only a temporary desire based usually on some basic instincts or sudden impulse. It is also much more oriented to a particular [Goal].

vůle

vůle: *sg.:* N vůle; G vůle; D vůli; A vůli; V vůle; L vůli; I vůlí; *pl.:* N vůle; G vůlí; D vůlím; A vůle; V vůle; L vůlích; I vůlemi, *vůlema

FREQ: 9183 (SYN2005), sg: 98%

Morphemic analysis	

vůle *(word)*	

inflexion	
base	**ending**
vůle *(morpheme)*	

Collocations and constructions

Verbs: - durative: *mít*

Semantics

1. duševní síla někoho směřující k nějakému cíli

   Collocations and constructions

   Verbs: - inchoative: *najít* - durative: *projevit* - terminative: *ztratit* - (other): *podléhat, odporovat, protivit_se, podřídit_se, podvolit_se, poddat_se*
   Fixed expressions: svobodná vůle *fri vilje*; dobrá vůle *god vilje / velvilje*; zlá vůle *ond vilje*; při nejlepší vůli *med <ens> beste vilje*

   Translation

   no: *vilje*

   a. rozhodnutí někoho směřovat k nějakému cíli

      Valency patterns

      A ~ *<INF>*
      B ~ k *<něčemu>*
      C ~ po *<něčem>*

      Collocations and constructions

      Adjectives: *politický*
      Fixed expressions: z vlastní vůle *av_egen_vilje*; poslední vůle *testament / siste_vilje*; vůle Boží *Guds vilje*; prosadit svou vůli *få viljen sin (igjennom)*; vnutit *<někomu>* svou vůli *påtvinge <noen> sin vilje*; upnout (všechnu) svou vůli k *<někomu/něčemu> sette (hele) sin vilje på <noe/å…>*

   b. duševní síla dovolující někomu překonat překážky a dosáhnout všech svých cílů

      Collocations and constructions

      Adjectives: *silný, slabý, pevný*
      Fixed expressions: síla vůle *viljestyrke*

2. velikost mezery mezi součástkami či díly

   tech.

   metaphorical extension of [1]

Figure 7.26: The entry for *vůle*
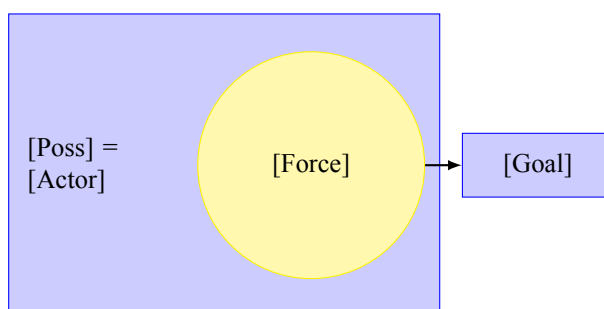
Figure 7.27: The conceptual frame of *lyst*

7.10.2 Norwegian: *lyst*

Monolingual description

The Norwegian noun *lyst* seems to be of Low-German origin (*lust*), but it appears already in Old-Norse.

The noun *lyst* has two senses according to *Bokmålsordboka*: 1. urge / craving, desire, interest; 2. joy, pleasure / delight.

Norsk ordbok tries to define 3 senses, dividing the first sense (of *Bokmålsordboka*) into two senses: 1. to be the in mood for st., urge, inclination; 2. (strong) desire, lust; 3. delight, joy, pleasure.

Norsk riksmålsordbok lists 5 senses: 1. (literary) sensual (espec. erotic) desire, instinct; 2. inclination, urge; to be in the mood for st., do st. with pleasure; 3. feeling of delight, pleasure; 4. st. giving delight / pleasure to someone; 5. (obsolete) liveliness / merriment / gaiety.

Valency patterns

The noun can take the [Goal] as its complement, using the prepositons *til* or *på*. The preposition *til* is mostly used with infinitive constructions, the preposition *på* is mostly used with nominal phrases. In the absolute majority of cases, these constructions appear together with the support verbs *å ha* or *å få*. In constructions with the preposition *på*, there is usually some underspecified verb (action) which would take the complement as its object. This verb would usually be the generic verb *å få* or *å ha* (*lyst på en ny jobb i utlandet* => *lyst til* å få / skaffe seg *en ny jobb i utlandet*).

Distribution

In LKB, there are 3166 occurrences tagged as the noun *lyst*, thereof 3065 occurences (96.8%) in singular form. However, it is homonymous with some forms of the adjective *lys* or the verb *å lyse* and the tagging (disambiguation) is sometimes wrong.

The preposition *til* follows in 2315 cases (73.1%), with only two exceptions always after singular form (99.9%). An infinitive follows in 2115 cases (91.4%). The word *at* follows in 26 cases, but only 17 of them (0.7%) really are the conjunction *at* with a subordinate clause. In the rest of the cases, the complement is almost always a pronoun referring to some verbal expression or action (or some irregularity). In 1717 cases (74.2%), the verb *å ha* precedes the expression *lyst til* on one of the four positions to the left. In 422 cases (18.2%), the verb *å få* occurs in the same range.

The preposition *på* follows in 499 cases (15.8%), always after singular form (100%). In only 4 cases (0.8%) it is followed by an infinitive construction. In only 1 case (0.2%) it is followed by a subordinate clause introduced by *at*. In 375 cases (75.2%), the verb *å ha* precedes the expression *lyst på* on one of the four positions to the left. In 65 cases (13%), the verb *å få* occurs in the same range.

Polysemy

The noun seems to have two basic senses: the meaning of desire (taking often a particular complement, the [Goal]) and the meaning of joy, delight or pleasure (without any complement or goal). The first sense can be further specified as either the general human (or animal) instinct(s), with mostly general and/or underspecified goal(s), or some particular (and often sudden) urge (strong volition) for some particular goal [Goal]. The metonymical meaning of the cause of delight and the meaning of merriment seem to be rather uncommon in modern Norwegian, except for some fixed expressions.

The plural form of the noun has almost exclusively the meaning of instincts. It often collocates with adjectives like *seksuell, sanselig, syndig, kjødelig*, genitive forms *menneskenes, mennenes, kjødets* or with possessive pronouns.

Collocations and idioms

As declared before, the noun *lyst* is mostly a part of the fixed expressions *ha / få lyst til å gjøre noe* and *ha / få lyst på noe*. Another common verb is the verb *å miste*.[70]

The noun is just seldom modified (mostly just quantified) by adjectives such as *mye, liten, seksuell, veldig, god, stor,* etc..

The frequency list and the dictionaries show a few fixed expressions and collocations: *kjødets lyst, den søte lyst, (av) hjertens lyst, hver sin lyst, miste lysten, lysten driver verket, det er en lyst å høre, (arbeidet gikk) med liv og lyst, ei blott til lyst, følge lystene sine, ha halvveis lyst til…; har du lyst, har du lov*.

Translation

The Norwegian-Czech dictionary gives translations for two senses of the noun *lyst*: 1. *chuť*; 2. *žádostivost, chtíč*. The first one corresponds to the meaning of a sudden urge for something, the second one for the general instinct(s). The sense of joy / delight is not mentioned.

The Norwegian-Czech parallel corpus confirms the noun *chuť* as the generic nominal equivalent, but sometimes the more specific nouns *touha* or even *slast* are used. Very often, the whole verbo-nominal construction is just replaced with modal verbs in Czech, mostly the verb *chtít* ("want") or the more intensive *toužit* ("to desire"). The modal adverb *rád* is sometimes used as well. Further interesting equivalent expressions from the corpus are: *lystetikk – etika (duševní a tělesné) slasti; ha liten lyst til…– nechtít, nemít chuť; lysthuset – altánek, besídka; kjødets lyst – chlípnost; kjødelig lyst – tělesný pud / potěcha / touha / žádost / hřích; lyster – choutky, libůstky, slasti; lyster og laster – choutky a zlozvyky; brenne av lyst – hořet touhou; vellyst – slast, rozkoš; lystkalkyle – žebříček priorit; han hadde mindre enn halvveis lyst – ani se mu moc nechtělo; av hjertens lyst - co srdce ráčí; spise av hjertens lyst - najíst se dosyta; onde lystene - zlá nálada*.

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[70]The verb *å se* can also be found on the frequency list, but in those cases the word form is usually a wrongly tagged form of the adjective/adverb *lys(t)*.

Dictionary entry

lyst

lyst: *sg. indef.* lyst ; *sg. def.* +Clysten, (+R)lysta ; *pl. indef.* lyster ; *pl. def.* lystene

FREQ: 3166 (LKB), sg: 96.8%

Morphemic analysis

lyst *(word)*

inflexion	
base	**ending**
lyst *(morpheme)*	

Semantics

1. trang som tvinger noen til å nå et mål

> **Valency patterns**
>
> A ~ til <*å…*/*noe*/*at…*>
> B ~ på <*noe*/*å…*/*at…*>
>
> **Collocations and constructions**
>
> **Verbs:** - inchoative: *få* - durative: *ha* - terminative: *miste*
> **Fixed expressions:** brenne av lyst *hořet touhou*; ha brennende lyst *mít sto/tisíc chutí*; ha (svært) liten lyst *mít pramalou chuť / nemít nejmenší chuť*
>
> **Translation**
>
> **cs:** *chuť [3]*

   a. plutselig trang som tvinger noen til å nå et bestemt mål

   b. trang som tvinger noen til å nå naturlige/sjenerelle mål

> **Collocations and constructions**
>
> **Adjectives:** *seksuell, sanselig, syndig, kjødelig*
> **Nominal attributes:** *menneskenes, mennenes*
> **Fixed expressions:** kjødets/kjødelig lyst *tělesná touha / chtíč*
>
> **Translation**
>
> **cs:** *touha; žádostivost*

2. glede eller fornøyelse (til noen)

> **Collocations and constructions**
>
> **Compounds:** vellyst *slast / rozkoš*
> **Fixed expressions:** av hjertens lyst *co_srdce_ráčí*

Figure 7.28: The entry for *lyst*

The entry (figure 7.28) is separated into two main senses. The first one corresponds to the third sense of the Czech noun *chuť* defines two specific valency patterns, with the two prepositions clearly associated to infinitive and to the nominal complements respectively. The complements in the form of an attributive clause are extremely rare (as indicated by the almost white background) and might be quietly ignored, but they are still presented as well. So is the possibility of infinitive complement after the preposition *på*.

The sub-sense [1b] (instinctive desire) is closely specified by its own collocations. Besides the adjectives, some frequent nominal (genitive) attributes are presented as well. Two more specialized Czech equivalents (*touha* and *žádostivost*) are presented in

addition to the general equivalent *chuť*, which is also available by means of the scope (inheritance) within the whole sense number 1. The noun *chtíč* is also presented as one possible equivalent of the even more explicit collocation *kjødets lyst* or *kjødelig lyst*.

The second sense has hardly any direct general equivalent in Czech, but it is implied at least through the equivalents of the more specific compound *vellyst* (in Czech *slast* or *rozkoš*) or the fixed expression *av hjertens lyst* (which can also be translated differently in various contexts).

7.10.3   Czech: *chuť*

Monolingual description

The noun *chuť* is related to the verb *chutnat* ("to taste") and its primary meaning is the meaning of "taste, appetite", unlike its Norwegian counterpart which is based on the general (sexual) instinct(s), appetence. The first three senses defined by the *SSJČ* dictionary are therefore related to the meaning of "taste": 1. the perception (sensation) of bitter, sweet, sour or salt taste; 2. taste as one of the five human senses; 3. taste as a quality of some (edible) substance, as experienced by the human sense. The next two senses relate to the more general meanings: 4. volition, desire; 5. (artistic) taste.

Valency patterns

The noun can take a complement expressing the [Goal] in the form of an infinitive construction, or using prepositional phrases. The prepositions *k*, *na*, *do* and (possibly) *po* can be used.

The preposition *na* (requiring complement in accusative case) is most frequent and connects usually nouns expressing some temporary and often sensual delights.

The preposition *k* (requiring dative case) is typical for the fixed expression *chuť k jídlu*, but it is also used in connection with some more abstract goals in life.

The preposition *do* (requiring genitive case) is used with more abstract goals (in life) as well, in the sense of energy or enthusiasm for something (the complement [Goal] being close to the beneficiary).

The preposition *po* (requiring locative case) appears very rarely in the sense of strong desire for something (usually more abstract goals in life, again, but not exclusively). It seems to occur as a result of influence of the valency of the noun *touha* when used in a closely synonymical meaning.

Distribution

The noun *chuť* appears 10920 times in SYN2005, thereof 10318 times (94.5%) in singular form. An infinitive follows in 1664 cases (15.2%), thereof 1558 times (93.6%) after singular form. Nearly all of the cases where the infinitive follows a plural form of the noun are either part of the idiomatic expression *mít sto / tisíc chutí* or just results of wrong tagging.

The preposition *k* follows in 467 cases (4.3%), (almost) always after singular form.[71] In 320 cases (68.5%) the complement is the noun *jídlo* ("food, meal"), building the idiomatic expression *chuť k jídlu* (being equivalent to the English noun "appetite").[72] Other more frequent complements include the nouns *život, práce, změna, psaní*.

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[71] There is one real exception and a few wrongly tagged occurrences.
[72] In only 3 cases the noun is modified by an adjective.

The preposition *na* follows in 645 cases (5.9%), thereof 626 times (97.1%) after singular form. The most frequent complements are the nouns *sex, čokoláda, cigareta, káva, pivo, jídlo, maso, alkohol,* etc.

The preposition *do* follows in 276 cases (2.5%), always after singular form.[73] The most frequent complements are the nouns *život, práce, hra, fotbal*.

The preposition *po* follows in 42 cases, but only 9 of them (<0.1%) connect the complement of [Goal]. In other 8 cases, the complement is a specification of some secondary taste (typical e.g. for the description of wine taste). In the rest of the cases, the prepositional phrases are just free adjuncts (of time, etc.) or complements to the verb.

Polysemy

The noun *chuť* has two main senses: the primary meaning of taste and the more general meaning of desire. The meaning of joy or delight is not directly present, but it can indirectly appear as figurative extension in fixed expressions (e.g. *s chutí*).

The meaning of taste would require its own conceptual structure with at least three elements: the (edible) substance and its quality of taste (as being sensed by humans), the human sense of taste as a capability of perception, and the sensual perception of some particular taste. By virtue of metonymy, the noun can refer to all the three elements, as defined by the *SSJČ* dictionary. However, this distinction is not very sustainable, especially the difference between the quality of substance and the human perception of it, which are almost inseparable from each other (the qualities can also be measured physically, but the actual reflection in terms of human "taste" is only based on the real human perception of them). The possibility of independent distinction of the sense of some objective quality is therefore spurious, and the examples presented in the *SSJČ* dictionary are not very convincing either.

The meaning of desire for something can have all the meanings of the Norwegian noun *lyst*, but the sense of instincts is not present as an independent meaning and can only be evoked with the help of modifiers. In this sense, other Czech nouns are more relevant, such as *žádostivost, chtíč* or the more general (and also more spiritual or mental) *touha*. This is already well indicated by the Norwegian-Czech dictionary. The sense of desire can be further specified in order to help with the choice of preposition: (a) in the meaning of desire for sensual delights and indulgence, the preposition *na* is used; (b) in the meaning of desire for some general goals, the preposition *k* is used; (c) in the meaning of energy or enthusiasm for something, the preposition *do* is preferred. The preposition *po* appears rarely in the meaning of strong desire or longing for something (close to the type (b)) when the noun is used almost synonymously with the noun *touha*). The use of the preposition might therefore be an analogy to the valency of the noun *touha*, using regularly the preposition *po*.

The plural form of the noun *chuť* seems to be more bound to the primary meaning of taste, even though it is often extended to the meaning of "people's strange / queerish desires". In the neutral meaning of "desire, urge", the plural form is almost exclusively used in the idiomatic expression *mít sto / tisíc chutí*. Otherwise, forms of other nouns seem to be more preferred in plural, especially the diminutive form *choutky* (which is itself very rare in singular), referring to the instinctive desires.

The additional sense number 5, defined in the *SSJČ* dictionary as "(artistic) taste" is a metaphorical extension present mainly in (obsolete) literary style, but in the mod-

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[73]All the 14 exceptions are results of wrong tagging.

ern language it should be more generally defined as some kind of "liking", being a generalized extension of the more goal-oriented desire for something particular.

Collocations and idioms

The most frequent verb used with the noun *chuť* is, again, the verb *mít*, followed by *dostat*. Other typical verbs used with the noun are e.g. *(po)vzbuzovat/(po)vzbudit, (do)dávat, zvýraznit, vyniknout, vyznačovat se, spravit si, pocítit, (z)kazit, probouzet, projevit.*

Various adjective modifiers are typical for the sense of taste (*dobrý, lahodný, hořký, sladký, jemný, ovocný, kořeněný,* etc.). In the sense of desire, mostly quantification is used (*velký, malý,* etc.).

Besides of the mentioned fixed expressions *chuť k jídlu* or *mít sto / tisíc chutí,* the noun takes part in many other more or less fixed expressions. It is often used with prepositions to construct adverbial expressions like *(po)dle chuti, s chutí* or other idiomatic expressions like *být (někomu) po chuti* or *být při chuti.* Many of the common collocations can also be considered almost fixed expressions: e.g. *(mít) chuť k životu / práci* or *(mít) chuť do života / práce.*

The *SSJČ* dictionary lists more examples, including fixed expressions: *zkazit / spravit si chuť; mít slanou / nasládlou / ošklivou / příjemnou chuť v ústech; nemít žádnou chuť; být úplně bez chuti; přijít něčemu / někomu na chuť; přijít někomu k chuti; s jídlem roste chuť; dělat něco bez chuti; dělat si chutě na něco; mít divné chutě; s chutí do toho, půl je hotovo; (ne)být (někomu) po chuti; (ne)dělat někomu něco (/nic) po chuti; přešla ho chuť; zašla mu chuť (na něco); zahnat někomu (všechnu) chuť (k něčemu); dodat někomu chuti (k životu / práci / ap.)* .

The *SČFI* dictionary suggests further fixed expressions: *dráždit chuť někoho; dělat někomu chuť / chutě (na něco)* ("whet so.'s appetite (for sth)"); *nechat si / dát si zajít chuť (na něco / Inf.)* ("will just have to do (without sth)"); *nemít nejmenší chuť (na něco / Inf.)* ("not fancy (doing) sth in the slightest, just not feel like (doing) sth"); *přijít / přicházet něčemu / někomu na chuť* ("develop a liking for so. / sth, grow to like so./sth"); *(po)přát někomu dobrou chuť; spravit si chuť něčím; vzít / brát někomu chuť do něčeho / k něčemu* ("put so. off st."); *ztratit chuť.* It also lists the common support verbs used with the noun – in the sense of "taste": *nabýt / získat* (inchoative); *mít chuť / být nějaké chuti* (durative); *ztratit* (terminative); *dát něčemu chuť, zpestřit chuť něčeho* (causative-inchoative); *zkazit chuť něčeho* (causative-terminative); and in the sense of "desire": *dostat chuť (na něco)* (inchoative); *mít* (durative); *ztratit* (terminative). The dictionary lists further verbs within the sense of "taste", but a sub-sense numbered as "2", which actually can be used in the sense of "desire" as well: *dodat někomu chuť; povzbudit chuť* (causative-inchoative); *zkazit chuť někomu; ukojit chuť někoho* (causative-terminative); *vzrůst, přejít někoho* (subject).

Translation

The Czech-Norwegian dictionary lists three Norwegian equivalents bound to three senses of the Czech noun *chuť*: 1. *smak* in the sense of "taste"; 2. *smaksans* in the sense of the human sense of taste (marked as "biol."); 3. *lyst* in the sense of desire. The equivalents are accompanied by a few useful examples of common collocations and their translations: *chuť k jídlu* as *appetitt*; *mám chuť na kávu* as *jeg har lyst på kaffe*; *mám chuť studovat* as *jeg har lyst til å studere*; *pracovat s chutí* as *arbeide med glede*.

According to the Czech-Norwegian parallel corpus, the general Norwegian equivalents are *smak* (mainly) in the sense of taste and *lyst* in the sense of desire. The Norwegian noun *appetitt* appears a few times, both in the sense of appetite and (figuratively) desire. The noun *trang* appears 8 times, too. The modal verbs *ville* and *ønske* are also frequently used as equivalents of the fixed expression *mít chuť*. The corpus also offers a lot of interesting parallel expressions for consideration: *nechuť – uvilje, ubehag, motvilje, aversjon, avsky, vemmelse, motbydelighet, tilbakeholdenhet; pocit nechuti – kvalme; chuť k jídlu – matlyst; zasmát se s chutí – le en hjertelig latter; s chutí – fornøyd, å nyte / like å, med lyst, med (stort) velbehag, gjerne, frydefullt; být plný chutě do něčeho – være klar til noe; nebýt někomu po chuti – ønske ikke; chuť do života – livsappetitt; mít neodolatelnou chuť – ha brennende lyst (til noe); ztratila chuť – lysten forsvant; mít tisíc chutí – ha vanvittig lyst (til…), være tilbøyelig (til noe); mít sto chutí – ha brennende lyst; pachuť, příchuť – bismak; s chutí do toho a půl díla je hotovo – godt begynt er halvt fullendt; být někomu po chuti – være etter ens smak; mít pramálo chuti – ha svært liten lyst; vzít někomu chuť – gjøre noen (helt) utilpass; být při chuti – være sulten; nemít žádnou chuť – være uten smak; ztratit chuť – bli trett av noe; každý podle své chuti – hver på sitt vis.*

Dictionary entry

The entry for the noun *chuť* (figure 7.29) has eventually been separated into three senses. Besides the basic meaning of "taste" as a quality and the meaning of "desire", the meaning of "taste" as a human capability was separated. It does not really have much in common with the first meaning of "taste". It is derived from the first sense by means of metonymy, which might seem closer to the original meaning than the metaphorical extension, which is base of the last sense. Nevertheless, there are common collocations shared between the senses of "taste" as a quality and its metaphorical extension of "desire" (e.g. the verbs *dostat, dodat, zkazit*), but only the most basic ones (*mít, ztratit*) can also be used together with the meaning of human capability of "taste".

Three sub-senses are distinguished for the third sense ("desire") bound to the three different valency patterns which seem to be semantically exclusive. The specific sense synonymous closely to the noun *touha* and using its preposition *po* has not been declared because it seems to be rather anomalous according to the corpus evidence.

7.11 Trang – touha (urge/desire)

7.11.1 The conceptual frame

The noun *trang* refers to a force which puts pressure on the [Actor] to force him to achieve some [Goal]. The force is inherent to the actor and usually based on his instincts or desires. It is usually a sudden and very strong feeling. The Czech noun *touha* does not share this perspective completely: it is much closer to the general meaning of (long-lasting) desire. It is also more identified with the [Actor] (the possessor [Poss]) and his own will, while the Norwegian noun *trang* does not necessarily imply that the urge is also the (rational) will of the actor.

chuť

chuť: *sg.:* N chuť; G chutě; D chuti; A chuť; V chuti; L chuti; I chutí; *pl.:* N chutě; G chutí; D chutím; A chutě; V chutě; L chutích; I chutěmi, *chuťěma

FREQ: 10920 (SYN2005), sg: 94.5%

Morphemic analysis

chuť *(word)*

inflexion	
base	**ending**
chuť *(morpheme)*	

Collocations and constructions

Verbs: - durative: *mít* - terminative: *ztratit*

Semantics

1. vlastnost něčeho vnímaná něčím smyslem

   Collocations and constructions

   Verbs: - inchoative: *získat, nabýt, dát$_c$ (POSS->ADDR), dostat, dodat$_c$ (POSS->ADDR)* - durative: *vyznačovat_se* - terminative: *zkazit$_c$ (POSS->ADDR)* - (other): *zvýraznit$_c$*
   Adjectives: *lahodný, jemný, kořeněný, ovocný*
   Fixed expressions: dobrou chuť *god_apetitt*; přijít <*někomu/něčemu*> na chuť

   Translation

   no: *smak*

2. smysl jako schopnost lidí rozeznávat specifické vlastnosti látek
   metonymical extension of [1]

   Translation

   no: *smak; smaksans*

3. potřeba někoho dosáhnout nějakého cíle
   metaphorical extension of [1]

   Collocations and constructions

   Verbs: - inchoative: *pocítit, probouzet$_c$, dostat, dodat$_c$ (POSS->ADDR)* - durative: *projevit* - terminative: *vzít$_c$ (POSS->ADDR), přejít (POSS->PAT), zkazit$_c$ (POSS->ADDR)* - (subj.): *přejít (POSS->PAT), vzrůstat* - (other): *povzbudit, spravit_si*
   Fixed expressions: s chutí *med_glede / gjerne / hjertelig*; nemít nejmenší chuť *ha (svært) liten lyst*; mít pramalou chuť *ha (svært) liten lyst*; být při chuti *være_sulten*; být <*někomu*> po chuti *være_etter_ens_smak*; dělat <*někomu*> chutě ; dát/nechat si zajít chuť

   Translation

   no: *lyst*

   a. okamžitá touha někoho po konkrétním smyslovém požitku

      Valency patterns

      | A | ~ na <*něco*> |

   b. touha někoho po dlouhodobé aktivitě, změně, apod.

      Valency patterns

      | A | ~ <*INF*> |
      | B | ~ k <*něčemu*> |

   c. nadšení/energie někoho potřebná pro nějakou činnost

      Valency patterns

      | A | ~ do <*něčeho*> |

Figure 7.29: The entry for *chuť*
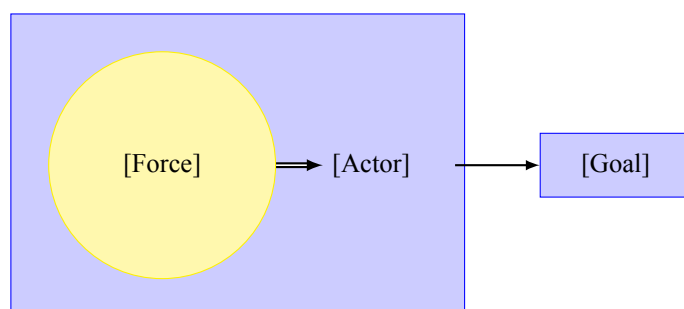
Figure 7.30: The conceptual frame of *trang*

7.11.2   Norwegian: *trang*

Monolingual description

Bokmålsordboka defines two basic senses of the noun *trang*: 1. need, desire (Norwegian: *behov, lyst*); 2. (obsolete) need (in misery / economical).

   Norsk ordbok mentions the same two senses, linking the first one to the nouns *lyst* and *drift* ("instinct").

   Norsk Riksmålsordbok lists the two senses in the reverse order, trying to distinguish finer sub-senses. The sub-senses distinguished for the sense of need / desire are: a) urge, instinctive desire (Norwegian: *lyst,tilbøyelighet*); b) longing, yearning (Norwegian: *lengsel, higen*).

Valency patterns

The noun can have a complement expressing the [Goal], connected by the preposition *til*. In a few cases the preposition *etter* appears as well, which can be possibly influence of the partially synonymous expression *lengsel etter*.

Distribution

The noun *trang* occurs 519 times in LKB, always in singular form.[74]

   The preposition *til* follows in 429 cases (82.7%), 350 (+2) times (82.1%) followed by an infinitive construction with the particle *å* (or *at*). In 5 cases the form *at* follows, in 3 cases (0.7%) introducing a subordinate clause (in 2 cases being the obsolete orthographical form of the infinitive particle).

   The preposition *etter* appears in 4 cases only (0.8%), in 2 cases (50%) with an infinitive construction.

Polysemy

The noun has two basic senses, but the meaning of economical need / misery seems to be obsolete in modern Norwegian, at least as a distinct sense. However, the sense of urge / desire can distinguish finer sub-senses, which are highly relevant for translation into Czech.

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[74]A few forms marked as non-singular forms are either proper nouns or mistakes in tagging. The noun is homonymous with the adjective *trang* and therefore mistakes can be expected.

Collocations and idioms

The most frequent verbs collocating with the noun *trang* are *å føle, å få, å kjenne, å ha*. They suggest strongly the meaning of *trang* as an inner (non-voluntary) feeling or urge.

The most frequent adjective modifiers are e.g. *sterk, uimotståelig, plutselig, intens, vill, sykelig,* etc. They point to the extraordinary strength (out of control) and suddenness of the urge (feeling).

Norsk ordbok suggests two further common collocations: *si noe / trang til litt forandring, drives av en indre trang. Bokmålsordboka* also gives an example of the second, obsolete meaning: *stjele av trang* ("steal of need").

Translation

The Norwegian-Czech dictionary distinguishes two senses of the Norwegian noun *trang* with three equivalents: 1. *potřeba, nutnost*; 2. *touha*. They correspond seemingly to the distinction made in *Norsk Riksmålsordbok.* However, the first pair of Czech equivalents covers (indirectly) also the economical and other forms of "need", and not just the more specific instinctive urge, while the second also includes desire from the more spiritual perspective, but including the instinctive desire as well. The correspondence between the distinctions made in *Riksmålsordbok* and in Czech are therefore not straightforward at all.

In the Norwegian-Czech parallel corpus, the noun *touha* is the most frequent nominal equivalent used for the Norwegian noun *trang.* In many cases, translations by modal verbs or adverbs are used, however. In 8 cases the noun *chuť* is used. Otherwise, different Czech nouns are used to express the concept of urge: *puzení, choutky, nutkání, chuť, sklon, přání, pokušení, žádost.* The corpus gives some further interesting collocations to consider: *ubendig trang – nutkavá potřeba; trangen kom (uforklarlig) over ham – zmocnila se ho (nevysvětlitelně) touha; trangen grep tak i ham – ovládla ho žádost; ha ingen trang – nemá chuť; fulgte sitt hjertes trang – uposlechl touhy svého srdce.*

Dictionary entry

No senses of the noun *trang* (figure 7.31) were defined within the entry. The meaning of the noun seems to cover a wide and continuous spectre of inner needs and urges, which can be translated in many different ways into the Czech language. Therefore, several translational sub-senses were defined for the most typical equivalents. In the current interface, their presentation is not space saving. In a printed dictionary their could be presented in a list, but preferably with some distinctive indicators (glosses, synonyms, etc.): e.g. (behov) *potřeba*; *(urasjonell ∼) puzení*; *(ubeviss ∼) nutkání*; (begjær) *žádost*; (lengsel) *touha [1].*

7.11.3   Czech: *touha*

Monolingual description

The Czech noun *touha* has two senses according to the *SSJČ* dictionary: 1. strong, intensive wish / desire with emotional enthusiasm; yearning, desire; 2. (rarely) object of the desire.

trang

trang: *sg. indef.* trang ; *sg. def.* trangen ; *pl. indef.* tranger ; *pl. def.* trangene

FREQ: 519 (LKB), sg: 100%

Morphemic analysis

trang *(word)*

	inflexion	
	base	**ending**
	trang *(morpheme)*	

Valency patterns

A ~ til *<å.../noe>*

Collocations and constructions

Verbs: - inchoative: *få* - durative: *føle, kjenne, ha*
Adjectives: *uimotståelig, plutselig, intens, vill, sykelig*
Fixed expressions: ubendig trang *nutkavá_potřeba*; trangen kom over *<noen> zmocnila se <někoho> touha*; følge sitt hjertes trang *uposlechnout touhy svého srdce*; drives av en indre trang

Semantics

sterk indre følelse eller drift som tvinger noen til å nå et bestemt mål

1. praktisk/økonomisk behov
   Synonyms: behov

Translation
cs: *potřeba*

2. urasjonell, langvarig indre trang

Translation
cs: *puzení*

3. ubeviss trang

Translation
cs: *nutkání*

4. sterk instiktiv, beviss trang
   Synonyms: begjær

Translation
cs: *žádost*

5. sterk åndelig aller fysisk lengsel
   Synonyms: lengsel

Translation
cs: *touha [1]*

Figure 7.31: The entry for *trang*

Valency patterns

The noun can take a complement expressing the [Goal] of the desire using the preposition *po* (with a noun phrase in locative case) or a in the form of a direct infinitive construction. The *SSJČ* dictionary mentions also the possibility of use of the prepositions *za* and *k*, but no single example of the use of the preposition *za* (introducing an element of the conceptual frame) was found in SYN2005, and only 4 occurrences of the preposition *k* used to connect the object of desire, but always with the personal pronoun of second person: *k tobě*.

Distribution

The noun *touha* occurs 8480 times in SYN2005, thereof 7725 times (91.1%) in singular. An infinitive follows in 1867 cases (22%), thereof 1846 times (98.9%) after singular form.

The preposition *po* follows the noun in 2463 cases (29%), thereof 2413 times (98%) after singular form.

Polysemy

The meaning of the Czech noun *touha* is much more restricted than the meaning of most of the other nouns treated in this analysis. It refers specifically to some strong emotional desire or to its object (the [Goal] in terms of the currently defined conceptual frame) by virtue of metonymy.

The meaning covers only a small part of the wide meaning of the Norwegian noun *trang* and not even the primary one (the Norwegian noun is derived from the verb *å trenge*, "to need"); on the other hand, its meaning overlaps with the meaning of other Norwegian nouns, as the section on *translation* shows.

Collocations and idioms

The noun *touha* is a typical subject of the verbs *posednout, hnát, zmocnit se, přepadnout,* and a typical object of verbs like *(po)cítit / (po)ciťovat, potlačit, vzbudit / vzbuzovat, vyvolávat, přemáhat, podlehnout, odolat, propadnout / propadat, poddávat se, podřídit se, probouzet, potlačovat.* etc., and also verbs collocating usually exclusively with fire: *rozněcovat, (za)hořet, planout, vzplát,* etc. Most of the fire-specific verbs take usually the noun as their complement in instrumental case (expressing means) and could also be considered fixed expressions, since the possible collocations are very restricted (*(za)hořet touhou, planout touhou, vzplát touhou*). Because of the metaphoric meaning, those expressions are poetic and appear mainly in the literary style.

The most frequent adjective modifiers are: *lidský, velký, sexuální, silný,* etc. Other typical adjectives are also: *neodolatelný, podvědomý, marný, naplněný, neukojitelný, zoufalý, neuhasitelný, odvěký, vášnivý, nezkrotný, milostný, spalující,* etc. The metaphor of fire applies here as well.

The SSJČ dictionary mentions some common collocations as well: *splnit / ukojit touhu; touhy a sny dětství; touha po lásce / ženě; hladová touha po vědění; odvěká touha lidí po míru / svobodě; touha po odplatě; touha po penězích; jeho touhou bylo stát se hercem; neměl jinou touhu než spát;* and a few more for the second meaning (of object of the desire): *vdova, touha všech mužů…; moře, to je moje touha.*

Translation

Unlike the article for the Norwegian noun *trang*, the Czech-Norwegian dictionary does not even mention the noun *trang* as an equivalent of the Czech noun *touha*. The only equivalents mentioned are *lengsel* ("longing") and the more passionate desire: *begjær*. The expression *touha po domově* is also translated as *hjemlengsel*.

The most frequent equivalent of the noun *touha* in the Czech-Norwegian parallel corpus is the neutral noun *ønske* (about 30%), followed by the nouns *lengsel, trang* and *begjær* (20%–14%). The noun *lyst* appears in some cases (about 8%) and the noun *attrå* in a very few cases. The use of the noun *trang* is not limited to its basic meaning of instinctive desire only, but the meaning of some inner (often uncontrollable) tendency is still obvious. The use of the noun *lengsel* is not limited to the meaning of some nostalgic long-term longing only, it also frequently refers to the erotic desire. The use of the noun *begjær* is typical for passionate (often sexual) desire, but not strictly limited to this meaning only. The noun *lyst* is usually preferred in the context of some sudden desire and in the context where the fixed expression *kjødelige / kjødets lyster* is an appropriate translation.

A few other interesting examples of translations from the corpus are: *žhnout touhou – brenne av lyst; vznítit něčí touhu – vekke ens attrå; tělesná touha – kjødelige / kroppslige lyster; touha po spravedlnosti / ospravedlnění – rettferdighetstrang / -tørst; touha po vědění – lyst etter å vite; být neklidný touhou – være rastløs av lengsel; svrběly ho prsty touhou otevřít…– han klødde i fingrene etter å åpne…; touha po moci – maktbrynde; samolibá touha – selvgodhet; hořet touhou – være overivrig (etter noe); hnán sžíravou touhou – drevet av et fortærende begjær; touha mstít se – hevntørst.*

Dictionary entry

The entry of the Czech noun *touha* (figure 7.32) is structured similarly to the entry of *trang*. The equivalence is not direct and both nouns are rather members of a whole group of synonyms in both languages. Only a particular context can determine the best equivalent. The most common equivalents found in the parallel corpus are listed within translational sub-senses specifying the meaning more closely. The possible equivalent *lyst* is only suggested through the explicit collocation *tělesná touha*. The Czech noun also adds another sub-sense referring to the object [Goal] of the desire, which has no direct equivalent in Norwegian.

7.12   Ønske – přání (wish)

7.12.1   The conceptual frame

The conceptual structure of *ønske* is similar to the structure of *vilje*, but here the force is very weak and does not imply any real effort to reach the desired goal. It refers rather to the mental impulse itself, which can trigger some secondary forces, depending on the particular strength of the wish or desire. The noun can refer both to the [Force] and to the [Goal]. The beneficiary of the [Goal] does not need to be always the [Actor]. In the social context of politeness, it can also refer to the whole situation or event [Event] when wishes (for another beneficiary, usually the addressee of the utterance) are formally expressed.

The Czech noun *přání* allows for multiple semi-lexicalized prepositional phrases expressing a wider context, scope (both in term of type or time) or field for the possible

touha

touha: *sg.:* N touha; G touhy; D touze; A touhu; V touho; L touze; I touhou; *pl.:* N touhy; G touh; D touhám; A touhy; V touhy; L touhách; I touhami, *touhama

FREQ: 8480 (SYN2005), sg: 91.1%

Morphemic analysis

touha *(word)*

	inflexion	
	base	ending
touha *(morpheme)*		

Collocations and constructions

Adjectives: *lidský, sexuální, podvědomý, marný, naplněný, zoufalý, neukojitelný, neuhasitelný, odvěký, vášnivý, nezkrotný, milostný, spalující*

Semantics

1. vnitřní duševní potřeba někoho dosáhnout nějakého (vzdáleného) cíle

   Valency patterns

   A ~ *<INF>*

   B ~ po *<někom/něčem>*

   Collocations and constructions

   Verbs: - inchoative: *posednout (POSS->PAT), zmocnit_se (POSS->PAT), přepadnout (POSS->PAT), pocítit, podlehnout, propadnout, zahořet, vzplát, poddávat_se, podřídit_se, vzbudit$_c$, probouzet$_c$, vyvolávat$_c$, rozněcovat$_c$* - durative: *hnát (POSS->PAT), planout* - terminative: *přemáhat, potlačovat, odolat, ukojit$_c$* - (subj.): *posednout (POSS->PAT), hnát (POSS->PAT), zmocnit_se (POSS->PAT), přepadnout (POSS->PAT)*

   Adjectives: *silný, neodolatelný*

   Fixed expressions: hořet touhou *brenne av lyst*; vznítit *<něčí>* touhu *vekke_ens_attrå*; tělesná touha *kjødets/kjødelig lyst*; hnán sžíravou touhou *drevet_av_fortærende_begjær*; uposlechnout touhy svého srdce *følge sitt hjertes trang*; zmocnila se *<někoho>* touha *trangen kom over <noen>*

   a. vnitřní puzení

      Synonyms: potřeba

      Translation

      no: *trang*

   b. fanatická touha

      Synonyms: žádost, posedlost

      Translation

      no: *begjær*

   c. mírná touha

      Synonyms: přání

      Translation

      no: *ønske*

   d. touha po něčem aktuálně nepřítomném

      Synonyms: stesk

      Translation

      no: *lengsel*

2. objekt/cíl k němuž směřuje vnitřní duševní potřeba někoho

   metonymical extension of [1]

Figure 7.32: The entry for *touha*
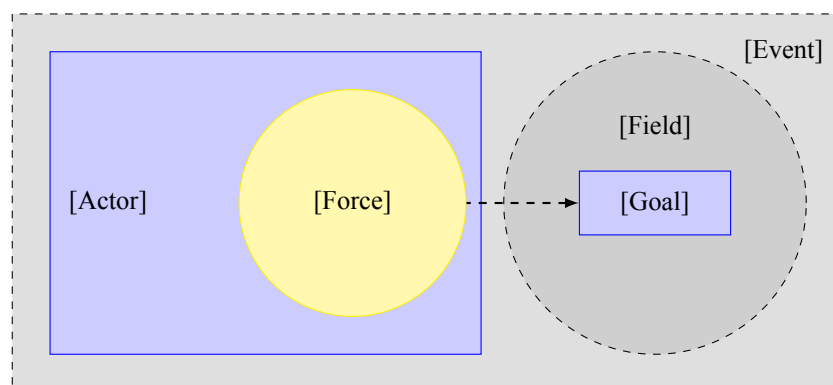
Figure 7.33: The conceptual frame of *ønske*

goals. Therefore the scheme includes the element of [Field], being an extension (or underspecification) of the particular [Goal]. In Norwegian, this type of extensions is expressed by standard adjuncts.

7.12.2   Norwegian: *ønske*

Monolingual description

Bokmålsordboka presents a very simple definition of the noun *ønske*: st. to wish or hope for; desire (Norwegian: *lyst*), longing, hope.

   Norsk ordbok makes difference between two senses of the noun: 1. desire to get or achieve st. (Norwegian: *lyst*); 2. the wishes of something good for someone else. *Norsk Riksmålsordbok* lists the same two senses, but tries to differentiate finer sub-senses again: the meanings of desire, hope or command for the first sense, and the meanings of loving or caring thoughts for someone else or the formal expression of politeness.

Valency patterns

The noun can take a complement expressing the [Goal] using the preposition *om*. Other prepositions are unusual. Since the noun can also refer to the object [Goal] of the desire (wish), copulative constructions are possible too.

Distribution

The noun *ønske* appears 1848 times in LKB, thereof 1360 times (73.6%) in singular form. It is homonymous with the verb *å ønske* and interference in the tagging can be expected.

   The preposition *om* follows in 960 cases (51.9%), thereof 900 times (93.8%) after singular form. In 612 cases (63.8%) it is followed by an infinitive construction, in 67 cases (7%) by the subordinate clause introduced by *at*.

   The preposition *for* follows in 26 cases, but in 5 cases (0.3%) only it can be considered a complement of the noun introducing the [Goal]/[Field].

Polysemy

The noun *ønske* has two main senses: 1. the inner, personal wish or desire; 2. the act of politeness by way of expressing "(good, best, etc.) wishes" to someone else.

In the sense number 1, the noun can refer either to the [Force] or its [Goal]. A border case between sense number 1 and 2 is the personal experience of wishes for some other beneficiary, which is assigned to the second sense in *Norsk Riksmålsordbok*, even thought it may have no formal expression and is not just an act of formal politeness.

Collocations and idioms

The noun *ønske* collocates with different verbs, the typical ones being e.g. *å ytre, å ha, å uttrykke*. It also often appears with the head preposition *etter* in the semi-fixed expression *etter (ens) ønske*.

The most frequent adjective modifiers are e.g. *sterk, høy, brennende, sist, stor, mange,* etc. They express a quantification common both to the personal and the formal meaning (domain).

Bokmålsordboka lists some common collocatians: *nære ønske om noe; alle gode ønsker for julen og det nye år; hennes ønske var å….* Further typical collocations can be found in *Norsk ordbok* and the other dictionaries: *ytre ønske om noe; oppfylle et ønske; mitt høyeste ønske; (han trer tilbake) etter eget ønske* and a few of the most typical formal expressions: *alle gode ønsker; de beste ønsker (for fremtiden); la meg få uttale ønske(t) om hell og fremgang.*

Translation

The Norwegian-Czech dictionary offers only one single equivalent for the Norwegian noun *ønske*: the Czech noun *přání*.

In the Norwegian-Czech parallel corpus, the noun is almost equally frequently translated by the general equivalent *přání* as the more specific noun *touha*. The interference with the much more frequent homonymous verb *å ønske* makes a more exact analysis difficult.

Dictionary entry

The entry of the noun *ønske* (figure 7.34) is quite simple. Only one valency pattern is defined and two fixed expressions, which have a very close but still slightly different equivalents in Czech: the extreme importance of some personal wish or desire is attributed to the superlative of the adjective *høy* ("high") in Norwegian, but to the superlative of *vroucný* ("devout") or more commonly just *velký* ("great") in Czech. The collocation *etter ønske* corresponds to the Czech collocations *na přání* or *(po)dle přání*.

Two senses are distinguished, but they have a common Czech equivalent. The possibility to use the preposition *for* to introduce some time-scope ([Field]) is only mentioned within the fixed expressions of the second sense. Its use is closer to the role of a free adjunct or an extension of a few particular fixed expressions, rather than an ordinary complement.

ønske

ønske: *sg. indef.* ønske ; *sg. def.* ønsket ; *pl. indef.* ønske ; *pl. def.* ønskene, [*R]ønska

FREQ: 1848 (LKB), sg: 73.6%

Morphemic analysis

ønske *(word)*

inflexion	
base	**ending**
ønske *(morpheme)*	

Valency patterns

A ~ om <*å…/noe/at…*>

Collocations and constructions

Verbs: - inchoative: *ytre, uttrykke, uttale* - durative: *ha* - terminative: *oppfylle_c*

Adjectives: *sterk, brennende*

Fixed expressions: høyeste ønske *nejvroucnější/největší přání*; etter (<*ens*>) ønske *na přání (<někoho>) / (po)dle přání (<někoho>)*

Translation

cs: *přání*

Semantics

1. indre lyst (til noen) til å realisere et mål

2. høflighetsuttryk av et ønske (fra noen om et mål til noen)

   Collocations and constructions

   Fixed expressions: alle gode ønsker (for fremtiden/etc.) *přání všeho nejlepšího (do nového roku/budoucna/etc.)*; de beste ønsker (for fremtiden/etc.) *přání všeho nejlepšího (do nového roku/budoucna/etc.)*

Figure 7.34: The entry for *ønske*

7.12.3   Czech: *přání*

Monolingual description

The *SSJČ* dictionary distinguishes three senses of the noun *přání*: 1. feeling of need of something, accompanied by emotional strain; desire (Czech: *touha*); 2. request, claim, demand; 3. expression of best wishes for another beneficiary (usually expressed formally).

The distinctions are similar to the Norwegian ones, but the meaning of wish as an explicitly expressed requirement or demand is separated. Also the meaning of wishes for some other beneficiary are limited to the explicitly expressed ones, here.

Valency patterns

In the sense of personal desire, the noun can use a direct infinitive construction to express the [Goal]. The use of prepositions with a noun phrase is rare and not very fixed, however. The prepositions used occasionally seem to be an influence of the valency patterns of other nouns or just of free adjuncts. The preposition *po* (requiring locative case) is infrequent, but its use seems to be quite stable in this role. The preposition *na* (requiring accusative case) seems to be used exceptionally for expressing the [Goal] as well, but it can also be used to express the wider context [Field] for personal wishes or desires. The preposition *pro* (requiring accusative case) seems to be used in a very few exceptional cases only. The preposition *do* is used to express a time scope [Field] (usually some new period of time) for the wishes, but it appears in many other situations and behaves like a free adjunct of time (in a directional meaning of immediate future).

In the sense of formal expression of wishes for some other beneficiary, the noun can take a direct dative phrase expressing the beneficiary and a direct genitive phrase expressing the [Goal]. The preposition *k* (requiring dative case) can be used to specify the special occasion [Event]. The preposition *do* can be used (again) to express the time scope for the wishes (here being the indirect cause for the [Event], which is the special occasion of the beginning of the new period of time, e.g. the beginning of a new year). The preposition *na* can be seemingly used to express the particular [Goal] as well, but it is extremely rare.

Distribution

The noun *přání* occurs 6305 times in SYN2005, thereof 5227 times (82.9%) in singular form. An infinitive follows in 517 cases (9.9%), thereof 487 times (94.2%) after singular form. A noun phrase in genitive case follows in 1384 cases (22%), thereof 1286 times (92.9%) after singular form. The genitive phrase can express both the possessor ([Actor]) and the [Goal], but it seems to be limited to the meaning of formal wishes when expressing the [Goal].

The preposition *po* follows in 16 cases (0.3%). With two exceptions the complement always refers to the [Goal] of the wish or desire. It seems to be limited to the sense of personal desire.

The preposition *k* follows in 47 cases (0.7%), mostly followed by the nouns *narozeniny, Vánoce, svátek* referring to special events of birthday, Christmas, name-day or another holiday. It seems to be specific for the sense of formal expression of wishes to someone else.

The preposition *do* follows in 18 cases, but only in 10 cases (0.2%) it refers to the time scope of the wishes, always in the form of the fixed expressions *do (nového) roku*

(9 times) or *do budoucna* (once). But other complement nouns are also possible, as a search in the wider text bank confirms (*do (dalšího) života, do další sezóny*). It is used both in the personal and the formal sense of the noun.

The preposition *pro* follows in 11 cases, but only in 5 cases it can be considered a complement of the noun. It expresses mostly the time scope (context) for some wishes (like a free adjunct), but in one or two cases the complement can be considered the [Goal] of the wish (*vyslovil své přání pro finálový duel*).

The preposition *na* follows in 27 cases, but only in 9 cases (0.1%) it can be considered a complement of the noun. Still, the semantic role of the complement is variable even in those 9 cases. It can express the goal or object [Goal] of the desire, both in the meaning of personal desire (*přání na koňak / bramborové placky*) and in the meaning of wishes for someone else (*přání na prožití klidných vánočních svátků; mělo to cenu všech přání na dobrou noc*). It can also express some relation, connection or context ([Field]), which specifies closely what kind of wishes are discussed, in the sense of personal desire (*přání na výrobek v dané třídě / zlepšení programu / téma přednášky / ochranu / cestu*).

Polysemy

The Czech noun *přání* has (like its Norwegian counterpart) two different aspects giving it a combination of up to four possible distinct meanings: the beneficiary of the desire can either be the [Actor] itself or some other person, and the noun can refer either to the desire as a personal feeling or to the explicit expression of it. From all the four combinations at least one should be separated from the basic meaning of personal desire, because of formal and pragmatical reasons: the formal explicit expression of best wishes (on some special occasion [Event]) for some other beneficiary.[75] The *SSJČ* dictionary does also separate the explicitly expressed personal desire (the command, demand or request), but it can be hardly separated from the basic meaning of a pure feeling – there is no formal or conceptual distinction between the unexpressed and expressed desire within the scope of the noun itself.

The noun can also refer specifically to a special postcard used to express the formal wishes to someone else.

Collocations and idioms

The most frequent verbs collocating with the noun *přání* are *mít* and *splnit (se)* (which is also specific for this noun). Other typical verbs are: *(vy)plnit, vyjádřit, respektovat, vyslyšet, vyslovit, projevit, vyhovět, řídit se.*

Typical adjective modifiers are: *zbožný, splněný, toužebný, splnitelný, výslovný, tajný, vroucný, jediný, poslední,* etc. The preference of collocations with adjectives such as *vroucný, toužebný, hluboký, niterný, tajný* points to the meaning of *přání* as an inner, personal (and sometimes secret) feeling. Typical modifiers specific for the sense of formal expressions of wishes include the adjectives: *vánoční, novoroční, upřímný.*

Collocations with the head prepositions *na* and *(po)dle* can also be considered fixed expressions *na přání / podle přání někoho.* Typical collocations of the more idiomatic expression *na přání* are: *písnička, koncert, video, výbava.* The expression *video na přání* is an equivalent of the English term *video on demand.*

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[75]As a matter of fact, the formal expression of politeness does not necessarily imply that the expressed wishes are the real desire of the speaker.

The *SČFI* dictionary lists only a few extra collocations and fixed expressions: *vyčíst někomu z očí každé přání; skryté / tajné přání.* But it also suggests the common verbal collocators, which are often very specific and can also be considered fixed expressions: *pojmout přání; projevit / vyslovit / vyjádřit přání (inchoative); mít přání (durative); uskutečnit / uspokojit své přání (terminative); splnit někomu přání / vyhovět přání někoho / uspokojit přání někoho (causative-terminative)* or the collocation *zbožné přání.*

Translation

The Czech-Norwegian dictionary gives separate equivalents for the two main senses of the Czech noun *přání*: 1. the Norwegian noun *ønske*, together with the most typical collocation *splnit přání*, translated by *oppfylle et ønske*; 2. the nouns *gratulasjon* and *lykkeønskning* as equivalents in the second sense, specified by the Czech synonym *gratulace.*

According to the Czech-Norwegian parallel corpus, the Norwegian noun *ønske* is the general nominal equivalent of the Czech noun *přání.* In a few cases the noun *lyst* appears as well. In the sense of formally expressed wishes, the nouns *ønske* or *hilsen* appear, but usually the Czech compound *blahopřání* is used in the texts, having multiple possible translations in Norwegain: *gratulasjons- / fødselsdagskort; bursdagskort; (fødselsdags- / bursdags-) hilsen; gratulasjonsønske; bursdagssangen.* The corpus gives some examples of possible translations for some interesting collocations: *splnit přání – oppfylle et ønske; seznam přání – ønskelisten; koncert na přání – ønskekonserten; vzácné přání – et sjeldent ønske; je to na něčí přání – det er det noen vil; podivínské přání – et originalt ønske; podle jeho přání a potřeb – etter hans eget ønske og behov; jeho přání je mi rozkazem – hans ønske er i mine ører en befaling.*

Dictionary entry

The entry for the Czech noun *přání* (figure 7.35) is similar to its Norwegian counterpart, but it becomes a little bit more complex in the second sense of "formal wishes", which roughly corresponds to the second sense of the Norwegian noun *ønske* but the meaning has further extensions. The formal expression of "wishes" includes a reference to some written form, usually a postcard that is sent to the beneficiary of the wishes. Therefore there is an additional sub-sense in the second sense of the noun. Anyway, the whole second sense seems to have a wider usage in Czech than in Norwegian, and therefore additional equivalents (suggested by the Czech-Norwegian pocket dictionary) are added to the basic equivalent *ønske* (which is still applicable in the basic meaning of this sense). The slightly different delimitation (or usage) of the two parallel senses of "formal wishes" (the Czech and the Norwegian one) can hardly be specified much closer.

The adjective *zbožný* is just listed among the adjectival collocations within the first, basic sense, but the whole collocation should probably be defined as an independent fixed expression, because its meaning is much wider than the compositionality would suggest: its can well be classified as an idiom.

Like for the Norwegian counterpart, the possibility to use the preposition *do* to introduce some time-scope is only mentioned within the collocations *přání všeho nejlepšího*, despite of the fact that in case when the preposition is used, the attribute *...všeho nejlepšího* is usually omitted (according to the rare corpus evidence).

The unstable appearance of various prepositions is not presented in the entry. Only the possibility to connect with a direct infinitive construction is declared as a valency

přání

přání: *sg.:* N přání; G přání; D přání; A přání; V přání; L přání; I přáním; *pl.:* N přání; G přání; D přáním; A přání; V přání; L přáních; I přáními, *přáníma

FREQ: 6305 (SYN2005), sg: 82.9%

Morphemic analysis

přání *(word)*

	inflexion	
	base	**ending**
přání *(morpheme)*		

Translation

no: *ønske*

Semantics

1. vnitřní touha někoho realizovat nějaký cíl

   Valency patterns

   A ~ *<INF>*

   Collocations and constructions

   Verbs: - inchoative: *pojmout, projevit, vyslovit, vyjádřit* - durative: *mít* - terminative: *uskutečnit, splnit$_c$, vyplnit$_c$, vyhovět$_c$, splnit_se* - (subj.): *splnit_se* - (other): *respektovat, vyslyšet, řídit_se*

   Adjectives: *zbožný, splněný, toužebný, výslovný, tajný, vroucný, jediný, poslední*

   Fixed expressions: na přání (*<někoho>*) *etter* (*<ens>*) *ønske*; (po)dle přání (*<někoho>*) *etter* (*<ens>*) *ønske*; nejvroucnější/největší přání *høyeste ønske*

2. formální výraz zdvořilosti přáním (někomu , dosáhnout nějakého cíle , od někoho při nějaké zvláštní příležitosti)

   Valency patterns

   A ~ *<něčeho>* *<někomu>* k *<něčemu>*

   Collocations and constructions

   Adjectives: *upřímný*

   Compounds: blahopřání

   Fixed expressions: přání všeho nejlepšího (do nového roku/budoucna/etc.) *de beste ønsker (for fremtiden/etc.) / alle gode ønsker (for fremtiden/etc.)*

   Translation

   no: *gratulasjon; lykkeønskning*

   a. písemný projev

      Collocations and constructions

      Adjectives: *vánoční, novoroční*

      Translation

      no: *gratulasjonskort*

Figure 7.35: The entry for *přání*

pattern in the first sense. On the other hand, the second sense defines a complex valency pattern including the possibility of realization of three different conceptional elements. This rich valency pattern comes through the derivation from the verb *přát* with a corresponding valency pattern. However, the noun hardly ever appears with more than one of these complements at once.[76]

7.13 Behov – potřeba (need)

7.13.1 The conceptual frame

The conceptual frame of *behov* is similar to the frame of *trang*. The *need* is a [Force] that pushes on the [Actor] to realize some [Goal]. The noun can also refer to the [Goal] by virtue of metonymy.

The difference between *trang* and *behov* is the type of the [Force]. *Behov* is usually a more rational and conscious force, rather than just some instinctive subconscious impulse.
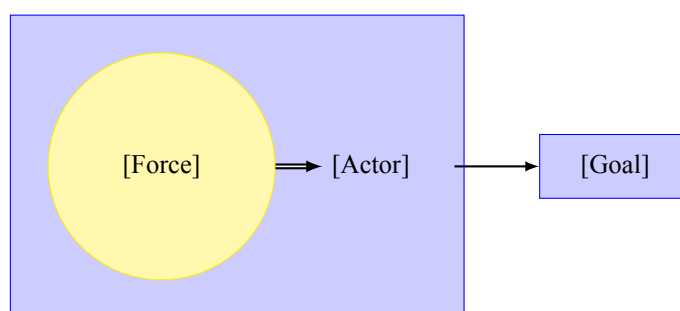
Figure 7.36: The conceptual frame of *behov*

For the Czech noun *potřeba* the distinction of the final [Goal] and an intermediate instrument [Instr] is needed. The noun has a very well established second sense referring exclusively to instruments and tools aimed at some particular type of activities. These activities are a more generalized [Field] of goals.

7.13.2 Norwegian: *behov*

Monolingual description

The Norwegian noun *behov* is closely related to the verb *å behøve* ("to need").

Bokmålsordboka presents a simple describes the meaning of the noun by its closest synonyms: *ønske, krav, bruk, etterspørsel* ("wish / desire, request, use, demand").

Norsk ordbok declares two senses of the noun. The second sense is the metonymical possibility of the noun to refer to the object ([Goal]) of the need.

Valency patterns

The noun can take a complement expressing the object of need ([Goal]) using the preposition *for*.

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[76]Which could and should be indicated in the definitions be means of some parameters as well.

Distribution

The noun *behov* occurs 4926 times in LKB, thereof 4292 times (87.1%) in singular. The preposition *for* follows in 3167 cases (64.3%), thereof 3098 times (97.8%) after singular form. An infinitive construction follows in 983 cases (31%), a subordinate clause introduced by *at* follows in 35 cases (1.1%).

Polysemy

The noun *behov* has one basic meaning, but it can also refer to the object of need ([Goal]) by virtue of metonymy. In the second sense it cannot take a complement, because it is identified with the object.

Collocations and idioms

The most frequent verb collocating with the noun *behov* is the verb *å ha*, followed by verbs such as *å dekke, å se, å redusere, å skape,* etc., which point to the domain of economics.

The most frequent adjective modifiers are: *stor, økende, spesiell, sterk, akutt,* etc. It is frequently attributed to nouns such as *menneske, bruker, kunde,* etc., pointing again to the domain of economics.

The noun appears commonly in collocation with the head prepositions *etter* og *ved*. The fixed expression *etter behov* behaves as an adverbial corresponding to the English expression "as needed / required", the expressions *ved behov* corresponding to "when needed / required".

Bokmålsordboka names further examples from the domain of economics: *få dekket / tilfredsstilt et behov; reklamer skaper ofte kunstlige behov; behovet for …vil øke; møte et behov; (få støtte) etter behov.*

Translation

The Norwegian-Czech dictionary offers two equivalents for the Norwegian noun *behov*: *požadavek* and *potřeba*.

The most common Czech nominal equivalent of the noun *behov* is *potřeba*. Verbo-nominal constructions such as *å føle / ha et behov* are usually translated by the corresponding verb *potřebovat* or by common modal verbs. A few interesting parallel collocations from the corpus are: *være i sterk behov for…– nutně potřebovat; få etter behov – dostávat podle (svých) potřeb; etter hans eget ønske og behov – podle jeho přání a potřeb; når det var behov (for det) – když bylo potřeba.*

Dictionary entry

The entry for *behov* (figure 7.37) is very simple, containing one valency frame and no distinction of senses. The extension referring to the [Goal] does not seem to play such an important role as to declare it as a specific sub-sense at the moment.

7.13.3   Czech: *potřeba*

Monolingual description

The *SSJČ* dictionary defines 5 senses of the noun *potřeba*: 1. state of something (or someone) when something is desirable or necessary; need, necessity, desirability; 2.

behov

behov: *sg. indef.* behov ; *sg. def.* behovet ; *pl. indef.* behov ; *pl. def.* behovene, ($^{+}$R)behova
FREQ: 4926 (LKB), sg: 87.1%

Morphemic analysis

behov *(word)*	
inflexion	
base	**ending**
behov *(morpheme)*	

Valency patterns
A ~ for <*noe/å…/at…*>

Collocations and constructions
Verbs: - inchoative: *skape$_c$* - durative: *ha* - terminative: *dekke$_c$, redusere$_c$* - (other): *se*
Adjectives: *økende, spesiell, sterk, akutt*
Nominal attributes: *menneske, bruker, kunde*
Fixed expressions: etter behov *podle potřeby*; ved behov *v případě potřeby*

Translation
cs: *potřeba [1]*

Figure 7.37: The entry for *behov*

(usually plural) requirement, demand, wish; 3. (usually plural) instruments, tools, etc. (for some particular needs); 4. use / utilization; 5. trouble, emergency, misery.

The distinction of sense number 1 and 2 is very difficult and there are even very similar examples given in the dictionary. The original intention of the authors may be to distinguish the need for something particular (a particular [Goal], in sense 1) from the general needs of people, animal, social groups, etc., where the [Goal] is underspecified.

Sense number 3 refers to equipment, tools and instruments [Instr] (very often seen as merchandise) for some special kind of activities ([Field]) (gardening, school / office, sports, construction, kitchen and home equipment, etc.) and (by means of metonymy) also for a shop with such merchandise.[77]

The sense number 4 seems to be based on the fixed expression *k potřebě* (e.g. *být k potřebě; sloužit (ke) každodenní / osobní potřebě;* etc.). The meaning is well expressed by the example *to není k hraní, to je k potřebě* ("this is no [toy] to play with, it is for (serious) use/utilization"). Otherwise it is difficult to distinguish it from the basic meaning. This 'sense' seems to become obsolete in the modern language as well.

The sense number 5 corresponds to the English use in (fixed) expressions like "to be / live in need". In Czech language it is mostly bound to the collocation with the head preposition *v*. But using this noun for this purpose is already obsolete in the modern Czech and more specialized nouns (e.g. *nouze*) are preferred.

Valency patterns

The noun *potřeba* can take a direct infinitive construction expressing the [Goal]. It can also take a noun phrase in genitive case expressing the [Goal] or the possessor ([Actor]) of the need. The preposition *po* appears in a few cases, when the meaning of the noun is close to *touha* ("desire", e.g. *potřeba po uznání, klidu, sounáležitosti, seberealizaci, jistotě, naplnění*, but also *po uhlí / vědeckých silách*). The prepositions *k* and *pro* have

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[77]The extension of "shop" may be in decline now again, when these special shops are being replaced by the more universal hypermarkets.

been found in one or two cases to introduce the [Goal], but there is no trace of systematic use.

In the sense of equipment, tools or instruments, the use of different prepositions is more common to express the [Field] of use. However, they all appear regularly as free adjuncts in different other situation. Nevertheless, there seems to be some semantic necessity to express the [Field]. The preposition *pro* appears most frequently, introducing either the activity (e.g. *pro sport, volný čas, měření, vytápění, modernizaci, kempink*, a general prepositional phrase introducing some aim), the location for special activity (where the equipment is going to be used, e.g. *pro domácnost, kuchyň, zahradu, koupelny*) or the group of subjects performing the activity or having special needs (*pro zahrádkáře, kutily, výtvarníky*, i.e. a general beneficiary). When talking about a group of subjects (people, animals), the meaning can almost overlap with the basic meaning of some basic, personal needs (e.g. *potřeby pro rodinu, ptáky, stromky, každou živou bytost*). The preposition *do* can be used to introduce the location (where the equipment is going to be placed, installed and used, e.g. *potřeby do kuchyně, školy, domácnosti*). The activities can also be introduced as a more specific [Goal] using the prepositions *na* (*potřeby na uklízení, šití, mytí, kreslení, paličkování*, but also *na opravu kláštera, financování investice, amortizaci*) or the preposition *k* (*potřeby k čištění bot, výrobě koláží, živobytí, přežití, obchodování, psaní, vaření, stříhání, krmení, kouření, životu na venkově*). These phrases can also be used generally to express the purpose of something.

Distribution

The lemma *potřeba* appears 23162 times in SYN2005, but the tagging does not make any difference between the homonymous forms of the noun and the adverb identical with the nominative singular form of the noun. Any statistics are therefore rather meaningless. An infinitive construction follows in 13.7% of the occurrences, a genitive form in 31.7% of the cases, but both are also common for the adverb.

None of the prepositional phrases reaches 1% within all the occurrences.

Polysemy

The noun has two distinct senses: the basic meaning of need as a force urging someone to do something, and a general expression for almost anything that can be used as instrument for some particular purpose or type of activities. The second sense arises (by means of metonymy) from the most common use of the verb *potřebovat* and other derivatives (like the adjective *potřebný*) focusing on the need of instruments necessary for something, rather than the goal itself. In this meaning, the generalized noun can almost compete with general words like "thing".

The possibility to distinguish the meaning of a particular need of something and the general needs of someone is hard to distinguish in real usage. But the second meaning does not require any complement and it is most typical for the use in plural.

The meanings defined as number 4 and 5 in the *SSJČ* dictionary are obsolete and bound mostly to the specific fixed expressions.

Collocations and idioms

The most frequent verb collocating with the noun *potřeba* is *mít*. The other frequent common verbs are *(po)cítit, uspokojit / uspokojovat, odpovídat, přizpůsobit se,* etc. A

special case is the idiomatic expression *vykonat (malou / velkou / tělesnou) potřebu*.

The most typical adjective modifiers are e.g. *základní, velký, vlastní, lidský, sociál-ní, individuální, osobní, denní, naléhavý*. They show that the primary use of the noun are the basic human needs.

Other fixed expressions with head prepositions are e.g. *(po)dle potřeby* (corresponding to Norwegian *etter behov*) and *v případě potřeby* (corresponding closely to the Norwegian *ved behov*).

The *SČFI* dictionary names two fixed expressions: *tělesná potřeba* ("daily function; (a visit to the lavatory)") and *životní potřeba* ("necessity; one of the necessities of life").

Translation

The Czech-Norwegian dictionary separates the two senses of the noun *potřeba*, offering the equivalents *bruk* and *behov* for the first, basic sense (and the corresponding valency of genitive (inanimate) complement [Goal] with the Norwegian prepositional phrase *for noe*). The second sense is translated as *utstyr* ("equipment") and typical collocations are mentioned: *kuchyňské potřeby* translated as *kjøkkenutstyr*, *sportovní potřeby* translated as *sportsutstyr* and *školní potřeby* translated as *skolesaker*.

In the Czech-Norwegian parallel corpus, the noun *behov* is the most frequent correspondent of the Czech noun *potřeba*. The nouns *trang* and *bruk* appear a few times as well. The noun appears hardly in its second sense (see the first of the following examples, though). Other interesting expresions from the corpus are e.g. *obchod s loveckými potřebami – butikk med jaktutstyr; v případě potřeby – måtte det til, .../ når det treng(t)es; podle potřeby – om nødvendig / etter valg; nutkavá potřeba – en voldsom trang*.

Dictionary entry

The entry for the noun *potřeba* (figure 7.38) is more complex than for its Norwegian counterpart. The first sense is linked both to the general equivalent *behov*, but also to the more specific equivalents *trang* and *bruk*. The translational sub-sense linking the noun to the Norwegian noun *bruk* actually corresponds to the sense number 4 defined in SSJČ, but it seems that in this meaning the noun appears only rarely in particular constructions replacing the other derivatives: e.g. the construction *být k potřebě* corresponding to the adjectival predicate *být potřebný* or the use of the adverb *potřeba*. The status of a distinct, independent sense for this meaning is thus spurious in modern language and other nouns are usually preferred (such as *užitek, (po)užití*).

The second sense follows the description and examples in the Czech-Norwegian pocket dictionary. In addition, three constructions are added as typical valency patterns: the prepositions *na, k* and *pro*. The preposition *do* is not mentioned because it behaves too much as a general adjunct of location, including the possibility of repeated use. Repeated use of the other prepositional phrases seems to be (at least) stylistically and semantically excluded.[78]

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[78]For the preposition *pro* at least when used with activities and not with the more general locations or groups of people (in the role of a beneficiary).

potřeba

potřeba: *sg.:* N potřeba; G potřeby; D potřebě; A potřebu; V potřebo; L potřebě; I potřebou; *pl.:* N potřeby; G potřeb; D potřebám; A potřeby; V potřeby; L potřebách; I potřebami, *potřebama

Morphemic analysis

potřeba *(word)*	
inflexion	
base	**ending**
potřeba *(morpheme)*	

Semantics

1. pragmatická či naturalistická síla nutící někoho dosáhnout nějakého cíle

   Synonyms: nutnost

Valency patterns
A ~ *<INF>*
B ~ *<něčeho>*

Collocations and constructions

   Verbs: - inchoative: *pocítit* - durative: *mít* - terminative: *uspokojit$_c$* - (other): *odpovídat, přizpůsobit_se*

   Adjectives: *základní, lidský, sociální, individuální, osobní, naléhavý, denní*

   Fixed expressions: podle potřeby *etter behov*; v případě potřeby *ved behov*; velká/malá (tělesná) potřeba

   a. obecná nutnost

      Synonyms: nutnost

Translation
no: *behov*

   b. vnitřní, instinktivní

      Synonyms: puzení, nutkání

Translation
no: *trang*

   c. praktická

      Synonyms: užitek, použití

Translation
no: *bruk*

2. nástroj potřebný pro někoho k výkonu nějakých aktivit (v rámci nějakého oboru, oblasti, apod.)

   Synonyms: pomůcka

Valency patterns
A ~ na *<něco>*
B ~ k *<něčemu>*
C ~ pro *<něco>*

Collocations and constructions

   Fixed expressions: sportovní potřeby *sportsutstyr*; kuchyňské potřeby *kjøkkenutstyr*

Translation
no: *utstyr*

Figure 7.38: The entry for *potřeba*

7.14   Drøm – sen (dream)

7.14.1   The conceptual frame

The conceptual frame of a dream (*drøm*) is based on the same structure as the frame of *ønske*, but the secondary extensions are different. The main reference is the [Force] or [Image]. A dream is primarily just a kind of thought (image) and does not necessarily turn into a force urging the realization of the [Goal]. The *dream* can also refer to its object [Goal] by virtue of metonymy. In the basic meaning of the word (i.e. the phenomenon of some experience in sleep), the dream is not a force at all, but a kind of experience ([Image]) and the [Goal] should be therefore rather called a [Theme].
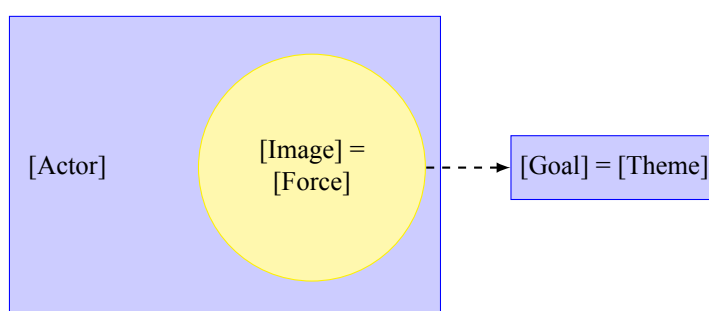
Figure 7.39: The conceptual frame of *drøm*

7.14.2   Norwegian: *drøm*

Monolingual description

Bokmålsordboka defines two senses for the noun *drøm*: 1. sensual / visual experience in consciousness while sleeping; 2. (unrealistic) idea, hope or a distant goal; strong wish / desire.

   Norsk ordbok and *Norsk rikmålsordbok* add a third meaning specific for colloquial language (especially talk of women) referring to something unbelievable, fantastic (a handsome man / pretty woman, beautiful object, experience, etc.).

Valency patterns

The noun can have a complement expressing the [Goal] ([Theme]) connected by the preposition *om*. It can be a noun phrase, infinitive construction or a whole proposition in the form of subordinate clause introduced by *at*.

Distribution

The noun appears 2968 times in LKB, thereof 2023 (68.2%) times in singular form. The preposition *om* follows 552 times (18.6%), thereof 465 times (84.2%) after singular form. An infinitive construction follows in 137 cases (24.8%), the subordinate sentence connected by *at* appears in 19 cases (3.4%).

Polysemy

The noun can refer either to the phenomenon of sensual or visual experience in sleep ([Image] with some [Theme]), or it can refer to some idea ([Force] with some [Goal]). It can refer both to the idea or experience and to their goal or object ([Goal] or [Theme]). The third sense defined by the dictionaries is a metaphorical extension to the latter one.

Collocations and idioms

Typical verbs used with the noun are e.g. *å ha, å realisere, å virkeliggjøre.*

Typical adjective modifiers are e.g. *amerikansk, gammel, hemmelig*, or *vond* in the sense of the night dream. The collocation *amerikansk drøm* can be consiedered a fixed expression with idiomatic meaning.

The noun appears often with the head preposition *i*, referring to the unreal experience during sleep. However, the special form *i drømme*,[79] mentioned by the dictionaries, was found only once (in a poem) in LKB and the noun is tagged as a verb. Usually, just regular inflectional forms occur in the corpus.

The collocation *(å være en) drøm av en/et ...* seems to be a fixed expression, closely connected with the third sense described in the dictionaries. The complement is identified with the *drøm*, being in that way attributed some fantastic, exceptional or extraordinary qualities. The collocation appears 13 times in the LKB corpus, but not always in this meaning. Te complements are e.g. *en kjole, en lærer, brukervenlighet, et godteriskap, en støtte.*

The dictionaries mention some further collocations: *drøm eller virkelighet; gå som en drøm; drømmen gikk i oppfyllelse; ikke i ens villeste drømmer; stå for noen som en drøm; tyde drømmer; være som en (vond) drøm.*

Translation

The Norwegian-Czech dictionary presents the Czech noun *sen* as the only equivalent of the noun *drøm*. It also mentions the collocation *i drømme* translated as *ve snu.*

The Czech noun *sen* is the (almost) exclusive equivalent of the Norwegian noun *drøm* in the Norwegian-Czech parallel corpus. The special expression *i drømme* appears four times, translated as *ve snu* or *ve snách*, once in the form *halvveis i drømme* translated as *v polosnu*. Other interesting parallel collocations are e.g. *tyde drømmer – vykládat sny; gjøre drømmene til virkelighet – uskutečnit sny; tolke drømmen – vyložit sen; de latente drømmetankene – latentní snové myšlenky (term of Sigmund Freud); det manifeste drømmeinnhold – zjevný snový obsah (term of Sigmund Freud); å drømme søte drømmer – snít sladké sny; drømmen oppfylles – sen se splní; kunstnerdrømmene – sny o umělecké dráze; hengi seg til dagdrømmer – zasnít se; våre innerste drømmer – naše nejtajnější sny; vond drøm – zlý sen; drømmene mine blir oppfylt – moje sny se začínají uskutečňovat; drømmer og sagn våkner til live – sny a pověsti ožívají; synke i dype drømmer – upadnout do hlubokého snu; kare seg ut av dype drømmer – vynořit se z hlubokého snu.*

Dictionary entry

The entry (figure 7.40) presents just a single valency pattern and a single general equivalent of the noun *drøm*. Two senses are distinguished: the night dream as a passive image

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[79]As opposed to the standard form *i drøm*.

drøm

drøm: *sg. indef.* drøm ; *sg. def.* drømmen ; *pl. indef.* drømmer ; *pl. def.* drømmene

FREQ: 2968 (LKB), sg: 68.2%

Morphemic analysis

drøm *(word)*

inflexion	
base	**ending**
drøm *(morpheme)*	

Valency patterns

[A] ~ om <*noe*/*å…*/*at…*>

Translation

cs: *sen*

Semantics

1. sansebilder (med innhold) i bevisstheten når noen sover

   Valency patterns

   [A] ~ om <*noe*/*å…*/*at…*>

   Collocations and constructions

   Verbs: - durative: *drømme* - (other): *tyde*
   Fixed expressions: i drømme *ve snách/snu*; vond drøm *zlý sen*

2. sterk og lang indre lyst (til noen) til å realisere et mål

   Valency patterns

   [A] ~ om <*noe*/*å…*/*at…*>

   Collocations and constructions

   Verbs: - durative: *ha* - terminative: *realisere, virkeliggjøre*
   Adjectives: *gammel, hemmelig*
   Fixed expressions: (<*ens*>) innerste drømmer *(<něčí>) nejtajnější sny*

Figure 7.40: The entry for *drøm*

of something and the active conscious desire to achieve some goal. The elements [Image] and [Theme] refer to the same conceptual elements as [Force] and [Goal] and the difference is just in the intensity, but the elements still have different labels and are indicated by different colours in the entry. Collocations and examples of fixed expressions are distributed between the senses.

7.14.3 Czech: *sen*

Monolingual description

The *SSJČ* dictionary defines five senses of the noun *sen*: 1. imagination and experience of action in the sleep; 2. a product of imagination, a phantastic / wonderful idea, illusion, fantasy; 3. a wish or desire (difficult to realize or accessible), plan; 4. something wonderful, transient; 5. (literary) sleep(ing). The last sense is explicitly associated to the frequent collocation *ze sna* (e.g. *procitnout / být vytržen ze sna*) or the fixed euphemistic expressions like *spát snem / spánkem spravedlivých* or *spí svůj věčný sen*, meaning "to be dead".

Valency patterns

The noun can take a direct infinitive clause expressing the [Goal] (used in the sense of desire), or a prepositional phrase using the preposition *o* with a noun phrase in locative case to express the [Theme] (which can refer to the [Goal] when used in the sense of some desire).

Distribution

The noun appears 15932 times in SYN2005, thereof 9761 times (61.3%) in singular form. An infinitive follows in 223 cases, but only 64 (0.4%) of them are really complements of the noun.

The preposition *o* follows in 875 cases (5.5%), thereof 553 times (63.2%) after singular form.

Polysemy

The noun *sen* has again two main senses: the meaning of night dreams and the meaning of some wish or desire. It can again refer both to the thought ([Image] or [Force]) and the object ([Goal] or [Theme]) of the dream. The senses 2 and 4 in the *SSJČ* dictionary refer to the latter one: the sense number 2 should probably refer to plain (false, unreal) illusions (themes or goals of the daydreams, unrealistic desires), while the sense number 4 refers to some wonderful (real) experience in / of life, which could be identified with the [Theme] of some dream in our conceptual frame (i.e. something is compared to a nice dream). The dictionary does not handle the case of the analogical metonymy of a "bad dream", however – it only mentions "something wonderful, transient". It is therefore doubtful, whether those sub-senses of the metonymical reference to the object of the dream should be distinguished at all.

Collocations and idioms

The most frequent verbs occuring with the noun *sen* are *mít, zdát se, splnit (se)*. Other typical verbs are e.g. *snít, spřádat, rozplynout se, uskutečnit, naplnit, oddávat se*.

The most frequent adjective modifiers are e.g. *zlý, velký, celý, vlastní, krásný, nový, americký, Český, starý, dětský, noční*. Other typical adjectives are: *splněný, splnitelný, děsivý, hrůzný, ošklivý, dávný, erotický, odvěký, podivný, divoký, tíživý, horečnatý*. They refer either to the night dreams, which can be either wonderful, very scary or at least very strange, or they refer to the ideas and desires, which are often long-termed, come from the childhood and can belong to individuals as well as whole communities.

The most common head preposition is *v*, appearing in 2179 cases just in front of the noun, often in the construction *ani ve snu* (303) or *jako ve snu* (272), in that case (almost) exclusively with the special fixed locative form *ve snách* when in plural.

The *SČFI* dictionary only mentions the idiomatic expressions *věčný sen* ("eternal rest"), *zlý sen* ("bad dream") and *živý sen* ("waking dream").

Translation

The Czech-Norwegian dictionary offers separate translations for the two senses of the noun: 1. (night dream) *drøm*; 2. (wish) *ønskedrøm*. In addition, the expression *ani ve snu by mě to nenapadlo* is translated as *det kunne ikke falle meg inn i drømme*

For the first sense, the collocation *mít sen* is specifically translated by the Norwegian verb *drømme* and the possible prepositional phrase using *o* is presented as being equivalent to Norwegian *om*. The expression *zlý sen* is translated by the special Norwegian word *mareritt* and the collocation *mluvit ze sna* as *snakke i søvne*.

In the Czech-Norwegian parallel corpus, the noun *drøm* is the almost exclusive equivalent of the Czech noun *sen*. In a few cases, the noun *søvn* appears, and once the noun *mareritt* (beside of *ond drøm*) for the collocation *zlý sen*. Other interesting translations are e.g. *ani v nejdivočejších snech – ikke i mine / sine villeste drømmer; uskutečnit velký sen svého života – gjøre sitt livs store drøm til virkelighet; uskutečnit svůj dávný sen – realisere en gammel drøm; ani ve snách by nás bylo nenapadlo…– intet var oss fjernere enn….*

Dictionary entry

The entry for *sen* (figure 7.41) is analogical to the entry of its Norwegian counterpart. The semantic space of the meaning of both nouns is very similar, though some extensions may be slightly limited on one or the other side. The valency pattern including infinitive constructions is limited to the second sense of "desire" only, because night dream are just images and cannot have goals or aims.

7.15   Tanke – myšlenka (thought)

7.15.1   The conceptual frame

The conceptual frame of *tanke* (thought) is similar to the frames of *drøm* or *ønske*. The central element can be called [Force] or often just an [Image] (since its power to act actively is usually almost completely neutral). The noun refers mostly both to the element of [Image] ([Force]) and the [Theme] ([Goal]) at the same time, since the [Theme] is generally inseparable from its [Image], however abstract, generalized or underspecified it is. Unlike *dream*, the *thought* is more pointed at one single and more simple object ([Theme] / [Goal]) and does not necessarily imply any real interest of the [Actor] to perform the action. It is primarily only the imagination of it ([Image]). The

sen

sen: *sg.:* N sen; G sna, snu; D snu; A sen; V sne; L snu; I snem; *pl.:* N sny; G snů; D snům; A sny; V sny; L snech; I sny, *snama

FREQ: 15932 (SYN2005), sg: 61.3%

Morphemic analysis

s\en *(word)*

inflexion	
base	**ending**
s\en *(morpheme)*	

Valency patterns

A ~ o <*někom/něčem*>

Collocations and constructions

Adjectives: *krásný, erotický*

Translation

no: *drøm*

Semantics

1. prožitky představ a dějů (někoho) ve spánku

   Valency patterns

   A ~ o <*někom/něčem*>

   Collocations and constructions

   Verbs: - durative: *zdát_se, snít* - (subj.): *zdát_se*
   Adjectives: *děsivý, hrůzný, ošklivý, podivný, tíživý, divoký, horečnatý*
   Fixed expressions: zlý sen *mareritt / vond drøm*; ve snách/snu *i drømme*

2. silná a dlouhodobá touha (někoho) realizovat nějaký cíl

   Valency patterns

   A ~ o <*někom/něčem*>
   B ~ <*INF*>

   Collocations and constructions

   Verbs: - inchoative: *spřádat* - durative: *mít, oddávat_se* - terminative: *splnit_se, rozplynout_se, naplnit$_c$, uskutečnit$_c$* - (subj.): *splnit_se, rozplynout_se*
   Adjectives: *dětský, dávný, odvěký*
   Fixed expressions: (<*něčí*>) nejtajnější sny *(<ens>) innerste drømmer*

Figure 7.41: The entry for *sen*

scale of the interest ([Force]) and the concreteness of the [Theme] or [Goal] can be base
for different senses, but the border between them would be very fuzzy and arbitrary.
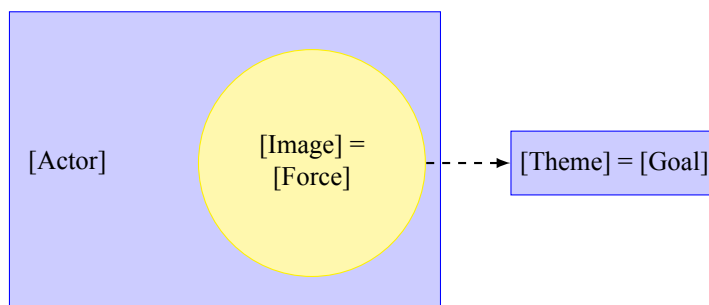
Figure 7.42: The conceptual frame of *tanke*

7.15.2 Norwegian: *tanke*

Monolingual description

Bokmålsordboka defines three different senses of the noun *tanke*: 1. the activity of
thinking, imagination / idea in the consciousness; 2. reason, intelligence; 3. a small
amount of something.

Norsk ordbok does not mention the sense number 2 of *Bokmålsordboka*, but it tries
to separate two meanings of the first sense: 1. the general idea or imagination in con-
sciousness or 2. some idea with a particular (more or less clear) goal. These are two
basic distinctions on the scale of the [Force] with the most general and passive [Theme]
on one side and the more particular [Goal] on the other side.

Norsk Riksmålsordbok differentiates up to 9 senses with multiple sub-senses. These
are rather small nuances of use in particular contexts, such as some deep thinking about
a problem, a subconscious idea haunting someone, a conclusion of some thinking or
experience, interest or care (for something or someone), a hope, a random idea or desire,
or a particular plan.

Valency patterns

The noun *tanke* can take a complement expressing the [Theme] or [Goal] using the
prepositions *på* or *om*.

The preposition *om* is typical for expressing the [Theme] in the meaning of the
process of (long-term or repeated) thinking on some theme. It appears mostly with the
noun in the definite singular form or in the indefinite plural form.

The preposition *på* is mainly used in the fixed expressions *med tanke på* or *ved
tanken på*. It is generally more typical for the meaning of a rather sudden, compact
idea or decision, with clear borders in time. Therefore it also appears mostly with the
noun in singular form.

The preposition *for* appears in the fixed expressions *ha tanke(r) for noe(n)* or *med
/ uten tanke for noe(n)*. The meaning of the complement is lies the intersection of the
general beneficiary and the [Theme] of the thoughts.

Distribution

The noun *tanke* appears 8242 times in LKB, thereof 4495 times (54.5%) in singular form.

The preposition *på* follows in 1463 cases (17.8%), thereof 1427 times (97.5%) after singular form, in 756 cases (51.7%) in the construction *med tanke på*[80] and in 166 cases (11.3%) in the construction *ved tanken på*.[81] In 272 cases (18.6%) an infinitive construction follows and in another 272 cases (18.6%) the subordinate clause connected by *at*.

The preposition *om* follows in 911 cases (11.1%), thereof 468 times (51.4%) after singular form (but only 76 times (16.2%) an indefinite form), 442 times (48.5%) after plural form (394 times (89.1%) indefinite). An infinitive construction follows in 73 cases (8%), a subordinate clause connected by *at* follows in 174 cases (19.1%).

The preposition *for* follows in 90 cases, but only about 40% of them can be considered complements of the noun (and not the free adjunct of beneficiary), always being part of the fixed expression *ha tanke(r) for noe(n)* or *med / uten tanke for noe(n)*.

Polysemy

The finer distinctions of *thought* as a process of thinking on some [Theme] or some particular idea with a specific [Goal] are rather difficult to delimit. Even the choice of prepositions seems to be more bound to particular fixed expressions than to the semantics. But they can still contribute to a finer specification of the meaning (the kind of the thought, mainly from the perspective of time). The meaning of "interest, care" seems to be bound to the fixed expressions with the preposition *for*.

The meaning of human reason or intelligence seems to be a metonymical extension of the basic meaning, specific for the fixed expression *den menneskelige tanke*, although the adjective does not need to be explicitly present.

The meaning of a small amount of something is an additional, clearly distinct sense of the noun.

Collocations and idioms

The most common verbs collocating with the noun *tanke* er *å tenke, å lede, å la, å føre, å ha*. The verb *å la* is usually used in constructions like *å la tankene vandre / komme / løpe / flyte / fly / kretse…*. The verbs *å lede* and *å føre* are used together with adverbials of direction.

The most common adjective modifiers are *ny, første, stor, god, gammel*.

The noun is very frequently used in fixed constructions with head prepositions. The most frequent is the preposition *med* (appearing 994 times) used in 75.6% of cases in the fixed expression *med tanke på* and in 4.5% of cases in the expression *med tanke om*. (See the section on distribution for more details.)

The dictionaries suggest a lot of other fixed collocations and idiomatic expressions: *å ofre / skjenke noe(n) en tanke; bare (ved) tanken / bare tanken på mat gjør meg kvalm; falle i tanker; ikke få noe(n) ut av tankene; ha høye / store / lave tanker (om noe(n) / seg selv); gjøre seg (sine) tanker om noe; hvem har satt deg på den tanken?; grøsse ved tanken på noe; komme i tanker om noe; komme på andre / bedre tanker; jeg får det ikke ut av tankene; å, hvor har jeg hatt mine tanker!; stå i andre tanker; sitte i (dype*

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[80]Five of the examples contain one additional adjective modifier.

[81]In two cases the noun is in indefinite form, otherwise always definite.

/ andre) tanker; jeg har hatt mine tanker / en tanke med det; bli med tanken; bringe tanken hen på; dystre tanker; samle tankene; få orden på tankene; gå i egne tanker; ha noe(n) i tankene; ha tankene et annet sted; holde tankene samlet; leke med en tanke; sette tankene i sving; slå fra seg en tanke; det er tanken som teller; gi opp tanken på noe; ha tankene med seg; ikke ha tanke for annet enn…; omsette sine tanker i handling.

Translation

The Norwegian-Czech dictionary presents the Czech noun *myšlenka* as the only general equivalent of the Norwegian noun *tanke*, but it also suggests translations for the two frequent collocations: *med tanke på noen* translated as *s myšlenkou na někoho* and *ved tanken på det* translated as *při pomyšlení na to*.

The Norwegian-Czech parallel corpus confirms the noun *myšlenka* as the main equivalent of the Norwegian noun *tanke*. But it shows also further equivalents for more specific meanings: the noun *představa* appears in some cases, about half of the occurrences are bound to the Norwegian collocation *tanke på*; the noun *pomyšlení* is almost exclusively bound to the collocation *tanke på* and confirms its more specific meaning of some sudden idea or imagination; the meaning of a sudden idea is also sometimes expressed by the Czech noun *nápad*, but the verb *napadnout* is used as well; the noun *názor* ("opinion") appears in a some cases as well; some occurrences of the nouns *myšlení* and *mysl* confirm the independent meaning of the noun *tanke* as the general human capacity of thinking. In a few cases the noun is also used in the sense of small amount of something, expressed in Czech e.g. by the expressions *o něco, o poznání*. A few examples of the expressions using the preposition *for* can be found: *han har tanke for meg – myslí na mě / záleží mu na (mně); han hadde ikke lenger tanke for…– už ani nevzpomněl na…; ikke har tanke for flukt – nepomýšlí na útěk; uten en tanke for…– nestaral se (už) o…/ nedbal / nedával si ani pozor, aby…*. The fixed expression *ved tanke på (at)* behaves almost as an (semantically empty) preposition: in only 4 cases (out of 33) it is equivalent with the Czech expression *při pomyšlení na*, but often it is just not expressed at all, and only grammatical constructions are used in the Czech text (…, že…; …nad tím, že…; protože; když). Only in about two cases it is literally translated by *při myšlence, že…*, alternatively also by *při představě, že…* or *při vzpomínce na…*. The expression *med tanke på* appears a few times in the corpus as well, but only once it is translated explicitly by *vzhledem k…*. Otherwise, it only correspond to plain prepositions in Czech.

The corpus gives a lot of interesting translations for many particular fixed collocations and idiomatic expressions: *samle tankene – uspořádat / urovnat myšlenky / soustředit myšlenky; en vemmelig tanke – zlomyslný nápad; en tanke slo ham – náhle dostal nápad / napadlo ho / prolétla mu hlavou myšlenka; en skremmende tanke slo meg – napadla mě hrozivá myšlenka; hva han hadde i tankene – co se mu honí hlavou; komme på tanken – napadnout; komme i tankene – přijít na mysl; i en brå tanke / i tankene – v duchu; hun blir kvalm bare ved tanken – jen při tom pomyšlení se jí dělá špatně; en vill tanke slo ned i meg – prolétla mně hlavou šílená myšlenka; jeg fikk ikke disse tankene ut av hodet – nemohl jsem na to přestat myslet; tankefull(t) – zamyšlený / zamyšleně / přemýšlivý; mor plutselig hadde tenkt den tanken at…– matku napadlo, že…; å fullføre tanken – dokončit myšlenku; jeg får ikke …vekk fra tankene – nemůžu přestat myslet na…; han våget ikke engang å tenke tanken – vůbec si nechtěl připustit, že…; spesielt med tanke på denne dagen – právě pro tento den; det var lenge siden han hadde skjenket den en tanke – už na něj skoro zapomněl; bare ved tanken på…– už jen při pomyšlení na…; sende noen en tanke – vzpomenout si na někoho; jeg*

*skjelver ved tanken på…– chvěji se při pomyšlení na…; de har ingen tanker om…–
vůbec nepomýšlejí na…; å slå tanken fra seg – odehnat myšlenku; sette noen på tanken
om…– přivést někoho na myšlenku…; venne seg til tanken på – smiřovat se s myšlenk-
ou…; utstå (ikke) tanken på…– (ne)snést pomyšlení na…; å tenke tanken helt ut –
domyslet myšlenku do konce; hva er det den dama har i tankene? – co má ta dáma
za lubem?; det var tanken – tak to bylo myšleno; bli kvitt tanken – zbavit se pocitu; leke
med tanken – pohrávat si s představou / myšlenkou; han hadde vel også i tankene…–
měl jistě na mysli…; å jage noe(n) fra tankene – vyhnat někoho / něco z mysli; å ha
høye tanker om noen – mít o někom vysoké mínění; åpne tankene sine for noen – otevřít
někomu svou mysl; sette tanke inn på…– obrátit mysl k…; tankegang / tankevirksomhet
– myšlení.*

Dictionary entry

Figure 7.43: The entry for *tanke*

The entry for *tanke* (figure 7.43) is separated into three senses as defined before.
The first one meaning "thought", corresponding to Czech *myšlenka*, the second one
corresponding to the general human ability of thinking (in Czech *myšlení* or *mysl*), and

the third one behaving rather as an adverb of quantity, referring to small amount of something. The third sense wasn't described because of lack of evidence, but it seems to correspond to the Czech adverb "trochu" and probably should rather be classified as a special idiomatic expression *en tanke*, rather than just another sense of the noun.

Sub-senses of the first sense were not distinguished, because there are no clear cues for such distinction. The two possible prepositions add some finer distinction to the meaning and use of the noun, but the sense of the noun itself does not change. The distinction reminds rather of change of aspect than a change in meaning.

7.15.3   Czech: *myšlenka*

Monolingual description

The noun *myšlenka* has 4 senses defined in the *SSJČ* dictionary: 1. thinking or the result thereof; 2. idea, conviction, meaning (ideological); 3. intention, plan; 4. subject, theme or message of some artwork.

The first three meanings are three levels on the scale of interest of the [Actor] for some particular goal. The first sense concerns the most general and neutral process of thinking, the second one some more directed ideological interests and the third one some particular intention or plan. The fourth sense refers to the (ideological) message of some work of art.

Valency patterns

The noun *myšlenka* can take a complement expressing the [Theme] or [Goal] in different ways: a direct infinitive construction is always possible; a direct genitive phrase is possible when the noun itself refers to the [Goal] as a thought (imagined) situation, action or solution (e.g. *myšlenka rozvodu / sebevraždy / koupě / hříchu / dohody*), or when the complement is some ideology or way of thinking (it is then a kind of abstract actor, source or primary possessor of the thought(s), even though it still may be possessed by some current [Actor]: e.g. *myšlenky okultismu / nicotnosti / komunismu / demokracie*) – the actual [Actor] is usually underspecified or generalized when the genitive phrase is used. An adjective can be used to specify the the noun in the same way (e.g. *sebevražedné / hříšné / komunistické / demokratické myšlenky*).

The preposition *o* (with a noun phrase in locative case) can be used to express the [Theme] of some (long-term) thoughts, while the preposition *na* (with a noun phrase in accusative case) can express a direct [Goal] of some particular idea or intention (e.g. *myšlenka na pomstu / sebevraždu / jídlo / útěk / léčbu*), or the object [Theme] of the sudden thoughts (e.g. *myšlenka na otce / domov / rodiče*). The preposition *o* corresponds generally to the use of the Norwegian preposition *om*, while the preposition *na* corresponds roughly both to the use of the preposition *på* and indirectly to the constructions using the preposition *for*. However, the role of the prepositions in Norwegian is often bound to specific fixed expressions, rather than just semantics.

The valency patterns can actually be connected with the senses defined by the *SSJČ* dictionary: the first sense would prefer either the preposition *o* to describe the general field [Theme] or the preposition *na* to express the particular object of thoughts; the second sense of general ideas would prefer the direct genitive phrase; and the third sense of some intention, plan or particular idea would prefer the preposition *na* to express the [Goal].

Distribution

The noun *myšlenka* appears 19290 times in SYN2005, thereof 10388 times (53.9%) in singular form. An infinitive construction follows in 679 cases (3.5%), thereof in 587 cases (86.5%) after singular form. A noun phrase in genitive case follows in 2228 cases, but in most cases it is the [Actor] (possessor of the thought(s)).

The preposition *o* follows in 270 cases (1.4%), thereof 130 times (44.8%) after singular form. There are no special nouns collocating with some higher frequency.

The preposition *na* follows in 852 cases (4.4%), thereof 672 times (78.9%) after singular form. The most frequent nominal collocations are *smrt, sebevražda, návrat, útěk, vytvoření, pomsta*.

Polysemy

The use of different valency patterns offers ground for distinction of different meanings, however thin the borderline might be.

The use of the preposition *o* is typical for the meaning of the general thinking within some field or [Theme]. In this sense, the noun refers to the [Image] element (often with neutral strength) with a generalized, underspecified or implicit [Goal] connected with the [Theme], and it is synonymous to nouns referring to the process of thinking (*myšlení, přemýšlení*).

The preposition *na* can be used in a similar sense as well, but a particular object is much more in the centre of interest of the [Actor]. In this sense, the noun refers also to the [Image] element (again without any specific [Goal]) and it is close to the meaning of nouns such as "interest, care".

Usually, the preposition *na* is used to connect the particular [Goal] of some intention. In the same sense, the genitive phrase or infinitive construction can be used as well. As the collocations reveal, the preposition *na* is in this sense often used to connect some unpleasant or even undesired (but in some sense unavoidable) goal. In this sense, the noun refers to the [Force], and it is close to the meaning of nouns such as "intention, decision".

Sometimes, the genitive does also express some ideology or way of thinking, which "possesses" the thoughts (both general opinions and particular goals). In this sense, the noun itself refers to the [Goal] element, and it is synonymous with nouns such as "goal, idea" (also corresponding to the meaning of the Czech noun *idea*). Because of the generalization, the use of plural form is very frequent here. The infinitive construction can be used to specify the [Goal] in this sense as well.

The meaning of message (or goal) of some artwork is actually very close to the sense of ideological goals and ideas. It also uses genitive phrase to refer to the artwork as the bearer of the idea. In this case, singular is more common.

Collocations and idioms

There are no especially frequent verbs collocating with the noun *myšlenka*, except of the verb *mít*. But there are more specific verbs used commonly with the noun, such as: *napadnout, honit se (v hlavě), zrodit se, znepokojovat, přivyknout / uvyknout / odvyknout, propadnout, vyslovit, vnuknout, prosazovat, utřídit, formulovat, připustit, zapudit, zavrhnout, vyjádřit, podporovat / podpořit, zaobírat se, zabývat se, nadchnout / prodchnout*. Other typical and more complex fixed expressions are e.g. *pohrávat si / koketovat s myšlenkou; smířit se s myšlenkou; bleskla mi / mu / jí hlavou myšlenka*.

There are also typical adjectives (some of them used mainly with this noun), such as *utkvělý, chmurný, základní, ústřední, spásný, kacířský, hříšný, bláznivý, neodbytný, revoluční, postranní* etc. The thoughts can be either very helpful (improving or changing something) or unpleasant or dangerous, often also unavoidable and urgent. In many cases the question of the origin of some thought or idea is questioned (e.g. *původní, přejatý, vlastní*).

The *SČFI* dictionary mentions only the typical adjectival collocations *fixní / spásná / utkvělá myšlenka*.

Translation

The Czech-Norwegian dictionary names both the Norwegian nouns *tanke* and *idé* as equivalents of the noun *myšlenka*. It also suggest the Norwegian preposition *på* as equivalent of the preposition *na* for the translation by *tanke*. In addition, the expression *přenášení myšlenek* is translated by the compound *tankeoverføring*.

In the Czech-Norwegian parallel corpus, the noun *myšlenka* is the most frequent equivalent, but the noun *idé* apears frequently (in around 10% of the cases) as well, mostly in the sense of "intention, decision" or "goal, idea". It is also used as translation in the sense of message or goal of some work of art: *myšlenka básně – ideen i diktet*. In addition to the parallel collocations listed under the Norwegian noun, there are further interesting translations available: *tíží ho myšlenky – han er tung til sinns; nemůže se zbavit myšlenky – får ikke tanken ut av hodet; chmurné myšlenky – tunge tanker; ctnostné myšlenky – dydige tanker; zmítaly mnou rozporuplné myšlenky – jeg var en bytte for høyst motstridende tanker; hlavou mi proběhla myšlenka, že…– det forekom meg at…; hlavou mi prolétla myšlenka – en tanke for / flakket / skjøt gjennom hodet (mitt); přijmout myšlenku – godta tanken om…; (seděl) ponořen do vlastních / těchto myšlenek – (han ble sittende) i sine egne tanker / fortapt i disse tankene; pohroužen do vlastních myšlenek – fordypet i egne tanker;snést myšlenku, že…– utholde tanken på at…; utřídit si myšlenky – ordne tankene sine; být posedlý myšlenkou, že…– være opptatt av at…; přivést někoho na jiné myšlenky – få noen på andre tanker; latentní snové myšlenky – de latente drømmetankene; černé myšlenky – dystre tanker; je už zase v myšlenkách jinde – tankene hans forsvinner i andre retninger; rouhavá myšlenka – en blasfemisk tanke; myšlenka mě strhla – tanken grep meg; napadaly ho dokonce myšlenky na sebevraždu – han hadde til og med vært inne på tanken om selvmord; oddávat se vlastním myšlenkám – hengi seg til sine egne betraktninger; odhánět myšlenky – skjøve fra seg tankene; ztracen v myšlenkách – fortapt i sine egne tanker; zabývat se myšlenkou – være opptatt av tanken (på); často jsem se k vám obracel v myšlenkách – mine tanker har ofte kretset om dere; měl myšlenku, že…– (han) hadde planer om….*

Dictionary entry

The entry for Czech noun *myšlenka* (figure 7.44) is divided into three senses different from the senses of its Norwegian counterpart. The first sense of "thought" corresponds to the first sense of *tanke*. The second sense of a potential "intention" corresponds to the Norwegian noun *idé*, but it is also partially included in the first sense of *tanke*. The third sense of "idea" or "goal" of something corresponds exclusively to the meaning of the Norwegian noun *idé* and it is also synonymous to the meaning of the Czech noun *idea*. The three senses have different valency, even though they share most collocations.

The valency frame with the preposition *na* should possibly be defined as two independent patterns for the senses number 1 and 2. In the first sense, the complement can

myšlenka

myšlenka: *sg.:* N myšlenka; G myšlenky; D myšlence; A myšlenku; V myšlenko; L myšlence; I myšlenkou; *pl.:* N myšlenky; G myšlenek; D myšlenkám; A myšlenky; V myšlenky; L myšlenkách; I myšlenkami, *myšlenkama

FREQ: 19290 (SYN2005), sg: 53.9%

Morphemic analysis		
myšlenka *(word)*		
inflexion		
base		**ending**
myšlenka *(morpheme)*		

Valency patterns

A ~ o *<někom/něčem>*

B ~ *<INF>*

C ~ *<něčeho>*

D ~ na *<někoho/něco>*

Collocations and constructions

Verbs: - inchoative: *napadnout (POSS->PAT), zrodit_se, propadnout, vnuknout_c (POSS->ADDR), smířit_se, nadchnout_se, formulovat, vyjádřit, připustit, strhnout* - durative: *znepokojovat (POSS->PAT), prosazovat, podporovat, zaobírat_se, zabývat_se, pohrávat_si, koketovat, utřídit* - terminative: *zapudit, zavrhnout* - (subj.): *zrodit_se, strhnout* - (other): *přivyknout, uvyknout, odvyknout*

Adjectives: *základní, ústřední, kacířský, hříšný, bláznivý, neodbytný, revoluční*

Fixed expressions: utkvělá myšlenka *en fiks idé*; myšlenka bleskla/prolétla *<někomu>* hlavou *tanken skjøt/for/flakket gjennom <ens> hode*

Semantics

1. myšlený obraz / představa někoho o něčem

   Preferred constructions: A , D

   Synonyms: představa

   #### Valency patterns

   D ~ na *<někoho/něco>*

   #### Translation

   no: *tanke [1]*

2. potenciální záměr/úmysl někoho realizovat nějaký cíl

   Preferred constructions: B , C , D

   Synonyms: záměr, úmysl

   #### Valency patterns

   B ~ *<INF>*

   C ~ *<něčeho>*

   D ~ na *<něco>*

   #### Collocations and constructions

   Adjectives: *postranní, spásný*

   #### Translation

   no: *tanke [1]; idé*

3. (ideový) cíl/záměr někoho/něčeho

   Preferred constructions: B

   Synonyms: idea

   #### Valency patterns

   B ~ *<INF>*

   #### Translation

   no: *idé*

Figure 7.44: The entry for *myšlenka*

also be a human, while in the second sense it cannot. There is hence an additional small formal (semantic) difference, besides the reference to some passive [Image] in the first sense and a more active [Goal] in the second sense.

7.16   Idé – nápad (idea)

7.16.1   The conceptual frame

The Norwegian noun *idé* and the Czech noun *idea* are both inherited from Greek, but they do not have identical meaning and use in the two languages. Therefore they cannot be directly compared to each other.

The conceptual frame of *idé* is very similar to the concept of *tanke*. The strength of the [Force] is not completely neutral (there must be at least some basic personal interest), but it does not necessarily imply a real action of the [Actor]. The noun *idé* refers equally both to the [Theme] or [Goal] as to its [Image].
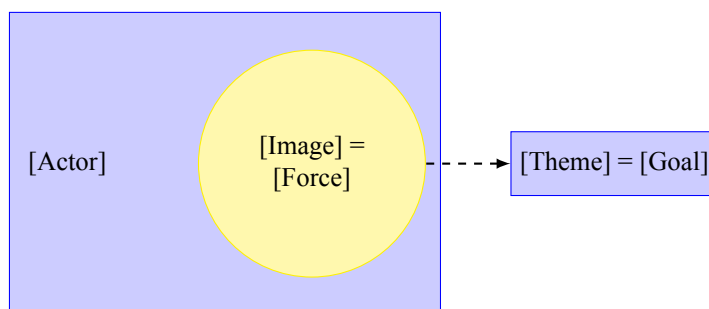
Figure 7.45: The conceptual frame of *idé*

7.16.2   Norwegian: *idé*

Monolingual description

Bokmålsordboka presents 5 different senses of the noun *idé*: 1. (philos.) general concept; original, invariable image or model / pattern; 2. (a clear) idea (image / knowledge) about something; 3. a sudden idea (invention, decision); 4. (fundamental) idea (thought), plan, draft; 5. meaning, contents, main idea (e.g. of some work of art).

Norsk ordbok defines only two senses, lumping the senses number 2–5 into one sense. The description in *Norsk riksmålsordbok* makes somewhat similar distinctions as *Bokmålsordboka* (except of sense number 5), but they are less clearly defined.

Valency patterns

The preposition *om* can be used to connect the [Theme] in the sense of "clear idea, knowledge" (e.g. "Har du noen ide om hvor håret kommer fra ?") or the [Goal] in the sense of "sudden idea, invention, decision" ("Da fikk Sørensen idéen om et lite ultralydapparat for leger…") or "plan, draft" ("Jeg har i flere år hatt en idé om å lage en snøfres med hydrauliske vinger"). The noun then refers to the knowledge [Image] or the [Force].

The preposition *til* can be used to connect the [Goal] in the sense of "fundamental idea, plan, draft" (e.g. "Ideen til komiserien kom fra Bjarni Haukur Thorsson"). The noun is the initial [Force] for the realization of the [Goal]. Unlike the preposition *om*, the preposition *til* seems to suggest that the idea is only a fundamental or partial thought, not necessarily the complete image of the solution [Goal]. It is therefore very close to the use of the preposition *for* introducing the free adjunct of beneficiary.

The preposition *med* can be used to connect the [Goal] in the sense of "sudden idea, invention, decision" (e.g. "Ideen med en avstemning til slutt var bra."). The noun is identified with the [Goal].

The preposition *i* is used in the common meaning of the free adjunct of location, but in the sense of "meaning, contents, main idea" of some work of art ("…en gjennomgripende idé i boken"). The construction may be considered a fixed expression as well.

The noun is also frequently used in predicative constructions when referring to the [Goal] (in the sense "sudden idea, invention, decision"), e.g. *det var hans idé å…* or *det var (ikke) en god idé å…*.

Distribution

The noun appears 3892 times in LKB (965 times (24.8%) as the lemma *idé* and *2928* times (75.2%) as *ide*), thereof 2395 times (61.5%) in singular form.

The preposition *om* is used in 814 cases (20.9%), thereof 640 times (78.6%) after singular form and 477 times (58.6%) after definite singular form. In 85 cases (10.4%) it is followed by an infinitive construction, in 139 cases (17.1%) by a subordinate clause connected by *at* and in 89 cases (10.9%) by a question word.

The preposition *til* follows in 180 cases (4.6%), thereof 113 times (62.8%) after singular form. An infinitive construction follows in 5 cases only (2.8%), a question word in 11 cases (6.1%). Not all the cases are complements of the noun, however.

The preposition *med* follows in 68 cases (1.7%), always with a singular form[82] and in 45 cases (66.2%) with definite singular form. In 12 cases (17.6%) the preposition is followed by an infinitive construction.

The preposition *for* follows in 37 cases, but it can always be considered the free adjunct of beneficiary. Although it can also be some general goal for which the particular solution (the idea) is needed, it is not the solution (the primary [Goal] element) itself. Still, it is able to express basically the same meaning as the preposition *til*.

The preposition *i* follows in about 68 cases, but only in about 4 of them it is used to introduce the work of art in which the central idea is discussed. This use is not really much different from the general use of adjunct of location: it can be seen as a metaphorical extension of the primary function, as the border case *den sentrale ideen i islam* shows.

Polysemy

The use of different prepositions can support the possibility to differentiate all the senses defined by *Bokmålsordboka*. The broader use of preposition *om* shows how unclear the borders are, however.

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[82]Two exceptions with plural form are not complements of the noun.

Collocations and idioms

The most frequent verbs collocating with the noun *idé* are *å få, å ha, å lansere.* Other common verbs are *å gi, å utvikle*.

The most frequent adjective modifiers are e.g. *god, ny, mange, politisk, dum, dårlig, genial, grunnleggende, abstrakt,* etc. The idea is thus usually something new (compared to *thought*), and its evaluation is quite common.

Additional fixed expressions mentioned by the dictionaries include e.g. *det godes idé; en fiks idé; få en lys idé; gripe en idé (og gjøre noe ut av den), dramaet bygger på en stor, samlende idé; være rik på idéer; falle på en (slik) idé.*

Translation

The Norwegian-Czech dictionary presents both the Czech nouns *myšlenka* and *nápad* as equivalents of the noun *idé*. It also presents translation for the expression *en fiks idé* (marked for the domain of "psychology") by the Czech expression *utkvělá myšlenka*.

The Czech equivalents can be bound more closely to the senses defined by *Bokmålsordboka* in the following way: 1. the first sense corresponds well to the Czech noun *idea*, which keeps its original philosophical (or ideological) meaning; 2. the second sense would probably fit best to the Czech noun *představa*; 3. the senses 3 and 4 correspond both to the meaning of the Czech noun *nápad*; 5. for the fifth sense, Czech language prefers usually the noun *myšlenka* in its (corresponding) third sense.

In the Norwegian-Czech parallel corpus, the noun *nápad* appears in about 27% of the cases as equivalent of the noun *idé*, while *myšlenka* in about 22% and *představa* only in about 7.5% of all cases. The Czech noun *idea* appears in more than 35% of the cases, but 86% of them come from Jostein Gaarder's roman *Sofies verden*, a book on the history of philosophy. All those examples are used in the philosophical or ideological meaning.

Other interesting collocations from the corpus include e.g. *finne fram til gode ideer – vymýšlet dobré nápady; fikse ideer – vrtochy / utkvělé představy; sette noen på ideen – nasadit někomu do hlavy nápad; tjene våre ideer om…– posloužila naší myšlence o…; han var ikke fremmed for ideen om at…– nebyla mu cizí myšlenka, aby…; musikalske ideer – hudební motivy; litterære ideer – literární nápady; jeg skal lufte ideen for…– přednesu ten nápad (někomu); medfødte ideer – vrozené ideje; den franske opplysningstidens ideer – myšlenky francouzského osvícenství; jeg kom på ideen med å – přišel jsem na nápad (+inf); den luftige ideen om kjærligheten – mlhavá představa lásky; den ideen har vi slått fra oss – my jsme ten návrh odmítli; hvor fikk han denne ideen fra? – co ho to napadlo?; ideen meldte seg stadig på ny for…– myšlenka se k …stále vracela.*

Dictionary entry

The entry for *idé* (figure 7.46) has been split into the five discussed senses, with their own valency frames. All the frames were defined at the top level, although most of them seem to be really exclusive – at least as much as the senses can be considered exclusive (the senses 3 and 4 may sometimes be difficult to distinguish and the original abstract sense 1 as well). The last sense has eventually been defined as well, thanks to its correspondence to the similar usage of the Czech noun *myšlenka*, even though it is very close to the original meaning of the word (sense 1), especially when used without the prepositional phrase with *i*.

idé

idé: *sg. indef.* idé ; *sg. def.* idéen ; *pl. indef.* idéer ; *pl. def.* idéene

FREQ: 3892 (LKB), sg: 61.5%

Morphemic analysis

idé *(word)*

inflexion	
base	**ending**
idé *(morpheme)*	

Valency patterns

A ~ om <*noe*/*å…*/*at…*/*hv…*>

B ~ til <*noe*/*å…*/*hv…*>

C ~ med <*noe*/*å…*>

D ~ i <*noe*>

Collocations and constructions

Verbs: - inchoative: *få, gi*$_c$ *(POSS->ADDR), lansere, utvikle* - durative: *ha*

Adjectives: *god, dårlig, ny, politisk, dum, genial, abstrakt, grunnleggende*

Semantics

1. allmennbegrep, urbilde i bevisstheten til noen

   phil.

   Translation

   cs: *idea; myšlenka [3]*

2. god forestilling / kunnskap om noe i bevisstheten til noen

   Preferred constructions: A

   Synonyms: forestilling

   Valency patterns

   A ~ om <*noe*/*å…*/*at…*/*hv…*>

   Collocations and constructions

   Fixed expressions: en fiks idé *utkvělá myšlenka*

   Translation

   cs: *představa*

3. plutselig innfall (til noen) om å realisere et mål

   Preferred constructions: A , C

   Synonyms: innfall

   Valency patterns

   A ~ om <*noe*/*å…*/*at…*/*hv…*>

   Collocations and constructions

   Fixed expressions: være rik på idéer *oplývat/sršet/překypovat/hýřit/přetékat nápady*

   Translation

   cs: *nápad*

4. grunnleggende tanke, plan eller utkast (til noen) som grunn til å nå et mål

   Preferred constructions: A , B

   Synonyms: plan [1], utkast

   Valency patterns

   A ~ om <*noe*/*å…*/*at…*/*hv…*>

   Translation

   cs: *nápad*

5. mening el. innhold i et kunstverk

   Preferred constructions: D

   Translation

   cs: *myšlenka [3]*

Figure 7.46: The entry for *idé*

7.16.3   Czech: *nápad*

Monolingual description

The noun *nápad* has three senses defined in the *SSJČ* dictionary: 1. immediate, sudden thought / idea; 2. (juristic) inception of circumstances for some rights, or of the rights ("descent"); 3. attack of an enemy. The second sense is a term within a special domain, derived from the verb *napadnout* in its literal meaning "to fall / drop down". The third sense is also an implicit derivative of the same verb, but in the meaning "to attack". The metaphorical extension specific for the sudden appearance of an idea is actually also a meaning extension of the corresponding verb. The three senses of the noun hence arise from the derivation from a verb with three corresponding distinct senses. The use of the noun in the third sense is however very strange in modern Czech language.

Valency patterns

The noun can take a direct infinitive construction, expressing the [Goal]. The use of direct genitive phrase (for this purpose) is very rare and appears only in particular context, but it is in principle possible.

The preposition *na* (with noun phrase in accusative case) can be used to connect the [Goal] when the noun refers to some fundamental (initial or partial) idea, plan or draft (e.g. "Tu a tam přišel někdo z nás s novým nápadem na jejich zapuzení, jako třeba postříkat…"; also for an artwork: "Mám nápad na písničku"). It can also be used in plural in the meaning of new (possibly refreshing) ideas for something already happening ("hned jsem začal chrlit nápady na nové programy."). It roughly corresponds to the use of the Norwegian preposition *til* or the generic adjunct using *for*. In some cases the Norwegian preposition *om* could be used as well.

Rarely, the preposition *k* (with noun phrase in dative case) is used in the same meaning, with a much looser connection to the [Goal]: the idea is then seen only as some partial (and possibly insignificant) contribution to some major [Goal] ("Jeho nápady k inscenaci této opery"). It can also be considered a more general free adjunct of relation or connection.

The general adjunct of beneficiary using the preposition *pro*, can be used to express the same meaning in Czech as in Norwegian.

The preposition *s* (with a noun phrase in instrumental case) can be used to connect a particular [Goal], when the noun is identified with it (and the [Goal] is usually realized). The complement usually refers to some idea previously mentioned (or otherwise known) in the text by mentioning some central (characteristic) element in the referred idea (e.g. "Nápad s falešným únosem se mi ale líbil."). It correspond to the use of the Norwegian preposition *med*.

The preposition *o* (with noun phrase in locative case) can sometimes be used in a similar way as the preposition *s*, but only in the meaning of some (at the moment) unrealized, imagined [Goal] ("Snad první Palivcův nápad o jeho vydání vznikl právě zde."). It also refers vaguely to the [Image] of some [Goal] already mentioned or known within the text ("Hlavou se mu mihla vzpomínka na nápad o pavučině"). It can be also considered a general adjunct of theme. The meaning of the noun is then close to the meaning of the noun *myšlenka*.

Distribution

The noun *nápad* occurs 8300 times in SYN2005, thereof 5781 times (69.7%) in singular form. An infinitive construction follows in 625 cases (7.5%), in 602 cases (96.3%) after singular form. A genitive phrase is mostly used to express just the [Actor] (possessor), but in a few marginal cases it is also used to express the [Goal].

The preposition *na* follows in 156 cases (1.9%), thereof 92 times (59%) after singular form.

The preposition *s* follows in 134 cases (1.6%), thereof 123 times (90.4%) after singular form.

The preposition *k* is used in 12 cases only (<0.2%); with two exceptions always after a plural form of the noun, confirming mostly the meaning of small or partial contributions to some major goal.

The preposition *o* appears in 15 cases (<0.2%) as a possible complement of the noun, both with singular and plural forms.

Polysemy

The meaning of the noun *nápad* is difficult to split into senses (except of the two special senses mentioned by the *SSJČ* dictionary). Even the prepositions contribute with their own meaning to the whole context rather than determine the meaning of the noun itself. The only possible justifiable distinction could be the one corresponding roughly to the meanings 3 and 4 defined for the Norwegian noun *idé* in *Bokmålsordboka*: there is also some distinction in the use of different prepositions in these two meanings in Czech. In the first meaning, the noun refers to some [Image] (sometimes even partial) of the [Goal] (with *na, k, o*), while in the other one it refers to the (realized or seriously intended) [Goal] itself (with the preposition *s*).

Collocations and idioms

The most frequent verbs collocating with the noun *nápad* are *mít, dostat, přijít (na)*. Other typical verbs are e.g. *(z)rodit se, vzejít, vnuknout, zamítnout, uskutečnit, zaujmout*. Special collocations include also *sršet / hýřit / překypovat / přetékat / oplývat nápady; chrlit nápady; nadchnout někoho nápadem; přijít / vyrukovat / vytasit se s nápadem; pohrávat si / koketovat s nápadem*.

The most frequent adjective modifiers are e.g. *dobrý, nový, špatný, skvělý*. More typical adjectives are e.g. *bláznivý, geniální, ztřeštěný, originální, výborný, báječný, neotřelý, šílený, pošetilý, spásný, praštěný, úžasný,* etc. They show that *nápad* is often really something extraordinary, unexpected or unconventional.

Other fixed expressions are: *to není nápad k zahození; co je to za nápad?; (být) bez nápadu*.

The *SSJČ* dictionary also mentions the idiomatic expressions *to je nápad!* and *ani nápad!*. The *SČFI* dictionary adds the collocations *dostat / mít spásný nápad; jiskřit nápady; sršet nápady;* and use of support verbs: *dostat nápad, přijít na nápad* (inchoative); *mít nápad* (durative); *zavrhnout nápad, uskutečnit / využít nápad* (terminative); *dát / vnuknout někomu nápad, přivést někoho na nápad* (causative-inchoative); *osvědčit se / vyplatit se* (subject). It also mentions the following adjective collocations: *hloupý / pitomý, koňský / kravský; spásný; špatný / zlý*.

Translation

The Czech-Norwegian dictionary suggests three different Norwegian equivalents for the noun *nápad*: *idé, påfunn* and (as a "sudden" idea) also the noun *innfall*. It also translates the collocation *dobrý nápad* as *en god idé*.

In the Czech-Norwegian parallel corpus, the noun *idé* appears as equivalent in more than one half of all cases. The nouns *påfunn* and *infall* appear only in about 8% and 5% of the cases. Also the nouns *tanke* and *forslag* appear with a similar frequency. In a few cases the noun *innskytelse* occurs in the meaning of some sudden idea. Other interesting collocations are e.g. *dostal nápad – en tanke slo ham / han fikk en idé; vymýšlet dobré nápady – finne fram til gode ideer; to je nápad! – det var lurt; sršící překvapivými nápady – full av merkelige innfall*.

Dictionary entry

nápad
nápad: *sg.:* N nápad; G nápadu; D nápadu; A nápad; V nápade; L nápadu, nápadě; I nápadem; *pl.:* N nápady; G nápadů; D nápadům; A nápady; V nápady; L nápadech; I nápady, *nápadama
FREQ: 8300 (SYN2005), sg: 69.7%

Morphemic analysis	
nápad *(word)*	
inflexion	
base	**ending**
nápad *(morpheme)*	

Semantics

1. náhlá myšlenka někoho realizovat nějaký cíl

   Valency patterns
   - A ~ *<INF>*
   - B ~ na *<něco>*
   - C ~ s *<něčím>*

   Collocations and constructions
   Verbs: - inchoative: *zrodit_se, vzejít, vnuknout$_c$ (POSS->ADDR)* - terminative: *zamítnout$_c$, uskutečnit$_c$* - (subj.): *zrodit_se, vzejít, zaujmout*
   Adjectives: *dobrý, špatný, skvělý, bláznivý, geniální, ztřeštěný, originální, výborný, báječný, neotřelý, šílený, pošetilý, spásný, praštěný, úžasný*
   Fixed expressions: oplývat/sršet/překypovat/hýřit/přetékat nápady *være rik på idéer*

   Translation
   no: *idé [3]; idé [4]*

2. vznik podmínek pro nějaké právo / práva samotného
   jur.

Figure 7.47: The entry for *nápad*

The entry for the Czech noun *nápad* (figure 7.47) has been divided into two senses only. The third sense defined by SSJČ is too obsolete. The potential distinction of the first sense was not made either and the whole sense refers equally both to the sense 3 and 4 of the Norwegian noun *idé*. The rich collocation with the support verbs *oplývat/sršet/překypovat/hýřit/přetékat nápady* has been linked to the corresponding (but

syntactically quite different) Norwegian construction *å være rik på idéer*. The specific juristic use (sense 2) was not analysed any closer.

7.17   Hensikt – záměr/úmysl (intention/aim)

7.17.1   The conceptual frame

The conceptual frame of *hensikt* is more complex than the previous structures. In addition to the elements [Image] or [Force] (with some possessor [Poss] or [Actor]) and the [Goal], it also contains some [Action] or instrument [Instr], which is expected to be the instrument to achieve the [Goal] with. The Czech nouns can also sometimes replace the instrument [Instr] with a patient [Pat] necessary for the final [Goal] (i.e. necessary for its realization).
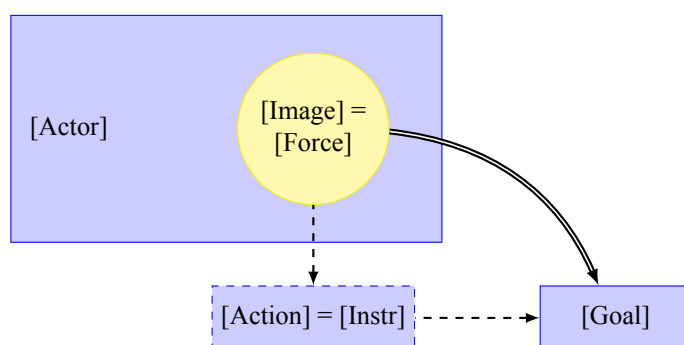
Figure 7.48: The conceptual frame of *hensikt* (the basic meaning)

The noun refers equally to the [Goal] and to the [Image] of it (i.e. the intention, being the [Force] for the [Action]). The [Instr] can be optional (or underspecified) in the basic meaning.

The noun can also have a non-human possessor: in that case the [Action] or the [Instr] becomes the metonymical possessor if the [Image] (while the real, human initiator [Actor] remains usually underspecified, in this case). In Czech and English, two different nouns are used in the two senses: *úmysl* or *záměr* ("intention, aim") for the basic meaning with a human possessor, and *účel* ("purpose") for the metonymical meaning, when the idea (the [Image] of the [Goal]) is attributed to the [Action] or [Instr] directly, and the [Actor] remains in background, underspecified and implicit.

7.17.2   Norwegian: *hensikt*

Monolingual description

Bokmålsordboka does not differentiate any senses of the noun *hensikt*. (Neither does *Norsk ordbok*.) It is defined by the synonyms *tanke, (for)mål, plan*.

Norsk Riksmålsordbok tries to make a difference between the meaning synonymous to *tanke, mål, plan* and the meaning of *formål*. The difference is obviously between the "intention" of a person on one side, and the "purpose" of some thing on the other side, as explained in 7.17.1.

Valency patterns

The noun *hensikt* cannot take a direct complement expressing the [Goal], because it is identified with it. The [Goal] appears therefore usually in predicative (or apposition).

The [Action] or [Instr] can become a complement of the noun, however. The otherwise free adjuncts of instrument and location, using prepositions *med* and *i* are used for this purpose. In the second sense ("purpose" of some thing), they also become semantically obligatory and should be therefore considered part of the valency. The preposition *med* usually presupposes some [Actor] (it may be underspecified, however) and it is therefore closer to the basic sense of "intention" (e.g. "Min hensikt med å skrive denne kronikken er å synliggjøre en stor mangel ved opptrappingsplanen…"), while the preposition *i* attributes the "purpose" directly to the [Action] ([Instr]), and it is therefore typical rather for the second meaning. The borderline is often very fuzzy, however.

Distribution

The noun appears 1829 times in LKB, thereof 1649 times (90.2%) in singular form. In 337 cases, the infinitive construction follows immediately after the noun, mostly as predicative (e.g. "Det var ikke min hensikt å…"), object in the fixed expression *ha til hensikt å…* (e.g. "han hadde til hensikt å kjøpe…") or complement of the fixed expression *i den hensikt å…* (behaves as a complex conjunction, e.g. "Videre utgav hun seg for å være hjemmesykepleier i den hensikt å komme seg inn hos en eldre dame.") or *med (den) hensikt å…* (e.g. "Historier har blitt fortalt og fortalt, med den hensikt å beholde livet.").

The preposition *med* follows in 342 cases (18.7%), thereof 333 times (97.4%) after singular form. An infinitive construction follows in 24 cases (7%), while the subordinate clause connected by *at* appears only once (0.3%).

The preposition *i* follows in 33 cases, but about half of them should be considered rather the free adjunct of location for the whole sentence. In some cases the distinction is undecidable, however. Both the infinitive construction and subordinate clause introduced by *at* can follow the preposition.

Polysemy

There seems to be a good reason to differentiate the two mentioned senses of the noun *hensikt*, both from the point of view of the conceptual focus, the preferences in valency and the translation to Czech (or English). In real use the difference of meaning is not clear at all, though. The meaning of "purpose" seems to be rather an extension of the basic meaning (which does not disappear completely). In this sense, the noun *formål* is more natural, unless the intention of some actor is still important.

Collocations and idioms

The noun *hensikt* is usually used in fixed constructions with the support verbs *å være* and *å ha*. The first one is usually used to construct simple constructions with the [Goal] in predicative. The verb *å ha* is used frequently in the fixed expression *ha til hensikt å…* (the complement is always an infinitive construction).

The head preposition *i* is used in the fixed expression *i den hensikt…* – in most cases the complement is an infinitive clause, in a few cases it is the subordinate clause connected by *at* or something previously mentioned in the text (i.e. no explicit superficial

complement). It can also build adverbial constructions in combination with adjectives, e.g. *i (den) beste hensikt, i terapeutisk / suicidal hensikt, i ond hensikt,* etc.

The head preposition *med* can be used either in the fixed expression *med hensikt*, having the function of an adverbial, or in the fixed expression *med (den) hensikt*, corresponding to the expression *i den hensikt* both in meaning and use.

The most frequent adjective modifiers are *god, ond, liten, egentlig, fredelig, informativ, kommunikativ, bestemt, ærlig, edel, klar,* etc. The adjective *liten* appears in a special extension of the meaning, which would be translated as "there is no point / reason to…" in English. This extension seems to be bound to negative constructions with the support verbs *å ha [å være* (or *å tjene*, i.e. *det har (/tjener) ingen / liten hensikt* or *det er liten hensikt i noe/å…*).

The dictionaries mention further collocations and fixed expressions: *hensikten helliger middelet; svare til sin hensikt; gjøre noe i vinnings hensikt; ha redelige / skumle / skjulte / de beste hensikter; i en bestemt hensikt; i ond hensikt; virke mot sin hensikt.*

Translation

The Norwegian-Czech dictionary lists two Czech equivalents of the Norwegian noun *hensikt: účel* and *záměr*. In addition, the expression *ha til hensikt* is translated as *zamýšlet*, and the expression *med hensikt* by the adverbs *úmyslně, záměrně.*

In the Norwegian-Czech parallel corpus, the noun *účel* appears in only about 8% of all cases as the equivalent of the noun *hensikt*, while *záměr* appears in about 23% and *úmysl* in about 19% of cases.[83] The noun *smysl* appears in the meaning *det har ingen / liten hensikt* and in questions like *har det en hensikt?*. Other examples of common collocations are: *i den hensikt…– …, aby…/ se záměrem…; i ond hensikt – ve zlém úmyslu; ha gode hensikter – mít dobré úmysly; i en slik hensikt / i denne hensikt – k tomu; ha til hensikt – mít v úmyslu / zamýšlet / hodlat; har ikke til hensikt å…– nemíní…/ nechce…; det har ikke noen hensikt – nestojí (to) za to / nemá cenu…/ nemá smysl…/ je na nic; hvilken hensikt har det å…? – jaký mý smysl …?; i hvilken hensikt? – s jakým cílem?; det har ingen hensikt at…– není třeba, aby…; mine hensikter er…– mým cílem je…; har …en hensikt? – má …(nějaký) smysl?; hva skulle (ellers) være hensikten med å …? – proč by (jinak) …?; med hensikt – schválně / úmyslně / záměrně; en estetisk hensikt – estetický záměr; det var i det hele tatt ikke min hensikt…– vůbec mi nešlo o to, aby…; hensikten helliger middelet – účel světí porstředky; uten noen slags hensikt – bez jakéhokoli záměru; hadde ikke noen annen hensikt enn…– neměla žádný účel než…; etter forfatterens hensikt – podle autorova záměru; det var hele hensikten med…– to byl jediný účel….*

Dictionary entry

The entry for *hensikt* (figure 7.49) does only symbolically distinguish the two subsenses, but only in order to link the different equivalents. All valency patterns and collocations are defined at the top level of the lemma.

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[83] The main source of the frequent noun *záměr* appears to be Czech translation of the *The Lord of the Rings*.

hensikt

hensikt: *sg. indef.* hensikt ; *sg. def.* hensikten ; *pl. indef.* hensikter ; *pl. def.* hensiktene

FREQ: 1829 (LKB), sg: 90.2%

Morphemic analysis

hensikt (word)

inflexion	
base	**ending**
hensikt *(morpheme)*	

Valency patterns

A ~ med *<noe/å…>*

B ~ i *<noe>*

Collocations and constructions

Fixed expressions: med hensikt *schválně / úmyslně / záměrně*; ha til hensikt *<å…> mít v úmyslu <INF> / zamýšlet / hodlat*; i den hensikt *<å…> za účelem <INF/něčeho> / s úmyslem <INF/něčeho> / se záměrem <INF/něčeho> / s cílem <INF/něčeho> / aby*; med (den) hensikt *<å…> za účelem <INF/něčeho> / s úmyslem <INF/něčeho> / se záměrem <INF/něčeho> / s cílem <INF/něčeho> / aby*; i ond hensikt *ve zlém úmyslu*; ha ingen/liten hensikt *nemít_smysl*; hensikten helliger middelet *účel světí prostředky*; ha gode hensikter *mít dobré úmysly*; en edlere hensikt *vyšší záměr*

Semantics

1. et mål tenkt eller planlagt av noen (som et instrument eller en gjerning skal tjene til)

   Translation

   cs: *záměr; úmysl*

2. et mål eller mening som et instrument eller en gjerning skal tjene til

   Translation

   cs: *účel; smysl*

Figure 7.49: The entry for *hensikt*

7.17.3   Czech: *záměr*

Monolingual description

The *SSJČ* dictionary defines only one general meaning of the noun *záměr*: "forethought effort to do something, achieve something, action aimed at some goal", using also the nouns *plán, úmysl* as synonyms. The meaning and use of the noun is mostly formed by the fixed expressions and constructions.

Valency patterns

The noun can take a direct infinitive construction expressing the [Goal] as its complement. In very rare cases the [Goal] can be expressed by a direct noun phrase in genitive case.[84]

The [Goal] can also be expressed by the prepositon *na* and a noun phrase in accusative case (usually using a deverbal noun).

As an extension to the basic meaning, the noun can also attribute the [Goal] to the element [Instr] directly, underspecifying the original [Actor]. It corresponds to the second meaning of the Norwegian noun *hensikt*. In such case, a direct genitive phrase (as an inanimate possessor of the [Image]) can express the instrument [Instr].[85]

The noun can take a complement expressing the patient [Pat] of the final [Goal] using the preposition *s* (with noun phrase in instrumental case, e.g. "Kupec zatím nechce zveřejnit , jaké záměry s objektem má."). In such case, the [Goal] remains usually underspecified, generalized, known from the previous text or otherwise implicit.[86]

In a few rare cases, the prepositions *k* and *o* have been found to connect the complement expressing the [Goal], but these are rather exceptions from the regular use. They can also be considered as common free adjuncts of aim and theme.

Distribution

The noun *záměr* appears 7400 times in SYN2005, thereof 5180 times (70%) in singular form. An infinitive construction follows in 927 cases (12.5%), thereof 865 times (93.3%) after singular form. Not all the cases can be considered complements of the noun, however. A direct genitive phrase follows in 1533 cases, but with a few exceptions it refers always to the [Actor].

The preposition *na* follows in 79 cases, but just above half of the cases (ca. 0.5%) can be considered complements of the noun expressing the [Goal].

The preposition *s* appears 67 times, and in about two thirds of the cases (ca. 0.6%) the phrase can be considered a complement of the noun.

Polysemy

In addition to the main meaning, the noun can also have the extension of purpose, corresponding to the secondary meaning of the Norwegian noun *hensikt*, but probably even less established. This kind of use is very infrequent and the [Actor] (even when underspecified and implicit) is always latently present as the thought originator of the

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[84]E.g. "záměr vytvoření až divadelně efektního celku byl pro něho rozhodující".

[85]E.g.: "Záměr dotazu byl evidentní…", "Jenže to je právě záměr přerušeného článku řetězu.", "záměr moderního umění", "sdělovací záměr každé věty v textu", "záměr celého projektu", etc

[86]Exceptionally, the referee can be the instrument [Instr], e.g. "Jaké má vláda záměry s prodejem státního podílu…"; or the [Goal] itself, e.g. "Tišnovští radní litují, že záměr se zpřístupněním jeskyně jde tak pomalu.").

instrument [Instr] or the donator of the purpose (i.e. *his / her* intention) to the instrument [Instr]. It is therefore difficult to classify this extension as an independent sense of the noun. The noun *účel* is usually preferred in this sense, unless the original intention should be emphasized.

Collocations and idioms

Beside of the frequent use of the verb *mít*, the following verbs are common collocates of the noun *záměr*: *schválit, oznámit, sledovat, pochopit, vysvětlit / vysvětlovat, zdařit / podařit se, projednat, realizovat,* etc.

The following adjectives are frequent modifiers of the noun: *podnikatelský, původní, nový, investiční, všechen, další, strategický, dlouhodobý, nějaký, vlastní, jasný,* etc. They suggest a frequent use of the noun in the context of business plans and investments.

The noun appears frequently with the head preposition *s*, in the fixed expression *se záměrem* taking an infinitive construction expressing the [Goal] as complement. The whole expression behaves as an adverbial of purpose (or subordinate clause of that type).

The *SČFI* dictionary names a few fixed expressions: *mít s někým / něčím (nějaké / své) záměry; prohlédnout záměry někoho; zkřížit / zhatit záměry někoho;* and classifies the commonly collocating verbs: *pojmout* (inchoative); *mít* (durative); *provést / uskutečnit / splnit, upustit od z.* (terminative); *podpořit z. někoho* (causative-inchoative); *zmařit / překazit* (causative-terminative). The *SSJČ* dictionary can add the following collocations: *výchovný, umělecký záměr; získat někoho pro svůj záměr; upustit od nekalých záměrů.*

Translation

The Czech-Norwegian dictionary suggests two Norwegian equivalents of the Czech noun *záměr*: *formål* and *hensikt*.

In the Czech-Norwegian parallel corpus, the noun *formål* appears in 7% of the cases as equivalent of the noun *záměr*, while the noun *hensikt* occurs in 33% of all cases. The noun *plan* appears in 13% of cases and the noun *tanke* in about 5%. In Jostein Gaarders novel *Sofies verden* the noun *záměr* is repeatedly used for Norwegian noun *prosjekt* in the collocations *(de greske) filosofenes / filosofisk prosjekt*. Other interesting collocations include: *vyšší záměr – en større plan / et høyere formål / edlere hensikt; to byl možná původní záměr – det er kanskje det som har vært meningen hele tiden; uskutečnil své záměry – å gjennomføre sine edle hensikter; estický záměr – estetisk hensikt; podle autorova záměru – etter forfatterens hensikt; jeho zlé záměry byly odhaleny – hans onde hensikter ble avslørt; použito s podobným záměrem – brukt til slike formål; vedeny jedním záměrem – styrt av én vilje; uprchnout s kořistí sám, s vlastním záměrem – å rømme alene med byttet for å mele sin egen kake; jeho záměr s tebou – hans hensikter med deg; ani neodhaloval své záměry – heller ikke ga han oss del i sine planer; podle svých (=tvých) vlastních záměrů – som det passer deg best; za jakým záměrem zbudovali to místo – hva formål de hadde med å skape dette stedet; se záměrem…– for å…, i den hensikt å…; záměr se nezdařil – han mislyktes i sitt forsett.*

záměr

záměr: *sg.:* N záměr; G záměru; D záměru; A záměr; V záměře; L záměru; I záměrem; *pl.:* N záměry; G záměrů; D záměrům; A záměry; V záměry; L záměrech; I záměry, *záměrama

FREQ: 7400 (SYN2005), sg: 70%

Morphemic analysis

záměr *(word)*

inflexion	
base	**ending**
záměr *(morpheme)*	

Synonyms: úmysl

Valency patterns
A ~ *<INF>*
B ~ na *<něco>*
C ~ s *<něčím>*

Collocations and constructions
Verbs: - inchoative: *pojmout, oznámit* - durative: *mít, podpořit$_c$, schválit$_c$, sledovat* - terminative: *provést, uskutečnit, splnit, upustit, zmařit$_c$, překazit$_c$, zkřížit$_c$, zhatit$_c$, zdařit_se, podařit_se, realizovat* - (other): *pochopit, prohlédnout, vysvětlit, projednat*   **Adjectives:** *podnikatelský, původní, investiční, strategický, dlouhodobý, vlastní, jasný, výchovný, umělecký*   **Fixed expressions:** se záměrem *<INF/něčeho> med (den) hensikt <å…> / i den hensikt <å…>*; vyšší záměr *et høyere formål / større_plan / en edlere hensikt*; to je záměr *det_er_meningen*

Translation
no: *hensikt; plan [1]*

Semantics
představa/vůle někoho realizovat nějaký cíl (s nějakým objektem)

Figure 7.50: The entry for *záměr*

Dictionary entry

The entry for *záměr* (figure 7.50) is very simple. The extension of "purpose" is not explicitly mentioned at all. The Norwegian equivalent *plan* is mentioned, however. It indicates the frequent use of the word in the context of business or investment plans.

7.17.4 Czech: *úmysl*

Monolingual description

The *SSJČ* dictionary makes no distinction of senses for the noun *úmysl*. It defines the meaning of the word as some "forethought effort to do something, thoughtful act, intention" (Czech *záměr*). The noun thus corresponds to the basic meaning of the Norwegian noun *hensikt* and refers to an active [Image], i.e. a [Force] of some subject, oriented at a particular [Goal]. The goal can be underspecified or generalized. The conceptual frame of the noun can optionally include some external object in the sense of patient [Pat] of the final [Goal] ("Co za úmysly se mnou máš?"). The element can hardly ever be considered a true instrument [Instr] anymore.

Valency patterns

The noun can take a direct infinitive construction expressing the [Goal] as its complement. A direct noun phrase in genitive is used very rarely for this purpose, but it is possible as well.

In rare cases, the noun can take an optional complement expressing a patient [Pat], using the preposition *s* (with noun phrase in instrumental case). This complement appears mostly in the fixed collocation *mít (/chovat) s něčím / někým (nějaké) úmysly*. The patient [Pat] becomes a kind of instrument [Instr] from the point of view of the [Image], but only in the way as being a necessary patient for the final [Goal].

Distribution

The noun appears 4881 times in SYN2005, thereof 3937 times (80.7%) in singular. An infinitive construction follows in 1714 cases (35.1%), thereof 1697 times (99%) after singular form, but in many cases it cannot be considered a complement of the noun itself. Very often it is the object of the verbo-nominal expression *mít (něco) v úmyslu*.

Polysemy

The noun has only one single meaning.

Collocations and idioms

The most frequent verb collocating with the noun *úmysl* is the verb *mít*. It can take the noun directly as its object (usually with some adjective specifying the kind of the intention), or in the fixed expression *mít (něco) v úmyslu*. Other nouns typically collocating with the noun are e.g. *oznámit, prokázat, pojmout, projevit, chovat, podsouvat, popírat, vyjevit, překazit, tajit, vést*.

The most typical adjective modifiers are *dobrý, zlý, špatný, nekalý, čistý, čestný, vražedný, sebevražedný, zřejmý, ušlechtilý, přátelský, vážný, poctivý,* etc. They also classify someone's good and bad intentions in general. Other adjectives appear in the idiomatic expressions *postranní úmysly* and *zaječí úmysly*.

The noun appears also frequently with the head preposition *s*, constructing a free adjunct (adverbial) expressing purpose. The expression *s úmyslem* usually takes an infinitive construction as its complement, but a subordinate clause connected by *že* (seldom also *aby*) is possible too. The whole phrase is then able to substitute a subordinate clause of purpose (e.g. one connected by *aby*). The expression can also stand without any complement, and then it is equivalent to the adverb *úmyslně*.

The *SČFI* dictionary mentions the following expressions: *chovat nějaký úmysl; mít nekalé úmysly; mít černé úmysly* ("(feel despondent / suicidal); have designs (on/against so.)"); *mít něco v úmyslu; mít pevný úmysl, přijít / přicházet v dobrém (/zlém) úmyslu / s dobrým (/zlým) úmyslem / v dobrém (/zlém); udělat něco v nejlepším úmyslu / s nejlepším úmyslem; překazit něčí úmysly; nekalý úmysl* ("sordid plans; dirty game; dishonest intention(s)"); *postranní úmysly* ("ulterior motive(s)"); *v dobrém / nejlepším úmyslu* ("with good intent; with the best of intentions"); *ve zlém úmyslu; zaječí úmysly* ("think of making one's gateway / oneself scarce"). It also lists the typical support verbs: *pojmout / projevit* (inchoative); *mít úmysl, mít něco v úmyslu* (durative); *vzdát se úmyslu, upustit od úmyslu; provést úmysl* (terminative).

Translation

The Czech-Norwegian dictionary suggests two Norwegian equivalents of the noun *úmysl*: *hensikt* and *intensjon*. It also translates the fixed expression *mít v úmyslu* as *ha til hensikt*.

The noun *hensikt* is the most frequent nominal equivalent of the noun *úmysl* in the Czech-Norwegian parallel corpus, but still it appears in about 20% of all cases only. The noun *intensjon* appears only once (within the 102 examples) and the noun *plan* about 5 times. Most of the examples are occurrences of the fixed expression *mít v úmyslu* with many different equivalents in Norwegian, usually verbs or verbo-nominal constructions. The interesting examples from the corpus are: *mít v úmyslu – planlegge / tenke (seg / på) / mene / ville / skulle / ha planer om / gå med planer om / ha til hensikt / ha i sinne…/ tanken er…; myslíš, že má vážné úmysly? – tror du det er alvor?; ne ve zlém úmyslu – ikke av noen ond vilje / ikke fordi den er ond; ve zlém úmyslu – i ond hensikt; s úmyslem…– for å…/ med henblikk på å…; má vážně v úmyslu…– virkelig hadde til hensikt å…; hnán týmiž úmysly – som akter å gjøre det samme; v dobrém úmyslu – i den beste tro; neměl jsem (to) v úmyslu – det var ikke meningen; Boží úmysl – guds forsyn; bez úmyslu – uten forhåpninger om…; bez postranních úmyslů – uten baktanker; neměl špatné úmysly – ikke mente noe galt; neměli s námi jiné úmysly – de hadde ikke annet ærende med oss; jeho úmysly s…– hans hensikter overfor….*

Dictionary entry

The entry for *úmysl* (figure 7.51) is very similar to the entry of *záměr*. The nouns are almost synonymous – the meaning of *úmysl* is often more general and abstract, related to someone's private intentions (often hidden), while the meaning of *záměr* refers rather to particular temporary intentions and goals (usually public), especially business plans. The difference consists mainly in the collocations and fixed expressions.

úmysl

úmysl: *sg.:* N úmysl; G úmyslu; D úmyslu; A úmysl; V úmysle; L úmyslu; I úmyslem; *pl.:* N úmysly; G úmyslů; D úmyslům; A úmysly; V úmysly; L úmyslech; I úmysly, *úmyslama

FREQ: 4881 (SYN2005), sg: 80.7%

Morphemic analysis	

úmysl *(word)*	
inflexion	
base	**ending**
úmysl *(morpheme)*	

Synonyms: záměr

Valency patterns
A ~ *<INF>*
B ~ s *<něčím>*

Collocations and constructions

Verbs: - inchoative: *pojmout, oznámit, projevit, vyjevit* - durative: *mít, chovat, vést, tajit, prokázat* - terminative: *provést, upustit, překazit$_c$, vzdát_se* - (other): *popírat, podsouvat*

Adjectives: *dobrý, zlý, špatný, nekalý, čistý, čestný, vražedný, sebevražedný, zřejmý, ušlechtilý, vážný, poctivý*

Fixed expressions: s úmyslem *<INF/něčeho> med (den) hensikt <å…> / i den hensikt <å…>*; postranní úmysly *baktanker*; zaječí úmysly ; mít v úmyslu *<INF> ha til hensikt <å…> / ha planer om <å…/noe> / gå med planer om <å…/noe>*; ve zlém úmyslu *i ond hensikt*; mít dobré úmysly *ha gode hensikter*

Translation
no: *hensikt*

Semantics
vědomá představa/vůle někoho realizovat nějaký cíl (s nějakým objektem)

Figure 7.51: The entry for *úmysl*

7.18   Formål – účel (purpose/object)

7.18.1   The conceptual frame

The nouns *formål* and *účel* are part of the same group of nouns analyzed in the last chapter (*hensikt*; *záměr* and *úmysl*).[87]

The noun *formål* corresponds to the second meaning of *hensikt*. It refers therefore the same conceptual structure: abstracting away from the [Actor] (it is usually only implicit) and attributing the idea [Image] of some [Goal] directly to some object, the instrument [Instr] or [Action].
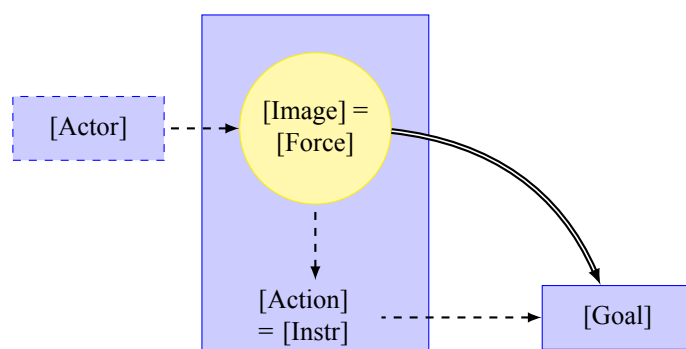
Figure 7.52: The conceptual frame of *formål*

7.18.2   Norwegian: *formål*

Monolingual description

Bokmålsordboka gives a simple definition of the noun by the synonyms *sak; endelig mål, sikte; tanke, hensikt, plan* (i.e. "case / issue / matter; final goal, aim; thought, intention, plan").

Neither *Norsk ordbok* nor *Norsk Riksmålsordbok* go any further than defining the meaning as some goal or aim intended for some activity.

Valency patterns

The noun refers both to the final [Goal] and the [Image] thereof, and therefore the [Goal] is usually expressed by a predicative or in the expression *ha noe som (/til) formål / ha som (/til) formål å…*. But the preposition *om* can introduce the [Goal] as well.

The preposition *med* can introduce a complement expressing the object [Instr] or [Activity].

Distribution

The noun *formål* appears 1503 times in LKB, thereof 1189 times (79.1%) in singular form.

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[87]Interestingly, the nouns *formål* and *záměr* have a parallel morphological constitution too, consisting of an original prefix and a noun connected to the verbs meaning "heading to" metaphorically transfered to the meaning of "aiming at".

The preposition *om* follows in 10 cases only (0.7%), always after singular form. In 6 cases (60%) it is followed by an infinitive construction.

The preposition *med* follows in 253 cases (16.8%), thereof 247 times (97.6%) after singular form. From the five cases with plural form, 4 are occurrences of the expression *et av formålene* ("one of the goals"), giving the word the singular meaning anyway. The noun is in most cases (226) in definite form. An infinitive construction follows in only 12 cases (4.7%).

Polysemy

The noun seems to have a single meaning with limited extensions. However, it does not distinguish between the meaning of the intended purpose of some instrument and the meaning of purpose intended by some actor (synonymous to the primary meaning of hensikt). This extension is an internal part of the basic meaning.

Collocations and idioms

The noun does not have any special frequent verbal collocates, except of the mentioned constructions.

The most frequent adjective modifiers are e.g. *god, ulik, veldedig, mange, viktig, praktisk, forskjellig, bestemt, økonomisk,* etc. The noun is also often used in generalizations too.

Bokmålsordboka suggests some common collocations such as *gi til et godt formål; ikke tjene noe formål; med formål ekteskap; svare til formålet.*

Translation

The Norwegian dictionary names two Czech equivalents of the Norwegian noun *formål*: *záměr* and *účel*.

In the Norwegian-Czech dictionary, the noun *účel* appears in about a quarter of all cases (only 45) as the equivalent of *formål*, while the frequency of *záměr* is only half as high. The noun *cíl* appears also about as frequently as *záměr* in the limited corpus, and in a few cases the noun *poslání* is used as well (in *The Lord of the Rings*). Some interesting collocations from the corpus are e.g. *til akkurat det formålet – pro tenhle účel; skapt for andre formål – vystavěná pro jiné účely; til et fromt formål – na zbožný úmysl; formålsårsaken – příčina účelová; et høyere formål – vyšší záměr; hva er formålet med…– jakou má cenu…; brukt til slike formål – použito s podobným záměrem; formålet med dem var…– jejich účelem bylo…; formålsløst – bez cíle; etter sine egne formål – podle svých potřeb.*

Dictionary entry

The noun *formål* (figure 7.53) is defined as a product of prefixation, with the prefix *for-* and the base *mål*. The noun *mål* thus determines the inflection.

The entry has only one (monolingual) sense, but for the purpose of translation, the two translational sub-senses are distinguished in order to signalize a different translation for the extension. The first one links to the neutral equivalents *účel* and *cíl*, unacquainted with any actor (originator of the purpose). The second one, where the originator's intention is still present, to the equivalent *záměr*.

for|mål

formål: *sg. indef.* formål ; *sg. def.* formålet ; *pl. indef.* formål ; *pl. def.* formålene, ^(+R)formåla

FREQ: 1503 (LKB), sg: 79.1%

Morphemic analysis

formål *(word)*

prefixation	
prefix	**base**
	Import: mål_N
	mål *(word)*
	inflexion
Import: _morph_pref_for	**base**	**ending**
for *(morpheme)*	mål *(morpheme)*	

Valency patterns

A ~ med *<noe/å…>*

B ~ om *<noe/å…>*

Collocations and constructions

Adjectives: *god, ulik, veldedig, viktig, praktisk, forskjellig, bestemt, økonomisk*

Fixed expressions: ha som/til formål *<å…/noe>* *mít za účel <INF/něco>*; tjene *<noe>* formål *sloužit <nějakému> účelu*; til *<noe>* formål *pro <nějaké> účely / <nějaký> účel / k <nějakému> účelu / <nějakým> účelům*; med formål ekteskap *za účelem sňatku*; et høyere formål *vyšší záměr*

Semantics

et mål tenkt eller planlagt av noen (eller hans/hennes forestilling om det) som et instrument eller en gjerning skal tjene til

1. et mål eller mening som et instrument eller en gjerning skal tjene til

   Translation

   cs: *účel; cíl*

2. et mål tenkt eller planlagt (av noen) som et instrument eller en gjerning skal tjene til

   Translation

   cs: *záměr*

Figure 7.53: The entry for *formål*

7.18.3 Czech: *účel*

Monolingual description

The *SSJČ* dictionary defines two senses of the noun *účel*: 1. intention, meaning, reason, goal of some activity; the meaning of existence of st.; 2. (usually in plural) use, usage of st.

The first sense includes the fixed expression *za účelem* used as an equivalent of the preposition *pro* or the conjunction *aby*, and often overused in many contexts. The second sense seems to be bound to plural form, where the noun is used to generalize the kind of usage (military, technical, medical,…) for which some object (tool, material, building, area, etc.) is intended.

Valency patterns

The noun can take complements in the form of direct infinitive construction expressing the [Goal] and/or a direct noun phrase in genitive expressing the [Instr] (usually when standalone) or the [Goal] (with the fixed expression *za účelem* or (sometimes) other prepositional phrases).

Distribution

The noun *účel* appears 9735 times in SYN2005, thereof 6396 times (65.7%) in singular form.

In only 11 cases the (immediately) following infinitive can be considered a direct complement of the noun, as well as in additional 35 cases as part of the fixed expression *za účelem*. The infinitive follows also after the fixed expression *mít za účel* (24 occurrences with infinitive on the first position), but in that case it should be considered a complement (object) of the verb (or the construction as a whole), since deverbal nouns can also appear in this role.

A noun phrase in genitive follows in 3067 cases (31.5%), thereof 2259 times (73.7%) after singular form. Not all the occurrences are complements of the noun.

Polysemy

The noun can hardly be considered polysemous, since even the generalization in plural is rather a natural extension of the meaning.

Collocations and idioms

The most frequent verbs collocating with the noun *účel* are *mít, sloužit, použít / používat, splnit, využívat / využít*. The noun either appears as a direct object of the verbs: *mít účel, sloužit účelu, splnit účel*, or it is used in prepositional phrases: *mít něco pro účel…, mít za účel…, použít / využít něco pro účel(y)…, použít / využít něco k …účelu / účelům*. The noun also appears in the proverb *účel světí prostředky*.

The typical adjective modifiers are e.g. *jiný, dobročinný, charitativní, prospěšný, komerční, léčebný, reklamní, bohulibý, humanitární, původní, praktický, vojenský, stavební, rekreační, stejný, soukromý, daný, hlavní, vědecký,* etc. Most of the nouns classify the general type of use for something and will therefore appear with the noun in plural.

The noun appears very frequently with the head preposition *za*, either in the fixed expression *za účelem* (with infinitive or noun phrase in genitive, both expressing the intended purpose [Goal]) or in the fixed expression *mít za účel* (with infinitive or noun phrase in accusative, both expressing the [Goal] and being objects of the verb or the whole verbo-nominal expression).

The noun also appears often in prepositional phrases with *k* or *pro*, as part of the free adjunct (adverbial) of purpose.

Translation

The Czech-Norwegian dictionary suggests two Norwegian equivalents of the noun *účel*: *hensikt* and *formål*. It also translates the proverb *účel světí prostředky* by its Norwegian equivalent *hensikten helliger middelet*.

The nouns *hensikt* and *formål* appear each in about 25% of the cases as equivalents of the noun *účel* in the Czech-Norwegian parallel corpus. Other interesting collocations from the corpus are e.g. *k tomu účelu – til slik bruk; (používat něco) pro účely léčebné – (bruke noe) som et ledd i en terapi; (použití peněz) pro účely náboženské – (bruk av penger) i religionens tjeneste; pro ten účel – for den saks skyld; příčina účelová – formålsårsaken (Aristoteles); pro vojenské účely – til militære formål; jejich účel – hva de ble brukt til; hlavní účel – hovedformål.*

Dictionary entry

účel
účel: *sg.:* N účel; G účelu; D účelu; A účel; V účele; L účelu; I účelem; *pl.:* N účely; G účelů; D účelům; A účely; V účely; L účelech; I účely, *účelama
FREQ: 9735 (SYN2005), sg: 65.7%

Morphemic analysis
účel *(word)*

inflexion	
base	**ending**
účel *(morpheme)*	

Valency patterns
A ~ *<INF>*
B ~ *<něčeho>*

Collocations and constructions
Verbs: - durative: *mít, sloužit* - terminative: *splnit*
Adjectives: *dobročinný, charitativní, prospěšný, komerční, léčebný, reklamní, bohulibý, humanitární, původní, praktický, vojenský, rekreační, soukromý, daný, vědecký*
Fixed expressions: za účelem *<INF/něčeho> med (den) hensikt <å…> / i den hensikt <å…>*; mít za účel *<INF/něco> ha som/til formål <å…/noe>*; pro *<nějaké>* účely / *<nějaký>* účel *til <noe> formål*; pro ten účel *for_den_saks_skyld / for anledningen*; k *<nějakému>* účelu / *<nějakým>* účelům *til <noe> formål*; sloužit *<nějakému>* účelu *tjene <noe> formål*; za účelem sňatku *med formål ekteskap*; účel světí prostředky *hensikten helliger middelet / målet helliger middelet*

Translation
no: *formål; hensikt [2]*

Semantics
cíl nějaké věci či činu (zamýšlený někým)

Figure 7.54: The entry for *účel*

The entry for *účel* (figure 7.54) is very simple. There are no distinctions of senses, the equivalents are the Norwegian nouns *formål* and *hensikt* (in its second, extended meaning). On the other hand, there are many fixed expressions listed with their equivalents.

The interface does not present the data about the distribution of plural and singular form in the expressions *pro nějaké účely / nějaký účel* and *k nějakému účelu / nějakým účelům*, but they are actually encoded in the structure: the preposition *pro* is followed by plural forms in about 76.1% of cases, but singular appears in about 23.9% only; the preposition *k* is less ambivalent – singular follows in 57.7% and plural in 42.9% of cases.

Most of the adjectives collocating with the noun should probably also present their strong preference of use with the noun in plural form. Even though the meaning does not differ very much, the use of the noun in plural form with different head prepositions is almost a candidate for special fixed construction(s).

7.19 Plan – plán (plan)

7.19.1 The conceptual frame

The conceptual frame of *plan* is similar to the concepts of *tanke* and *idé*. The *plan* is usually a complete and detailed [Image] of the intended [Goal]. It can become almost completely independent of its original [Actor], which can be underspecified.
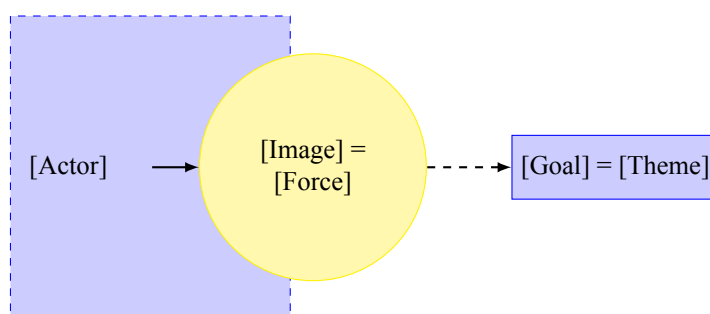
Figure 7.55: The conceptual frame of *plan*

7.19.2 Norwegian: *plan*

Monolingual description

The Norwegian noun *plan* appears as two homonyms with a different gender. This analysis will try to describe only the masculine noun. The neuter homonym refers to the meaning of English nouns *plane, level*.

Bokmålsordboka defines two senses of the masculine noun *plan*: 1. map; 2. draft, proposal.

Norsk ordbok adds a third sense: an ordered, systematic prescription or directive for some goal (educational plan). This can be hardly considered anything else but a more formalized or systematized version of the second meaning defined by *Bokmålsordboka*, however. The distinction would be extremely difficult.

Norsk Riksmålsordbok adds another third sense: a brochure or poster with timetables (schedule) for public transport. The noun refers in this case (in a similar way as the *map*) to the materialized [Image]. Unlike the *map*, however, this image really reflects some *proposal* for future. It does not only describe some given situation.

Valency patterns

The noun refers both to the [Image] and to the element [Goal]. Therefore the [Goal] can be expressed by a predicative or apposition.

The preposition *om* can introduce the [Goal] in the meaning of intentions to realize some idea. The frequent use of plural form of the noun *plan* with this prepositions suggests the meaning of general intentions (the will itself), not necessarily a very detailed proposal of the particular solution.

The preposition *for* can introduce the [Goal] in the meaning of more specific (detailed) proposal for change, improvement or solution within some field or for some problem, some previously intended, planned or already ongoing activity or general (long-termed) goal. The choice of the preposition is not bound to absolute rules, however, it is often a question of preferences.

The preposition *med* appears rarely in order to indicate the [Goal] (usually already known from the context) indirectly by introducing its patient [Pat]. In exceptional cases, it can also introduce the [Goal] directly. Its use is analogical to the use with the nouns *hensikt* or *formål* and the Czech nouns *záměr* and *úmysl*.

Distribution

In LKB, there are 3547 occurrences of the noun *plan* tagged as masculine, and 1120 additional with a different tag. However imperfect the disambiguation might be, only those tagged as masculine have been considered for the analysis. There are 1710 occurrences (48.2%) in singular form.

The preposition *om* follows in 700 cases (19.7%), thereof only 81 times (11.6%) after singular form. An infinitive construction follows in 382 cases (54.6%), thereof 39 times (10.2%) after singular form. A subordinate clause introduced by *at* follows in 5 cases (0.7%), thereof only once after singular form. In 7 cases (1%), a subordinate sentence introduced by a question word follows. The preposition appears almost four times as often with the construction *ha planer* than the preposition *for*.

The preposition *for* follows in 455 cases (12.8%), often expressing the free adjuncts of beneficiary or time, but also the [Goal] of the *plan*. In 192 cases (42.2%) it follows a singular form of the noun. An infinitive construction follows in 39 cases (8.5%). In 49 cases (10.8%), a subordinate sentence introduced by a question word follows. The preposition occurs more than twice as often with the construction *legge (fram/frem) planer* than the preposition *om*.

The preposition *til* appears in 29 cases, mostly introducing the [Actor] as the general analytical replacement of genitive phrase. In one case, the phrase refers to the costs of some investment plan, and in about three cases it refers to the [Goal]. Based on the exceptional use, it can only be considered an anomaly.

The preposition *over* can be used to connect the [Theme] of the [Image] in the sense of *map* (i.e. the city, town or area), according to *Norsk ordbok*. No examples were found in the LKB corpus.

The preposition *med* appears in 55 cases (1.6%). In two cases it is followed by an infinitive construction, in one case by a subordinate clause introduced by *at*.

Polysemy

The noun *plan* (as the homonym limited by the masculine gender only) has two basic meanings: an intention or proposal [Image] of some [Goal] and a publication or schematics describing the topography of some existing place (i.e. the *map*).

Based on the reflection in the use of the prepositions *om* and *for*, the first (as described here) meaning can also be divided into two sub-senses, but with some expected overlap. One sub-sense is the initial, basic idea or intention to realize some [Goal] (a plan *that* something should be done, mostly synonymous to the nouns *idé, tanke, hensikt*), the other one is the sense of proposal of particular change or specific solution for some necessary, inevitable or already suggested or ongoing process or activity (a plan *how* to do something (better), mostly synonymous to the nouns *forslag, fremlegg*, English *proposal*).

The metonymical extension of some (paper) publication (e.g. timetable, schedule) or schematics (e.g. drawings) showing someone's *plan* for some activities or construction is very close to the meaning of *map*, but still different in the way it does not give just a description of some given reality, but description of some intention for the future activities. It cannot be directly lumped together with the sense of *map*, but it cannot be always declared a clearly independent sub-sense of the first sense either: often, it is difficult to recognize whether the proposal has a form of a pure idea or a form of some materialized formal (paper) document.

Collocations and idioms

The most frequent verbs collocating with the noun *plan* are the verbs *å ha, å legge (fram/frem), å utarbeide, å realisere*.

The most frequent adjective modfiers are e.g. *konkret, stor, strategisk, individuell, ny, opprinnelig, langsiktig, ambisiøs,* etc.

The noun occurs frequently with the head preposition *etter*, constructing an independent expression with the function of an adverbial of circumstances (English "according to (the) plan").

The dictionaries suggest further collocations and fixed expressions: *gjennomføre en plan; ha planer for fremtiden; det som står i planen; arbeide etter en plan; det er ikke plan i noe av det han foretar seg; omgås med, ha planer om noe; høytflyvende planer; følge planen; klekke ut en plan.*

Translation

The Norwegian-Czech dictionary mentions only the Czech noun *plán* as an equivalent of the Norwegian masculine noun *plan*.

The Czech noun *plán* appears in two thirds of all occurrences of the Norwegian noun *plan* as its equivalent in the Norwegian-Czech parallel corpus. The nouns *záměr* and *úmysl* appear in a few percent of the cases as well. A special translation by the archaic noun *úradek* is used in a few cases, especially in the context *den guddommelige plan – boží úradek.* Other interesting collocations form the corpus are: *har ingen planer om…– nemá v úmyslu…/ nehodlá; være klar over hvilke planer …har – být (někomu) jasné, co má …za lubem; planer om…– plány na…; det var planen – měl jsem to v plánu; planen kan settes i verk / i livet – můžeme plán uskutečnit / plán může vyjít; gå med planer om…– mít v úmyslu…; legge frem en plan – přednášet (svůj) plán / podat návrh; han spurte hvilke planer hun hadde for kvelden – otázal se jí, co dělá dnes*

večer; alt gikk nøyaktig etter planen – všechno šlo přesně podle plánu; det er i planen – je to tak plánováno; at planen hans ville lykkes – že jeho plán vyjde / zdaří se; en plan begynte så smått å ta form i det lille hodet hans – v hlavičce se mu začínal rodit jistý plán; å lage (noen annen) plan – vypracovat (jiný) plán / naplánovat; å gjennomføre planen – provést (svůj) plán; holde (fast) ved planen sin – držet se svého plánu; etter planen – podle plánu; det var utvilsomt en del av planen deres – to jistě patřilo k jejich plánu; legge planer – dělat plány / plánovat; hadde ikke mine planer slått feil – kdyby bylo po mém; onde planer – zlé /zločinné záměry; han hadde ingen plan som gjaldt dem – neměl s nimi žádné plány.

Dictionary entry

The entry for *plan* (figure 7.56) defines two senses: the sense of intention and the sense of a map. The first one introduces all the valency patterns and collocations, as well as the general Czech translation. The two sub-senses specify their preferred valency patterns, closer synonyms and the first of them two more possible equivalents *záměr* and *úmysl*. The second sense presents its own valency pattern and links to the Czech equivalent *mapa*.

7.19.3 Czech: *plán*

Monolingual description

The Czech noun *plán* unites the meanings of both Norwegian homonyms. In the *SSJČ* dictionary, six senses are distinguished as follows: 1. intention, aim, project (Czech: *úmysl, záměr, projekt*); 2. schedule; 3. topographic scheme of some area or building; 4. (miner's slang) department in a mine; 5. (visual arts) visual layers (of space) in a painting; 6. (linguistics) level in (or one aspect of) language description.

The meanings 4–6 are restricted to particular domains and correspond generally to the meaning of "level" or "layer", expressed by the neutral Norwegian noun *plan*. The senses 1–3 correspond very well to the meaning of the masculine Norwegian noun *plan*. The second meaning is significantly inflated by the frequent overuse in the "centrally planned economy" during the socialistic regime.

Valency patterns

The noun can take a direct infinitive construction expressing the [Goal] or a direct noun phrase in genitive case expressing the [Goal] (or [Theme]).

The preposition *na* (with noun phrase in accusative case) can introduce a complement expressing the [Goal].

The preposition *k* is sometimes used to express the [Goal], but it can be considered the free adjunct of aim as well.

The preposition *o* is rarely used to express the [Goal]. It can be considered the free adjunct of theme as well.

The preposition *s* is sometimes used to express an additional patient [Pat], identifying indirectly the [Goal] (usually already known from context). The use corresponds to the use of this complement with the nouns *záměr* or *úmysl*.

plan

plan: *sg. indef.* plan ; *sg. def.* planen ; *pl. indef.* planer ; *pl. def.* planene

FREQ: 3547 (LKB), sg: 48.2%

Morphemic analysis

plan *(word)*

	inflexion	
	base	**ending**
plan *(morpheme)*		

Semantics

1. en forestilling til noen om et mål eller en handling, løsning av et problem, osv.

   Valency patterns

   A ~ om *<noe/å…/at…/hv…>*

   B ~ for *<noe/å…/hv…>*

   C ~ med *<noe/å…/at…>*

   Collocations and constructions

   Verbs: - durative: *ha, følge* - terminative: *utarbeide, realisere, gjennomføre, lykkes*
   Adjectives: *konkret, stor, strategisk, individuell, opprinnelig, langsiktig, ambisiøs*
   Fixed expressions: legge fram (en) plan *předložit plán / podat_návrh*; legge planer *spřádat plány / plánovat*; ha planer om *<å…/noe> mít v plánu <INF/něco> / mít v úmyslu <INF>*; gå med planer om *<å…/noe> mít v plánu <INF/něco> / mít v úmyslu <INF>*; gå etter planen *jít podle plánu*

   Translation

   cs: *plán [1]*

   a. en forestilling til noen om at et mål skulle realiseres

      Preferred constructions: A
      Synonyms: idé [4], tanke [1], hensikt [1]

      Translation

      cs: *úmysl; záměr*

   b. et forslag av noen om hvordan å realisere et mål / løse et problem

      Preferred constructions: B
      Synonyms: forslag, framlegg

2. et schematisk bilde med oversikt over geografisk topologi av en by, land, byggning, osv.

   Valency patterns

   A ~ over *<noen/noe>*

   Translation

   cs: *mapa*

Figure 7.56: The entry for *plan*

Distribution

The noun *plán* occurs 18588 times in SYN2005, thereof 12250 times in singular form. In 677 cases, it is followed by an infinitive, thereof 570 times after singular form. Not always the infinitive is a complement of the noun. In many cases, the collocation is part of the fixed expression *mít v plánu…*. A noun phrase in genitive case follows in 4023 cases, expressing either the [Goal] or the [Actor].

The preposition *na* follows in 1218 cases, thereof 621 times after singular form.

The preposition *k* follows in 59 cases, and in almost 30 cases it can be considered a complement of the noun.

The preposition *o* follows in only about 21 cases as a complement of the noun.

The preposition *s* follows in 123 cases, but only in about 50 cases it can be considered a complement of the noun expressing the patient [Pat] of the [Goal].

Polysemy

The noun has again two basic senses: some intention or proposal and a topographic scheme (in a rather technical sense). The sense of intention can be splitted into two sub-senses again: the general (mostly personal) intention and a more formal schedule or proposal. There is no dictinction in the valency pattern used, however.

Other additional senses are domain-specific and correspond to the general meaning of "level, layer", usually in an abstract meaning.

Collocations and idioms

The most frequent verbs collocating with the noun *plán* are e.g. *mít, vypracovat, počítat, změnit,* etc. The verb *mít* takes the noun either as direct object *mít plán* or it is often part of the fixed expression *mít něco v plánu*. The verb *počítat* usually takes the noun as its subject. Other typical verbs are e.g. *spřádat, zkřížit, překazit, sestavit / sestavovat, schválit, ztroskotat, vyjít, spočívat, selhat,* etc. Especially the fixed expression *spřádat plány* should be considered an idiomatic expression.

The most frequent adjective modifiers are e.g. *územní, nový, všechen, další, původní, časový, strategický,* etc. The frequent use of the collocation *územní plán* can be consiedered a fixed expression with an almost idiomatic meaning on the border of the meanings of "proposal" and "topographic scheme" – it is both things at the same time.

The noun occurs frequently with the head preposition *podle*. The expression *podle plánu* corresponds to the Norwegian expression *etter planen* (English "according to (the) plan").

The *SČFI* dictionary mentions the common collocations *pekelný / ďábelský plán* ("wicked plan, diabolical scheme") and *černé / temné plány* ("black design"). It also lists the common support verbs used with the noun: *pojmout / udělat si, dostat* (inchoative); *mít, plnit* (durative); *splnit / dodržet, překročit* (terminative); in the first sense and: *dostat se do plánu* (inchoative); *být v plánu* (durative); *sestavit / vytvořit / udělat, dát něco do plánu* (causative-inchoative); *mít něco v plánu* (causative-durative); *realizovat / uskutečnit / provést, zmařit / zkřížit* (causative-terminative); *počítat s, zahrnovat, pamatovat na* (subject).

Translation

The Czech-Norwegian dictionary presents translations in two senses of the noun: 1. *plan* and 2. *kart* (sense defined by the context *plán města*, i.e. a *map*). The second

sense is accompanied by the example *plán Osla* translated as *et kart over Oslo*.

In the Czech-Norwegian parallel corpus, the noun *plan* appears as equivalent of the Czech noun *plán* in more than 80% of all cases. The noun *kart* appears only once (two additional occurrences appear as equivalents of the diminutive form *plánek*). The noun *prosjekt* appears a few times. Other useful examples of collocation in the corpus are: *plán stvoření – skaperverket; spřádá své temné plány – legger sine mørke planer; plán Hamburku – et kart over Hamburg; plány na mou vraždu – planer om å drepe meg; byla zasvěcená do plánů – hun var fortrolig med planene om…; uskutečnit plán – sette i verk / ut i livet; spředla ďábelský plán – [hun] unnfanget en djevelsk plan; technický plán – teknisk prosjekt; vymyslet plán – pønske / tenke ut en plan; plán se naplňoval zdárně – det gikk helt etter skjemaet; vymyslet si nějaký plán – få lagt noen planer; držet se plánu – holde seg til / ved planen (sin); měl jsem v plánu – jeg hadde tenkt…/ hensikten var…; rozbít všechny plány – ødelegge alle planer; neměl s nimi žádné plány – han hadde ingen plan som gjaldt dem; vyložil jim plán – fortalte dem om en plan; dělat plány – legge planer; jejich plány nevyšly – planene deres gikk skeis.*

Dictionary entry

The entry for the Czech noun *plán* (figure 7.57) is divided into two senses and a third abstract group of further senses, which are not closer specified (it can be expected there there would be much more senses and domain specific terms than the ones presented by SSJČ, anyway). The abstract only refers to the (undefined) second Norwegian homonym *plan*.

The first sense refers to the first sense of the Norwegian masculine noun *plan*. It presents all the appropriate valency patterns, collocations and fixed expressions. No fines sub-senses are distinguished here. The exceptionally appearing prepositions are not mentioned either.

The second sense ("map") refers both to the Norwegian noun *kart* and to the second sense of *plan*.

7.20 Mål – cíl (goal/aim)

7.20.1 The conceptual frame

The noun *mål* has many different meanings, but the one which is in the center of interest here has a conceptual structure similar to the noun *formål*. The focus of the noun is here even more pointed to the [Goal] itself, abstracting away from the original idea and often the [Actor] as well. Even the element [Instr] (or [Action]) is optional. The [Goal] can be attributed (i.e. it can be possessed by) equally both to the original [Actor] and the [Instr].

7.20.2 Norwegian: *mål*

Monolingual description

The Norwegian noun *mål* is very rich on different meanings. There are two homonyms of the same (neutral) gender: one expressing voice, speech, language (variety) and one expressing measure, goal / aim, target, meal, etc. The concern of this analysis is only

plán

plán: *sg.:* N plán; G plánu; D plánu; A plán; V pláne; L plánu; I plánem; *pl.:* N plány; G plánů; D plánům; A plány; V plány; L plánech; I plány, *plánama

FREQ: 18588 (SYN2005), sg: 65.9%

Morphemic analysis

plán *(word)*	
inflexion	
base	**ending**
plán *(morpheme)*	

Semantics

1. záměr/představa někoho o realizaci nějakého cíle či řešení problému

   Synonyms: záměr

   Valency patterns

   A ~ *<INF>*
   B ~ *<něčeho>*
   C ~ na *<něco>*
   D ~ s *<něčím>*

   Collocations and constructions

   Verbs: - inchoative: *pojmout, sestavit* - durative: *mít, schválit$_c$* - terminative: *provést, uskutečnit, splnit, zmařit$_c$, překazit$_c$, zkřížit$_c$, zhatit$_c$, ztroskotat, selhat, vyjít, realizovat* - (subj.): *ztroskotat, selhat, vyjít, spočívat* - (other): *změnit*
   Adjectives: *původní, strategický, časový, ďábelský, temný*
   Fixed expressions: mít v plánu *<INF/něco> ha planer om <å…/noe> / gå med planer om <å…/noe> / ha til hensikt <å…>*; spřádat plány *legge planer*; jít podle plánu *gå etter planen*; předložit plán *legge fram (en) plan*; územní plán

   Translation

   no: *plan [1]*

2. schéma zobrazující geografickou topologii nějakého města, oblasti či budovy

   Translation

   no: *kart; plan [2]*

3. rovina / úroveň / vrstva

   Translation

   no: *plan_2*

Figure 7.57: The entry for *plán*
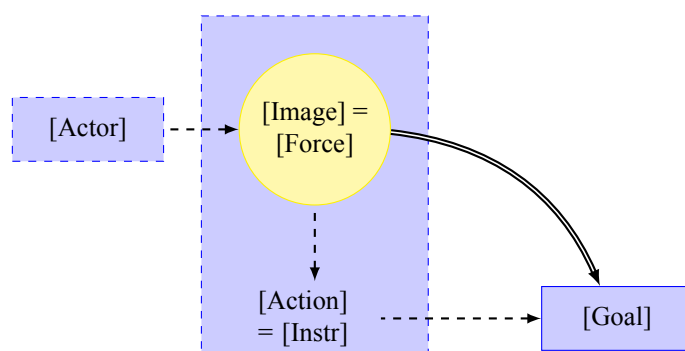
Figure 7.58: The conceptual frame of *mål*

the latter homonym.[88]

Bokmålsordboka lists 12 different senses for the (latter) noun *mål*: 1. dimension, size or measure (exact, measurable); 2. amount / quantity (generally); 3. a measure unit of 1/10 hectare, 10 ares; 4. gauge, gage; 5. (matematics) factor (in division); 6. (upper) limit; 7. target, goal, aim; 8. line as a goal, finish (usually in sports); 9. destination, goal, aim (Norwegian *formål, plan, mening*); 10. meal; 11. milking session; 12. (in compounds) time, point in time.

Norsk ordbok gives only 8 senses, excluding number 12, lumping together senses number 7–9 and senses number 5 and 6 with the general sense number 1. On the other hand, it separates the meaning of a general unit of some measure (scale or standards) from the general meaning of a measurable dimension. Descriptions in *Norsk Riksmål-sordbok* are similar to *Norsk ordbok*.

Many of the senses defined by *Bokmålsordboka* are limited to special domains (e.g. number 3, 5, 8 and partly 7) or to specific expressions or compounds (6 or 12).

Valency patterns

The noun refers usually directly to the [Goal], so that the expressions of the goal are usually part of the predicative or apposition.

The preposition *om* can be used to specify more closely the particular [Goal] when the noun referes to the [Image].

The preposition *for* (as the general way of expressing a beneficiary) can be used to express either the [Actor], who sets the goal to himself or herself, or the instrument [Instr] (which becomes the actor by way of metonymy) whose goal is set by the real actor(s) (the [Instr] can be a human actor as well, if others set the goal for him or her). It can also express the patient [Pat] of some (unit of) measure.

The preposition *med* can be used to connect the instrument [Instr].

The preposition *på* can be used to connect the object [Pat] or the quantity [Quant] in the sense of "measure" or "limit". The measure (as maximum or minimum) can be the [Goal] of someone as well (e.g. "å virkeliggjøre et mål på 14 TWh økt produksjon" or "problemer med å nå målet på 7.000 tonn reprosessert brensel innen april 2004").

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[88]Not all the dictionaries differentiate between these two homonyms. They are actually both of the same Old-Norse origin.

Distribution

The noun *mål* occurs 5632 times in LKB, thereof 4395 times (78%) in singular form. The distinction of the two homonyms or of the single senses is hardly possible in this statistics. In 381 cases (6.8%), an infinitive construction follows immediately after the noun. In most cases it is part of the expression *ha som mål å...* (or *sette som mål å...*).

The preposition *om* follows in 217 cases (3.9%), thereof 194 times (89.4%) after singular form. In 70 cases (32.3%) it is followed by an infinitive construction, in 21 cases (9.7%) by a subordinate clause connected by *at*.

The preposition *for* follows in 465 cases (8.3%), thereof 361 (77.6%) after singular form. Not all of them can be attributed to the noun. Occurrences of a following infinitive particle or of the form *at* seem to be just components of the composed conjunctions *for å* and *for at* introducing purpose.

The preposition *med* follows in 216 cases (3.8%), thereof 193 (89.4%) after singular form. In 7 cases (3.2%) it is followed by an infinitive construction.

The preposition *på* follows in 142 cases (2.5%), thereof 112 (78.9%) after singular form. In 14 cases (9.9%), a question word follows after the preposition and in 2 cases (1.4%) a subordinate clause connected by *at*.

Polysemy

The noun *mål* has, according to *Bokmålsordboka*, at least 4 core meanings:[89] the meanings related to 1. measure, 2. goal / aim, 3. meal and 4. milking. The first sense has multiple sub-senses based on metonymical and metaphorical extensions: a) (absolute) measurable size / dimension, b) (relative) amount / quantity, c) square unit (topography / agronomy), d) gauge, gage, e) (mathematical) factor, f) limit (maximal / minimal measure for something), g) time (point or limit). The second sense can have following sub-senses: a) target, goal, b) finish (in sports), c) destination, goal / aim. The sub-sense 1f is an extension of sense 1a, and it is already on the border to sense number 2, as shown above. In the same manner, the senses 2a and (especially) 2b can be considered border cases to sense number 1, since their meaning is very close to the meaning of 1f. The distinction of sub-senses 2a and 2b can be sometimes difficult, however. On the other hand, the sub-sense 2c could also be split into several (sub-)sub-senses, at least the objective destination of some journey and the subjective goal or aim of some action [Action], subject or object [Instr].

The conceptual frame suggested in this chapter concerns mainly the sense 2c, but it can be applied more or less to the whole sense number 2, since 2a and 2b are concrete applications of the general sense 2c and could be considered sub-senses of it (or 2c could be considered the general definition for 2), and possibly also 1f. In those sub-senses, the [Goal] is in the focus and the other elements remain underspecified, possibly except of the [Actor], whose trial to achieve the [Goal] is discussed. Actually, the goal itself (its essence) is underspecified as well and only implicitly given from the context (e.g. in sports, where the [Goal] is an inherent part of the rules, i.e. the conceptual frame of the particular game). The noun then just refers to it.

Collocations and idioms

There is a variety of collocations and fixed expressions for the different senses of the noun. In the sense number 2 (as defined in the previous section) the noun is a frequent

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[89]If the meanings of speech and language are separated as different homonyms.

object of the verb *å nå*, while in the sense number 1 it frequently constructs idiomatic expressions *holde mål* and *ta mål av seg* (this meaning is actually on the border to sense number 2). Collocations with the verbs *å score* are very typical for the domain of sports. Other typical verbal fixed expressions are *ha (noe) som mål* and *sette seg (noe) som mål*.

In the sense 2c, adjectives like *langsiktig, viktig, overordnet, felles, klar, politisk, konkret, endelig, ambisiøs,* etc. are frequent modifiers.

A frequent non-verbal fixed expressions is *et mål i seg selv*.

The prepositional collocation *(være / komme / ...) i mål* is typical for sports (sense 2b or 2a).

The dictionaries present further typical collocations and idiomatic expressions for the single senses:

- (1a) compounds *flatemål, lengdemål, minstemål, rommål, tverrmål, øyemål; innvendige / utvendige mål; oppgi målene i meter; ta mål av noen (til klær); sy etter mål; ta mål av seg (til noe stort); holde (ikke) mål (med noe(n))*

- (1b) *gi godt mål; et toppet / breddfullt mål; i fullt / rikelig mål*

- (1c) *tomta er på 0,8 mål; 1 mål jord*

- (1d) *bruke sju mål kaffe til en liter vann; litermål; metermål; målet er fullt* (the last one bordering with its metaphorical meaning to 1f)

- (1e) *største felles mål*

- (1f) *flommål; magemål*

- (1g) *åremål; sommermål*

- (2a) *treffe målet; skyte til måls; gå på mål; hige mot målet; skyte høyt over målet; lage / skåre (=score) / skyte mål; stå i mål; tape kampen med ett mål; det ble mål etter to minutters spill* (mostly the domain of sports)

- (2b) (mostly in sports) *gli over mål; komme i mål på idealtid; lede fra start til mål; gå over mål med noe* (bordering to 1f and 2c)

- (2c) *reisemål; ønskemål; målet for virksomheten; målet helliger middelet; flakke omkring uten mål og med; uten mål og mening; det er helt bak mål; sette seg noe som mål; forfølge et mål; være / stå ved målet; karakterer er ikke mål i seg selv*

- (3) *et mål mat; spise tre mål om dagen; spisel mellom målene*

- (4) *kua melker sju liter i målet; kveldsmål*

Translation

The Norwegian-Czech dictionary presents different translations for different senses of the noun: 1. *cíl, účel*; 2. (sports) *branka, gól*; 3. *míra (ta mål av noe – změřit něco)*; 4. *jazyk, dialekt*; 5. *měřice* (0,19ha).[90] The sense number 1 corresponds to the previously defined 2c (the noun *cíl* can also express the meaning 2b); sense 2 corresponds to 2a; sense 3 corresponds to most of the sub-senses of the previously defined sense 1; sense

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[90] However, according to *Bokmålsordboka*, 1 *mål* is set to 1000 m^2, while 1 *měřice* corresponds mostly to 1918 m^2.

5 corresponds to 1c; and sense 4 corresponds to the meanings expressed by the noun defined as the other homonym in the Norwegian (monolingual) dictionaries.

In the Norwegian-Czech parallel corpus, the noun *cíl* occurs in about one third of the cases as equivalent of the Norwegian noun *mål*. The noun *míra* appears in almost 10% of cases. In a few cases, the noun *konec* ("end") appears as a synonym in the meaning of (final) goal / aim. The nouns *jazyk* (10%) and *řeč* are frequent in the sense of "language, speech". Other synonyms appear infrequently in the different senses: *jídlo* (for "meal", 3); *lán* (in metaphorical use of 1c); *terč* (for "target", 2a); *hranice* (for 1f); *plán, úkol, úmysl, smysl, záměr* (for 2c); *odměrka* (for 1d); *množství* (for 1b); *rozměr* (for 1a); *branka* (for 2a).

The corpus offers many interesting examples of parallel expressions: *komme til det samme målet – naměřit přesně stejně; (en skredder) tar mål (av noen) – (krejčí) měří / bere míru (někomu); målet er nådd – cíl(e) je dosažen(o); ingen av ballene gikk i mål – ani jeden míč neskončil v brance; å erobre nye mål – dosáhnout netušených met; at andre forfattere ikke holder mål – že ostatní spisovatelé nedosahují dostatečných kvalit; nesten ingen av dem holdt mål – téměř nikdo z nich (v jeho očích) neuspěl; dermed er vi i mål – tím jsme u cíle; filosofiens ytterste mål – nejvyšší cíl filosofie; forfølge et mål – hnát se za cílem / sledovat cíl; skåret etter mål for…– ušitý přesně na míru (někomu); stå / være (like) ved målet – být u cíle / (těsně) před cílem; og så la de for godt mål til at han…– a tak mu vyčetli navíc ještě to, že…; nå frem til målet – dospět do cíle; å fremme sine mål (ved…) – prosazovat své cíle (čím); uten mål (og mening) – bezcílně / bez cíle / jen tak nazdařbůh; vandret rundt uten mål eller med – jen tak bloumal; hold målet fast for øye! – držte se svého cíle!; …, hvilket mål de enn sikter mot – …, ať míří kamkoli; å sette mål på – měřit; etter et mål mat – po jídle; jeg skyter nå nærmere målet – jsem teď blíže pravdě; …sa han, grov i målet – …, řekl hrubě; hans levedager nærmet seg sitt fulle mål – jeho dny se blíží ke konci.*

7.20.3   Dictionary entry

The entry for the noun *mål* (figure 7.59) follows the rich polysemy as analyzed in the section on *Polysemy* above. Appropriate equivalents are assigned to all the senses, where possible. Collocations and fixed expressions are defined only for the sense 2c. The senses 2a-c specify some further equivalents, even though the general equivalent *cíl* defined for the whole abstract group 2 can also be used for all of them.

The valency frames are still defined at the top level, because they can partially cross the borders of the meanings, where they overlap.[91] The fact that the preposition *på* can introduce both a [Quant]ity and a [Pat]ient is not indicated, however. The preposition *for* can introduce different conceptual elements: the [Pat]ient in the senses referring to "quantity", but the [Instr]ument in the senses referring to the "goal". In the latter case, it can also introduce the [Act]or, as a beneficiary – actually because the [Instr]ument is semantically raised to the role of an actor. This fact is not currently indicated.

7.20.4   Czech: *cíl*

Monolingual description

The Czech noun *cíl* has two senses, according to the *SSJČ* dictionary: 1. destination or object that some movement is directed towards / that someone is trying to reach; 2.

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[91]For example the preposition *på* introducing a [Quant]ity being a [Goal] at the same time, as shown in the section on *Valency patterns*.

mål

mål: *sg. indef.* mål ; *sg. def.* målet ; *pl. indef.* mål ; *pl. def.* målene, [+R]måla

FREQ: 5632 (LKB), sg: 78%

Morphemic analysis

mål *(word)*

	inflexion	
base		**ending**
mål *(morpheme)*		

Valency patterns

A   ~ om <*noe*/*å…*/*at…*>

B   ~ for <*noe*>

C   ~ med <*noe*/*å…*>

D   ~ på <*noe*/*hv…*/*at…*>

Semantics

1. kvantitet

    Preferred constructions: D

    Valency patterns

    B   ~ for <*noe*>

    a.   størrelse på noe

      Translation

      cs: *míra; rozměr; velikost*

    b.   en mengde av noe

      Translation

      cs: *míra; množství*

    c.   en målenhet for areal satt lik 1000m2

    d.   målekar / måleredskap

      Translation

      cs: *odměrka*

    e.   multiplum (størrelse som går opp i en annen uten rest)

      math.

      Translation

      cs: *dělitel*

    f.   grense / limit for noe

      Translation

      cs: *míra*

    g.   tidspunkt

2. endepunkt for noe(n)

Collocations and constructions
Verbs: - durative: *forfølge* - terminative: *nå*

Translation
cs: *cíl*

a. merke som skal treffes (av noen)

Translation
cs: *terč*

b. linje som det gjelder å nå fram til (av noen)
sport.

Collocations and constructions
Verbs: - terminative: *score*

Translation
cs: *branka; gól*

c. formål el. endepunkt som noe skal tjene til eller som noe(n) skal nå
Preferred constructions: A , B , C

Valency patterns
B ~ for *\<noe\>*

Collocations and constructions
Adjectives: *langsiktig, viktig, overordnet, felles, klar, politisk, konkret, endelig, ambisiøs*
Fixed expressions: uten mål (og mening) *bez cíle / bezcílně / jen_tak_nazdařbůh*; fremme sine
mål (ved \<å…\>) *prosazovat své cíle (\<něčím\>)*; sette seg som mål *\<å…/noe\> stanovit si za cíl*
\<něco/INF\>; målet helliger middelet *účel světí prostředky*

Translation
cs: *účel*

3. måltid

Translation
cs: *jídlo; chod*

4. en gangs melking

Figure 7.59: The entry for *mål*

conclusion (aim) of some action or effort.

The second sense refers mostly to the meaning defined as sense 2c of the Norwegian noun *mål* (or number 9 in *Bokmålsordboka*). The first sense corresponds both to the sense 2b of the Norwegian noun, and to the part of sense 2c which relates to some physical goals (destination of a journey). The examples also cover partially the meaning 2a of "target", but here (as well as in English) a special noun is preferred, at least in case of reference to a physical object and not just an abstract goal.

Valency patterns

The noun cat take a direct infinitive construction expressing the [Goal] as its complement. A direct noun phrase in genitive case can express either the [Actor] or the element [Instr] ([Action]) (like for the Norwegian noun, the Czech one can also be attributed to / possessed by both).

The preposition *pro* (with noun phrase in accusative case) can also be used in the same way as the direct genitive phrase, i.e. to express either the author of the idea [Actor] or the element [Instr]. It is still used as the general adjunct of beneficiary as well.

Distribution

The noun *cíl* occurs 28056 times in SYN2005, thereof 20680 times (73.7%) in singular form. A direct infinitive construction follows in 2563 cases (9.1%), thereof 2479 times (96.7%) after singular form. Nearly all of of the occurrences with a plural form cannot be attributed to the noun, however. If the noun is not an object of the infinitive itself, the construction has the form *(mít / vytknout si /...) za jeden z cílů (+Inf)* (lit. "to have / take as one of the goals to..."). In altogether 1519 cases (59.3%), the infinitive construction is part of the fixed expression *s cílem...*, having the function of a complex conjunction (or preposition) representing a final clause or adverb of purpose.

A direct genitive complement follows in 6404 cases (22.8%), but in many cases it is the [Act]or (and possessor) and not the instrument [Instr].

The preposition *pro* follows in 188 cases (0.7%), thereof 113 times (60.1%) after singular form.

Polysemy

The noun *cíl* has only one basic sense, corresponding to the second sense of the Norwegian noun *mål*. In addition, there is a special word for the meaning of "target" (Czech *terč*) and the noun *cíl* is only used in this meaning when the reference is abstract (not the physical target for shooting). Otherwise, the division of sub-senses can follow the Norwegian sense 2: the meaning 2a should be rather excluded because of the existence of the noun *terč*. The meaning of "finish" in sports (competitions) can also be considered an independent sub-sense. The question common to both languages is whether the meaning of destination for some journey should be lumped to the general, abstract meaning, or to the concrete meaning of "finish", or whether it could be considered another independent sub-sense.

Collocations and idioms

The most frequent verbal collocations of the noun *cíl* are the verbs *mít* and *dosáhnout*. Other typical collocations include: *klást / stanovit (si), sledovat, splnit*. In the mean-

ing of abstract target, verbs typical for the noun *terč* are used as well: *minout / míjet, přestřelit, zasáhnout, trefit*. The fact, that the metaphorical extension of the meaning "target" merges into the general abstract meaning of goal, is confirmed by them and other special verbs used originally for the physical target (*terč*), but used as well in the general meaning of goal by means of metaphor: *vytyčit / vytyčovat si, vymezit, vytknout*, but also the mentioned verbs *minout / míjet, přestřelit*, etc.[92] This is an argument to lump the abstract meaning of target rather with the general meaning of goal than with the concrete meaning of "finish" in sport competitions. The meaning of "destination" of some journey can still be connected both with the verbs typical for the abstract, general goal (e.g. *dosáhnout*) as with the verbs typical for the meaning of "finish" (e.g. *dojet / dorazit do cíle*). Other verbs typical for the meaning of "finish" are e.g. *proběhnout, dobíhat / doběhnout (do cíle)*.

Typical adjective modifiers are e.g. *hlavní, jediný, konečný, strategický, vzdělávací, stanovený, základní, společný, dlouhodobý, konkrétní, jasný, inflační,* etc. Special adjectives appearing with the noun are e.g.: *kýžený, prioritní*.

The noun occurs frequently with the head preposition *s*, constructing a fixed expression *s cílem*, mentioned above. It appears also frequently with the head preposition *za* in constructions such as *mít / klást si / stanovit si /...za cíl...* (corresponding to the Norwegian expressions *ha / sette seg som mål...*). The noun also occurs frequently with the head prepositions *k* and *do* in combination with many verbs, such as *dojít / dojet / dorazit / blížit se / dospět /...k cíli / do cíle*. In parallel to the Norwegian collocation *uten mål*, the Czech noun also occurs in constructions with the head preposition *bez*: *(bloudit / jezdit / bloumat / potulovat se / potloukat se / flákat se / motat se /...) bez cíle (, z místa na místo)*. The compound adverb *bezcílně* is frequently used for this purpose as well.

The *SČFI* dictionary mentions further collocations and fixed expressions: *k tomu cíli* (synonymous to *za tím účelem*, translated as: "to that end"); *jít tvrdě za svým cílem; klást si za cíl / úkol (něco); minout se cílem*. It also lists the typical support verbs: *vytyčit si / vytknout si / stanovit si* (inchoative); *mít, sledovat, klást si* (durative); *dosáhnout cíle, dospět k cíli* (terminative); and for some (unspecified) second sense (obviously the more concrete meaning of "destination"): *vydat se za cílem* (inchoative); *stanovit* (causative-inchoative); *dorazit / dospět k cíli; být u cíle; minout se cílem* (terminative). The distinction of two senses does not make much sense here, since the collocations are not so unambiguous.

Translation

The Czech-Norwegian dictionary suggests two Norwegian equivalents for the Czech noun *cíl*: *mål* and *siktemål*. In addition, it offers a lot of examples of collocations: *být u cíle – stå ved målet; dojít do cíle – komme i mål; stanovit si cíl – sette seg mål; střílet na cíl – skyte på mål; zamířit na cíl – sikte på mål*.

In the Czech-Norwegian parallel corpus, the noun *mål* appears in more than half of the occurrences as equivalent of the Czech noun *cíl*. The complements appearing in the Czech within the genitive phrase are usually expressed by the prepositions *med* or *for* in Norwegian (or by the genitive as well). In a few cases, the nouns *formål, siktemål* and *hensikt* appear as well. Some additional examples of translations from the corpus

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[92]The verbs *míjet* and *minout* can actually be used in two different constructions: *míjet / minout cíl* (accusative case) and *míjet se / minout se cílem* (verb in reflexive form, noun in instrumental case). The first type is more typical for the meaning of "target" ("to miss the target"), while the latter one is used in the metaphorical meaning of goal or purpose: i.e. "something does not have the effect as expected / aimed / etc."

are e.g. *dorazit do cíle* (fig.) *– komme helt fram; být u cíle – komme fram; bez cíle – på måfå / vettløst og formålsløst / uten mål; dojít k cíli svého hledání – komme til slutten av sin søken; dosáhnout cíle / dorazit k cíli – nå målet; využít toho pro své vlastní cíle – for å trekke fordel av det; s cílem…– for å…; s jakým cílem? – i hvilken hensikt?; dospět do cíle – nå frem til målet; prosazovat své cíle (+instr) – fremme sine mål ved å…; zasáhnout cíl – treffe målet; hlavní cíl – hovedhensikten.*

7.20.5 Dictionary entry

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cíl

cíl: sg.: N cíl; G cíle; D cíli; A cíl; V cíli; L cíli; I cílem; *pl.:* N cíle; G cílů; D cílům; A cíle; V cíle; L cílích; I cíli, *cílema

FREQ: 28056 (SYN2005), sg: 73700%

Morphemic analysis

cíl *(word)*

	inflexion	
	base	**ending**
cíl *(morpheme)*		

Valency patterns

A ~ *<INF>*

B ~ *<něčeho>*

C ~ pro *<něco>*

Collocations and constructions

Verbs: - inchoative: *stanovit_c, vytyčit_c, vymezit_c, vytknout_c* - durative: *mít, klást, sledovat* - terminative: *dosáhnout, splnit, trefit, minout, minout_se, zasáhnout, přestřelit, dorazit, dospět, dojít, dojet, doběhnout*
Adjectives: *hlavní, konečný, strategický, vzdělávací, dlouhodobý, stanovený, základní, společný, konkrétní, jasný, inflační, prioritní, kýžený*
Fixed expressions: bez cíle *uten mål (og mening)*; s cílem *<INF/něčeho> med (den) hensikt <å…> / i den hensikt <å…>*; prosazovat své cíle *(<něčím>) fremme sine mål (ved <å…>)*; stanovit si za cíl *<něco/INF> sette seg som mål <å…/noe>*

Translation

no: *mål [2]*

Semantics

1. smysl / závěr / účel nějaké věci či činu (zamýšlený někým)

2. konečný bod nějakého pohybu (zamýšlený někým)

Figure 7.60: The entry for *cíl*

The entry for *cíl* (figure 7.60) is very simple compared to its Norwegian counterpart, referring only to its second sense as an equivalent. Two sub-senses are still distinguished, but their role is unimportant and the meaning has hardly any clear borderline, but the abstractness. The complements of the preposition *pro* and the genitive phrase are again identified with the [Instr]ument element only, without any indication that the element is basically identical with the role of an [Act]or, in the perspective of the noun.

The interface does not even show, that the verbs *dorazit, dospět, dojít, dojet* and *doběhnout* take the noun as its complement *DIR3* (according to *Vallex*) and not just a *PAT*ient, as usually, although it is defined in the data. The preposition necessary to construct this complement of *direction* is not specified, however. Several prepositions are possible in this role, usually *k* and *do*.

Chapter 8

Conclusion

The model fulfils the objectives set in chapter 1.2 to a great degree. However, it offers a plethora of possible solutions to every problem, and the particular task (i.e. language- and dictionary-) specific specifications determine the efficiency, universality and usability of the implementation. Even though the practical application and linguistic analysis from the second part of this study were meant solely as illustration of the possibilities of the model, they bring a lot of experience and problems on its own, which are worth to be summarized here as well. A conclusion on the advantages and problems of the model and its possible application, as well as its practical implementation, will follow.

8.1 Linguistic problems

The most basic problem noticed in the analysis is the common problem of corpus lexicography in general: what is a random deviation and what is a proof of a potential possibility or tendency in the corpus data? What should be captured and described in a comprehensive lexicon? Many intuitively natural collocations, valency patterns or fixed expressions appear very exceptionally in the corpus (or not at all). On the other hand, many unusual collocations (or those evaluated by many native speakers as "wrong") occur with the same or even higher frequency. The relative frequencies of units or fractions of percent are quite unsafe for any interpretation. The problem is most apparent on the choice of prepositions used in the valency patterns of the nouns described: where there is competition between two or several prepositions, infrequent occurrences of one preposition may indicate both a new tendency in the language, or just random deviation in the usage within a limited group of language users (a dialectal or social group, etc.). This problem might be solved by a greater amount of data, but it would surely require a data of reliable quality with the possibility of a clear source identification.

The most apparent problem is the role of prepositions in the valency patterns: i.e. whether they should be considered part of the valency or just free adjuncts. The analyzed nouns almost always require some closer specification (usually concerning the element [Goal]), but this specification can be arbitrarily generic or underspecified. It may only be hinted indirectly and vaguely by elements that would usually qualify rather as free adjuncts: i.e. prepositional phrases appearing freely with almost any noun (or adjective or verb), specifying some beneficiary, location in the abstract meaning of do-

main, area or field, etc. In some cases, such prepositional phrases are so commonly used with the particular noun, that they must be considered either part of its valency pattern or fixed expressions. Because of the unclear borderlines in both semantics and syntax of the nominal frames, the decisions in this study are mostly based on a combination of the semantic importance and frequency of use with each particular noun.

Another problem specific to the use of prepositions is the question whether they are just semantically empty grammatical words or whether they contribute with their own meaning to the whole construction. The analysis seems to confirm rather the second interpretation in most cases. Even though there are single prepositions fixed to many of the nouns, other nouns can seemingly freely use a variety of prepositions, depending on the particular context. The prepositions seem to be associated with particular meanings rather than words, or more precisely with particular conceptual configurations: e.g. the preposition *om* (Czech *o*) introduces usually a [Theme] of some [Image], the preposition *til* (Czech *k*) introduces some very specific [Goal] (aim, target) of some intention or activity, the preposition *for* (Czech *pro*) is typical for expressing a beneficiary, which can also be some passive [Goal] to be realized, the preposition *med* introduces usually some passive patient [Pat] or instrument [Instr] specifying indirectly the [Goal], the preposition *i* (Czech *v*) specifies some location, in metonymical way also a domain, area or field for possible [Goal]s, etc. The prepositions can then occasionally appear in connection with more general nouns when their meaning, i.e. the context is close to the typical context (meaning) of the primary noun: e.g. the prepositions *om/o* are commonly used with nouns such as *tanke/myšlenka* or *drøm/sen*, but they can also be used with nouns such as *idé* or *formål* in the rare cases where the noun is used in a synonymical sense, i.e. referring to an [Image] of some [Theme]. The prepositions seem hence to have gained their own meaning (reference to particular conceptual configuration) which is more or less compatible with the particular senses or sub-senses of different nouns. They can then appear (in *parole*) even in combination with nouns which have, in principle (*langue*), a slightly different meaning, i.e. in particular contexts, where the noun is used in an extension of its core meaning.

The simple classification of three aspects of events for verbo-nominal collocations, used in the SČFI dictionary, is obviously insufficient. The *inchoatives* do not distinguish events arising intentionally from those occurring spontaneously, *terminatives* do not distinguish successful terminations from failures, *causativity* does not specify whether the cause is the actor himself or herself, a third person or just any other unspecified or underspecified entity, etc. Some verbs express a change, which is both termination and initiation, and some verbs refer just to public declaration of some already existing intention or idea, and can be thus classified as both durative or inchoative, depending on the perspective. At least some of the more complex aspects of the events could be captured by a more sophisticated classification.[1] The blending of the aspect with the syntactic distinction of verbs taking the noun as its objects from those taking the noun as subject, seems to be especially unlucky.

8.2   Problems of the model or its specification

The most obvious problem of the current implementation and use of the model is the necessity to decide between the definition of collocations by means of links between

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[1] Cf. Cinková and Žabokrtský (2005a,b)

two units or as fully independent fixed expressions (units).[2] Creation of independent units for multi-word expressions is much more powerful than pure linking of collocates as simple relations between words. Linking collocation makes it also possible to specify some features or map inner relations, but it is limited to the relations between two words (or expressions) only and has limits for further expansion or specification. On the other hand, it is much more efficient for quick listing of frequent collocates. The trouble starts at the moment when some collocation needs extension or should become part of a more complex fixed expression. For example, in chapter 7.20.2 the collocation of the noun *cíl* with the support verb *stanovit* is declared, but the much more frequent collocation in the reflexive form and with an additional head preposition *stanovit si <něco> za cíl*, corresponding to the Norwegian collocation *sette seg <noe> som mål*, must already be declared as an independent multi-word lexical unit, which is not connected with the collocational link in any way. It is not possible just to convert the two distinct types of description to each other, even though they are closely related. Importing (inheriting) a collocation defined by a link only, or referring to it from another unit is virtually impossible, too. A more unified solution would thus be better.

Another improvement would be some smarter interconnection of object types, features and templates. The use of inheritance at the level of each object class, based on its type, and possibly the classification of the type by the features, would be practical in many ways. Every object is already assigned to some class or type by having some particular feature.

The assignment of roles (conceptual elements) allows also for improvement. Nothing currently indicates that different labels are used to refer to elements with identical conceptual background (eg. [Image] = [Force], [Goal]=[Theme], etc.). For this purpose, an external resource describing conceptual frames at the different level of specificity (analogically to the hierarchical specificity of lexical units used here) would be useful.[3]

8.3   Desiderata for an effective (and efficient) implementation

A practically usable implementation of a database based on the proposed model would be significantly more demanding than most existing frameworks. The main requirement would be a user-friendly editor, which would allow the lexicographer to seamlessly navigate, edit and create the complex structures. Even though they correspond to the common linguistic and lexicological categories, an easy navigation in such network is crucial for practical and efficient work.

The different testing implementations also show the need for an efficient technical implementation. The testing implementation in Ruby is relatively inefficient and slow and needs often more then 10 seconds to complete a tree of lexical units with all the features inherited from templates and compute the possible forms and combinations, even on modern machines. Computing whole multi-word expressions would hence be prohibitively time-consuming without some proper caching, and has not been fully implemented.[4]

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[2]For example, collocations such as *svobodná vůle / fri vilje, dobrá vůle / god vilje, zlá vůle / ond vilje* can be defined as collocational links as well as independent lexical units.

[3]Such relations between semantic frames have already been explored in the FrameNet project. Cf. Fillmore et al. (2003) and chapter 6 in Ruppenhofer et al. (2010, 73 ff.).

[4]There were actually two different testing implementations created during the project. The first one im-

Implementing the final dictionary rendering (presentation) in the form of XSLT templates may not be the most practical solution either. More flexible and user specific presentations would require more complex transformations of the structure and smart reversion of the features extrapositioned to the different levels, because the flattening of the tree-structure of senses would be required for most common users. So complicated transformation with inclusion of several embedded sub-entries will probably be easier to implement by some regular programming language than the limited XSLT technology. A tight cooperation of the language module[5] is required anyway, so that a lot of pre-processing depends on this level, anyway. XSLT templates can efficiently be used only in a final filtering and presentation of a thoroughly completed structure with all possible information pre-computed, i.e. a structure prepared for all the possible types of presentation.

A possible promise for a future successful implementation and even improvement of the current model are the newly emerging *graph databases* (more flexible successors to the older *network databases*). Defining the structures as true networks or graphs with nodes and relations could improve both the practical efficiency and the theoretical possibilities. It might also offer solutions to the problems discussed in the previous section. The representation in XML (as presented here) does not even offer true relation links, that would not need to be defined on both sides: e.g. the fixed expressions would not need to be explicitly linked to the units of the lemmata in a true network, because they are already connected to them by the fact that they refer to the lemma in the definition of their morphological or syntactic structure.

An important factor for the practical usability would also be a proper integration with other lexicographical tools: not only the flexible presentation and visualisation of the data for different users and tasks, but also integration with the tools for data collection, i.e. the corpus processing tools, which could automatically collect collocations, valency patterns, statistics, etc. A seamless transfer of the data between the tools would probably be much more easier to implement for this model than for other frameworks, where typing and copy-pasting is often the only possibility, anyway. The structures of this model represent more or less directly the data as they are already extracted by the corpus query tools, so that the patterns extracted from corpus concordances could be directly (automatically or semi-automatically) recorded into the database after a little manual filtering and/or further annotation.

8.4 Advantages and limits of the framework

The problems discussed in the previous sections indicate the most obvious points needing a further investigation and development. More important than the model itself is a practical and user-friendly implementation, which would definitely be quite demanding, and an elaborated specification of types and categories for a particular task.

The framework offers many advantages not offered (to such an extent) by any other (known) framework:

- flexible description of lexical units both in the paradigmatic and syntagmatic dimension,[6] at all levels of the language system commonly described (or at least desired) in dictionaries, open for adjustments and extensions in the process of work

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plemented slightly more features, but it was not well modularized and very inefficient.

[5]Cf. chapter 5.2.

[6]Already claimed by RBN (van der Vliet, 2007).

- possibility of description at different levels of detail, specificity, explicitness or granularity at once, open for easy future extensions or refinements (re-usability, multiple purposes, new theories, etc.)

- independence of a particular theory or method and a possibility (to some degree limited) of description according to several different theories at once

- separation of the content from the form – only facts about the lexical units are recorded, their later selection, transformation and form of presentation is not in the focus; the data can be presented in different forms to different users and for different tasks (possibly automatically, on demand); more specific resources can be generated from the common resource, and information from different resources can be gathered in it

- methods for ensuring consistency and verifiability of the data by the use of templates and inheritance and automatic interpretation of the data, explicit separation of analogy and anomaly (rules and exceptions), etc.

- both semasiological and onomasiological perspectives integrated in one framework[7]

- possibility of easy tracking of morphologically related words and participation of words in different collocations, fixed expressions or idioms (even if not explicitly linked together)

- flexible and complex treatment of language variability at all levels of language description and appropriate diasystematic marking

- easy linking to other external resources

The main disadvantages have mostly already been mentioned as well:

- very demanding implementation (the complexity of the technical implementation is a trade-off for the linguistic efficiency and naturalness, scalability and other objectives declared in chapter 1.2)

- the hierarchical classification (division) of semantic space (senses) corresponds to the perspective of dictionaries, but can also present a limit for alternative theories and incompatible approaches; as shown on the example of the polysemy of the word *mål* (chapter 7.20.2), the semantic space has several dimensions and different senses and sub-senses may be related (or even overlapping) in several ways, which the single hierarchy cannot represent equally at once

- the need for a conception of specifications (classification and categorization) well elaborated for a particular task (languages and dictionary), prepared in advance (at least as a rough draft)

- interpretation and verification needs implementation of task-specific methods (based on the prepared specifications) in the language modules

- need for systematic work – every mistake is immediately visible and can be prohibitive for further development (work-arounds, hot-fixes and ad-hoc solutions can break the system)

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[7]Already presented by Calzolari (1988).

- requires linguistic insight; is of little or no use for intuitive creation of dictionaries by non-linguists

- is not suitable for single-purpose production of simple dictionaries (e.g. pocket dictionaries without any further ambitions)

The framework is not a solution for "quick and dirty" composition of commercial dictionaries. It is a framework for description of lexical units in lexicological and general linguistic terms and categories. It does not specify which theories, methods and categories should be used, nor how to use them. It does not specify how the data should be acquired nor how they should finally be selected, interpreted and presented. Its task is solely the representation of the lexical knowledge, based on the structure of traditional dictionaries, intuitively intelligible to human users, but with the addition of explicitness necessary for Natural Language Processing. The framework could thus connect the world of theoretical lexicography (and linguistics generally), practical lexicology and Natural Language Processing, at least where these distinct domains share the same interests.

Bibliography

Adamska-Sałaciak, A. (2010, December). Examining Equivalence. *International Journal of Lexicography 23*(4).

Atkins, B. T. S. (1996). Bilingual Dictionaries: Past, Present and Future. In *Proceedings of EURALEX International Congress, 1996*, pp. 515–546.

Atkins, B. T. S. and M. Rundell (2008). *The Oxford Guide to Practical Lexicography*. Oxford University Press.

Bokmålsordboka (2006). Bokmålsordboka. `http://www.dokpro.uio.no/ordboksoek.html`.

Boye, K. (2005). Modality and the concept of force-dynamic potential. In A. Klinge and H. H. Müller (Eds.), *Modality. Studies in Form and Function*, pp. 49–80. London: Equinox Publishing Ltd.

Braasch, A. (1995). Arbejdet med 'Forslag om dansk standard for lagring og udveksling af leksikalske data. In Á. Svavarsdóttir, G. Kvaran, and J. H. Jónsson (Eds.), *Nordiske studier i leksikografi 3. Rapport fra Konferanse om leksikografi i Norden, Reykjavík 7.-10. juni 1995*, Reykjavík, pp. 69–81. Nordisk forening for leksikografi.

Calzolari, M., F. Bertagna, A. Lenci, M. Monachini, et al. (2004). Standards and Best Practice for Multilingual Computational Lexicons & MILE (the Multilingual ISLE Lexical Entry). CLWG Results D2.2-D3.2. `http://www.ilc.cnr.it/EAGLES96/isle/clwg_doc/ISLE_D2.2-D3.2.zip`.

Calzolari, N. (1988). The Dictionary and the Thesaurus can be combined. In M. W. Evens (Ed.), *Relational Models of the Lexicon*, pp. 73–95. Cambridge: Cambridge University Press.

Čermák, F. (1995). Překladová lexikografie. In F. Čermák and R. Blatná (Eds.), *Manuál lexikografie*, pp. 230–248. H&H.

Čermák, F. (2001). Syntagmatika slovníku: typy lexikálních kolokací. In Z. Hladká and P. Karlík (Eds.), *Čeština – Univerzália a specifika*, Volume 3, Brno, pp. 223–232.

Čermák, F. (2010). Notes on Compiling a Corpus-Based Dictionary. In *LEXIKOS 20*, Volume 20 of *Afrilex-series*, pp. 559–579.

Čermák, F. et al. (1983). *Slovník české frazeologie a idiomatiky I-IV (Dictionary of Czech Phraseology and Idioms, SČFI)*. Praha: Academia.

Cinková, S. (2009). *Words that Matter: Towards a Swedish-Czech Colligational Dictionary of Basic Verbs*, Volume 2 of *Studies in Computational and Theoretical Linguistics*. Praha: Institute of Formal and Applied Linguistics, Charles University.

Cinková, S. and V. Kolářová (2005). Nouns as Components of Support Verb Constructions in the Prague Dependency Treebank. In *Insight into Slovak and Czech Corpus Linguistics*, pp. 113–139. Veda Bratislava, Slovakia.

Cinková, S. and Z. Žabokrtský (2005a, June 17-18). Swedish-Czech Combinatorial Valency Lexicon of Predicate Nouns: Describing Event Structure in Support Verb Constructions. In F. Kiefer, G. Kiss, and J. Pajzs (Eds.), *Proceedings of the 8th International Conference on Computational Lexicography COMPLEX*, Budapest, pp. 50–59.

Cinková, S. and Z. Žabokrtský (2005b). Treating support verb constructions in a lexicon: Swedish-Czech combinatorial valency lexicon of predicate nouns. In K. Erk, A. Melinger, and S. S. im Walde (Eds.), *Proceedings of Interdisciplinary Workshop on the Identification and Representation of Verb Features and Verb Classes*, Saarbrücken, Germany, pp. 22–27.

Cruse, D. A. (1986). *Lexical semantics*. Cambridge textbooks in linguistics. Cambridge University Press.

Cruse, D. A. (2000). *Meaning in Language: An Introduction to Semantics and Pragmatics*. Oxford: Oxford University Press.

Cruse, D. A. (2001). Microsenses, Default Specificity and the Semantics-Pragmatics Boundary. *Axiomathes* (12), 35–54.

Cvrček, V. et al. (2010). *Mluvnice současné češtiny*, Volume 1. Praha: Karolinum.

Daelemans, W. and K. de Smedt (1994). Default inheritance in an object-oriented representation of linguistic categories. *Int. J. Human-Computer Sciences 41*, 149–177.

Daelemans, W., K. de Smedt, and G. Gazdar (1992). Inheritance in Natural Language Processing. *Computational Linguistics 18*, 205–218.

de Haan, F. (2006). Typological approaches to modality. In W. Frawley, W. Klein, and S. Levinson (Eds.), *Expression of Cognitive Categories: The Expression of Modality.*, pp. 27–69. Berlin: Walter de Gruyter & Co. KG Publishers.

de Smedt, K. and V. Rosén (1999a). Automatic proofreading for Norwegian: The challenges of lexical and grammatical variation. In T. Nordgård (Ed.), *NODALIDA '99: Proceedings from the 12th "Nordiske datalingvistikkdager", Trondheim, 9-10 December, 1999*, Trondheim, pp. 206–215. NTNU.

de Smedt, K. and V. Rosén (1999b). Datamaskinell skrivestøtte. In B. Lidgren (Ed.), *Språk i Norden 1999*. Oslo: Novus Forlag.

Degnbol, H., G. Á. Grímsdóttir, B. C. Jacobsen, J. Knudsen, E. Rode, and C. Sanders (1992). En ordbok er en database. In R. V. Fjeld (Ed.), *Nordiske studier i leksikografi. Rapport fra Konferanse om leksikografi i Norden 28.-31. mai 1991*, Oslo, pp. 385–389. Nordisk forening for leksikografi.

Engelsk ordbok (2010). Engelsk ordbok: engelsk-norsk / norsk-engelsk. Kunnskaps-forlaget. `http://ordnett.no/`.

Evans, R. and G. Gazdar (1996). DATR: A language for lexical knowledge representation. *Computational Linguistics 22*(2), 167–216.

Faarlund, J. T., S. Lie, and K. I. Vannebo (1997). *Norsk referansegrammatikk*. Oslo: Universitetsforlaget.

Fellbaum, C. (Ed.) (1998). *WordNet: An Electronic Lexical Database*. Cambridge, MA: MIT Press.

Fillmore, C. and B. Atkins (1994). Starting where the Dictionaries Stop: The Challenge of Corpus Lexicography. In B. Atkins and A. Zampolli (Eds.), *Computational Approaches to Lexicon*, pp. 349–392. Oxford: Oxford University Press.

Fillmore, C. J., C. R. Johnson, and M. R. L. Petruck (2003, September). Background to FrameNet. *International Journal of Lexicography 16*(3), 235–250.

Francopoulo, G., T. Declerck, V. Sornlertlamvanich, E. De la Clergerie, and M. Monachini (2008). Data Category Registry: Morpho-syntactic and Syntactic Profiles. LREC, Marrakech.

Francopoulo, G., M. George, M. Calzolari, M. Monachini, N. Bel, M. Pet, and C. Soria (2006). Lexical Markup Framework (LMF). LREC, Genoa.

Guttu, T. (2005). Norsk Ordbok med 1000 illustrasjoner. Kunnskapsforlaget. `http://ordnett.no/`.

Hanks, P. (2000). Do word meanings exist? *Computers and the Humanities 34*, 205–215.

Haraldsson, H. (1995). Plasshensyn i tospråklige ordbøker. In Á. Svavarsdóttir, G. Kvaran, and J. H. Jónsson (Eds.), *Nordiske studier i leksikografi 3. Rapport fra Konferanse om leksikografi i Norden, Reykjavík 7.-10. juni 1995*, Reykjavík, pp. 185–194. Nordisk forening for leksikografi.

Haraldsson, H. (1996). *Rússnesk-íslensk orðabók*. Reykjavík: Nesútgáfan.

Haraldsson, H. (2002). *Beygingarkótar íslenskra orða: Tilraun um orðabókarmálfæði með tilvísunarkerfi fyrir nafnorð, lýsingarorð og sagnir*, Volume 6 of *Rannsóknar- og fræðslurit*. Reykjavík: Orðabók Háskólans.

Hartmann, R. (2001). *Teaching and Researching Lexicography*. Applied Linguistics in Action. Pearson Education Limited / Longman.

Haugen, E. (1996). *Norsk-engelsk ordbok. Norwegian-English Dictionary* (4 ed.). Oslo: Universitetsforlaget.

Hausmann, F. J., O. Reichmann, H. E. Wiegand, and L. Zgusta (Eds.) (1989-1991). *Wörterbücher / Dictionaries / Dictionnaires*. Handbücher zur Sprach- und Kommunikationswissenschaft. Berlin / New York: De Gruyter.

Hausmann, F. J. and R. O. Werner (1991). Spezifische Bauteile und Strukturen zweisprachiger Wörterbücher: eine übersicht. In F. J. Hausmann, O. Reichmann, H. E. Wiegand, and L. Zgusta (Eds.), *Worterbücher / Dictionaries / Dictionnaires*, Volume 3 of *Handbooks of Linguistics and Communication Science*, pp. 2729–2769. Berlin / New York: Walter de Gruyter.

Hausmann, F. J. and H. E. Wiegand (1991). Component parts and structures of general monolingual dictionaries: A survey. In F. J. Hausmann, O. Reichmann, H. E. Wiegand, and L. Zgusta (Eds.), *Worterbücher / Dictionaries / Dictionnaires*, Volume 1 of *Handbooks of Linguistics and Communication Science*, pp. 328–360. Berlin / New York: Walter de Gruyter.

Havránek, B. et al. (Eds.) (1935-1957). *Příruční slovník jazyka českého (Reference Dictionary of Czech Language, PSJČ)*. Praha: Státní pedagogické nakladatelství/SPN. electronic version, created in the Institute of Czech Language, Czech Academy of Sciences Prague in cooperation with Faculty of Informatics, Masaryk University Brno.

Havránek, B. et al. (1960-1971). *Slovník spisovného jazyka českého (Dictionary of Written Czech, SSJČ)* (1st ed.). Praha: Academia. electronic version, created in the Institute of Czech Language, Czech Academy of Sciences Prague in cooperation with Faculty of Informatics, Masaryk University Brno.

Hustad, T. (1984). *Stor norsk-tysk ordbok. Großes Norwegisch-Deutsches Wörterbuch* (Studentutgave ed.). Oslo: Universitetsforlaget.

InterCorp (2010). InterCorp - project of parallel corpora. `http://www.korpus.cz/intercorp/?lang=en`.

Jacobsen, T. (2010). Norsk-fransk blå ordbok. Kunnskapsforlaget. `http://ordnett.no/`.

Johnson, C. R. and C. J. Fillmore (2000, May). The FrameNet tagset for frame-semantic and syntactic coding of predicate-argument structure. In *Proceedings of the First Meeting of the North American Chapter of the Association for Computational Linguistics (ANLP-NAACL 2000)*, pp. 56–62.

Kahane, S. (2003). The Meaning-Text Theory. In *Dependency and Valency. An International Handbook on Contemporary Research*. Berlin: De Gruyter.

Kilgarriff, A. (1997). I don't believe in word senses. *Computers and the Humanities 31*, 91–113.

Kilgarriff, A. and M. Rundell (2002, August 13-17). Lexical Profiling Software and its Lexicographic Applications – a Case Study. In *Proceedings of EURALEX International Congress, 2002*, Volume 2, pp. 807–818.

Kilgarriff, A., P. Rychlý, P. Smrž, and D. Tugwell (2004, July 6-10). The Sketch Engine. In *Proceedings of EURALEX International Congress, 2004*, Volume 1, pp. 105–116.

Knudsen, T., A. Sommerfelt, and H. Noreng (1937-1995). Norsk Riksmålsordbok. Kunnskapsforlaget. `http://ordnett.no/`.

Landau, S. I. (1991). *Dictionaries : the art and craft of lexicography*. Cambridge: Cambridge University Press.

Laureys, G. (2007, September2007). Optimizing Procedures for the Making of Bilingual Dictionaries and the Concept of Linking Contrastive Lexical Databases. *International Journal of Lexicography 20*(3), 295–311.

Leksikografisk bokmålskorpus (2010). Leksikografisk bokmålskorpus. `http://www.hf.uio.no/iln/tjenester/sprak/korpus/skriftsprakskorpus/lbk/`.

LMF (2008). Lexical Markup Framework. ISO/TC37/SC4, ISO-24613:2008, `http://www.tagmatica.fr/lmf/iso_tc37_sc4_n453_rev16_FDIS_24613_LMF.pdf`.

Lopatková, M., Z. Žabokrtský, V. Kettnerová, et al. (2006). VALLEX 2.5: Valency Lexicon of Czech Verbs. `http://ufal.mff.cuni.cz/vallex/2.5/doc/home.html`.

Maks, I. (2007, September2007). OMBI: The Practice of Reversing Dictionaries. *International Journal of Lexicography 20*(3), 259–274.

Maks, I., C. Tiberius, and R. van Veenendaal (2008). Standardising bilingual lexical resources according to the Lexicon Markup Framework. In *LREC Marrakech*.

Marello, C. (2003). The Bilingual Dictionary: Definition, history, bidirectionality. In R. Hartmann (Ed.), *Lexicography: Critical concepts*, Volume 2, pp. 325–342. London: Routledge.

Martin, W. (2002). Lexicography, Lexicology, Linking and the Hub-and-Spoke Model. In F. Melka and M. C. Augusto (Eds.), *De la Lexicologie à la Lexicographie / From Lexicology to Lexicography*, pp. 52–70. University Utrecht – Utrecht institute of Lunguistics OTS.

Martin, W. (2007, September2007). Government Policy and the Planning and Production of Bilingual Dictionaries: The 'Dutch' Approach as a Case in Point. *International Journal of Lexicography 20*(3), 221–237.

Martin, W. and A. Tamm (1996). OMBI: An editor for constructing reversible lexical databases. In *EURALEX 1996*, pp. 675–687.

Nilsson, K. (2010). Norsk-spansk blå ordbok. Kunnskapsforlaget. `http://ordnett.no/`.

Nuyts, J. (2005). The modal confusion: on terminology and the concepts behind it. In A. Klinge and H. H. Müller (Eds.), *Modality. Studies in Form and Function*, pp. 5–38. London: Equinox Publishing Ltd.

Nuyts, J. (2006). Modality: Overview and linguistic issues. In W. Frawley, W. Klein, and S. Levinson (Eds.), *Expression of Cognitive Categories: The Expression of Modality*, pp. 1–26. Berlin: Walter de Gruyter & Co. KG Publishers.

Nynorskordboka (2006). Nynorskordboka. `http://www.dokpro.uio.no/ordboksoek.html`.

OKTNT (2006). Oslo-korpuset av taggede norske tekster (bokmålsdelen). `http://www.tekstlab.uio.no/norsk/bokmaal/`.

Palmer, F. R. (1986). *Mood and Modality*. Cambridge: Cambridge University Press.

Panevová, J. (1974). On verbal frames in Functional generative description I. *Prague Bulletin of Mathematical Linguistics* (22), 3–40.

Panevová, J. (2000). Poznámky k valenci podstatných jmen. In Z. Hladká and P. Karlík (Eds.), *Čeština - univerzália a specifika*, Volume 2 of *Sb. konference ve Šlapanicích u Brna, 17.-19.11.1999*, Brno, pp. 173–180. Masarykova univerzita.

Panevová, J. (2002). K valenci substantiv (s ohledem na jejich derivaci). In P. Piper (Ed.), *Zbornik Matice srpske za slavistiku*, Volume 61, Novi Sad, pp. 29–36. Matica srpska.

Panevová, J. (2011). Infinitiv ve funkci atributu. In F. Štícha (Ed.), *Kapitoly z české gramatiky*. Praha: Academia. In press.

Paulsen, G. (2010). Norsk-tysk blå ordbok. Kunnskapsforlaget. `http://ordnett.no/`.

Pustejovsky, J. (1995). *The Generative Lexicon*. Cambridge, MS: MIT Press.

Pustejovsky, J. and B. Boguraev (2008). Lexical Knowledge Representation and Natural Language Processing. In P. Hanks (Ed.), *Lexicology. Critical concepts in Linguistics*. London and New York: Routledge.

Rosén, V. (2000). Er norsk et naturlig språk? In Ø. Andersen, K. Fløttum, and T. Kinn (Eds.), *Menneske, språk og felleskap. Festskrift til Kirsti Koch Christensen på 60-årsdagen 1.desember 2000*. Oslo: Novus Forlag.

Ruppenhofer, J., M. Ellsworth, M. R. L. Petruck, C. R. Johnson, and J. Scheffczyk (2010, September 14). FrameNet II: Extended Theory and Practice . `http://framenet.icsi.berkeley.edu/index.php?option=com_wrapper&Itemid=126`.

Schutz, R. (1992). Redigeringsprogrammet EDI. In R. V. Fjeld (Ed.), *Nordiske studier i leksikografi. Rapport fra Konferanse om leksikografi i Norden 28.-31. mai 1991*, Oslo, pp. 441–446. Nordisk forening for leksikografi.

Sciarone, A. G. and M. R. Ahmadi (1996). Towards a Universal Dictionary. In *Proceedings of EURALEX International Congress, 1996*.

Sowa, J. F. (1993). Lexical Structures and Conceptual Structures. In J. Pustejovsky (Ed.), *Semantics and the Lexicon*, pp. 223–262. Dordrecht: Kluwer Academic Publishers.

Stor engelsk ordbok (2010). Stor engelsk ordbok: engelsk-norsk / norsk-engelsk. Kunnskapsforlaget. `http://ordnett.no/`.

Svensén, B. (2009). *A Handbook of Lexicography: The Theory and Practice of Dictionary-Making*. Cambridge: Cambridge University Press.

Sverdrup, J. (1933). *Tysk-norsk ordbok*. Oslo: Nasjonalforlaget.

Svoboda, K. (1962). *Infinitiv v současné spisovné češtině*. Rozpravy Československé akademie věd. Praha: Nakladatelství Československé akademie věd.

SYN2005 (2005). Czech National Corpus - SYN2005. `http://www.korpus.cz`.

TEI (2007). TEI Guidelines P5. Text Encoding Initiative, `http://www.tei-c.org/Guidelines/P5/`.

van der Vliet, H. (2007, September2007). The Referentiebestand Nederlands as Multi-Purpose Lexical Database. *International Journal of Lexicography 20*(3), 239–257.

Vondřička, P. (2003). Bokmål og nynorsk sammen i tospråklige ordbøker . Master's thesis, Charles University in Prague.

Vrbová, J., B. Stejskalová, I.-M. Gabrielsen, and A. Ekeland (2005). *Norsko-český a česko-norský praktický slovník*. Praha: Leda.

Šmilauer, V. (1947). *Novočeská skladba*. Praha: Nakladatel Ing. Mikuta.

Wanner, L. (Ed.) (1996). *Lexical Functions in Lexicography and Natural Language Processing*, Volume 31 of *Studies in Language Companion Series (SLCS)*. Amsterdam-Philadelphia: John Benjamins.

Wijne, C., I. Maks, and W. Martin (1998). *OMBI 4 User Manual*. CLVV.

Zachariassen, P. and Z. Hansen (1995). Redigeringssystemet RiSt – udviklet og anvendt i et færøsk ordbogsmiljø. In Á. Svavarsdóttir, G. Kvaran, and J. H. Jónsson (Eds.), *Nordiske studier i leksikografi 3. Rapport fra Konferanse om leksikografi i Norden, Reykjavík 7.-10. juni 1995*, Reykjavík, pp. 433-443. Nordisk forening for leksikografi.

Zgusta, L. (1971). *Manual of Lexicography*. Praha: Czechoslovak Academy of Sciences.

Part III

Appendix

Appendix A

Listing of XML definitions

This is a list of the full XML definitions of the data structures representing the dictionary entries presented in chapter 7. However, only structures of the entries themselves are presented here. Templates, morphemes and multi-word entries are not shown, but they generally follow the examples given in chapter 6.

A.1   mulighet_N.xml

```
<lunit name='mulighet_N' type='lemma'>
  <usage key='default'>
    <f value='8956' key='form/stat/freq[LKB]'/>
    <constraint key='mulighet'>
      <f value='mulighet' key='form/base'/>
    </constraint>
  </usage>
  <usage key='singular'>
    <f value='0.563' key='form/stat/rfreq[LKB]'/>
    <constraint key='mulighet-sg'>
      <f value='sg' key='gram/num'/>
      <f value='mulighet' key='form/base'/>
    </constraint>
  </usage>
  <exp key='core'>
    <real type='word' key='mulighet'>
      <gen>suffixation</gen>
      <exp key='base'>
        <real type='word' key='mulig'>
          <include>mulig_A</include>
        </real>
      </exp>
      <exp key='suffix'>
        <real type='morpheme' key='het'>
          <include>_morph_suff_het_N</include>
        </real>
      </exp>
    </real>
  </exp>
  <exp key='phrase'>
    <real type='phrase' key='til_Comp'>
      <gen>phrase</gen>
      <usage key='default'>
        <f value='0.331' key='form/stat/rfreq[LKB]'/>
      </usage>
      <usage key='singular'>
        <f value='0.759' key='form/stat/rfreq[LKB]'/>
        <constraint key='default'>
          <f value='sg' key='gram/num'/>
        </constraint>
      </usage>
```

```
42        <exp key='core'>
            <include>@THIS/core</include>
44        </exp>
          <exp key='til_PP'>
46          <include>til_Pre/phrase</include>
            <real type='phrase' key='PP'>
48            <gen>phrase</gen>
              <exp key='Comp'>
50              <constraint key='NP'>
                  <f value='NP' key='form/cat'/>
52                <f value='false' key='sem/human'/>
                </constraint>
54              <constraint key='VinfP'>
                  <f value='VinfP' key='form/cat'/>
56                <usage key='default'>
                    <f value='0.858' key='form/stat/rfreq[LKB]'/>
58                </usage>
                </constraint>
60              <constraint key='at_S'>
                  <f value='at_S' key='form/cat'/>
62                <usage key='default'>
                    <f value='0.002' key='form/stat/rfreq[LKB]'/>
64                </usage>
                </constraint>
66            </exp>
            </real>
68        </exp>
        </real>
70      <real type='phrase' key='for_Comp'>
          <gen>phrase</gen>
72        <usage key='default'>
            <f value='0.317' key='form/stat/rfreq[LKB]'/>
74        </usage>
          <usage key='singular'>
76          <f value='0.577' key='form/stat/rfreq[LKB]'/>
            <constraint key='default'>
78            <f value='sg' key='gram/num'/>
            </constraint>
80        </usage>
          <exp key='core'>
82          <include>@THIS/core</include>
          </exp>
84        <exp key='for_PP'>
            <include>for_Pre/phrase</include>
86          <real type='phrase' key='PP'>
              <gen>phrase</gen>
88            <exp key='Comp'>
                <constraint key='NP'>
90                <f value='NP' key='form/cat'/>
                  <f value='false' key='sem/human'/>
92              </constraint>
                <constraint key='VinfP'>
94                <f value='VinfP' key='form/cat'/>
                  <usage key='default'>
96                  <f value='0.413' key='form/stat/rfreq[LKB]'/>
                  </usage>
98              </constraint>
                <constraint key='at_S'>
100               <f value='at_S' key='form/cat'/>
                  <usage key='default'>
102                 <f value='0.085' key='form/stat/rfreq[LKB]'/>
                  </usage>
104             </constraint>
              </exp>
106         </real>
          </exp>
108     </real>
        <real type='phrase' key='av_Comp'>
110       <gen>phrase</gen>
          <usage key='default'>
112         <f value='0.012' key='form/stat/rfreq[LKB]'/>
          </usage>
114       <exp key='core'>
            <include>@THIS/core</include>
```

```
116         <constraint key='default'>
              <f value='def' key='gram/def'/>
118         </constraint>
           </exp>
120       <exp key='av_PP'>
           <include>av_Pre/phrase</include>
122       <real type='phrase' key='PP'>
              <gen>phrase</gen>
124       <exp key='Comp'>
             <constraint key='NP'>
126           <f value='NP' key='form/cat'/>
              <f value='false' key='sem/human'/>
128         </constraint>
             <constraint key='VinfP'>
130           <f value='VinfP' key='form/cat'/>
              <usage key='default'>
132             <f value='0.355' key='form/stat/rfreq[LKB]'/>
              </usage>
134         </constraint>
             <constraint key='at_S'>
136           <f value='at_S' key='form/cat'/>
              <usage key='default'>
138             <f value='0.355' key='form/stat/rfreq[LKB]'/>
              </usage>
140         </constraint>
           </exp>
142       </real>
         </exp>
144      </real>
       </exp>
146   <link key='col/Vsup[ha]' ref='ha_V'>
        <map key='self' loc='#self' rem='PAT'/>
148     <f key='sem/aspect' value='dur'/>
      </link>
150   <link key='col/Vsup[få]' ref='få_V'>
        <map key='self' loc='#self' rem='PAT'/>
152     <f key='sem/aspect' value='inch'/>
      </link>
154   <link key='col/Vsup[gi]' ref='gi_V'>
        <map key='self' loc='#self' rem='PAT'/>
156     <map key='poss' loc='POSS' rem='ADDR'/>
        <f key='sem/aspect' value='inch'/>
158     <f key='sem/caus' value='true'/>
      </link>
160   <link key='col/Vsup[frata]' ref='frata_V'>
        <map key='self' loc='#self' rem='PAT'/>
162     <map key='poss' loc='POSS' rem='ADDR'/>
        <f key='sem/aspect' value='term'/>
164     <f key='sem/caus' value='true'/>
      </link>
166   <link key='col/Vsup[gripe]' ref='gripe_V'>
        <map key='self' loc='#self' rem='PAT'/>
168     <f key='sem/aspect' value='term'/>
      </link>
170   <link key='col/Vsup[bruke]' ref='bruke_V'>
        <map key='self' loc='#self' rem='PAT'/>
172     <f key='sem/aspect' value='term'/>
      </link>
174   <link key='col/Vsup[utnytte]' ref='utnytte_V'>
        <map key='self' loc='#self' rem='PAT'/>
176     <f key='sem/aspect' value='term'/>
      </link>
178   <link key='col/Vsup[benytte]' ref='benytte_V'>
        <map key='self' loc='#self' rem='PAT'/>
180     <f key='sem/aspect' value='term'/>
      </link>
182   <link key='col/Vsup[forspille]' ref='forspille_V'>
        <map key='self' loc='#self' rem='PAT'/>
184     <f key='sem/aspect' value='term'/>
      </link>
186   <link key='col/Vsup[miste]' ref='miste_V'>
        <map key='self' loc='#self' rem='PAT'/>
188     <f key='sem/aspect' value='term'/>
      </link>
```

```
190    <link key='col/Vsup[ødelegge]' ref='ødelegge_V'>
         <map key='self' loc='#self' rem='PAT'/>
192      <f key='sem/aspect' value='term'/>
         <f key='sem/caus' value='true'/>
194    </link>
       <link key='col/Vsup[skape]' ref='skape_V'>
196      <map key='self' loc='#self' rem='PAT'/>
         <f key='sem/aspect' value='inch'/>
198      <f key='sem/caus' value='true'/>
       </link>
200    <link key='col/Vsup[vurdere]' ref='vurdere_V'>
         <map key='self' loc='#self' rem='PAT'/>
202    </link>
       <link key='col/Vsup[diskutere]' ref='diskutere_V'>
204      <map key='self' loc='#self' rem='PAT'/>
       </link>
206    <link key='col/Vsup[se]' ref='se_V'>
         <map key='self' loc='#self' rem='PAT'/>
208    </link>
       <link key='col/Vsup[øke]' ref='øke_V'>
210      <map key='self' loc='#self' rem='PAT'/>
       </link>
212    <link key='col/Vsup[tenke_seg]' ref='tenke_seg_V'>
         <map key='self' loc='#self' rem='PAT'/>
214    </link>
       <link key='col/Aatr[unik]' ref='unik_A'/>
216    <link key='col/Aatr[enestående]' ref='enestående_A'/>
       <link key='col/Aatr[glimrende]' ref='glimrende_A'/>
218    <link key='constr[m_grenser]' ref='mulighetenes_grenser_MWE'/>
       <link key='constr[ligge_innenfor_m_grenser]' ref='ligge_innenfor_mulighetenes_grenser_MWE'/>
220    <link key='constr[m_står_åpne]' ref='mulighetene_står_åpne_MWE'/>
       <link key='constr[holde_m_åpne]' ref='holde_mulighetene_åpne_MWE'/>
222    <link key='constr[ms_land]' ref='mulighetenes_land_MWE'/>
       <link key='trans/cs' ref='možnost_N'/>
224    <lunit name='vilkår' type='abstract'>
         <desc key='default'>COND.{vilkår} som tillater en GOAL.{hendelse}</desc>
226      <exp key='phrase'>
           <real type='phrase' key='til_Comp'>
228          <gen>phrase</gen>
             <exp key='core'>
230            <f value='COND' key='sem/label'/>
             </exp>
232          <exp key='til_PP'>
               <real type='phrase' key='PP'>
234              <gen>phrase</gen>
                 <exp key='Comp'>
236                <f value='GOAL' key='sem/label'/>
                 </exp>
238            </real>
             </exp>
240        </real>
           <real type='phrase' key='for_Comp'>
242          <gen>phrase</gen>
             <exp key='core'>
244            <f value='COND' key='sem/label'/>
             </exp>
246          <exp key='for_PP'>
               <real type='phrase' key='PP'>
248              <gen>phrase</gen>
                 <exp key='Comp'>
250                <f value='GOAL' key='sem/label'/>
                 </exp>
252            </real>
           </exp>
254      </real>
         </exp>
256      <lunit name='til' type='abstract'>
           <desc key='default'>COND.{vilkår} som tillater at ACT.{noen} realiserer en GOAL.{hendelse}</desc>
258        <f value='til_Comp' key='select/phrase'/>
           <ex key='LKB:0001'>Jeg har ikke       mulighet til å      konsentrere meg .</ex>
260        <ex key='LKB:0002'>Her var det plutselig en        mulighet til flukt   !</ex>
           <ex key='LKB:0003'>Gard ser sin       mulighet til å      bli venner med pappa .</ex>
262        <ex key='LKB:0004'>
     lærergjerningen var viktigere , den gav ham        mulighet til å       bruke seg selv i samfunnets tjeneste .
```

```
264        </ex>
        </lunit>
266      <lunit name='for' type='abstract'>
          <desc key='default'>
268  COND.{vilkår} som tillater at en GOAL.{hendelse} blir realisert (av ACT.{noen})
          </desc>
270        <f value='for_Comp' key='select/phrase'/>
          <ex key='LKB:0001'>Jeg har jo        mulighet for å       si nei .</ex>
272        <ex key='LKB:0002'>Vi har ingen      mulighet for å       realisere idealsamfunn</ex>
          <ex key='LKB:0003'>Det er jo en liten        mulighet for at      jeg kan finne et spor der</ex>
274        <ex key='LKB:0004'>Her var det       mulighet for større          utfoldelse.</ex>
        </lunit>
276      <link ref='anledning_N' key='sem/syn[anledning]'/>
        <link ref='sjanse_N' key='sem/syn[sjanse]'/>
278    </lunit>
      <lunit name='situasjon' type='abstract'>
280      <desc key='default'>
  SIT.{en mulig situasjon (med gunstige COND.{vilkår}), hvor en GOAL.{hendelse} blir realisert (av ACT.{noen})}
282      </desc>
        <f value='for_Comp' key='select/phrase[for]'/>
284      <f value='av_Comp' key='select/phrase[av]'/>
        <exp key='phrase'>
286        <real type='phrase' key='for_Comp'>
            <gen>phrase</gen>
288          <exp key='core'>
              <f value='SIT' key='sem/label'/>
290          </exp>
            <exp key='for_PP'>
292            <real type='phrase' key='PP'>
                <gen>phrase</gen>
294              <exp key='Comp'>
                  <f value='SIT' key='sem/label'/>
296              </exp>
              </real>
298          </exp>
          </real>
300        <real type='phrase' key='av_Comp'>
            <gen>phrase</gen>
302          <exp key='core'>
              <f value='SIT' key='sem/label'/>
304          </exp>
            <exp key='av_PP'>
306            <real type='phrase' key='PP'>
                <gen>phrase</gen>
308              <exp key='Comp'>
                  <f value='SIT' key='sem/label'/>
310              </exp>
              </real>
312          </exp>
          </real>
314      </exp>
        <link ref='eventualitet_N' key='sem/syn[eventualitet]'/>
316      <ex key='LKB:0001'>Har du tenkt på            muligheten for at    du er gravid ?</ex>
        <ex key='LKB:0002'>man regner med     muligheten for feil          i programvare .</ex>
318      <ex key='LKB:0003'>Han hadde tenkt seg        muligheten av at     de kanskje hadde hørt ham</ex>
        <ex key='LKB:0004'>
320  motstandsbevegelsen som så for seg         muligheten av        en sovjetisk okkupasjon
        </ex>
322      <ex key='LKB:0005'>Statoil vurderer          muligheten for å     legge en ny gassledning</ex>
        <ex key='LKB:0006'>Jeg kalkulerer alltid med          muligheten for å     tape penger</ex>
324      <ex key='LKB:0007'>Hun avviser       muligheten for å     bestille en bestemt krokodillefarge .</ex>
      </lunit>
326  </lunit>
```

A.2 možnost_N.xml

```
  <lunit name='možnost_N' type='lemma'>
2    <usage key='default'>
      <f value='40565' key='form/stat/freq[SYN2005]'/>
4    </usage>
    <usage key='singular'>
6      <f value='0.649' key='form/stat/rfreq[SYN2005]'/>
```

```
       <constraint key='mulighet-sg'>
  8      <f value='sg' key='gram/num'/>
       </constraint>
 10  </usage>
     <exp key='core'>
 12    <real type='word' key='možnost'>
         <gen>suffixation</gen>
 14      <exp key='base'>
           <real type='morpheme' key='možný'>
 16          <form key='base'>
               <f value='možn' key='form/src'/>
 18          </form>
           </real>
 20      </exp>
         <exp key='suffix'>
 22        <real type='morpheme' key='ost'>
             <include>_morph_suff_ost_N</include>
 24        </real>
         </exp>
 26    </real>
     </exp>
 28  <exp key='phrase'>
       <real type='phrase' key='Gen_Comp'>
 30      <gen>phrase</gen>
         <usage key='default'>
 32        <f value='0.358' key='form/stat/rfreq[SYN2005]'/>
         </usage>
 34      <usage key='singular'>
           <f value='0.649' key='form/stat/rfreq[SYN2005]'/>
 36        <constraint key='default'>
             <f value='sg' key='gram/num'/>
 38        </constraint>
         </usage>
 40      <exp key='core'>
           <include>@THIS/core</include>
 42      </exp>
         <exp key='attr'>
 44        <constraint key='NPgen'>
             <f value='NP' key='form/cat'/>
 46          <f key="gram/case" value="2"/>
             <f key="sem/human" value="false"/>
 48        </constraint>
         </exp>
 50    </real>
       <real type='phrase' key='Inf_Comp'>
 52      <gen>phrase</gen>
         <usage key='default'>
 54        <f value='0.197' key='form/stat/rfreq[SYN2005]'/>
         </usage>
 56      <usage key='singular'>
           <f value='0.927' key='form/stat/rfreq[SYN2005]'/>
 58        <constraint key='default'>
             <f value='sg' key='gram/num'/>
 60        </constraint>
         </usage>
 62      <exp key='core'>
           <include>@THIS/core</include>
 64      </exp>
         <exp key='attr'>
 66        <constraint key='VinfP'>
             <f value='VinfP' key='form/cat'/>
 68        </constraint>
         </exp>
 70    </real>
       <real type='phrase' key='Sattr_Comp'>
 72      <gen>phrase</gen>
         <usage key='default'>
 74        <f value='0.061' key='form/stat/rfreq[SYN2005]'/>
         </usage>
 76      <exp key='core'>
           <include>@THIS/core</include>
 78      </exp>
         <exp key='attr'>
 80        <f key="slot/open" value="semi"/>
```

```
         <constraint key='jak_S'>
82         <usage key='default'>
             <f value='0.035' key='form/stat/rfreq[SYN2005]'/>
84         </usage>
           <f value='S' key='form/cat'/>
86         <f key="form/conj" value="jak"/>
         </constraint>
88       <constraint key='že_S'>
           <usage key='default'>
90           <f value='0.026' key='form/stat/rfreq[SYN2005]'/>
           </usage>
92         <f value='S' key='form/cat'/>
           <f key="form/conj" value="že"/>
94       </constraint>
       </exp>
96   </real>
     <real type='phrase' key='Sattr_aby_Comp'>
98     <gen>phrase</gen>
       <usage key='default'>
100       <f value='0.008' key='form/stat/rfreq[SYN2005]'/>
       </usage>
102     <exp key='core'>
         <include>@THIS/core</include>
104     </exp>
       <exp key='attr'>
106       <constraint key='aby_S'>
           <f value='S' key='form/cat'/>
108         <f key="form/conj" value="aby"/>
         </constraint>
110     </exp>
     </real>
112   <real type='phrase' key='k_Comp'>
       <gen>phrase</gen>
114     <usage key='default'>
         <f value='0.006' key='form/stat/rfreq[SYN2005]'/>
116     </usage>
       <usage key='singular'>
118       <f value='0.398' key='form/stat/rfreq[SYN2005]'/>
         <constraint key='default'>
120         <f value='sg' key='gram/num'/>
         </constraint>
122     </usage>
       <exp key='core'>
124       <include>@THIS/core</include>
       </exp>
126     <exp key='k_PP'>
         <include>k_Pre/phrase</include>
128       <real type='phrase' key='PP'>
           <gen>phrase</gen>
130         <exp key='Comp'>
             <constraint key='NP'>
132             <f value='NP' key='form/cat'/>
               <f key="gram/case" value="3"/>závěrzávěr
134             <f key="sem/human" value="false"/>
             </constraint>
136         </exp>
         </real>
138     </exp>
     </real>
140   <real type='phrase' key='pro_Comp'>
       <gen>phrase</gen>
142     <usage key='default'>
         <f value='0.010' key='form/stat/rfreq[SYN2005]'/>
144     </usage>
       <usage key='singular'>
146       <f value='0.243' key='form/stat/rfreq[SYN2005]'/>
         <constraint key='default'>
148         <f value='sg' key='gram/num'/>
         </constraint>
150     </usage>
       <exp key='core'>
152       <include>@THIS/core</include>
       </exp>
154     <exp key='pro_PP'>
```

```
            <include>pro_Pre/phrase</include>
156         <real type='phrase' key='PP'>
              <gen>phrase</gen>
158           <exp key='Comp'>
                <constraint key='NP'>
160               <f value='NP' key='form/cat'/>
                  <f key="gram/case" value="4"/>
162               <f key="sem/human" value="false"/>
                </constraint>
164           </exp>
            </real>
166        </exp>
          </real>
168     </exp>
        <link key='col/Vsup[dostat]' ref='dostat_V'>
170       <map key='self' loc='#self' rem='PAT'/>
          <f key='sem/aspect' value='inch'/>
172     </link>
        <link key='col/Vsup[získat]' ref='získat_V'>
174       <map key='self' loc='#self' rem='PAT'/>
          <f key='sem/aspect' value='inch'/>
176     </link>
        <link key='col/Vsup[mít]' ref='mít_V'>
178       <map key='self' loc='#self' rem='PAT'/>
          <f key='sem/aspect' value='dur'/>
180     </link>
        <link key='col/Vsup[ztratit]' ref='ztratit_V'>
182       <map key='self' loc='#self' rem='PAT'/>
          <f key='sem/aspect' value='term'/>
184     </link>
        <link key='col/Vsup[pozbýt]' ref='pozbýt_V'>
186       <map key='self' loc='#self' rem='PAT'/>
          <f key='sem/aspect' value='term'/>
188     </link>
        <link key='col/Vsup[využít]' ref='využít_V'>
190       <map key='self' loc='#self' rem='PAT'/>
          <f key='sem/aspect' value='term'/>
192     </link>
        <link key='col/Vsup[dát]' ref='dát_V'>
194       <map key='self' loc='#self' rem='PAT'/>
          <map key='poss' loc='POSS' rem='ADDR'/>
196       <f key='sem/aspect' value='inch'/>
          <f key='sem/caus' value='true'/>
198     </link>
        <link key='col/Vsup[poskytnout]' ref='poskytnout_V'>
200       <map key='self' loc='#self' rem='PAT'/>
          <map key='poss' loc='POSS' rem='ADDR'/>
202       <f key='sem/aspect' value='inch'/>
          <f key='sem/caus' value='true'/>
204     </link>
        <link key='col/Vsup[nechat]' ref='nechat_V'>
206       <map key='self' loc='#self' rem='PAT'/>
          <map key='poss' loc='POSS' rem='ADDR'/>
208       <f key='sem/aspect' value='dur'/>
          <f key='sem/caus' value='true'/>
210     </link>
        <link key='col/Vsup[vzít]' ref='vzít_V'>
212       <map key='self' loc='#self' rem='PAT'/>
          <map key='poss' loc='POSS' rem='ADDR'/>
214       <f key='sem/aspect' value='term'/>
          <f key='sem/caus' value='true'/>
216     </link>
        <link key='col/Vsup[zbavit]' ref='zbavit_V'>
218       <map key='self' loc='#self' rem='PAT'/>
          <map key='poss' loc='POSS' rem='ADDR'/>
220       <f key='sem/aspect' value='term'/>
          <f key='sem/caus' value='true'/>
222     </link>
        <link key='col/Vsup[být]' ref='být_V'>
224       <map key='self' loc='#self' rem='ACT'/>
        </link>
226     <link key='col/Vsup[existovat]' ref='existovat_V'>
          <map key='self' loc='#self' rem='ACT'/>
228     </link>
```

```
       <link key='col/Vsup[naskytnout_se]' ref='naskytnout_se_V'>
230      <map key='self' loc='#self' rem='ACT'/>
       </link>
232    <link key='col/Aatr[neomezený]' ref='neomezený_A'/>
       <link key='col/Aatr[netušený]' ref='netušený_A'/>
234    <link key='col/Aatr[nedozírný]' ref='nedozírný_A'/>
       <link key='col/Aatr[nekonečný]' ref='nekonečný_A'/>
236    <link key='constr[v_rámci_m]' ref='v_rámci_možností_MWE'/>
       <link key='constr[v_mezích_m]' ref='v_mezích_možností_MWE'/>
238    <link key='constr[hranice_m]' ref='hranice_možností_MWE'/>
       <link key='constr[m_jsou_otevrene]' ref='možnosti_jsou_otevřené_MWE'/>
240    <link key='constr[nechat_m_otevrene]' ref='nechat_možnosti_otevřené_MWE'/>
       <link key='constr[země_neomezených_m]' ref='země_neomezených_možností_MWE'/>
242    <link key='trans/no' ref='mulighet_N'/>
       <lunit name='podmínky' type='abstract'>
244      <desc key='default'>COND.{podmínky} umožňující realizaci nějaké GOAL.{události}</desc>
         <f value='Inf_Comp' key='select/phrase[Inf]'/>
246      <f value='Gen_Comp' key='select/phrase[Gen]'/>
         <f value='Sattr_aby_Comp' key='select/phrase[Sattr_aby]'/>
248      <exp key="phrase">
           <real type='phrase' key='Gen_Comp'>
250          <gen>phrase</gen>
             <exp key='core'>
252            <f value='COND' key='sem/label'/>
             </exp>
254          <exp key='attr'>
               <f value='GOAL' key='sem/label'/>
256          </exp>
           </real>
258        <real type='phrase' key='Inf_Comp'>
             <gen>phrase</gen>
260          <exp key='core'>
               <f value='COND' key='sem/label'/>
262          </exp>
             <exp key='attr'>
264            <f value='GOAL' key='sem/label'/>
             </exp>
266        </real>
           <real type='phrase' key='Sattr_aby_Comp'>
268          <gen>phrase</gen>
             <exp key='core'>
270            <f value='COND' key='sem/label'/>
             </exp>
272          <exp key='attr'>
               <f value='GOAL' key='sem/label'/>
274          </exp>
           </real>
276        <real type='phrase' key='k_Comp'>
             <gen>phrase</gen>
278          <exp key='core'>
               <f value='COND' key='sem/label'/>
280          </exp>
             <exp key='k_PP'>
282            <real type='phrase' key='PP'>
                 <gen>phrase</gen>
284              <exp key='Comp'>
                   <f value='GOAL' key='sem/label'/>
286              </exp>
               </real>
288          </exp>
           </real>
290        <real type='phrase' key='pro_Comp'>
             <gen>phrase</gen>
292          <exp key='core'>
               <f value='COND' key='sem/label'/>
294          </exp>
             <exp key='pro_PP'>
296            <real type='phrase' key='PP'>
                 <gen>phrase</gen>
298              <exp key='Comp'>
                   <f value='GOAL' key='sem/label'/>
300              </exp>
               </real>
302          </exp>
```

```
            </real>
304       </exp>
        <lunit name='k' type='abstract'>
306       <desc key='default'>COND.{podmínky} vhodné k tomu, aby ACT.{někdo} realizoval nějaký GOAL.{čin}</desc>
          <f value='k_Comp' key='select/phrase[k]'/>
308       </lunit>
        <lunit name='pro' type='abstract'>
310       <desc key='default'>COND.{podmínky} vhodné pro to, aby nějaká GOAL.{událost} byla realizována (ACT.{někým})</desc>
          <f value='pro_Comp' key='select/phrase[pro]'/>
312       </lunit>
        <link ref='příležitost_N' key='sem/syn[příležitost]'/>
314       <link ref='šance_N' key='sem/syn[šance]'/>
      </lunit>
316   <lunit name='situace' type='abstract'>
        <desc key='default'>SIT.{možná situace (s příznivými COND.{podmínkami}), kde je nějaká GOAL.{událost} realizována (A
318     <f value='Inf_Comp' key='select/phrase[Inf]'/>
        <f value='Gen_Comp' key='select/phrase[Gen]'/>
320     <f value='Sattr_Comp' key='select/phrase[Sattr]'/>
        <link ref='eventualita_N' key='sem/syn[eventualita]'/>
322     <exp key="phrase">
          <real type='phrase' key='Gen_Comp'>
324         <gen>phrase</gen>
            <exp key='core'>
326           <f value='SIT' key='sem/label'/>
            </exp>
328         <exp key='attr'>
              <f value='SIT' key='sem/label'/>
330         </exp>
          </real>
332       <real type='phrase' key='Inf_Comp'>
            <gen>phrase</gen>
334         <exp key='core'>
              <f value='SIT' key='sem/label'/>
336         </exp>
            <exp key='attr'>
338           <f value='SIT' key='sem/label'/>
            </exp>
340       </real>
          <real type='phrase' key='Sattr_Comp'>
342         <gen>phrase</gen>
            <exp key='core'>
344           <f value='SIT' key='sem/label'/>
            </exp>
346         <exp key='attr'>
              <f value='SIT' key='sem/label'/>
348         </exp>
          </real>
350     </exp>
      </lunit>
352 </lunit>
```

A.3 anledning_N.xml

```
    <lunit name='anledning_N' type='lemma'>
2   <desc key='default'>SIT.{situasjon} (f.eks. EVENT.{begivenhet} ved et TIME.{tidspunkt}) med passende COND.{vilkår} ell
    <include>_tmpl_N:fem:f1</include>
4   <usage key='default'>
      <f value='2404' key='form/stat/freq[LKB]'/>
6   </usage>
    <usage key='singular'>
8     <f value='0.703' key='form/stat/rfreq[LKB]'/>
      <constraint key='sg'>
10      <f value='sg' key='gram/num'/>
      </constraint>
12  </usage>
    <exp key="core">
14    <real key="N" type="word">
        <exp key="base">
16        <real key="anledning" type="morpheme">
            <form key="base">
18            <f key="form/src" value="anledning"/>
              <f key="form/base" value="anledning"/>
```

```
20          </form>
          </real>
22        </exp>
      </real>
24    </exp>
    <exp key='phrase'>
26      <real type='phrase' key='til_Comp'>
        <gen>phrase</gen>
28        <usage key='default'>
          <f value='0.470' key='form/stat/rfreq[LKB]'/>
30        </usage>
        <exp key='core'>
32          <include>@THIS/core</include>
          <f value='SIT' key='sem/label'/>
34        </exp>
        <exp key='til_PP'>
36          <include>til_Pre/phrase</include>
          <real type='phrase' key='PP'>
38            <gen>phrase</gen>
            <exp key='Comp'>
40              <f value='GOAL' key='sem/label'/>
              <constraint key='NP'>
42                <f value='NP' key='form/cat'/>
                <f value='false' key='sem/human'/>
44              </constraint>
              <constraint key='VinfP'>
46                <f value='VinfP' key='form/cat'/>
                <usage key='default'>
48                  <f value='0.857' key='form/stat/rfreq[LKB]'/>
                </usage>
50              </constraint>
            </exp>
52          </real>
        </exp>
54      </real>
    </exp>
56    <link key='col/Vsup[ha]' ref='ha_V'>
      <map key='self' loc='#self' rem='PAT'/>
58      <f key='sem/aspect' value='dur'/>
    </link>
60    <link key='col/Vsup[få]' ref='få_V'>
      <map key='self' loc='#self' rem='PAT'/>
62      <f key='sem/aspect' value='inch'/>
    </link>
64    <link key='col/Vsup[gi]' ref='gi_V'>
      <map key='self' loc='#self' rem='PAT'/>
66      <map key='poss' loc='POSS' rem='ADDR'/>
      <f key='sem/aspect' value='inch'/>
68      <f key='sem/caus' value='true'/>
    </link>
70    <link key='col/Vsup[benytte]' ref='benytte_V'>
      <map key='self' loc='#self' rem='PAT'/>
72      <f key='sem/aspect' value='term'/>
    </link>
74    <link key='col/Vsup[gripe]' ref='gripe_V'>
      <map key='self' loc='#self' rem='PAT'/>
76      <f key='sem/aspect' value='term'/>
    </link>
78    <link key='col/Vsup[bruke]' ref='bruke_V'>
      <map key='self' loc='#self' rem='PAT'/>
80      <f key='sem/aspect' value='term'/>
    </link>
82    <link key='col/Vsup[forsømme]' ref='forsømme_V'>
      <map key='self' loc='#self' rem='PAT'/>
84      <f key='sem/aspect' value='term'/>
    </link>
86    <link key='col/Vsup[byde_seg]' ref='byde_seg_V'>
      <map key='self' loc='#self' rem='ACT'/>
88    </link>
    <link key='col/Aatr[enestående]' ref='enestående_A'/>
90    <link key='col/Aatr[festlig]' ref='festlig_A'/>
    <link key='col/Aatr[sjelden]' ref='sjelden_A'/>
92    <link key='col/Aatr[spesiell]' ref='spesiell_A'/>
    <link key='col/Aatr[høytidelig]' ref='høytidelig_A'/>
```

```
94    <link key='constr[ved_a]' ref='ved_anledning_MWE'/>
      <link key='constr[i_a]' ref='i_anledning_MWE'/>
96    <link key='constr[i_den_a]' ref='i_den_anledning_MWE'/>
      <link key='constr[i_sakens_a]' ref='i_sakens_anledning_MWE'/>
98    <link key='constr[for_a]' ref='for_anledningen_MWE'/>
      <link key='constr[la_a_gå_fra_seg]' ref='la_anledningen_gå_fra_seg_MWE'/>
100   <link key='trans/cs' ref='příležitost_N'/>
    </lunit>
```

A.4   příležitost_N.xml

```
    <lunit name='příležitost_N' type='lemma'>
2     <desc key='default'>SIT.{situace} (např. EVENT.{událost} v TIME.{čase}) s vhodnými COND.{podmínkami} či CAUSE.{důvodem
      <usage key='default'>
4      <f value='14152' key='form/stat/freq[SYN2005]'/>
      </usage>
6     <usage key='singular'>
       <f value='0.755' key='form/stat/rfreq[SYN2005]'/>
8      <constraint key='sg'>
         <f value='sg' key='gram/num'/>
10     </constraint>
      </usage>
12    <exp key='core'>
       <real type='word' key='příležitost'>
14      <gen>suffixation</gen>
        <exp key='base'>
16       <real type='morpheme' key='příležitý'>
          <form key='base'>
18          <f value='příležit' key='form/src'/>
            <f value='příležit' key='form/base'/>
20        </form>
         </real>
22      </exp>
        <exp key='suffix'>
24       <real type='morpheme' key='ost'>
          <include>_morph_suff_ost_N</include>
26       </real>
        </exp>
28     </real>
      </exp>
30    <exp key='phrase'>
       <real type='phrase' key='Gen_Comp'>
32      <gen>phrase</gen>
        <usage key='default'>
34       <f value='0.091' key='form/stat/rfreq[SYN2005]'/>
        </usage>
36      <usage key='singular'>
         <f value='0.930' key='form/stat/rfreq[SYN2005]'/>
38       <constraint key='default'>
           <f value='sg' key='gram/num'/>
40       </constraint>
        </usage>
42      <exp key='core'>
         <include>@THIS/core</include>
44       <f value='SIT' key='sem/label'/>
        </exp>
46      <exp key='attr'>
         <f value='GOAL' key='sem/label'/>
48       <constraint key='NPgen'>
           <f value='NP' key='form/cat'/>
50         <f key="gram/case" value="2"/>
           <f key="sem/human" value="false"/>
52       </constraint>
        </exp>
54     </real>
       <real type='phrase' key='Inf_Comp'>
56      <gen>phrase</gen>
        <usage key='default'>
58       <f value='0.142' key='form/stat/rfreq[SYN2005]'/>
        </usage>
60      <usage key='singular'>
         <f value='0.928' key='form/stat/rfreq[SYN2005]'/>
```

```
62          <constraint key='default'>
              <f value='sg' key='gram/num'/>
64          </constraint>
          </usage>
66        <exp key='core'>
            <include>@THIS/core</include>
68          <f value='SIT' key='sem/label'/>
          </exp>
70        <exp key='attr'>
            <f value='GOAL' key='sem/label'/>
72          <constraint key='VinfP'>
              <f value='VinfP' key='form/cat'/>
74          </constraint>
          </exp>
76      </real>
        <real type='phrase' key='k_Comp'>
78        <gen>phrase</gen>
          <usage key='default'>
80          <f value='0.081' key='form/stat/rfreq[SYN2005]'/>
          </usage>
82        <usage key='singular'>
            <f value='0.782' key='form/stat/rfreq[SYN2005]'/>
84          <constraint key='default'>
              <f value='sg' key='gram/num'/>
86          </constraint>
          </usage>
88        <exp key='core'>
            <include>@THIS/core</include>
90          <f value='SIT' key='sem/label'/>
          </exp>
92        <exp key='k_PP'>
            <include>k_Pre/phrase</include>
94          <real type='phrase' key='PP'>
              <gen>phrase</gen>
96            <exp key='Comp'>
                <f value='GOAL' key='sem/label'/>
98              <constraint key='NP'>
                  <f value='NP' key='form/cat'/>
100                 <f key="gram/case" value="3"/>
                  <f key="sem/human" value="false"/>
102             </constraint>
              </exp>
104         </real>
          </exp>
106     </real>
        <real type='phrase' key='pro_Comp'>
108       <gen>phrase</gen>
          <usage key='default'>
110         <f value='0.037' key='form/stat/rfreq[SYN2005]'/>
          </usage>
112       <usage key='singular'>
            <f value='0.543' key='form/stat/rfreq[SYN2005]'/>
114         <constraint key='default'>
              <f value='sg' key='gram/num'/>
116         </constraint>
          </usage>
118       <exp key='core'>
            <include>@THIS/core</include>
120         <f value='SIT' key='sem/label'/>
          </exp>
122       <exp key='pro_PP'>
            <include>pro_Pre/phrase</include>
124         <real type='phrase' key='PP'>
              <gen>phrase</gen>
126           <exp key='Comp'>
                <f value='GOAL' key='sem/label'/>
128             <constraint key='NP'>
                  <f value='NP' key='form/cat'/>
130                 <f key="gram/case" value="4"/>
                  <f key="sem/human" value="false"/>
132             </constraint>
              </exp>
134         </real>
          </exp>
```

```
136        </real>
         </exp>
138      <link key='col/Vsup[dostat]' ref='dostat_V'>
            <map key='self' loc='#self' rem='PAT'/>
140         <f key='sem/aspect' value='inch'/>
         </link>
142      <link key='col/Vsup[mít]' ref='mít_V'>
            <map key='self' loc='#self' rem='PAT'/>
144         <f key='sem/aspect' value='dur'/>
         </link>
146      <link key='col/Vsup[promeškat]' ref='promeškat_V'>
            <map key='self' loc='#self' rem='PAT'/>
148         <f key='sem/aspect' value='term'/>
         </link>
150      <link key='col/Vsup[promarnit]' ref='promarnit_V'>
            <map key='self' loc='#self' rem='PAT'/>
152         <f key='sem/aspect' value='term'/>
         </link>
154      <link key='col/Vsup[propásnout]' ref='propásnout_V'>
            <map key='self' loc='#self' rem='PAT'/>
156         <f key='sem/aspect' value='term'/>
         </link>
158      <link key='col/Vsup[ztratit]' ref='ztratit_V'>
            <map key='self' loc='#self' rem='PAT'/>
160         <f key='sem/aspect' value='term'/>
         </link>
162      <link key='col/Vsup[pozbýt]' ref='pozbýt_V'>
            <map key='self' loc='#self' rem='PAT'/>
164         <f key='sem/aspect' value='term'/>
         </link>
166      <link key='col/Vsup[chopit_se]' ref='chopit_se_V'>
            <map key='self' loc='#self' rem='PAT'/>
168         <f key='sem/aspect' value='term'/>
         </link>
170      <link key='col/Vsup[využít]' ref='využít_V'>
            <map key='self' loc='#self' rem='PAT'/>
172         <f key='sem/aspect' value='term'/>
         </link>
174      <link key='col/Vsup[dát]' ref='dát_V'>
            <map key='self' loc='#self' rem='PAT'/>
176         <map key='poss' loc='POSS' rem='ADDR'/>
            <f key='sem/aspect' value='inch'/>
178         <f key='sem/caus' value='true'/>
         </link>
180      <link key='col/Vsup[poskytnout]' ref='poskytnout_V'>
            <map key='self' loc='#self' rem='PAT'/>
182         <map key='poss' loc='POSS' rem='ADDR'/>
            <f key='sem/aspect' value='inch'/>
184         <f key='sem/caus' value='true'/>
         </link>
186      <link key='col/Vsup[vzít]' ref='vzít_V'>
            <map key='self' loc='#self' rem='PAT'/>
188         <map key='poss' loc='POSS' rem='ADDR'/>
            <f key='sem/aspect' value='term'/>
190         <f key='sem/caus' value='true'/>
         </link>
192      <link key='col/Vsup[naskytnout_se]' ref='naskytnout_se_V'>
            <map key='self' loc='#self' rem='ACT'/>
194      </link>
         <link key='col/Vsup[nabízet_se]' ref='nabízet_se_V'>
196         <map key='self' loc='#self' rem='ACT'/>
         </link>
198      <link key='col/Vsup[vycítit]' ref='vycítit_V'>
            <map key='self' loc='#self' rem='PAT'/>
200      </link>
         <link key='col/Aatr[pracovní]' ref='pracovní_A'/>
202      <link key='col/Aatr[vhodný]' ref='vhodný_A'/>
         <link key='col/Aatr[slavnostní]' ref='slavnostní_A'/>
204      <link key='col/Aatr[jedinečný]' ref='jedinečný_A'/>
         <link key='col/Aatr[promarněný]' ref='promarněný_A'/>
206      <link key='col/Aatr[vítaný]' ref='vítaný_A'/>
         <link key='col/Aatr[nejbližší]' ref='nejbližší_A'/>
208      <link key='constr[u_příležitosti]' ref='u_příležitosti_MWE'/>
         <link key='constr[při_příležitosti]' ref='při_příležitosti_MWE'/>
```

```
210    <link key='constr[při_nějaké_p]' ref='při_nějaké_příležitosti_MWE'/>
       <link key='constr[vidět_svou_p]' ref='vidět_svou_příležitost_MWE'/>
212    <link key='constr[nechat_si_ujít_p]' ref='nechat_si_ujít_příležitost_MWE'/>
       <link key='constr[popadnout_p_za_pačesy]' ref='popadnout_příležitost_za_pačesy_MWE'/>
214    <link key='constr[p_dělá_zloděje]' ref='příležitost_dělá_zloděje_MWE'/>
       <link key='trans/no' ref='anledning_N'/>
216  </lunit>
```

A.5   sjanse_N.xml

```
     <lunit name='sjanse_N' type='lemma'>
2      <include>_tmpl_N:masc:m1</include>
       <usage key='default'>
4        <f value='2107' key='form/stat/freq[LKB]'/>
       </usage>
6      <usage key='singular'>
         <f value='0.782' key='form/stat/rfreq[LKB]'/>
8        <constraint key='sg'>
           <f value='sg' key='gram/num'/>
10       </constraint>
       </usage>
12     <exp key="core">
         <real key="N" type="word">
14         <exp key="base">
             <real key="sjanse" type="morpheme">
16             <form key="base">
                 <f key="form/src" value="sjanse"/>
18               <f key="form/base" value="sjanse"/>
               </form>
20           </real>
           </exp>
22       </real>
       </exp>
24     <exp key='phrase'>
         <real type='phrase' key='til_Comp'>
26         <gen>phrase</gen>
           <usage key='default'>
28           <f value='0.241' key='form/stat/rfreq[LKB]'/>
           </usage>
30         <usage key='singular'>
             <f value='0.874' key='form/stat/rfreq[LKB]'/>
32           <constraint key='default'>
               <f value='sg' key='gram/num'/>
34           </constraint>
           </usage>
36         <exp key='core'>
             <include>@THIS/core</include>
38         </exp>
           <exp key='til_PP'>
40           <include>til_Pre/phrase</include>
             <real type='phrase' key='PP'>
42             <gen>phrase</gen>
               <exp key='Comp'>
44               <constraint key='NP'>
                   <f value='NP' key='form/cat'/>
46                 <f value='false' key='sem/human'/>
                 </constraint>
48               <constraint key='VinfP'>
                   <f value='VinfP' key='form/cat'/>
50                 <usage key='default'>
                     <f value='0.858' key='form/stat/rfreq[LKB]'/>
52                 </usage>
                 </constraint>
54             </exp>
             </real>
56         </exp>
         </real>
58       <real type='phrase' key='for_Comp'>
           <gen>phrase</gen>
60         <usage key='default'>
             <f value='0.173' key='form/stat/rfreq[LKB]'/>
62         </usage>
```

```
           <usage key='singular'>
64            <f value='0.720' key='form/stat/rfreq[LKB]'/>
              <constraint key='default'>
66              <f value='sg' key='gram/num'/>
              </constraint>
68          </usage>
           <exp key='core'>
70            <include>@THIS/core</include>
           </exp>
72         <exp key='for_PP'>
              <include>for_Pre/phrase</include>
74            <real type='phrase' key='PP'>
                <gen>phrase</gen>
76              <exp key='Comp'>
                  <constraint key='VinfP'>
78                  <f value='VinfP' key='form/cat'/>
                    <usage key='default'>
80                    <f value='0.407' key='form/stat/rfreq[LKB]'/>
                    </usage>
82                </constraint>
                  <constraint key='at_S'>
84                  <f value='at_S' key='form/cat'/>
                    <usage key='default'>
86                    <f value='0.390' key='form/stat/rfreq[LKB]'/>
                    </usage>
88                </constraint>
                </exp>
90            </real>
           </exp>
92       </real>
       </exp>
94     <link key='col/Vsup[ha]' ref='ha_V'>
         <map key='self' loc='#self' rem='PAT'/>
96       <f key='sem/aspect' value='dur'/>
       </link>
98     <link key='col/Vsup[få]' ref='få_V'>
         <map key='self' loc='#self' rem='PAT'/>
100      <f key='sem/aspect' value='inch'/>
       </link>
102    <link key='col/Vsup[gi]' ref='gi_V'>
         <map key='self' loc='#self' rem='PAT'/>
104      <map key='poss' loc='POSS' rem='ADDR'/>
         <f key='sem/aspect' value='inch'/>
106      <f key='sem/caus' value='true'/>
       </link>
108    <link key='col/Vsup[forspille]' ref='forspille_V'>
         <map key='self' loc='#self' rem='PAT'/>
110      <f key='sem/aspect' value='term'/>
       </link>
112    <link key='col/Vsup[miste]' ref='miste_V'>
         <map key='self' loc='#self' rem='PAT'/>
114      <f key='sem/aspect' value='term'/>
       </link>
116    <link key='col/Vsup[byde_seg]' ref='byde_seg_V'>
         <map key='self' loc='#self' rem='ACT'/>
118    </link>
       <link key='constr[la_s_gå_fra_seg]' ref='la_anledningen_gå_fra_seg_MWE'/>
120    <link key='constr[ta_s]' ref='ta_sjansen_MWE'/>
       <link key='constr[s_i]' ref='sjanse_i_MWE'/>
122    <link key='constr[s_mot]' ref='sjanse_mot_MWE'/>
       <link key='trans/cs[možnost]' ref='možnost_N'/>
124    <link key='trans/cs[šance]' ref='šance_N'/>
       <lunit name='anledning' type='subsense'>
126      <link key='trans/cs[příležitost]' ref='příležitost_N'/>
         <desc key='default'>COND.{vilkår} som tillater (ACT.{noen} å realisere) en GOAL.{hendelse}</desc>
128      <link key='sem/syn' ref='anledning_N'/>
         <f value='til_Comp' key='select/phrase'/>
130      <exp key='phrase'>
           <real type='phrase' key='til_Comp'>
132          <gen>phrase</gen>
             <exp key='core'>
134            <f value='COND' key='sem/label'/>
             </exp>
136          <exp key='til_PP'>
```

```
              <real type='phrase' key='PP'>
138               <gen>phrase</gen>
                  <exp key='Comp'>
140                 <f value='GOAL' key='sem/label'/>
                  </exp>
142             </real>
              </exp>
144         </real>
          </exp>
146       <link key='col/Vsup[benytte]' ref='benytte_V'>
            <map key='self' loc='#self' rem='PAT'/>
148         <f key='sem/aspect' value='term'/>
          </link>
150       <link key='col/Vsup[gripe]' ref='gripe_V'>
            <map key='self' loc='#self' rem='PAT'/>
152         <f key='sem/aspect' value='term'/>
          </link>
154     </lunit>
        <lunit name='sannsynlighet' type='subsense'>
156       <desc key='default'>PROB.{sannsynlighet} at en SIT.{situasjon} (hvor ACT.{noen} realiserer en GOAL.{hendelse}) skjer</desc>
          <link key='sem/syn' ref='sannsynlighet_N'/>
158       <link key='trans/cs[pravděpodobnost]' ref='pravděpodobnost_N'/>
          <link key='trans/cs[naděje]' ref='naděje_N'/>
160       <f value='for_Comp' key='select/phrase'/>
          <exp key='phrase'>
162         <real type='phrase' key='for_Comp'>
              <gen>phrase</gen>
164           <exp key='core'>
                <f value='PROB' key='sem/label'/>
166           </exp>
              <exp key='for_PP'>
168             <real type='phrase' key='PP'>
                  <gen>phrase</gen>
170               <exp key='Comp'>
                    <f value='SIT' key='sem/label'/>
172               </exp>
                </real>
174           </exp>
            </real>
176       </exp>
          <link key='col/Vsup[øke]' ref='øke_V'>
178         <map key='self' loc='#self' rem='PAT'/>
          </link>
180       <link key='col/Vsup[redusere]' ref='redusere_V'>
            <map key='self' loc='#self' rem='PAT'/>
182       </link>
        </lunit>
184   </lunit>
```

A.6   šance_N.xml

```
      <lunit name='šance_N' type='lemma'>
2       <include>_tmpl_N:fem:duše</include>
        <desc key='default'>SIT.{situace} s velkou PROB.{pravděpodobností} / vhodnými COND.{podmínkami} k tomu, aby se ACT.{někomu} podařilo
4       <usage key='default'>
          <f value='12975' key='form/stat/freq[SYN2005]'/>
6       </usage>
        <usage key='singular'>
8         <f value='0.755' key='form/stat/rfreq[SYN2005]'/>
          <constraint key='sg'>
10          <f value='sg' key='gram/num'/>
          </constraint>
12      </usage>
        <exp key='core'>
14        <real type='word' key='N'>
            <exp key='base'>
16            <real type='morpheme' key='šance'>
                <form key='base'>
18                <f value='šance' key='form/src'/>
                  <f value='šance' key='form/base'/>
20              </form>
              </real>
```

```
22        </exp>
        </real>
24    </exp>
    <exp key="phrase">
26    <real type='phrase' key='Inf_Comp'>
        <gen>phrase</gen>
28      <usage key='default'>
        <f value='0.192' key='form/stat/rfreq[SYN2005]'/>
30      </usage>
        <usage key='singular'>
32        <f value='0.934' key='form/stat/rfreq[SYN2005]'/>
        <constraint key='default'>
34          <f value='sg' key='gram/num'/>
        </constraint>
36      </usage>
        <exp key='core'>
38        <include>@THIS/core</include>
          <f value='SIT' key='sem/label'/>
40      </exp>
        <exp key='attr'>
42        <f value='GOAL' key='sem/label'/>
        <constraint key='VinfP'>
44          <f value='VinfP' key='form/cat'/>
        </constraint>
46      </exp>
      </real>
48    <real type='phrase' key='na_Comp'>
        <gen>phrase</gen>
50      <usage key='default'>
        <f value='0.127' key='form/stat/rfreq[SYN2005]'/>
52      </usage>
        <usage key='singular'>
54        <f value='0.755' key='form/stat/rfreq[SYN2005]'/>
        <constraint key='default'>
56          <f value='sg' key='gram/num'/>
        </constraint>
58      </usage>
        <exp key='core'>
60        <include>@THIS/core</include>
          <f value='SIT' key='sem/label'/>
62      </exp>
        <exp key='na_PP'>
64        <include>na_Pre/phrase</include>
        <real type='phrase' key='PP'>
66        <gen>phrase</gen>
          <exp key='Comp'>
68        <f value='GOAL' key='sem/label'/>
            <constraint key='NP'>
70            <f value='NP' key='form/cat'/>
            <f key="gram/case" value="4"/>
72            <f key="sem/human" value="false"/>
            </constraint>
74        </exp>
        </real>
76      </exp>
      </real>
78    <real type='phrase' key='k_Comp'>
        <gen>phrase</gen>
80      <usage key='default'>
        <f value='0.008' key='form/stat/rfreq[SYN2005]'/>
82      </usage>
        <usage key='singular'>
84        <f value='0.771' key='form/stat/rfreq[SYN2005]'/>
        <constraint key='default'>
86          <f value='sg' key='gram/num'/>
        </constraint>
88      </usage>
        <exp key='core'>
90        <include>@THIS/core</include>
          <f value='SIT' key='sem/label'/>
92      </exp>
        <exp key='k_PP'>
94        <include>k_Pre/phrase</include>
          <real type='phrase' key='PP'>
```

```
 96              <gen>phrase</gen>
                 <exp key='Comp'>
 98              <f value='GOAL' key='sem/label'/>
                   <constraint key='NP'>
100                  <f value='NP' key='form/cat'/>
                     <f key="gram/case" value="3"/>
102                  <f key="sem/human" value="false"/>
                   </constraint>
104              </exp>
               </real>
106          </exp>
           </real>
108    </exp>
     <link key='col/Vsup[chopit_se]' ref='chopit_se_V'>
110      <map key='self' loc='#self' rem='PAT'/>
         <f key='sem/aspect' value='term'/>
112    </link>
       <link key='col/Vsup[využít]' ref='využít_V'>
114      <map key='self' loc='#self' rem='PAT'/>
         <f key='sem/aspect' value='term'/>
116    </link>
       <link key='col/Vsup[dát]' ref='dát_V'>
118      <map key='self' loc='#self' rem='PAT'/>
         <map key='poss' loc='POSS' rem='ADDR'/>
120      <f key='sem/aspect' value='inch'/>
         <f key='sem/caus' value='true'/>
122    </link>
       <link key='col/Vsup[dostat]' ref='dostat_V'>
124      <map key='self' loc='#self' rem='PAT'/>
         <f key='sem/aspect' value='inch'/>
126    </link>
       <link key='col/Vsup[promarnit]' ref='promarnit_V'>
128      <map key='self' loc='#self' rem='PAT'/>
         <f key='sem/aspect' value='term'/>
130    </link>
       <link key='col/Vsup[propást]' ref='propást_V'>
132      <map key='self' loc='#self' rem='PAT'/>
         <f key='sem/aspect' value='term'/>
134    </link>
       <link key='col/Vsup[zahodit]' ref='zahodit_V'>
136      <map key='self' loc='#self' rem='PAT'/>
         <f key='sem/aspect' value='term'/>
138    </link>
       <link key='col/Vsup[naskytnout_se]' ref='naskytnout_se_V'>
140      <map key='self' loc='#self' rem='ACT'/>
       </link>
142    <link key='col/Vsup[existovat]' ref='existovat_V'>
         <map key='self' loc='#self' rem='ACT'/>
144    </link>
       <link key='col/Vsup[rýsovat_se]' ref='rýsovat_se_V'>
146      <map key='self' loc='#self' rem='ACT'/>
       </link>
148    <link key='col/Vsup[nabízet_se]' ref='nabízet_se_V'>
         <map key='self' loc='#self' rem='ACT'/>
150    </link>
       <link key='col/Vsup[zrodit_se]' ref='zrodit_se_V'>
152      <map key='self' loc='#self' rem='ACT'/>
       </link>
154    <link key='col/Vsup[zvyšovat_se]' ref='zvyšovat_se_V'>
         <map key='self' loc='#self' rem='ACT'/>
156    </link>
       <link key='col/Vsup[růst]' ref='růst_V'>
158      <map key='self' loc='#self' rem='ACT'/>
       </link>
160    <link key='col/Vsup[vycítit]' ref='vycítit_V'>
         <map key='self' loc='#self' rem='PAT'/>
162    </link>
       <link key='col/Vsup[proměnit]' ref='proměnit_V'>
164      <map key='self' loc='#self' rem='PAT'/>
         <f key='sem/aspect' value='term'/>
166      <usage key="sports">
           <f key="style/domain" value="sport"/>
168      </usage>
       </link>
```

```
170    <link key='col/Aatr[gólový]' ref='gólový_A'/>
       <link key='col/Aatr[životní]' ref='životní_A'/>
172    <link key='col/Aatr[promarněný]' ref='promarněný_A'/>
       <link key='col/Aatr[vyložený]' ref='vyložený_A'/>
174    <link key='col/Aatr[reálný]' ref='reálný_A'/>
       <link key='constr[š_v]' ref='šance_v_MWE'/>
176    <link key='constr[š_proti]' ref='šance_proti_MWE'/>
       <link key='constr[popadnout_p_za_pačesy]' ref='popadnout_příležitost_za_pačesy_MWE'/>
178    <link key='trans/no' ref='sjanse_N'/>
    </lunit>
```

A.7   evne_N.xml

```
    <lunit name='evne_N' type='lemma'>
2     <include>_tmpl_N:fem:f1</include>
      <usage key='default'>
4       <f value='2783' key='form/stat/freq[LKB]'/>
      </usage>
6     <usage key='singular'>
        <f value='0.824' key='form/stat/rfreq[LKB]'/>
8       <constraint key='sg'>
          <f value='sg' key='gram/num'/>
10      </constraint>
      </usage>
12    <exp key="core">
        <real key="N" type="word">
14        <exp key="base">
            <real key="evne" type="morpheme">
16            <form key="base">
                <f key="form/src" value="evne"/>
18              <f key="form/base" value="evne"/>
              </form>
20          </real>
          </exp>
22      </real>
      </exp>
24    <exp key='phrase'>
        <real type='phrase' key='til_Comp'>
26        <gen>phrase</gen>
          <usage key='default'>
28          <f value='0.711' key='form/stat/rfreq[LKB]'/>
          </usage>
30        <usage key='singular'>
            <f value='0.966' key='form/stat/rfreq[LKB]'/>
32          <constraint key='default'>
              <f value='sg' key='gram/num'/>
34          </constraint>
          </usage>
36        <exp key='core'>
            <include>@THIS/core</include>
38        </exp>
          <exp key='til_PP'>
40          <include>til_Pre/phrase</include>
            <real type='phrase' key='PP'>
42            <gen>phrase</gen>
              <exp key='Comp'>
44              <constraint key='NP'>
                  <f value='NP' key='form/cat'/>
46                <f value='false' key='sem/human'/>
                </constraint>
48              <constraint key='VinfP'>
                  <f value='VinfP' key='form/cat'/>
50                <usage key='default'>
                    <f value='0.813' key='form/stat/rfreq[LKB]'/>
52                </usage>
                </constraint>
54            </exp>
            </real>
56        </exp>
        </real>
58    </exp>
      <link key='col/Vsup[ha]' ref='ha_V'>
```

```
60       <map key='self' loc='#self' rem='PAT'/>
         <f key='sem/aspect' value='dur'/>
62     </link>
       <link key='col/Vsup[utvikle]' ref='utvikle_V'>
64       <map key='self' loc='#self' rem='PAT'/>
         <f key='sem/aspect' value='inch'/>
66     </link>
       <link key='col/Vsup[bruke]' ref='bruke_V'>
68       <map key='self' loc='#self' rem='PAT'/>
         <f key='sem/aspect' value='term'/>
70     </link>
       <link key='col/Vsup[miste]' ref='miste_V'>
72       <map key='self' loc='#self' rem='PAT'/>
         <f key='sem/aspect' value='term'/>
74     </link>
       <link key='col/Vsup[mangle]' ref='mangle_V'>
76       <map key='self' loc='#self' rem='PAT'/>
         <f key='sem/aspect' value='dur'/>
78     </link>
       <link key='col/Vsup[overstige]' ref='overstige_V'>
80       <map key='self' loc='#self' rem='PAT'/>
       </link>
82     <link key='col/Aatr[økonomisk]' ref='økonomisk_A'/>
       <link key='col/Aatr[kunstnerisk]' ref='kunstnerisk_A'/>
84     <link key='col/Aatr[intelektuell]' ref='intelektuell_A'/>
       <link key='col/Aatr[skapende]' ref='skapende_A'/>
86     <link key='col/Aatr[enestående]' ref='enestående_A'/>
       <link key='col/Aatr[sjelden]' ref='sjelden_A'/>
88     <link key='col/Aatr[spesiell]' ref='spesiell_A'/>
       <link key='col/Aatr[overnaturlig]' ref='overnaturlig_A'/>
90     <link key='col/Aatr[synsk]' ref='synsk_A'/>
       <link key='col/Aatr[særlig]' ref='særlig_A'/>
92     <link key='col/Aatr[mental]' ref='mental_A'/>
       <link key='col/Aatr[fabelaktig]' ref='fabelaktig_A'/>
94     <link key='constr[etter_e]' ref='etter_evne_MWE'/>
       <link key='constr[etter_beste_e]' ref='etter_beste_evne_MWE'/>
96     <link key='constr[over_e]' ref='over_evne_MWE'/>
       <link key='constr[ligge_i_e]' ref='ligge_i_evne_MWE'/>
98     <link key='constr[ligge_utenfor_e]' ref='ligge_utenfor_evner_MWE'/>
       <link key='trans/cs[schopnost]' ref='schopnost_N'/>
100    <lunit name='egenskap' type='abstract'>
         <desc key='default'>CAP.{personlig egenskap} som tillater ACT.{eieren} å realisere en GOAL.{hendelse}</desc>
102      <f value='til_Comp' key='select/phrase'/>
         <exp key='phrase'>
104        <real type='phrase' key='til_Comp'>
             <gen>phrase</gen>
106          <exp key='core'>
               <f value='CAP' key='sem/label'/>
108          </exp>
             <exp key='til_PP'>
110            <real type='phrase' key='PP'>
                 <gen>phrase</gen>
112              <exp key='Comp'>
                   <f value='GOAL' key='sem/label'/>
114              </exp>
               </real>
116          </exp>
           </real>
118      </exp>
       <link key='trans/cs[síla]' ref='síla_N'/>
120    <link key='trans/cs[moc]' ref='moc_N'/>
       </lunit>
122    <lunit name='begavelse' type='abstract'>
         <desc key='default'>CAP.{spesiell personlig begavelse} som tillater ACT.{eieren} å bli vellykket i et FIELD.{felt}</desc>
124      <f value='pl' key='select/gram/num'/>
         <exp key='phrase'>
126        <real type='phrase' key='for_Comp'>
             <gen>phrase</gen>
128          <exp key='core'>
               <include>@THIS/core</include>
130            <f value='CAP' key='sem/label'/>
               <constraint key='default'>
132              <f value='pl' key='gram/num'/>
               </constraint>
```

```
134    </exp>
       <exp key='for_PP'>
136      <include>for_Pre/phrase</include>
         <real type='phrase' key='PP'>
138        <gen>phrase</gen>
           <exp key='Comp'>
140          <f value='FIELD' key='sem/label'/>
             <constraint key='NP'>
142            <f value='NP' key='form/cat'/>
               <f value='false' key='sem/human'/>
144          </constraint>
             <constraint key='VinfP'>
146            <f value='VinfP' key='form/cat'/>
             </constraint>
148        </exp>
         </real>
150    </exp>
       </real>
152    <real type='phrase' key='i_Comp'>
         <gen>phrase</gen>
154      <exp key='core'>
           <include>@THIS/core</include>
156        <f value='CAP' key='sem/label'/>
           <constraint key='default'>
158          <f value='pl' key='gram/num'/>
           </constraint>
160      </exp>
         <exp key='i_PP'>
162        <include>i_Pre/phrase</include>
           <real type='phrase' key='PP'>
164          <gen>phrase</gen>
             <exp key='Comp'>
166            <f value='FIELD' key='sem/label'/>
               <constraint key='NP'>
168              <f value='NP' key='form/cat'/>
                 <f value='false' key='sem/human'/>
170            </constraint>
             </exp>
172        </real>
         </exp>
174      </real>
       </exp>
176    <link key='trans/cs[dar]' ref='dar_N'/>
       </lunit>
178  </lunit>
```

A.8   schopnost_N.xml

```
    <lunit name='schopnost_N' type='lemma'>
2     <desc key='default'>CAP.{vlastnost} (ACT.{něčí}) potřebná k tomu, aby byla realizována nějaká GOAL.{činnost} (v rámci
      <usage key='default'>
4       <f value='11235' key='form/stat/freq[SYN2005]'/>
      </usage>
6     <usage key='singular'>
        <f value='0.662' key='form/stat/rfreq[SYN2005]'/>
8       <constraint key='sg'>
          <f value='sg' key='gram/num'/>
10      </constraint>
      </usage>
12    <exp key='core'>
        <real type='word' key='možnost'>
14        <gen>suffixation</gen>
          <exp key='base'>
16          <real type='morpheme' key='schopný'>
              <form key='base'>
18              <f value='schopn' key='form/src'/>
              </form>
20          </real>
          </exp>
22        <exp key='suffix'>
            <real type='morpheme' key='ost'>
24            <include>_morph_suff_ost_N</include>
```

```
                    </real>
26              </exp>
            </real>
28      </exp>
        <exp key="phrase">
30          <real type='phrase' key='Inf_Comp'>
                <gen>phrase</gen>
32              <usage key='default'>
                    <f value='0.306' key='form/stat/rfreq[SYN2005]'/>
34              </usage>
                <usage key='singular'>
36                  <f value='0.942' key='form/stat/rfreq[SYN2005]'/>
                    <constraint key='default'>
38                      <f value='sg' key='gram/num'/>
                    </constraint>
40              </usage>
                <exp key='core'>
42                  <include>@THIS/core</include>
                    <f value='CAP' key='sem/label'/>
44              </exp>
                <exp key='attr'>
46                  <f value='GOAL' key='sem/label'/>
                    <constraint key='VinfP'>
48                      <f value='VinfP' key='form/cat'/>
                    </constraint>
50              </exp>
            </real>
52          <real type='phrase' key='k_Comp'>
                <gen>phrase</gen>
54              <exp key='core'>
                    <include>@THIS/core</include>
56                  <f value='CAP' key='sem/label'/>
                </exp>
58              <exp key='k_PP'>
                    <include>k_Pre/phrase</include>
60                  <real type='phrase' key='PP'>
                        <gen>phrase</gen>
62                      <exp key='Comp'>
                            <f value='GOAL' key='sem/label'/>
64                          <constraint key='NP'>
                                <f value='NP' key='form/cat'/>
66                              <f key="gram/case" value="3"/>
                                <f key="sem/human" value="false"/>
68                          </constraint>
                        </exp>
70                  </real>
                </exp>
72          </real>
            <real type='phrase' key='pro_Comp'>
74              <gen>phrase</gen>
                <exp key='core'>
76                  <include>@THIS/core</include>
                    <f value='CAP' key='sem/label'/>
78              </exp>
                <exp key='pro_PP'>
80                  <include>pro_Pre/phrase</include>
                    <real type='phrase' key='PP'>
82                      <gen>phrase</gen>
                        <exp key='Comp'>
84                          <f value='FIELD' key='sem/label'/>
                            <constraint key='NP'>
86                              <f value='NP' key='form/cat'/>
                                <f key="gram/case" value="4"/>
88                              <f key="sem/human" value="false"/>
                            </constraint>
90                      </exp>
                    </real>
92              </exp>
            </real>
94          <real type='phrase' key='v_Comp'>
                <gen>phrase</gen>
96              <exp key='core'>
                    <include>@THIS/core</include>
98                  <f value='CAP' key='sem/label'/>
```

```
          </exp>
100       <exp key='v_PP'>
            <include>v_Pre/phrase</include>
102         <real type='phrase' key='PP'>
              <gen>phrase</gen>
104           <exp key='Comp'>
                <f value='FIELD' key='sem/label'/>
106             <constraint key='NP'>
                  <f value='NP' key='form/cat'/>
108               <f key="gram/case" value="6"/>
                  <f key="sem/human" value="false"/>
110             </constraint>
              </exp>
112         </real>
          </exp>
114     </real>
      </exp>
116   <link key='col/Vsup[nabýt]' ref='nabýt_V'>
        <map key='self' loc='#self' rem='PAT'/>
118     <f key='sem/aspect' value='inch'/>
      </link>
120   <link key='col/Vsup[získat]' ref='získat_V'>
        <map key='self' loc='#self' rem='PAT'/>
122     <f key='sem/aspect' value='inch'/>
      </link>
124   <link key='col/Vsup[vypěstovat_si]' ref='vypěstovat_si_V'>
        <map key='self' loc='#self' rem='PAT'/>
126     <f key='sem/aspect' value='inch'/>
      </link>
128   <link key='col/Vsup[osvědčit]' ref='osvědčit_V'>
        <map key='self' loc='#self' rem='PAT'/>
130     <f key='sem/aspect' value='inch'/>
      </link>
132   <link key='col/Vsup[projevit]' ref='projevit_V'>
        <map key='self' loc='#self' rem='PAT'/>
134     <f key='sem/aspect' value='inch'/>
      </link>
136   <link key='col/Vsup[mít]' ref='mít_V'>
        <map key='self' loc='#self' rem='PAT'/>
138     <f key='sem/aspect' value='dur'/>
      </link>
140   <link key='col/Vsup[pěstovat]' ref='pěstovat_V'>
        <map key='self' loc='#self' rem='PAT'/>
142     <f key='sem/aspect' value='dur'/>
      </link>
144   <link key='col/Vsup[ztratit]' ref='ztratit_V'>
        <map key='self' loc='#self' rem='PAT'/>
146     <f key='sem/aspect' value='term'/>
      </link>
148   <link key='col/Vsup[pozbýt]' ref='pozbýt_V'>
        <map key='self' loc='#self' rem='PAT'/>
150     <f key='sem/aspect' value='term'/>
      </link>
152   <link key='col/Vsup[prokázat]' ref='prokázat_V'>
        <map key='self' loc='#self' rem='PAT'/>
154   </link>
      <link key='col/Vsup[využít]' ref='využít_V'>
156     <map key='self' loc='#self' rem='PAT'/>
      </link>
158   <link key='col/Vsup[rozvíjet]' ref='rozvíjet_V'>
        <map key='self' loc='#self' rem='PAT'/>
160   </link>
      <link key='col/Vsup[obdařit]' ref='obdařit_V'>
162     <map key='self' loc='#self' rem='PAT'/>
        <map key='poss' loc='POSS' rem='ADDR'/>
164     <f key='sem/aspect' value='inch'/>
        <f key='sem/caus' value='true'/>
166   </link>
      <link key='col/Vsup[vyznačovat_se]' ref='vyznačovat_se_V'>
168     <map key='self' loc='#self' rem='PAT'/>
        <f key='sem/aspect' value='dur'/>
170   </link>
      <link key='col/Vsup[disponovat]' ref='disponovat_V'>
172     <map key='self' loc='#self' rem='PAT'/>
```

```
            <f key='sem/aspect' value='dur'/>
174     </link>
        <link key='col/Vsup[vynikat]' ref='vynikat_V'>
176       <map key='self' loc='#self' rem='PAT'/>
            <f key='sem/aspect' value='dur'/>
178     </link>
        <link key='col/Vsup[vládnout]' ref='vládnout_V'>
180       <map key='self' loc='#self' rem='PAT'/>
            <f key='sem/aspect' value='dur'/>
182     </link>
        <link key='col/Vsup[oplývat]' ref='oplývat_V'>
184       <map key='self' loc='#self' rem='PAT'/>
            <f key='sem/aspect' value='dur'/>
186     </link>
        <link key='col/Vsup[vymykat_se]' ref='vymykat_se_V'>
188       <map key='self' loc='#self' rem='PAT'/>
        </link>
190     <link key='col/Aatr[pracovní]' ref='pracovní_A'/>
        <link key='col/Aatr[mimořádný]' ref='mimořádný_A'/>
192     <link key='col/Aatr[rozlišovací]' ref='rozlišovací_A'>
          <usage key="technical">
194         <f key="style/domain" value="tech"/>
          </usage>
196     </link>
        <link key='col/Aatr[rozumový]' ref='rozumový_A'/>
198     <link key='col/Aatr[vyjadřovací]' ref='vyjadřovací_A'/>
        <link key='col/Aatr[vypovídací]' ref='vypovídací_A'/>
200     <link key='col/Aatr[nadpřirozený]' ref='nadpřirozený_A'/>
        <link key='col/Aatr[tvůrčí]' ref='tvůrčí_A'/>
202     <link key='col/Aatr[intelektuální]' ref='intelektuální_A'/>
        <link key='col/Aatr[vůdčí]' ref='vůdčí_A'/>
204     <link key='constr[podle_s]' ref='podle_schopností_MWE'/>
        <link key='constr[být_ve_s]' ref='být_ve_schopnostech_MWE'/>
206     <link key='trans/no' ref='evne_N'/>
    </lunit>
```

A.9   styrke_N.xml

```
    <lunit name='styrke_N' type='lemma'>
2     <include>_tmpl_N:masc:m1</include>
      <usage key='default'>
4       <f value='2476' key='form/stat/freq[LKB]'/>
      </usage>
6     <usage key='singular'>
        <f value='0.672' key='form/stat/rfreq[LKB]'/>
8       <constraint key='sg'>
          <f value='sg' key='gram/num'/>
10      </constraint>
      </usage>
12    <exp key="core">
        <real key="N" type="word">
14        <exp key="base">
            <real key="styrke" type="morpheme">
16            <form key="base">
                <f key="form/src" value="styrke"/>
18              <f key="form/base" value="styrke"/>
              </form>
20          </real>
          </exp>
22      </real>
      </exp>
24    <exp key='phrase'>
        <real type='phrase' key='til_Comp'>
26        <gen>phrase</gen>
          <exp key='core'>
28          <include>@THIS/core</include>
            <f key='sem/label' value='CAP'/>
30        </exp>
          <exp key='til_PP'>
32          <include>til_Pre/phrase</include>
            <real type='phrase' key='PP'>
34            <gen>phrase</gen>
```

```
        <exp key='Comp'>
36          <f key='sem/label' value='GOAL'/>
            <constraint key='VinfP'>
38            <f value='VinfP' key='form/cat'/>
            </constraint>
40        </exp>
        </real>
42    </exp>
    </real>
44  <real type='phrase' key='på_Comp_Quant'>
      <gen>phrase</gen>
46    <exp key='core'>
        <include>@THIS/core</include>
48      <f key='sem/label' value='QUANT'/>
        <constraint key='default'>
50        <f key='gram/num' value='sg'/>
        </constraint>
52    </exp>
      <exp key='på_PP'>
54      <include>på_Pre/phrase</include>
        <real type='phrase' key='PP'>
56        <gen>phrase</gen>
          <exp key='Comp'>
58          <f key='sem/label' value='QUANT'/>
            <constraint key='NP'>
60            <f value='NP' key='form/cat'/>
              <f value='false' key='sem/human'/>
62          </constraint>
          </exp>
64      </real>
      </exp>
66  </real>
    <real type='phrase' key='på_Comp_Act'>
68    <gen>phrase</gen>
      <exp key='core'>
70      <include>@THIS/core</include>
        <f key='sem/label' value='QUANT'/>
72      <constraint key='default'>
          <f key='gram/num' value='sg'/>
74      </constraint>
      </exp>
76    <exp key='på_PP'>
        <include>på_Pre/phrase</include>
78      <real type='phrase' key='PP'>
          <gen>phrase</gen>
80        <exp key='Comp'>
            <f key='sem/label' value='ACT'/>
82          <constraint key='NP'>
              <f value='NP' key='form/cat'/>
84            <f value='false' key='sem/human'/>
            </constraint>
86        </exp>
        </real>
88    </exp>
    </real>
90  <real type='phrase' key='i_Comp_Act'>
      <gen>phrase</gen>
92    <exp key='core'>
        <include>@THIS/core</include>
94      <f key='sem/label' value='QUANT'/>
        <constraint key='default'>
96        <f key='gram/num' value='sg'/>
        </constraint>
98    </exp>
      <exp key='i_PP'>
100     <include>i_Pre/phrase</include>
        <real type='phrase' key='PP'>
102       <gen>phrase</gen>
          <exp key='Comp'>
104         <f key='sem/label' value='ACT'/>
            <constraint key='NP'>
106           <f value='NP' key='form/cat'/>
              <f value='false' key='sem/human'/>
108         </constraint>
```

```
            </exp>
110         </real>
          </exp>
112     </real>
      </exp>
114   <link key='col/Vsup[ha]' ref='ha_V'>
        <map key='self' loc='#self' rem='PAT'/>
116     <f key='sem/aspect' value='dur'/>
      </link>
118   <link key='col/Vsup[gi]' ref='gi_V'>
        <map key='self' loc='#self' rem='PAT'/>
120     <map key='poss' loc='POSS' rem='ADDR'/>
        <f key='sem/aspect' value='inch'/>
122     <f key='sem/caus' value='true'/>
      </link>
124   <link key='col/Vsup[vise]' ref='vise_V'>
        <map key='self' loc='#self' rem='PAT'/>
126   </link>
      <link key='col/Vsup[gjenvinne]' ref='gjenvinne_V'>
128     <map key='self' loc='#self' rem='PAT'/>
      </link>
130   <link key='col/Vsup[overvurdere]' ref='overvurdere_V'>
        <map key='self' loc='#self' rem='PAT'/>
132   </link>
      <link key='constr[ha_s_i]' ref='ha_styrke_i_MWE'/>
134   <link key='constr[på_full_s]' ref='på_full_styrke_MWE'/>
      <link key='constr[øke_i_s]' ref='øke_i_styrken_MWE'/>
136   <link key='constr[måle_s]' ref='måle_styrke_MWE'/>
      <lunit name='egenskap' type='sense'>
138     <desc key='default'>CAP.{egenskap} (med målbar QUANT.{kvantitet}) som tillater ACT.{sin eier} å overvinne OBSTR.{motvirkende kreft
        <link key='trans/cs' ref='síla_N:kvalita:vlastnost'/>
140     <lunit name='til_mennesker' type='subsense'>
          <desc key='default'>CAP.{fysisk eller mental egenskap} til et ACT.{menneske} (med målbar QUANT.{kvantitet}) som tillater ACT.{si
142     <f key='select/phrase' value='til_Comp'/>
        <link key='col/Aatr[indre]' ref='indre_A'/>
144     <link key='col/Aatr[fysisk]' ref='fysisk_A'/>
        </lunit>
146     <lunit name='til_materiale' type='subsense'>
          <desc key='default'>CAP.{fysisk egenskap} til et ACT.{materiale} (med målbar QUANT.{kvantitet}) som tillater ACT.{materialet} GO
148     </lunit>
      </lunit>
150   <lunit name='til_krefter' type='sense'>
        <desc key='default'>QUANT.{kvantitet/intensitet} til en ACT.{kraft}</desc>
152     <link key='comp/prim[vindstyrke]' ref='vindstyrke_N'/>
        <link key='comp/pri[viljestyrke]' ref='viljestyrke_N'/>
154     <link key='trans/cs' ref='síla_N:kvantita:intenzita'/>
      </lunit>
156   <lunit name='gruppe' type='sense'>
        <desc key='default'>CAP.{organisert gruppe av mennesker} (med målbar QUANT.{antall} medlemmer) som tillater ACT.{sin organisator}
158     <f key='select/gram/num' value='pl'/>
        <link key="sem/ext/pers" ref="egenskap"/>
160     <link key='col/Aatr[militær]' ref='militær_A'/>
        <link key='constr[væpnede_s]' ref='væpnede_styrker_MWE'/>
162     <link key='col/Aatr[norsk]' ref='norsk_A'/>
        <link key='col/Aatr[tysk]' ref='tysk_A'/>
164     <link key='col/Aatr[internasjonal]' ref='internasjonal_A'/>
        <link key='col/Aatr[fredsbevarende]' ref='fredsbevarende_A'/>
166       <link key='trans/cs' ref='síla_N:kvalita:bytost'/>
      </lunit>
168 </lunit>
```

A.10   kraft_N.xml

```
    <lunit name='kraft_N' type='lemma'>
2     <include>_tmpl_N:fem:f1o</include>
      <usage key='default'>
4       <f value='4471' key='form/stat/freq[LKB]'/>
      </usage>
6     <usage key='singular'>
        <f value='0.499' key='form/stat/rfreq[LKB]'/>
8       <constraint key='sg'>
          <f value='sg' key='gram/num'/>
```

```
10        </constraint>
        </usage>
12      <exp key="core">
          <real key="N" type="word">
14          <exp key="base">
              <real key="kraft" type="morpheme">
16              <form key="root">
                  <f key="form/src" value="kraft"/>
18                <f key="form/base" value="kraft"/>
                </form>
20            </real>
            </exp>
22        </real>
        </exp>
24      <exp key='phrase'>
          <real type='phrase' key='til_Comp'>
26          <gen>phrase</gen>
            <exp key='core'>
28            <include>@THIS/core</include>
              <f key='sem/label' value='CAP'/>
30          </exp>
            <exp key='til_PP'>
32            <include>til_Pre/phrase</include>
              <real type='phrase' key='PP'>
34              <gen>phrase</gen>
                <exp key='Comp'>
36                <f key='sem/label' value='GOAL'/>
                  <constraint key='NP'>
38                  <f value='NP' key='form/cat'/>
                    <f value='false' key='sem/human'/>
40                </constraint>
                  <constraint key='VinfP'>
42                  <f value='VinfP' key='form/cat'/>
                  </constraint>
44              </exp>
              </real>
46          </exp>
          </real>
48      </exp>
        <lunit name='energi' type='abstract'>
50        <desc key='default'>FORCE.{energi} som tillater å (overvinne OBSTR.{motstand} og) nå GOAL.{et mål / en effekt}</desc>
          <link key='col/Vsup[ha]' ref='ha_V'>
52          <map key='self' loc='#self' rem='PAT'/>
            <f key='sem/aspect' value='dur'/>
54        </link>
          <link key='col/Vsup[gi]' ref='gi_V'>
56          <map key='self' loc='#self' rem='PAT'/>
            <map key='poss' loc='POSS' rem='ADDR'/>
58          <f key='sem/aspect' value='inch'/>
            <f key='sem/caus' value='true'/>
60        </link>
          <link key='col/Vsup[ta]' ref='ta_V'>
62          <map key='self' loc='#self' rem='PAT'/>
            <map key='poss' loc='POSS' rem='ADDR'/>
64          <f key='sem/aspect' value='term'/>
            <f key='sem/caus' value='true'/>
66        </link>
          <link key='col/Vsup[bruke]' ref='bruke_V'>
68          <map key='self' loc='#self' rem='PAT'/>
            <f key='sem/aspect' value='term'/>
70        </link>
          <link key='col/Vsup[samle]' ref='samle_V'>
72          <map key='self' loc='#self' rem='PAT'/>
            <f key='sem/aspect' value='inch'/>
74        </link>
          <link key='col/Aatr[frastøtende]' ref='frastøtende_A'/>
76        <link key='col/Aatr[stor]' ref='stor_A'/>
          <link key='col/Aatr[sterk]' ref='sterk_A'/>
78        <link key='col/Aatr[skjult]' ref='skjult_A'/>
          <link key='constr[ha_k_til]' ref='ha_kraft_til_MWE'>
80          <f key='sem/aspect' value='dur'/>
          </link>
82        <link key='constr[sette_k_inn]' ref='sette_krefter_inn_MWE'/>
          <link key='comp/prim[drivkraft]' ref='drivkraft_N'/>
```

```
84      <lunit name="egenskap" type="trans-abstract">
          <desc key='default'>FORCE.{energi som egenskap}</desc>
86        <link key='trans/cs' ref='síla_N:kvalita:vlastnost'/>
          <lunit name='evne' type='sense'>
88          <desc key='default'>FORCE.{fysisk eller mental egenskap} til et ACT.{menneske} som tillater ACT.{sin eier} å (overvinne OBSTR.
            <link key='constr[måle_k]' ref='måle_styrke_MWE'/>
90          <link key='constr[av_all_k]' ref='av_all_kraft_MWE'/>
            <link key='constr[av_alle_k]' ref='av_alle_krefter_MWE'/>
92          <link key='comp/prim[kjøpekraft]' ref='kjøpekraft_N'/>
          </lunit>
94        <lunit name='effekt' type='sense'>
            <desc key='default'>FORCE.{naturlig energi} (i en ACT.{materie}) som tillater å nå GOAL.{et mål / en effekt}</desc>
96          <link key='col/Aatr[elektrisk]' ref='elektrisk_A'/>
            <link key='col/Aatr[magnetisk]' ref='magnetisk_A'/>
98          <link key='comp/prim[tyngdekraft]' ref='tyngdekraft_N'/>
            <link key='comp/prim[gravitasjonskraft]' ref='gravitasjonskraft_N'/>
100       </lunit>
        </lunit>
102     <lunit name='vesen' type='sense'>
          <desc key='default'>ACT.{menneske/medlem/vesen}-FORCE.{energi} (som man kan/må regne med) med et bestemt GOAL.{mål}</desc>
104       <link key='sem/ext/pers" ref="egenskap"/>
          <link key='col/Aatr[politisk]' ref='politisk_A'/>
106       <link key='col/Aatr[revolusjonær]' ref='revolusjonær_A'/>
          <link key='col/Aatr[overnaturlig]' ref='overnaturlig_A'/>
108       <link key='col/Aatr[bærende]' ref='bærende_A'/>
          <link key='col/Aatr[ledende]' ref='ledende_A'/>
110       <link key='col/Aatr[drivende]' ref='drivende_A'/>
          <link key='comp/prim[arbeidskraft]' ref='arbeidskraft_N'/>
112       <link key='trans/cs' ref='síla_N:kvalita:bytost'/>
        </lunit>
114   </lunit>
      <lunit name='gyldighet' type='sense'>
116     <desc key='default'>FORCE.{virkning/gyldighet} til en ACT.{lov}</desc>
        <link key='col/Aatr[tilbakevirkende]' ref='tilbakevirkende_A'/>
118     <link key='constr[tre_i_k]' ref='tre_i_kraft_MWE'>
          <f key='sem/aspect' value='inch'/>
120     </link>
        <link key='constr[tre_ut_av_k]' ref='tre_ut_av_kraft_MWE'>
122       <f key='sem/aspect' value='term'/>
        </link>
124     <link key='constr[sette_i_k]' ref='sette_i_kraft_MWE'>
          <f key='sem/aspect' value='inch'/>
126       <f key='sem/caus' value='true'/>
        </link>
128     <link key='constr[sette_ut_av_k]' ref='sette_ut_av_kraft_MWE'>
          <f key='sem/aspect' value='term'/>
130       <f key='sem/caus' value='true'/>
        </link>
132     <link key='trans/cs' ref='platnost_N'/>
      </lunit>
134 </lunit>
```

A.11 síla_N.xml

```
    <lunit name='síla_N' type='lemma'>
2     <include>_tmpl_N:fem:žena</include>
      <usage key='default'>
4       <f value='37590' key='form/stat/freq[SYN2005]'/>
      </usage>
6     <usage key='singular'>
        <f value='0.549' key='form/stat/rfreq[SYN2005]'/>
8       <constraint key='sg'>
          <f value='sg' key='gram/num'/>
10      </constraint>
      </usage>
12    <exp key='core'>
        <real type='word' key='N'>
14        <exp key='base'>
            <real type='morpheme' key='síla'>
16            <form key='base'>
                <f value='síla' key='form/src'/>
18              <f value='síla' key='form/base'/>
```

```
          </form>
20        <form key='base-s'>
            <f value='s\íla' key='form/src'/>
22          <f value='síla' key='form/base'/>
          </form>
24      </real>
        </exp>
26      <form key="NS7[sílou]">
          <f key="form/stat/rfreq[Cvrcek2010]" value="0.05"/>
28      </form>
        <form key="NP2[síl]">
30        <f key="form/stat/rfreq[Cvrcek2010]" value="0.005"/>
        </form>
32      <form key="NP3[sílám]">
          <f key="form/stat/rfreq[Cvrcek2010]" value="0.005"/>
34      </form>
        <form key="NP6[sílách]">
36        <f key="form/stat/rfreq[Cvrcek2010]" value="0.005"/>
        </form>
38      <form key="NP7[sílami]">
          <f key="form/stat/rfreq[Cvrcek2010]" value="0.005"/>
40      </form>
      </real>
42    </exp>
      <exp key='phrase'>
44      <real type='phrase' key='Gen_Comp'>
          <gen>phrase</gen>
46        <usage key='default'>
            <f value='0.151' key='form/stat/rfreq[SYN2005]'/>
48        </usage>
          <usage key='singular'>
50          <f value='0.754' key='form/stat/rfreq[SYN2005]'/>
            <constraint key='default'>
52            <f value='sg' key='gram/num'/>
            </constraint>
54        </usage>
          <exp key='core'>
56          <include>@THIS/core</include>
          </exp>
58        <exp key='attr'>
            <f key='sem/label[ACT]' value='ACT'/>
60          <f key='sem/label[QUANT]' value='QUANT'/>
            <constraint key='NPgen'>
62            <f value='NP' key='form/cat'/>
              <f key="gram/case" value="2"/>
64            <f key="sem/human" value="false"/>
            </constraint>
66        </exp>
      </real>
68      <real type='phrase' key='Num_Comp'>
          <gen>phrase</gen>
70        <exp key='core'>
            <include>@THIS/core</include>
72        </exp>
          <exp key='attr'>
74          <f key='sem/label' value='QUANT'/>
            <constraint key='Num'>
76            <f value='Num' key='form/cat'/>
              <f key="gram/case" value="1"/>
78          </constraint>
          </exp>
80      </real>
        <real type='phrase' key='Inf_Comp'>
82        <gen>phrase</gen>
          <usage key='default'>
84          <f value='0.027' key='form/stat/rfreq[SYN2005]'/>
          </usage>
86        <usage key='singular'>
            <f value='0.612' key='form/stat/rfreq[SYN2005]'/>
88          <constraint key='default'>
              <f value='sg' key='gram/num'/>
90          </constraint>
          </usage>
92        <exp key='core'>
```

```
              <f key='sem/label' value='CAP'/>
94            <include>@THIS/core</include>
            </exp>
96        <exp key='attr'>
            <f key='sem/label' value='GOAL'/>
98          <constraint key='VinfP'>
              <f value='VinfP' key='form/cat'/>
100         </constraint>
          </exp>
102     </real>
        <real type='phrase' key='k_Comp'>
104       <gen>phrase</gen>
          <usage key='default'>
106         <f value='0.010' key='form/stat/rfreq[SYN2005]'/>
          </usage>
108       <usage key='singular'>
            <f value='0.592' key='form/stat/rfreq[SYN2005]'/>
110         <constraint key='default'>
              <f value='sg' key='gram/num'/>
112         </constraint>
          </usage>
114       <exp key='core'>
            <include>@THIS/core</include>
116         <f key='sem/label' value='CAP'/>
          </exp>
118       <exp key='k_PP'>
            <include>k_Pre/phrase</include>
120         <real type='phrase' key='PP'>
              <gen>phrase</gen>
122           <exp key='Comp'>
                <f key='sem/label' value='GOAL'/>
124             <constraint key='NP'>
                  <f value='NP' key='form/cat'/>
126               <f key="gram/case" value="3"/>
                  <f key="sem/human" value="false"/>
128             </constraint>
              </exp>
130         </real>
          </exp>
132     </real>
        <real type='phrase' key='proti_Comp'>
134       <gen>phrase</gen>
          <exp key='core'>
136         <include>@THIS/core</include>
            <f key='sem/label' value='CAP'/>
138       </exp>
          <exp key='proti_PP'>
140         <include>proti_Pre/phrase</include>
            <real type='phrase' key='PP'>
142           <gen>phrase</gen>
              <exp key='Comp'>
144             <f key='sem/label' value='OBSTR'/>
                <constraint key='NP'>
146               <f value='NP' key='form/cat'/>
                  <f key="gram/case" value="3"/>
148               <f key="sem/human" value="false"/>
                </constraint>
150           </exp>
            </real>
152       </exp>
        </real>
154   </exp>
      <lunit name="kvalita" type="abstract">
156     <desc key="default">CAP.{kvalita/vlastnost}</desc>
        <f key='select/phrase[gen]' value='Gen_Comp'/>
158     <f key='select/phrase[inf]' value='Inf_Comp'/>
        <f key='select/phrase[k]' value='k_Comp'/>
160     <f key='select/phrase[proti]' value='proti_Comp'/>
        <link key='constr[hnací_s]' ref='hnací_síla_MWE'/>
162     <link key='constr[hybná_s]' ref='hybná_síla_MWE'/>
        <link key='constr[být_v_s]' ref='být_v_silách_MWE'/>
164     <lunit name="vlastnost" type="sense">
          <desc key="default">CAP.{fyzická nebo mentální vlastnost} ACT.{člověka, přírodního jevu nebo věci}, která mu umožňuje (překonat
166       <link key='col/Vsup[působit]' ref='působit_V'>
```

```
                    <map key='self' loc='#self' rem='MEANS'/>
168                 <f key='sem/aspect' value='dur'/>
               </link>
170            <link key='col/Vsup[disponovat]' ref='disponovat_V'>
                 <map key='self' loc='#self' rem='PAT'/>
172                 <f key='sem/aspect' value='dur'/>
               </link>
174            <link key='col/Vsup[mít]' ref='mít_V'>
                 <map key='self' loc='#self' rem='PAT'/>
176                 <f key='sem/aspect' value='dur'/>
               </link>
178            <link key='col/Vsup[šetřit]' ref='šetřit_V'>
                 <map key='self' loc='#self' rem='PAT'/>
180                 <f key='sem/aspect' value='dur'/>
               </link>
182            <link key='col/Vsup[nabrat]' ref='nabrat_V'>
                 <map key='self' loc='#self' rem='PAT'/>
184                 <f key='sem/aspect' value='inch'/>
               </link>
186            <link key='col/Vsup[čerpat]' ref='čerpat_V'>
                 <map key='self' loc='#self' rem='PAT'/>
188                 <f key='sem/aspect' value='inch'/>
               </link>
190            <link key='col/Vsup[mobilizovat]' ref='mobilizovat_V'>
                 <map key='self' loc='#self' rem='PAT'/>
192                 <f key='sem/aspect' value='inch'/>
               </link>
194            <link key='col/Vsup[vyvinout]' ref='vyvinout_V'>
                 <map key='self' loc='#self' rem='PAT'/>
196                 <f key='sem/aspect' value='inch'/>
               </link>
198            <link key='col/Vsup[ztrácet]' ref='ztrácet_V'>
                 <map key='self' loc='#self' rem='PAT'/>
200                 <f key='sem/aspect' value='term'/>
               </link>
202            <link key='col/Vsup[vyčerpat]' ref='vyčerpat_V'>
                 <map key='self' loc='#self' rem='PAT'/>
204                 <f key='sem/aspect' value='term'/>
               </link>
206            <link key='col/Vsup[vynaložit]' ref='vynaložit_V'>
                 <map key='self' loc='#self' rem='PAT'/>
208                 <f key='sem/aspect' value='term'/>
               </link>
210            <link key='col/Vsup[plýtvat]' ref='plýtvat_V'>
                 <map key='self' loc='#self' rem='PAT'/>
212                 <f key='sem/aspect' value='term'/>
               </link>
214            <link key='col/Vsup[mrhat]' ref='mrhat_V'>
                 <map key='self' loc='#self' rem='PAT'/>
216                 <f key='sem/aspect' value='term'/>
               </link>
218            <link key='col/Vsup[ubývat]' ref='ubývat_V'>
                 <map key='self' loc='#self' rem='ACT'/>
220                 <map key='poss' loc='POSS' rem='PAT'/>
                 <f key='sem/aspect' value='term'/>
222            </link>
               <link key='constr[gravitační_s]' ref='gravitační_síla_MWE'/>
224            <link key='constr[kupní_s]' ref='kupní_síla_MWE'/>
               <link key='constr[ze_všech_s]' ref='ze_všech_sil_MWE'/>
226            <link key='constr[vší_s]' ref='vší_silou_MWE'/>
               <link key='constr[měřit_s]' ref='měřit_síly_MWE'/>
228            <link key='trans/no[styrke]' ref='styrke_N:egenskap'/>
               <link key='trans/no[kraft]' ref='kraft_N:energi:egenskap'/>
230         </lunit>
          <lunit name="bytost" type="sense">
232         <link key='constr[pracovní_s]' ref='pracovní_síla_MWE'/>
            <link key='col/Aatr[politický]' ref='politický_A'/>
234         <link key='constr[ozbrojené_s]' ref='ozbrojené_síly_MWE'/>
            <link key='col/Aatr[vojenský]' ref='vojenský_A'/>
236         <link key='col/Aatr[kvalifikovaný]' ref='kvalifikovaný_A'/>
            <link key='col/Aatr[nadřirozený]' ref='nadřirozený_A'/>
238         <link key='col/Aatr[vzdušný]' ref='vzdušný_A'/>
            <link key='col/Aatr[námořní]' ref='námořní_A'/>
240         <desc key="default">ACT.{nositel} zvláštní CAP.{vlastnosti/energie}, které mu umožňuje (překonat nějaký OBSTR.{odp
```

```
            <link key="sem/ext/pers" ref="vlastnost"/>
242         <link key='trans/no[styrke]' ref='styrke_N:gruppe'/>
            <link key='trans/no[kraft]' ref='kraft_N:energi:vesen'/>
244       </lunit>
        </lunit>
246     <lunit name="kvantita" type="abstract">
          <desc key="default">QUANT.{kvantita}</desc>
248       <f key='select/phrase[gen]' value='Gen_Comp'/>
          <f key='select/phrase[inf]' value='Num_Comp'/>
250       <lunit name="intenzita" type="sense">
            <desc key="default">QUANT.{intenzita} nějakého ACT.{fenoménu/energie}</desc>
252         <link key='constr[s_zvuku]' ref='síla_zvuku_MWE'/>
            <link key='constr[s_větru]' ref='síla_větru_MWE'/>
254         <link key='constr[s_vůle]' ref='síla_vůle_MWE'/>
            <link key='trans/no' ref='styrke_N:til_krefter'/>
256       </lunit>
          <lunit name="tloušťka" type="sense">
258         <desc key="default">QUANT.{tloušťka} nějakého ACT.{plochého předmětu či vrstvy}</desc>
          </lunit>
260     </lunit>
        </lunit>
```

A.12   makt_N.xml

```
    <lunit name='makt_N' type='lemma'>
2     <include>_tmpl_N:fem:f1</include>
      <usage key='default'>
4       <f value='3966' key='form/stat/freq[LKB]'/>
      </usage>
6     <usage key='singular'>
        <f value='0.957' key='form/stat/rfreq[LKB]'/>
8       <constraint key='sg'>
          <f value='sg' key='gram/num'/>
10      </constraint>
      </usage>
12    <exp key="core">
        <real key="N" type="word">
14        <exp key="base">
            <real key="makt" type="morpheme">
16            <form key="root">
                <f key="form/src" value="makt"/>
18              <f key="form/base" value="makt"/>
              </form>
20          </real>
          </exp>
22      </real>
      </exp>
24    <link key='col/Aatr[politisk]' ref='politisk_A'/>
      <link key='col/Aatr[militær]' ref='militær_A'/>
26    <link key='col/Aatr[økonomisk]' ref='økonomisk_A'/>
      <link key='constr[lovgivende_m]' ref='lovgivende_makt_MWE'/>
28    <link key='constr[dømmende_m]' ref='dømmende_makt_MWE'/>
      <link key='constr[utøvende_m]' ref='utøvende_makt_MWE'/>
30    <link key='comp/prim[fullmakt]' ref='fullmakt_N'/>
      <lunit name='egenskap' type='sense'>
32      <desc key='default'>CAP.{egenskap eller vilkår} som tillater ACT.{sin eier} å nå et/hvilken som helst GOAL.{mål} innenfor en PAT.{
        <exp key='phrase'>
34        <real type='phrase' key='til_Comp'>
            <gen>phrase</gen>
36          <usage key='default'>
              <f value='0.059' key='form/stat/rfreq[LKB]'/>
38          </usage>
            <usage key='singular'>
40            <f value='1.0' key='form/stat/rfreq[LKB]'/>
              <constraint key='default'>
42              <f value='sg' key='gram/num'/>
              </constraint>
44          </usage>
            <exp key='core'>
46            <include>@THIS/core</include>
              <f key='sem/label' value='CAP'/>
48          </exp>
```

```
        <exp key='til_PP'>
50        <include>til_Pre/phrase</include>
          <real type='phrase' key='PP'>
52          <gen>phrase</gen>
            <exp key='Comp'>
54            <f key='sem/label' value='GOAL'/>
              <constraint key='VinfP'>
56              <f value='VinfP' key='form/cat'/>
              </constraint>
58            <constraint key='NP'>
                <f value='NP' key='form/cat'/>
60              <f value='false' key='sem/human'/>
              </constraint>
62          </exp>
          </real>
64      </exp>
        </real>
66    <real type='phrase' key='over_Comp'>
        <gen>phrase</gen>
68      <usage key='default'>
          <f value='0.050' key='form/stat/rfreq[LKB]'/>
70      </usage>
        <usage key='singular'>
72        <f value='1.0' key='form/stat/rfreq[LKB]'/>
          <constraint key='default'>
74          <f value='sg' key='gram/num'/>
          </constraint>
76      </usage>
        <exp key='core'>
78        <include>@THIS/core</include>
          <f key='sem/label' value='CAP'/>
80      </exp>
        <exp key='over_PP'>
82        <include>over_Pre/phrase</include>
          <real type='phrase' key='PP'>
84          <gen>phrase</gen>
            <exp key='Comp'>
86            <f key='sem/label' value='PAT'/>
              <constraint key='NP'>
88              <f value='NP' key='form/cat'/>
              </constraint>
90          </exp>
          </real>
92      </exp>
        </real>
94    </exp>
      <link key='col/Vsup[ha]' ref='ha_V'>
96      <map key='self' loc='#self' rem='PAT'/>
        <f key='sem/aspect' value='dur'/>
98    </link>
      <link key='col/Vsup[få]' ref='få_V'>
100     <map key='self' loc='#self' rem='PAT'/>
        <f key='sem/aspect' value='inch'/>
102   </link>
      <link key='col/Vsup[ta]' ref='ta_V'>
104     <map key='self' loc='#self' rem='PAT'/>
        <f key='sem/aspect' value='inch'/>
106   </link>
      <link key='col/Vsup[gi]' ref='gi_V'>
108     <map key='self' loc='#self' rem='PAT'/>
        <map key='poss' loc='POSS' rem='ADDR'/>
110     <f key='sem/aspect' value='inch'/>
        <f key='sem/caus' value='true'/>
112   </link>
      <link key='col/Vsup[gripe]' ref='gripe_V'>
114     <map key='self' loc='#self' rem='PAT'/>
        <f key='sem/aspect' value='inch'/>
116   </link>
      <link key='col/Vsup[utøve]' ref='utøve_V'>
118     <map key='self' loc='#self' rem='PAT'/>
        <f key='sem/aspect' value='dur'/>
120   </link>
      <link key='col/Aatr[symbolsk]' ref='symbolsk_A'/>
122   <link key='col/Aatr[reell]' ref='reell_A'/>
```

```
        <link key='constr[vanens_m]' ref='vanens_makt_MWE'/>
124     <link key='constr[sitte_ved_m]' ref='sitte_ved_makten_MWE'/>
        <link key='constr[stå_i_m]' ref='stå_i_makt_MWE'/>
126     <link key='trans/cs' ref='moc_N:vlastnost'/>
        <lunit name='fysisk' type='trans'>
128     <desc key='default'>CAP.{overlegne fysiske egenskaper} som tillater ACT.{sin eier} å nå sitt eget GOAL.{mål} til tross for PAT.{
        <link key='col/Vsup[bruke]' ref='bruke_V'>
130       <map key='self' loc='#self' rem='PAT'/>
          <f key='sem/aspect' value='dur'/>
132     </link>
        <link key='col/Aatr[fysisk]' ref='fysisk_A'/>
134     <link key='constr[med_m]' ref='med_makt_MWE'/>
        <link key='trans/cs' ref='síla_N:kvalita:vlastnost'/>
136     </lunit>
      </lunit>
138   <lunit name='vesen' type='sense'>
        <desc key='default'>ACT.{stat, myndighet eller annen autoritet} som har CAP.{spesielle egenskaper} til å nå sine bestemte GOAL.{må
140     <link key="sem/ext/pers" ref='egenskap'/>
        <link key='col/Aatr[høyere]' ref='høyere_A'/>
142     <link key='col/Aatr[overnaturlig]' ref='overnaturlig_A'/>
        <link key='col/Aatr[fremmed]' ref='fremmed_A'/>
144     <link key='comp/prim[stormakt]' ref='stormakt_N'/>
        <link key='trans/cs' ref='moc_N:entita'/>
146   </lunit>
    </lunit>
```

A.13   moc_N.xml

```
    <lunit name='moc_N' type='lemma'>
2     <include>_tmpl_N:fem:kost</include>
      <include>_tmpl_N:fem:píseň</include>
4     <exp key='core'>
        <real type='word' key='N'>
6         <exp key='base'>
            <real type='morpheme' key='moc'>
8             <form key='base'>
                <f value='moc' key='form/src'/>
10              <f value='moc' key='form/base'/>
              </form>
12          </real>
          </exp>
14        <form key="NS2[moce]">
            <f key="form/stat/rfreq[Cvrcek2010]" value="0.005"/>
16        </form>
          <form key="NP7[mocmi]">
18          <f key="form/stat/rfreq[Cvrcek2010]" value="0.005"/>
          </form>
20        <form key="NP1[moce]">
            <f key="form/stat/rfreq[Cvrcek2010]" value="0.005"/>
22        </form>
          <form key="NP4[moce]">
24          <f key="form/stat/rfreq[Cvrcek2010]" value="0.005"/>
          </form>
26      </real>
      </exp>
28    <link key='col/Aatr[politický]' ref='politický_A'/>
      <link key='col/Aatr[vojenský]' ref='vojenský_A'/>
30    <link key='col/Aatr[státní]' ref='státní_A'/>
      <link key='constr[plná_m]' ref='plná_moc_MWE'/>
32    <link key='constr[zákonodárná_m]' ref='zákonodárná_moc_MWE'/>
      <link key='constr[soudní_m]' ref='soudní_moc_MWE'/>
34    <link key='constr[výkonná_m]' ref='výkonná_moc_MWE'/>
      <lunit name="vlastnost" type="sense">
36      <desc key="default">CAP.{vlastnost} ACT.{člověka nebo věci} umožňující dosáhnout libovolného GOAL.{cíle} v nějaké PAT.{oblasti}</d
        <exp key="phrase">
38        <real type='phrase' key='Inf_Comp'>
            <gen>phrase</gen>
40          <exp key='core'>
              <f key='sem/label' value='CAP'/>
42            <include>@THIS/core</include>
            </exp>
44          <exp key='attr'>
```

```
                 <f key='sem/label' value='GOAL'/>
46               <constraint key='VinfP'>
                   <f value='VinfP' key='form/cat'/>
48               </constraint>
               </exp>
50          </real>
           <real type='phrase' key='k_Comp'>
52            <gen>phrase</gen>
              <exp key='core'>
54              <include>@THIS/core</include>
                <f key='sem/label' value='CAP'/>
56            </exp>
              <exp key='k_PP'>
58              <include>k_Pre/phrase</include>
                <real type='phrase' key='PP'>
60                <gen>phrase</gen>
                  <exp key='Comp'>
62                  <f key='sem/label' value='GOAL'/>
                    <constraint key='NP'>
64                    <f value='NP' key='form/cat'/>
                      <f key="gram/case" value="3"/>
66                    <f key="sem/human" value="false"/>
                    </constraint>
68                </exp>
                </real>
70            </exp>
           </real>
72         <real type='phrase' key='nad_Comp'>
             <gen>phrase</gen>
74           <exp key='core'>
               <include>@THIS/core</include>
76             <f key='sem/label' value='CAP'/>
             </exp>
78           <exp key='nad_PP'>
               <include>nad_Pre/phrase</include>
80             <real type='phrase' key='PP'>
                 <gen>phrase</gen>
82               <exp key='Comp'>
                   <f key='sem/label' value='PAT'/>
84                 <constraint key='NP'>
                     <f value='NP' key='form/cat'/>
86                   <f key="gram/case" value="7"/>
                   </constraint>
88               </exp>
               </real>
90           </exp>
           </real>
92       </exp>
         <link key='col/Vsup[získat]' ref='získat_V'>
94         <map key='self' loc='#self' rem='PAT'/>
           <f key='sem/aspect' value='inch'/>
96       </link>
         <link key='col/Vsup[dostat]' ref='dostat_V'>
98         <map key='self' loc='#self' rem='PAT'/>
           <f key='sem/aspect' value='inch'/>
100      </link>
         <link key='col/Vsup[nabýt]' ref='nabýt_V'>
102        <map key='self' loc='#self' rem='PAT'/>
           <f key='sem/aspect' value='inch'/>
104      </link>
         <link key='col/Vsup[chopit_se]' ref='chopit_se_V'>
106        <map key='self' loc='#self' rem='PAT'/>
           <f key='sem/aspect' value='inch'/>
108      </link>
         <link key='col/Vsup[ujmout_se]' ref='ujmout_se_V'>
110        <map key='self' loc='#self' rem='PAT'/>
           <f key='sem/aspect' value='inch'/>
112      </link>
         <link key='col/Vsup[uchvátit]' ref='uchvátit_V'>
114        <map key='self' loc='#self' rem='PAT'/>
           <f key='sem/aspect' value='inch'/>
116      </link>
         <link key='col/Vsup[převzít]' ref='převzít_V'>
118        <map key='self' loc='#self' rem='PAT'/>
```

```
            <f key='sem/aspect' value='inch'/>
120      </link>
        <link key='col/Vsup[vládnout]' ref='vládnout_V'>
122        <map key='self' loc='#self' rem='PAT'/>
           <f key='sem/aspect' value='dur'/>
124      </link>
        <link key='col/Vsup[vykonávat]' ref='vykonávat_V'>
126        <map key='self' loc='#self' rem='PAT'/>
           <f key='sem/aspect' value='dur'/>
128      </link>
        <link key='col/Vsup[zneužívat]' ref='zneužívat_V'>
130        <map key='self' loc='#self' rem='PAT'/>
           <f key='sem/aspect' value='dur'/>
132      </link>
        <link key='col/Vsup[ztělesňovat]' ref='ztělesňovat_V'>
134        <map key='self' loc='#self' rem='PAT'/>
           <f key='sem/aspect' value='dur'/>
136      </link>
        <link key='col/Vsup[představovat]' ref='představovat_V'>
138        <map key='self' loc='#self' rem='PAT'/>
           <f key='sem/aspect' value='dur'/>
140      </link>
        <link key='col/Vsup[náležet]' ref='náležet_V'>
142        <map key='self' loc='#self' rem='ACT'/>
           <map key='self' loc='ACT' rem='PAT'/>
144        <f key='sem/aspect' value='dur'/>
        </link>
146      <link key='col/Vsup[mít]' ref='mít_V'>
           <map key='self' loc='#self' rem='PAT'/>
148        <f key='sem/aspect' value='dur'/>
        </link>
150      <link key='col/Vsup[disponovat]' ref='disponovat_V'>
           <map key='self' loc='#self' rem='PAT'/>
152        <f key='sem/aspect' value='dur'/>
        </link>
154      <link key='col/Vsup[ztratit]' ref='ztratit_V'>
           <map key='self' loc='#self' rem='PAT'/>
156        <f key='sem/aspect' value='term'/>
        </link>
158      <link key='col/Vsup[pozbýt]' ref='pozbýt_V'>
           <map key='self' loc='#self' rem='PAT'/>
160        <f key='sem/aspect' value='term'/>
        </link>
162      <link key='col/Vsup[dát]' ref='dát_V'>
           <map key='self' loc='#self' rem='PAT'/>
164        <map key='poss' loc='POSS' rem='ADDR'/>
           <f key='sem/aspect' value='inch'/>
166        <f key='sem/caus' value='true'/>
        </link>
168      <link key='col/Vsup[nechat]' ref='nechat_V'>
           <map key='self' loc='#self' rem='PAT'/>
170        <map key='poss' loc='POSS' rem='ADDR'/>
           <f key='sem/aspect' value='dur'/>
172        <f key='sem/caus' value='true'/>
        </link>
174      <link key='col/Vsup[vzít]' ref='vzít_V'>
           <map key='self' loc='#self' rem='PAT'/>
176        <map key='poss' loc='POSS' rem='ADDR'/>
           <f key='sem/aspect' value='term'/>
178        <f key='sem/caus' value='true'/>
        </link>
180      <link key='col/Vsup[zbavit]' ref='zbavit_V'>
           <map key='self' loc='#self' rem='PAT'/>
182        <map key='poss' loc='POSS' rem='ADDR'/>
           <f key='sem/aspect' value='term'/>
184        <f key='sem/caus' value='true'/>
        </link>
186      <link key='col/Vsup[rozdělovat]' ref='rozdělovat_V'>
           <map key='self' loc='#self' rem='PAT'/>
188      </link>
        <link key='col/Vsup[podrobit_se]' ref='podrobit_se_V'>
190        <map key='self' loc='#self' rem='PAT'/>
        </link>
192      <link key='col/Aatr[léčivý]' ref='léčivý_A'/>
```

```
       <link key='constr[být_u_m]' ref='být_u_moci_MWE'/>
194    <link key='constr[být_v_m]' ref='být_v_silách_MWE'/>
       <link key='constr[nabýt_právní_m]' ref='nabýt_právní_moci_MWE'/>
196    <link key='constr[pozbýt_právní_m]' ref='pozbýt_právní_moci_MWE'/>
     </lunit>
198  <lunit name="entita" type="sense">
       <desc key="default">ACT.{stát, bytost či jiná entita} se CAP.{zvláštními vlastnostmi}, umožňujícími ovládat (velké)
200    <link key="sem/ext/pers" ref="vlastnost"/>
       <link key='col/Aatr[nadpřirozený]' ref='nadpřirozený_A'/>
202    <link key='col/Aatr[vyšší]' ref='vyšší_A'/>
       <link key="der[velmoc]" ref="velmoc_N"/>
204  </lunit>
   </lunit>
```

A.14   mot_N.xml

```
   <lunit name='mot_N' type='lemma'>
2    <include>_tmpl_N:neut:n1</include>
     <exp key="core">
4      <real key="N" type="word">
         <exp key="base">
6          <real key="mot" type="morpheme">
             <form key="root">
8              <f key="form/src" value="mot"/>
               <f key="form/base" value="mot"/>
10           </form>
           </real>
12       </exp>
       </real>
14   </exp>
     <lunit name="egenskap" type="sense">
16     <desc key='default'>CAP.{mental styrke} som tillater ACT.{sin eier} å nå et GOAL.{mål} til tross for OBSTR.{fysisk e
       <exp key='phrase'>
18       <real type='phrase' key='til_Comp'>
           <gen>phrase</gen>
20         <exp key='core'>
             <include>@THIS/core</include>
22           <f key='sem/label' value='CAP'/>
           </exp>
24         <exp key='til_PP'>
             <include>til_Pre/phrase</include>
26           <real type='phrase' key='PP'>
               <gen>phrase</gen>
28             <exp key='Comp'>
                 <f key='sem/label' value='GOAL'/>
30               <constraint key='VinfP'>
                   <f value='VinfP' key='form/cat'/>
32               </constraint>
                 <constraint key='NP'>
34                 <f value='NP' key='form/cat'/>
                   <f value='false' key='sem/human'/>
36               </constraint>
               </exp>
38           </real>
           </exp>
40       </real>
       </exp>
42     <link key='col/Vsup[ha]' ref='ha_V'>
         <map key='self' loc='#self' rem='PAT'/>
44       <f key='sem/aspect' value='dur'/>
       </link>
46     <link key='col/Vsup[få]' ref='få_V'>
         <map key='self' loc='#self' rem='PAT'/>
48       <f key='sem/aspect' value='inch'/>
       </link>
50     <link key='col/Vsup[miste]' ref='miste_V'>
         <map key='self' loc='#self' rem='PAT'/>
52       <f key='sem/aspect' value='term'/>
       </link>
54     <link key='col/Vsup[tape]' ref='tape_V'>
         <map key='self' loc='#self' rem='PAT'/>
56       <f key='sem/aspect' value='term'/>
```

```
        </link>
58      <link key='col/Vsup[gjenvinne]' ref='gjenvinne_V'>
          <map key='self' loc='#self' rem='PAT'/>
60        <f key='sem/aspect' value='inch'/>
        </link>
62      <link key='col/Vsup[svikte]' ref='svikte_V'>
          <map key='self' loc='#self' rem='ACT'/>
64        <map key='poss' loc='POSS' rem='PAT'/>
          <f key='sem/aspect' value='term'/>
66      </link>
        <link key='col/Vsup[kreve]' ref='kreve_V'>
68        <map key='self' loc='#self' rem='PAT'/>
          <map key='poss' loc='GOAL' rem='ACT'/>
70      </link>
        <link key='constr[ta_m_til_seg]' ref='ta_mot_til_seg_MWE'>
72        <map key='self' loc='POSS' rem='ADDR'/>
          <f key='sem/aspect' value='inch'/>
74      </link>
        <link key='constr[ta_m_fra]' ref='ta_motet_fra_MWE'>
76        <map key='self' loc='POSS' rem='ADDR'/>
          <f key='sem/aspect' value='term'/>
78      </link>
        <link key='constr[ta_m_fra]' ref='sette_mot_i_MWE'>
80        <map key='self' loc='POSS' rem='ADDR'/>
          <f key='sem/aspect' value='inch'/>
82        <f key='sem/caus' value='true'/>
        </link>
84      <link key='constr[ha_m_på]' ref='ha_mot_på_MWE'/>
        <link key='constr[fatte_m]' ref='fatte_mot_MWE'>
86        <map key='self' loc='POSS' rem='ACT'/>
          <f key='sem/aspect' value='inch'/>
88      </link>
        <link key='constr[holde_m_oppe]' ref='holde_motet_oppe_MWE'>
90        <map key='self' loc='POSS' rem='ACT'/>
          <f key='sem/aspect' value='dur'/>
92      </link>
        <link key='constr[holde_m_i]' ref='holde_mot_i_MWE'>
94        <map key='self' loc='POSS' rem='ADDR'/>
          <f key='sem/aspect' value='dur'/>
96        <f key='sem/caus' value='true'/>
        </link>
98      <link key='constr[hente_m_fra]' ref='hente_mot_fra_MWE'/>
        <link key='trans/cs' ref='odvaha_N'/>
100   </lunit>
      <lunit name="sinnsstemning" type="sense">
102     <desc key='default'>COND.{stemning} som ACT.{en} er i</desc>
        <link key='constr[ved_godt_m]' ref='ved_godt_mot_MWE'/>
104     <link key='constr[til_m]' ref='til_mote_MWE'/>
        <link key='trans/cs' ref='nálada_N'/>
106   </lunit>
    </lunit>
```

A.15   odvaha_N.xml

```
    <lunit name='odvaha_N' type='lemma'>
2     <include>_tmpl_N:fem:žena</include>
      <usage key='default'>
4       <f value='4526' key='form/stat/freq[SYN2005]'/>
      </usage>
6     <usage key='singular'>
        <f value='1.0' key='form/stat/rfreq[SYN2005]'/>
8       <constraint key='sg'>
          <f value='sg' key='gram/num'/>
10      </constraint>
      </usage>
12    <exp key='core'>
        <real type='word' key='N'>
14        <exp key='base'>
            <real type='morpheme' key='odvaha'>
16            <form key='base'>
                <f value='odvaha' key='form/src'/>
18                <f value='odvaha' key='form/base'/>
```

```
                    </form>
20              </real>
              </exp>
22        </real>
        </exp>
24      <exp key='phrase'>
          <real type='phrase' key='Inf_Comp'>
26          <gen>phrase</gen>
            <usage key='default'>
28            <f value='0.165' key='form/stat/rfreq[SYN2005]'/>
            </usage>
30          <exp key='core'>
              <f key='sem/label' value='CAP'/>
32            <include>@THIS/core</include>
            </exp>
34          <exp key='attr'>
              <f key='sem/label' value='GOAL'/>
36            <constraint key='VinfP'>
                <f value='VinfP' key='form/cat'/>
38            </constraint>
            </exp>
40        </real>
          <real type='phrase' key='k_Comp'>
42          <gen>phrase</gen>
            <usage key='default'>
44            <f value='0.039' key='form/stat/rfreq[SYN2005]'/>
            </usage>
46          <exp key='core'>
              <include>@THIS/core</include>
48            <f key='sem/label' value='CAP'/>
            </exp>
50          <exp key='k_PP'>
              <include>k_Pre/phrase</include>
52            <real type='phrase' key='PP'>
                <gen>phrase</gen>
54              <exp key='Comp'>
                  <f key='sem/label' value='GOAL'/>
56                <constraint key='NP'>
                    <f value='NP' key='form/cat'/>
58                  <f key="gram/case" value="3"/>
                    <f key="sem/human" value="false"/>
60                </constraint>
                </exp>
62            </real>
            </exp>
64        </real>
        </exp>
66      <desc key='default'>CAP.{duševní síla} umožňující svému ACT.{nositeli} dosáhnout GOAL.{cíle} navzdory OBSTR.{fyzickému
        <link key='col/Vsup[mít]' ref='mít_V'>
68        <map key='self' loc='#self' rem='PAT'/>
          <f key='sem/aspect' value='dur'/>
70      </link>
        <link key='col/Vsup[dodat]' ref='dodat_V'>
72        <map key='self' loc='#self' rem='PAT'/>
          <map key='poss' loc='POSS' rem='ADDR'/>
74        <f key='sem/aspect' value='inch'/>
          <f key='sem/caus' value='true'/>
76      </link>
        <link key='col/Vsup[najít]' ref='najít_V'>
78        <map key='self' loc='#self' rem='PAT'/>
          <f key='sem/aspect' value='inch'/>
80      </link>
        <link key='col/Vsup[nabýt]' ref='nabýt_V'>
82        <map key='self' loc='#self' rem='PAT'/>
          <f key='sem/aspect' value='inch'/>
84      </link>
        <link key='constr[sebrat_o]' ref='sebrat_odvahu_MWE'>
86        <map key='self' loc='#self' rem='PAT'/>
          <f key='sem/aspect' value='inch'/>
88      </link>
        <link key='col/Vsup[ztratit]' ref='ztratit_V'>
90        <map key='self' loc='#self' rem='PAT'/>
          <f key='sem/aspect' value='term'/>
92      </link>
```

```
      <link key='col/Vsup[prokázat]' ref='prokázat_V'>
94      <map key='self' loc='#self' rem='PAT'/>
        <f key='sem/aspect' value='dur'/>
96    </link>
      <link key='constr[dodat_si_o]' ref='dodat_si_odvahy_MWE'>
98      <map key='self' loc='POSS' rem='ACT'/>
        <f key='sem/aspect' value='inch'/>
100     <f key='sem/caus' value='true'/>
      </link>
102   <link key='constr[zachovat_si_o]' ref='zachovat_si_odvahu_MWE'>
        <map key='self' loc='POSS' rem='ACT'/>
104     <f key='sem/aspect' value='dur'/>
        <f key='sem/caus' value='true'/>
106   </link>
      <link key='col/Vsup[opustit]' ref='opustit_V'>
108     <map key='self' loc='#self' rem='ACT'/>
        <map key='poss' loc='POSS' rem='PAT'/>
110     <f key='sem/aspect' value='term'/>
      </link>
112   <link key='trans/no' ref='mot_N:egenskap'/>
    </lunit>
```

A.16   vilje_N.xml

```
    <lunit name='vilje_N' type='lemma'>
2     <include>_tmpl_N:masc:m1:bm</include>
      <include>_tmpl_nn_N:masc:m1</include>
4     <usage key='default'>
        <f value='2044' key='form/stat/freq[LKB]'/>
6     </usage>
      <usage key='singular'>
8       <f value='0.992' key='form/stat/rfreq[LKB]'/>
        <constraint key='sg'>
10        <f value='sg' key='gram/num'/>
        </constraint>
12    </usage>
      <exp key="core">
14      <real key="N" type="word">
          <exp key="base">
16          <real key="vilje" type="morpheme">
              <form key="base">
18              <f key="form/src" value="vilje"/>
                <f key="form/base" value="vilje"/>
20            </form>
            </real>
22        </exp>
        </real>
24    </exp>
      <link key='col/Vsup[ha]' ref='ha_V'>
26      <map key='self' loc='#self' rem='PAT'/>
        <f key='sem/aspect' value='dur'/>
28    </link>
      <link key='col/Vsup[vise]' ref='vise_V'>
30      <map key='self' loc='#self' rem='PAT'/>
        <f key='sem/aspect' value='dur'/>
32    </link>
      <link key='col/Vsup[mangle]' ref='mangle_V'>
34      <map key='self' loc='#self' rem='PAT'/>
        <f key='sem/aspect' value='dur'/>
36    </link>
      <link key='constr[fri_v]' ref='fri_vilje_MWE'/>
38    <link key='constr[god_v]' ref='god_vilje_MWE'/>
      <link key='constr[ond_v]' ref='ond_vilje_MWE'/>
40    <link key='constr[med_beste_v]' ref='med_beste_vilje_MWE'/>
      <link key='comp/pri[velvilje]' ref='velvilje_N'/>
42    <link key='trans/cs' ref='vůle_N:schopnost'/>
      <lunit name="bestemmelse" type="subsense">
44      <desc key='default'>FORCE.{bestemmelse} (til ACT.{noen}) til å nå et GOAL.{mål}</desc>
        <exp key='phrase'>
46        <real type='phrase' key='til_Comp'>
            <gen>phrase</gen>
48          <usage key='default'>
```

```
              <f value='0.295' key='form/stat/rfreq[LKB]'/>
50          </usage>
          <usage key='singular'>
52          <f value='1.0' key='form/stat/rfreq[LKB]'/>
            <constraint key='default'>
54            <f value='sg' key='gram/num'/>
            </constraint>
56        </usage>
          <exp key='core'>
58          <include>@THIS/core</include>
          </exp>
60        <exp key='til_PP'>
            <include>til_Pre/phrase</include>
62          <real type='phrase' key='PP'>
              <gen>phrase</gen>
64            <exp key='Comp'>
                <constraint key='VinfP'>
66                <f value='VinfP' key='form/cat'/>
                  <usage key='default'>
68                  <f value='0.738' key='form/stat/rfreq[LKB]'/>
                  </usage>
70              </constraint>
                <constraint key='NP'>
72                <f value='NP' key='form/cat'/>
                  <f value='false' key='sem/human'/>
74              </constraint>
              </exp>
76          </real>
          </exp>
78        </real>
        </exp>
80      <link key='col/Aatr[politisk]' ref='politisk_A'/>
        <link key='constr[med_v]' ref='med_vilje_MWE'/>
82      <link key='constr[siste_v]' ref='siste_vilje_MWE'/>
        <link key='constr[få_v_sin]' ref='få_viljen_sin_MWE'/>
84      <link key='constr[påtvinge_v]' ref='påtvinge_vilje_MWE'/>
        <link key='constr[sette_v]' ref='sette_vilje_MWE'/>
86      <link key='constr[Guds_v]' ref='Guds_vilje_MWE'/>
        <link key='comp/pri[velvilje]' ref='velvilje_N'/>
88    </lunit>
      <lunit name="styrke" type="subsense">
90      <desc key='default'>CAP.{mental styrke} som tillater ACT.{sin eier} å overkomme OBSTR.{psykisk motstand} og nå GOAL.
        <link key='col/Aatr[sterk]' ref='sterk_A'/>
92      <link key='col/Aatr[svak]' ref='svak_A'/>
        <link key='comp/sec[viljestyrke]' ref='viljestyrke_N'/>
94    </lunit>
    </lunit>
```

A.17   vůle_N.xml

```
    <lunit name='vůle_N' type='lemma'>
2     <include>_tmpl_N:fem:duše</include>
      <usage key='default'>
4       <f value='9183' key='form/stat/freq[SYN2005]'/>
      </usage>
6     <usage key='singular'>
        <f value='0.980' key='form/stat/rfreq[SYN2005]'/>
8       <constraint key='sg'>
          <f value='sg' key='gram/num'/>
10      </constraint>
      </usage>
12    <exp key='core'>
        <real type='word' key='N'>
14        <exp key='base'>
            <real type='morpheme' key='vůle'>
16            <form key='base'>
                <f value='vůle' key='form/src'/>
18              <f value='vůle' key='form/base'/>
              </form>
20          </real>
          </exp>
22      </real>
```

```
        </exp>
24  <link key='col/Vsup[mít]' ref='mít_V'>
      <map key='self' loc='#self' rem='PAT'/>
26    <f key='sem/aspect' value='dur'/>
    </link>
28  <lunit name="schopnost" type="sense">
      <desc key='default'>CAP.{duševní síla} ACT.{někoho} směřující k nějakému GOAL.{cíli}</desc>
30    <link key='col/Vsup[projevit]' ref='projevit_V'>
        <map key='self' loc='#self' rem='PAT'/>
32      <f key='sem/aspect' value='dur'/>
      </link>
34    <link key='col/Vsup[najít]' ref='najít_V'>
        <map key='self' loc='#self' rem='PAT'/>
36      <f key='sem/aspect' value='inch'/>
      </link>
38    <link key='col/Vsup[ztratit]' ref='ztratit_V'>
        <map key='self' loc='#self' rem='PAT'/>
40      <f key='sem/aspect' value='term'/>
      </link>
42    <link key='col/Vsup[ztratit]' ref='ztratit_V'>
        <map key='self' loc='#self' rem='PAT'/>
44      <f key='sem/aspect' value='term'/>
      </link>
46    <link key='col/Vsup[podléhat]' ref='podléhat_V'>
        <map key='self' loc='#self' rem='PAT'/>
48    </link>
      <link key='col/Vsup[odporovat]' ref='odporovat_V'>
50      <map key='self' loc='#self' rem='PAT'/>
      </link>
52    <link key='col/Vsup[protivit_se]' ref='protivit_se_V'>
        <map key='self' loc='#self' rem='PAT'/>
54    </link>
      <link key='col/Vsup[podřídit_se]' ref='podřídit_se_V'>
56      <map key='self' loc='#self' rem='PAT'/>
      </link>
58    <link key='col/Vsup[podvolit_se]' ref='podvolit_se_V'>
        <map key='self' loc='#self' rem='PAT'/>
60    </link>
      <link key='col/Vsup[poddat_se]' ref='poddat_se_V'>
62      <map key='self' loc='#self' rem='PAT'/>
      </link>
64    <link key='constr[svobodná_v]' ref='svobodná_vůle_MWE'/>
      <link key='constr[dobrá_v]' ref='dobrá_vůle_MWE'/>
66    <link key='constr[zlá_v]' ref='zlá_vůle_MWE'/>
      <link key='constr[při_nejlepší_v]' ref='při_nejlepší_vůli_MWE'/>
68    <link key='trans/no' ref='vilje_N'/>
      <lunit name="rozhodnutí" type="subsense">
70      <desc key='default'>FORCE.{rozhodnutí} ACT.{někoho} směřovat k nějakému GOAL.{cíli}</desc>
        <exp key='phrase'>
72        <real type='phrase' key='Inf_Comp'>
            <gen>phrase</gen>
74          <usage key='default'>
              <f value='0.067' key='form/stat/rfreq[SYN2005]'/>
76          </usage>
            <exp key='core'>
78            <f key='sem/label' value='CAP'/>
              <include>@THIS/core</include>
80          </exp>
            <exp key='attr'>
82            <f key='sem/label' value='GOAL'/>
              <constraint key='VinfP'>
84              <f value='VinfP' key='form/cat'/>
              </constraint>
86          </exp>
          </real>
88        <real type='phrase' key='k_Comp'>
            <gen>phrase</gen>
90          <usage key='default'>
              <f value='0.039' key='form/stat/rfreq[SYN2005]'/>
92          </usage>
            <exp key='core'>
94            <include>@THIS/core</include>
              <f key='sem/label' value='CAP'/>
96          </exp>
```

```
        <exp key='k_PP'>
98        <include>k_Pre/phrase</include>
          <real type='phrase' key='PP'>
100         <gen>phrase</gen>
            <exp key='Comp'>
102           <f key='sem/label' value='GOAL'/>
              <constraint key='NP'>
104             <f value='NP' key='form/cat'/>
                <f key="gram/case" value="3"/>
106             <f key="sem/human" value="false"/>
              </constraint>
108         </exp>
          </real>
110       </exp>
        </real>
112     <real type='phrase' key='po_Comp'>
          <gen>phrase</gen>
114       <usage key='default'>
            <f value='0.010' key='form/stat/rfreq[SYN2005]'/>
116       </usage>
          <exp key='core'>
118         <include>@THIS/core</include>
            <f key='sem/label' value='CAP'/>
120       </exp>
          <exp key='po_PP'>
122         <include>po_Pre/phrase</include>
            <real type='phrase' key='PP'>
124           <gen>phrase</gen>
              <exp key='Comp'>
126             <f key='sem/label' value='GOAL'/>
                <constraint key='NP'>
128               <f value='NP' key='form/cat'/>
                  <f key="gram/case" value="6"/>
130               <f key="sem/human" value="false"/>
                </constraint>
132           </exp>
            </real>
134       </exp>
        </real>
136     </exp>
        <link key='constr[z_vlastní_v]' ref='z_vlastní_vůle_MWE'/>
138     <link key='constr[poslední_v]' ref='poslední_vůle_MWE'/>
        <link key='constr[v_Boží]' ref='vůle_Boží_MWE'/>
140     <link key='constr[prosadit_v]' ref='prosadit_vůli_MWE'/>
        <link key='constr[vnutit_v]' ref='vnutit_vůli_MWE'/>
142     <link key='constr[upnout_v]' ref='upnout_vůli_MWE'/>
        <link key='col/Aatr[politický]' ref='politický_A'/>
144   </lunit>
      <lunit name="síla" type="subsense">
146     <desc key='default'>CAP.{duševní síla} dovolující ACT.{někomu} překonat OBSTR.{překážky} a dosáhnout GOAL.{všech s
        <link key='col/Aatr[silný]' ref='silný_A'/>
148     <link key='col/Aatr[slabý]' ref='slabý_A'/>
        <link key='col/Aatr[pevný]' ref='pevný_A'/>
150     <link key='constr[s_vůle]' ref='síla_vůle_MWE'/>
      </lunit>
152 </lunit>
    <lunit name="mezera" type="sense">
154   <desc key='default'>QUANT.{velikost mezery} mezi ACT.{součástkami či díly}</desc>
      <usage key='tech'>
156     <f key="style/domain" value="tech"/>
      </usage>
158   <link key="sem/ext/metaphor" ref="schopnost"/>
      </lunit>
160 </lunit>
```

A.18 lyst_N.xml

```
    <lunit name='lyst_N' type='lemma'>
2     <include>_tmpl_N:fem:f1</include>
      <usage key='default'>
4       <f value='3166' key='form/stat/freq[LKB]'/>
      </usage>
```

```
 6     <usage key='singular'>
         <f value='0.968' key='form/stat/rfreq[LKB]'/>
 8       <constraint key='sg'>
           <f value='sg' key='gram/num'/>
10       </constraint>
       </usage>
12     <exp key="core">
         <real key="N" type="word">
14         <exp key="base">
             <real key="lyst" type="morpheme">
16             <form key="root">
                 <f key="form/src" value="lyst"/>
18               <f key="form/base" value="lyst"/>
               </form>
20           </real>
           </exp>
22       </real>
       </exp>
24     <lunit name='trang' type='sense'>
         <desc key='default'>FORCE.{trang} som tvinger ACT.{noen} til å nå et GOAL.{mål}</desc>
26       <exp key='phrase'>
           <real type='phrase' key='til_Comp'>
28           <gen>phrase</gen>
             <usage key='default'>
30             <f value='0.731' key='form/stat/rfreq[LKB]'/>
             </usage>
32           <usage key='singular'>
               <f value='0.999' key='form/stat/rfreq[LKB]'/>
34             <constraint key='default'>
                 <f value='sg' key='gram/num'/>
36             </constraint>
             </usage>
38           <exp key='core'>
               <include>@THIS/core</include>
40             <f key='sem/label' value='FORCE'/>
             </exp>
42           <exp key='til_PP'>
               <include>til_Pre/phrase</include>
44             <real type='phrase' key='PP'>
                 <gen>phrase</gen>
46               <exp key='Comp'>
                   <f key='sem/label' value='GOAL'/>
48                 <constraint key='VinfP'>
                     <f value='VinfP' key='form/cat'/>
50                   <usage key='default'>
                       <f value='0.914' key='form/stat/rfreq[LKB]'/>
52                   </usage>
                   </constraint>
54                 <constraint key='NP'>
                     <f value='NP' key='form/cat'/>
56                   <f value='false' key='sem/human'/>
                   </constraint>
58                 <constraint key='at_S'>
                     <f value='at_S' key='form/cat'/>
60                   <usage key='default'>
                       <f value='0.007' key='form/stat/rfreq[LKB]'/>
62                   </usage>
                   </constraint>
64               </exp>
               </real>
66           </exp>
           </real>
68         <real type='phrase' key='på_Comp'>
             <gen>phrase</gen>
70           <usage key='default'>
               <f value='0.158' key='form/stat/rfreq[LKB]'/>
72           </usage>
             <usage key='singular'>
74             <f value='1.0' key='form/stat/rfreq[LKB]'/>
               <constraint key='default'>
76               <f value='sg' key='gram/num'/>
               </constraint>
78           </usage>
             <exp key='core'>
```

```
80        <include>@THIS/core</include>
          <f key='sem/label' value='FORCE'/>
82        <constraint key='default'>
            <f key='gram/num' value='sg'/>
84        </constraint>
        </exp>
86      <exp key='på_PP'>
          <include>på_Pre/phrase</include>
88        <real type='phrase' key='PP'>
            <gen>phrase</gen>
90          <exp key='Comp'>
              <f key='sem/label' value='GOAL'/>
92            <constraint key='NP'>
                <f value='NP' key='form/cat'/>
94              <f value='false' key='sem/human'/>
              </constraint>
96            <constraint key='VinfP'>
                <f value='VinfP' key='form/cat'/>
98              <usage key='default'>
                  <f value='0.008' key='form/stat/rfreq[LKB]'/>
100             </usage>
              </constraint>
102           <constraint key='at_S'>
                <f value='at_S' key='form/cat'/>
104             <usage key='default'>
                  <f value='0.002' key='form/stat/rfreq[LKB]'/>
106             </usage>
              </constraint>
108         </exp>
          </real>
110       </exp>
        </real>
112     </exp>
      <link key='col/Vsup[ha]' ref='ha_V'>
114     <map key='self' loc='#self' rem='PAT'/>
        <f key='sem/aspect' value='dur'/>
116   </link>
      <link key='col/Vsup[få]' ref='få_V'>
118     <map key='self' loc='#self' rem='PAT'/>
        <f key='sem/aspect' value='inch'/>
120   </link>
      <link key='col/Vsup[miste]' ref='miste_V'>
122     <map key='self' loc='#self' rem='PAT'/>
        <f key='sem/aspect' value='term'/>
124   </link>
      <link key='constr[brenne_av_l]' ref='brenne_av_lyst_MWE'/>
126   <link key='constr[ha_brennende_l]' ref='ha_brennende_lyst_MWE'/>
      <link key='constr[ha_liten_l]' ref='ha_liten_lyst_MWE'/>
128   <link key="trans/cs" ref="chuť_N:touha"/>
      <lunit name='impuls' type='sub-sense'>
130     <desc key='default'>FORCE.{plutselig trang} som tvinger ACT.{noen} til å nå et GOAL.{bestemt mål}</desc>
      </lunit>
132   <lunit name='instinkt' type='sub-sense'>
        <desc key='default'>FORCE.{trang} som tvinger ACT.{noen} til å nå GOAL.{naturlige/sjenerelle mål}</desc>
134     <link key='col/Aatr[seksuell]' ref='seksuell_A'/>
        <link key='col/Aatr[sanselig]' ref='sanselig_A'/>
136     <link key='col/Aatr[syndig]' ref='syndig_A'/>
        <link key='col/Aatr[kjødelig]' ref='kjødelig_A'/>
138     <link key='col/Natr[menneskenes]' ref='menneske_N/NPDG[menneskenes]'/>
        <link key='col/Natr[mennenes]' ref='mann_N/NPDG[mennenes]'/>
140     <link key='constr[kjødets_l]' ref='kjødets_lyst_MWE'/>
        <link key="trans/cs[touha]" ref="touha_N"/>
142     <link key="trans/cs[žádostivost]" ref="žádostivost_N"/>
      </lunit>
144 </lunit>
    <lunit name='glede' type='sense'>
146   <desc key='default'>STATE.{glede eller fornøyelse} (til ACT.{noen})</desc>
      <link key='constr[hjertens_l]' ref='av_hjertens_lyst_MWE'/>
148   <link key='comp/pri[vellyst]' ref='vellyst_N'/>
    </lunit>
150 </lunit>
```

A.19   chuť_N.xml

```
   <lunit name='chuť_N' type='lemma'>
2    <include>_tmpl_N:fem:píseň</include>
     <usage key='default'>
4      <f value='10920' key='form/stat/freq[SYN2005]'/>
     </usage>
6    <usage key='singular'>
       <f value='0.945' key='form/stat/rfreq[SYN2005]'/>
8      <constraint key='sg'>
         <f value='sg' key='gram/num'/>
10     </constraint>
     </usage>
12   <exp key='core'>
       <real type='word' key='N'>
14       <exp key='base'>
           <real type='morpheme' key='chuť'>
16           <form key='base'>
               <f value='chuť' key='form/src'/>
18             <f value='chuť' key='form/base'/>
             </form>
20         </real>
         </exp>
22     </real>
     </exp>
24   <link key='col/Vsup[mít]' ref='mít_V'>
       <map key='self' loc='#self' rem='PAT'/>
26     <f key='sem/aspect' value='dur'/>
     </link>
28   <link key='col/Vsup[ztratit]' ref='ztratit_V'>
       <map key='self' loc='#self' rem='PAT'/>
30     <f key='sem/aspect' value='term'/>
     </link>
32   <lunit name='vlastnost' type='sense'>
       <desc key='default'>QUAL.{vlastnost} POSS.{něčeho} vnímaná ACT.{něčím} CAP.{smyslem}</desc>
34     <link key='col/Vsup[zvýraznit]' ref='zvýraznit_V'>
         <map key='self' loc='#self' rem='PAT'/>
36       <f key='sem/caus' value='true'/>
       </link>
38     <link key='col/Vsup[vyznačovat_se]' ref='vyznačovat_se_V'>
         <map key='self' loc='#self' rem='PAT'/>
40       <f key='sem/aspect' value='dur'/>
       </link>
42     <link key='col/Vsup[získat]' ref='získat_V'>
         <map key='self' loc='#self' rem='PAT'/>
44       <f key='sem/aspect' value='inch'/>
       </link>
46     <link key='col/Vsup[nabýt]' ref='nabýt_V'>
         <map key='self' loc='#self' rem='PAT'/>
48       <f key='sem/aspect' value='inch'/>
       </link>
50     <link key='col/Vsup[dát]' ref='dát_V'>
         <map key='self' loc='#self' rem='PAT'/>
52       <map key='poss' loc='POSS' rem='ADDR'/>
         <f key='sem/aspect' value='inch'/>
54       <f key='sem/caus' value='true'/>
       </link>
56     <link key='col/Vsup[dostat]' ref='dostat_V'>
         <map key='self' loc='#self' rem='PAT'/>
58       <f key='sem/aspect' value='inch'/>
       </link>
60     <link key='col/Vsup[dodat]' ref='dodat_V'>
         <map key='self' loc='#self' rem='PAT'/>
62       <map key='poss' loc='POSS' rem='ADDR'/>
         <f key='sem/aspect' value='inch'/>
64       <f key='sem/caus' value='true'/>
       </link>
66     <link key='col/Vsup[promarnit]' ref='zkazit_V'>
         <map key='self' loc='#self' rem='PAT'/>
68       <map key='poss' loc='POSS' rem='ADDR'/>
         <f key='sem/aspect' value='term'/>
70       <f key='sem/caus' value='true'/>
       </link>
72     <link key='col/Aatr[lahodný]' ref='lahodný_A'/>
```

```
            <link key='col/Aatr[jemný]' ref='jemný_A'/>
74          <link key='col/Aatr[kořeněný]' ref='kořeněný_A'/>
            <link key='col/Aatr[ovocný]' ref='ovocný_A'/>
76          <link key='constr[dobrou_ch]' ref='dobrou_chuť_MWE'/>
            <link key='constr[přijít_na_ch]' ref='přijít_na_chuť_MWE'/>
78          <link key="trans/no" ref="smak_N"/>
        </lunit>
80      <lunit name='smysl' type='sense'>
            <desc key='default'>CAP.{smysl jako schopnost} ACT.{lidí} rozeznávat specifické QUAL.{vlastnosti} POSS.{látek}</desc
82          <link key="sem/ext/metonymy" ref="vlastnost"/>
            <link key="trans/no[smak]" ref="smak_N"/>
84          <link key="trans/no[smaksans]" ref="smaksans_N"/>
        </lunit>
86      <lunit name='touha' type='sense'>
            <desc key='default'>FORCE.{potřeba} ACT.{někoho} dosáhnout nějakého GOAL.{cíle}</desc>
88          <link key="sem/ext/metaphor" ref="vlastnost"/>
            <link key="trans/no" ref="lyst_N"/>
90          <link key='col/Vsup[vzít]' ref='vzít_V'>
              <map key='self' loc='#self' rem='PAT'/>
92            <map key='poss' loc='POSS' rem='ADDR'/>
              <f key='sem/aspect' value='term'/>
94            <f key='sem/caus' value='true'/>
            </link>
96          <link key='col/Vsup[přejít]' ref='přejít_V'>
              <map key='self' loc='#self' rem='ACT'/>
98            <map key='poss' loc='POSS' rem='PAT'/>
              <f key='sem/aspect' value='term'/>
100         </link>
            <link key='col/Vsup[vzrůstat]' ref='vzrůstat_V'>
102           <map key='self' loc='#self' rem='ACT'/>
            </link>
104         <link key='col/Vsup[povzbudit]' ref='povzbudit_V'>
              <map key='self' loc='#self' rem='PAT'/>
106         </link>
            <link key='col/Vsup[spravit_si]' ref='spravit_si_V'>
108           <map key='self' loc='#self' rem='PAT'/>
            </link>
110         <link key='col/Vsup[pocítit]' ref='pocítit_V'>
              <map key='self' loc='#self' rem='PAT'/>
112           <f key='sem/aspect' value='inch'/>
            </link>
114         <link key='col/Vsup[projevit]' ref='projevit_V'>
              <map key='self' loc='#self' rem='PAT'/>
116           <f key='sem/aspect' value='dur'/>
            </link>
118         <link key='col/Vsup[probouzet]' ref='probouzet_V'>
              <map key='self' loc='#self' rem='PAT'/>
120           <f key='sem/aspect' value='inch'/>
              <f key='sem/caus' value='true'/>
122         </link>
            <link key='col/Vsup[dostat]' ref='dostat_V'>
124           <map key='self' loc='#self' rem='PAT'/>
              <f key='sem/aspect' value='inch'/>
126         </link>
            <link key='col/Vsup[dodat]' ref='dodat_V'>
128           <map key='self' loc='#self' rem='PAT'/>
              <map key='poss' loc='POSS' rem='ADDR'/>
130           <f key='sem/aspect' value='inch'/>
              <f key='sem/caus' value='true'/>
132         </link>
            <link key='col/Vsup[promarnit]' ref='zkazit_V'>
134           <map key='self' loc='#self' rem='PAT'/>
              <map key='poss' loc='POSS' rem='ADDR'/>
136           <f key='sem/aspect' value='term'/>
              <f key='sem/caus' value='true'/>
138         </link>
            <link key='constr[s_chutí]' ref='s_chutí_MWE'/>
140         <link key='constr[nemít_nejmenší_ch]' ref='nemít_nejmenší_chuť_MWE'/>
            <link key='constr[mít_sto_ch]' ref='mít_sto_chutí_MWE'/>
142         <link key='constr[mít_sto_ch]' ref='mít_pramalou_chuť_MWE'/>
            <link key='constr[být_při_ch]' ref='být_při_chuti_MWE'/>
144         <link key='constr[být_po_ch]' ref='být_po_chuti_MWE'/>
            <link key='constr[dělat_ch]' ref='dělat_chutě_MWE'/>
146         <link key='constr[dát_si_zajít_ch]' ref='dát_si_zajít_chuť_MWE'/>
```

```
       <lunit name='impuls' type='sub-sense'>
148      <desc key='default'>FORCE.{okamžitá touha} ACT.{někoho} po GOAL.{konkrétním smyslovém požitku}</desc>
       <exp key="phrase">
150      <real type='phrase' key='na_Comp'>
         <gen>phrase</gen>
152      <usage key='default'>
           <f value='0.059' key='form/stat/rfreq[SYN2005]'/>
154      </usage>
         <usage key='singular'>
156        <f value='0.971' key='form/stat/rfreq[SYN2005]'/>
           <constraint key='default'>
158          <f value='sg' key='gram/num'/>
           </constraint>
160      </usage>
         <exp key='core'>
162        <include>@THIS/core</include>
           <f key='sem/label' value='FORCE'/>
164      </exp>
         <exp key='na_PP'>
166        <include>na_Pre/phrase</include>
           <real type='phrase' key='PP'>
168        <gen>phrase</gen>
           <exp key='Comp'>
170        <f value='GOAL' key='sem/label'/>
             <constraint key='NP'>
172            <f value='NP' key='form/cat'/>
               <f key="gram/case" value="4"/>
174            <f key="sem/human" value="false"/>
             </constraint>
176        </exp>
           </real>
178      </exp>
         </real>
180    </exp>
       </lunit>
182    <lunit name='touha' type='sub-sense'>
       <desc key='default'>FORCE.{touha} ACT.{někoho} po GOAL.{dlouhodobé aktivitě, změně, apod.}</desc>
184    <exp key='phrase'>
         <real type='phrase' key='Inf_Comp'>
186        <gen>phrase</gen>
           <usage key='default'>
188          <f value='0.152' key='form/stat/rfreq[SYN2005]'/>
           </usage>
190        <usage key='singular'>
             <f value='0.936' key='form/stat/rfreq[LKB]'/>
192          <constraint key='default'>
               <f value='sg' key='gram/num'/>
194          </constraint>
           </usage>
196        <exp key='core'>
             <f key='sem/label' value='FORCE'/>
198          <include>@THIS/core</include>
           </exp>
200        <exp key='attr'>
             <f key='sem/label' value='GOAL'/>
202          <constraint key='VinfP'>
               <f value='VinfP' key='form/cat'/>
204          </constraint>
           </exp>
206      </real>
         <real type='phrase' key='k_Comp'>
208        <gen>phrase</gen>
           <usage key='default'>
210          <f value='0.043' key='form/stat/rfreq[SYN2005]'/>
           </usage>
212        <usage key='singular'>
             <f value='1.0' key='form/stat/rfreq[LKB]'/>
214          <constraint key='default'>
               <f value='sg' key='gram/num'/>
216          </constraint>
           </usage>
218      <exp key='core'>
           <include>@THIS/core</include>
220        <f key='sem/label' value='FORCE'/>
```

```
              </exp>
222           <exp key='k_PP'>
                <include>k_Pre/phrase</include>
224           <real type='phrase' key='PP'>
                <gen>phrase</gen>
226           <exp key='Comp'>
                <f key='sem/label' value='GOAL'/>
228           <constraint key='NP'>
                <f value='NP' key='form/cat'/>
230           <f key="gram/case" value="3"/>
              <f key="sem/human" value="false"/>
232           </constraint>
              </exp>
234         </real>
            </exp>
236       </real>
          </exp>
238     </lunit>
        <lunit name='nadšení' type='sub-sense'>
240       <desc key='default'>FORCE.{nadšení/energie} ACT.{někoho} potřebná pro GOAL.{nějakou činnost}</desc>
          <exp key="phrase">
242         <real type='phrase' key='do_Comp'>
              <gen>phrase</gen>
244           <usage key='default'>
                <f value='0.025' key='form/stat/rfreq[SYN2005]'/>
246           </usage>
              <usage key='singular'>
248             <f value='1.0' key='form/stat/rfreq[LKB]'/>
              <constraint key='default'>
250             <f value='sg' key='gram/num'/>
              </constraint>
252           </usage>
            <exp key='core'>
254           <include>@THIS/core</include>
              <f key='sem/label' value='FORCE'/>
256           </exp>
            <exp key='do_PP'>
258           <include>do_Pre/phrase</include>
              <real type='phrase' key='PP'>
260             <gen>phrase</gen>
              <exp key='Comp'>
262             <f key='sem/label' value='GOAL'/>
                <constraint key='NP'>
264               <f value='NP' key='form/cat'/>
                <f key="gram/case" value="2"/>
266               <f key="sem/human" value="false"/>
                </constraint>
268             </exp>
              </real>
270           </exp>
            </real>
272       </exp>
          </lunit>
274     </lunit>
      </lunit>
```

A.20   trang_N.xml

```
    <lunit name='trang_N' type='lemma'>
2     <include>_tmpl_N:masc:m1</include>
      <usage key='default'>
4       <f value='519' key='form/stat/freq[LKB]'/>
      </usage>
6     <usage key='singular'>
        <f value='1.0' key='form/stat/rfreq[LKB]'/>
8       <constraint key='sg'>
          <f value='sg' key='gram/num'/>
10        </constraint>
      </usage>
12    <exp key="core">
        <real key="N" type="word">
14          <exp key="base">
```

```
            <real key="trang" type="morpheme">
16            <form key="root">
                <f key="form/src" value="trang"/>
18              <f key="form/base" value="trang"/>
              </form>
20          </real>
          </exp>
22      </real>
      </exp>
24    <exp key='phrase'>
        <real type='phrase' key='til_Comp'>
26        <gen>phrase</gen>
          <usage key='default'>
28          <f value='0.827' key='form/stat/rfreq[LKB]'/>
          </usage>
30        <exp key='core'>
            <include>@THIS/core</include>
32          <f key='sem/label' value='FORCE'/>
          </exp>
34        <exp key='til_PP'>
            <include>til_Pre/phrase</include>
36          <real type='phrase' key='PP'>
              <gen>phrase</gen>
38            <exp key='Comp'>
                <f key='sem/label' value='GOAL'/>
40              <constraint key='VinfP'>
                  <f value='VinfP' key='form/cat'/>
42                <usage key='default'>
                    <f value='0.821' key='form/stat/rfreq[LKB]'/>
44                </usage>
                </constraint>
46              <constraint key='NP'>
                  <f value='NP' key='form/cat'/>
48                <f value='false' key='sem/human'/>
                </constraint>
50            </exp>
            </real>
52        </exp>
        </real>
54    </exp>
      <link key='col/Vsup[få]' ref='få_V'>
56      <map key='self' loc='#self' rem='PAT'/>
        <f key='sem/aspect' value='inch'/>
58    </link>
      <link key='col/Vsup[føle]' ref='føle_V'>
60      <map key='self' loc='#self' rem='PAT'/>
        <f key='sem/aspect' value='dur'/>
62    </link>
      <link key='col/Vsup[kjenne]' ref='kjenne_V'>
64      <map key='self' loc='#self' rem='PAT'/>
        <f key='sem/aspect' value='dur'/>
66    </link>
      <link key='col/Vsup[ha]' ref='ha_V'>
68      <map key='self' loc='#self' rem='PAT'/>
        <f key='sem/aspect' value='dur'/>
70    </link>
      <link key='col/Aatr[uimotståelig]' ref='uimotståelig_A'/>
72    <link key='col/Aatr[plutselig]' ref='plutselig_A'/>
      <link key='col/Aatr[intens]' ref='intens_A'/>
74    <link key='col/Aatr[vill]' ref='vill_A'/>
      <link key='col/Aatr[sykelig]' ref='sykelig_A'/>
76    <link key='constr[ubendig_t]' ref='ubendig_trang_MWE'/>
      <link key='constr[t_kom_over_ham]' ref='trangen_kom_over_en_MWE'/>
78    <link key='constr[hjertes_t]' ref='hjertes_trang_MWE'/>
      <link key='constr[drives_av_t]' ref='drives_av_trang_MWE'/>
80    <desc key='default'>FORCE.{sterk indre følelse eller drift} som tvinger ACT.{noen} til å nå et bestemt GOAL.{mål}</desc>
      <lunit name='behov' type='trans'>
82      <desc key='default'>praktisk/økonomisk behov</desc>
        <link key='sem/syn' ref='behov_N'/>
84      <link key="trans/cs[potřeba]" ref="potřeba_N"/>
      </lunit>
86    <lunit name='indre' type='trans'>
        <desc key='default'>urasjonell, langvarig indre trang</desc>
88      <link key="trans/cs[puzení]" ref="puzení_N"/>
```

```
        </lunit>
90      <lunit name='ubeviss' type='trans'>
          <desc key='default'>ubeviss trang</desc>
92        <link key="trans/cs[nutkání]" ref="nutkání_N"/>
        </lunit>
94      <lunit name='instinktiv' type='trans'>
          <desc key='default'>sterk instiktiv, beviss trang</desc>
96        <link key='sem/syn' ref='begjær_N'/>
          <link key="trans/cs[žádost]" ref="žádost_N"/>
98      </lunit>
      <lunit name='lengsel' type='sub-sense'>
100     <desc key='default'>sterk åndelig aller fysisk lengsel</desc>
          <link key='sem/syn' ref='lengsel_N'/>
102     <link key="trans/cs" ref="touha_N:síla"/>
      </lunit>
104 </lunit>
```

A.21 touha_N.xml

```
    <lunit name='touha_N' type='lemma'>
2     <include>_tmpl_N:fem:žena</include>
      <usage key='default'>
4       <f value='8480' key='form/stat/freq[SYN2005]'/>
      </usage>
6     <usage key='singular'>
        <f value='0.911' key='form/stat/rfreq[SYN2005]'/>
8       <constraint key='sg'>
          <f value='sg' key='gram/num'/>
10      </constraint>
      </usage>
12    <exp key='core'>
        <real type='word' key='N'>
14        <exp key='base'>
            <real type='morpheme' key='touha'>
16            <form key='base'>
                <f value='touha' key='form/src'/>
18              <f value='touha' key='form/base'/>
              </form>
20          </real>
          </exp>
22      </real>
      </exp>
24    <link key='col/Aatr[lidský]' ref='lidský_A'/>
      <link key='col/Aatr[sexuální]' ref='sexuální_A'/>
26    <link key='col/Aatr[podvědomý]' ref='podvědomý_A'/>
      <link key='col/Aatr[marný]' ref='marný_A'/>
28    <link key='col/Aatr[naplněný]' ref='naplněný_A'/>
      <link key='col/Aatr[zoufalý]' ref='zoufalý_A'/>
30    <link key='col/Aatr[neukojitelný]' ref='neukojitelný_A'/>
      <link key='col/Aatr[neuhasitelný]' ref='neuhasitelný_A'/>
32    <link key='col/Aatr[odvěký]' ref='odvěký_A'/>
      <link key='col/Aatr[vášnivý]' ref='vášnivý_A'/>
34    <link key='col/Aatr[nezkrotný]' ref='nezkrotný_A'/>
      <link key='col/Aatr[milostný]' ref='milostný_A'/>
36    <link key='col/Aatr[spalující]' ref='spalující_A'/>
      <lunit name='síla' type='sense'>
38      <desc key='default'>FORCE.{vnitřní duševní potřeba} ACT.{někoho} dosáhnout nějakého (vzdáleného) GOAL.{cíle}</desc>
        <exp key='phrase'>
40        <real type='phrase' key='Inf_Comp'>
            <gen>phrase</gen>
42          <usage key='default'>
              <f value='0.220' key='form/stat/rfreq[SYN2005]'/>
44          </usage>
            <usage key='singular'>
46            <f value='0.989' key='form/stat/rfreq[LKB]'/>
              <constraint key='default'>
48              <f value='sg' key='gram/num'/>
              </constraint>
50          </usage>
            <exp key='core'>
52            <f key='sem/label' value='FORCE'/>
              <include>@THIS/core</include>
```

```
54        </exp>
          <exp key='attr'>
56          <f key='sem/label' value='GOAL'/>
            <constraint key='VinfP'>
58            <f value='VinfP' key='form/cat'/>
            </constraint>
60        </exp>
        </real>
62      <real type='phrase' key='po_Comp'>
          <gen>phrase</gen>
64        <usage key='default'>
            <f value='0.290' key='form/stat/rfreq[SYN2005]'/>
66        </usage>
          <usage key='singular'>
68          <f value='0.98' key='form/stat/rfreq[LKB]'/>
            <constraint key='default'>
70            <f value='sg' key='gram/num'/>
            </constraint>
72        </usage>
          <exp key='core'>
74          <include>@THIS/core</include>
            <f key='sem/label' value='FORCE'/>
76        </exp>
          <exp key='po_PP'>
78          <include>po_Pre/phrase</include>
            <real type='phrase' key='PP'>
80            <gen>phrase</gen>
              <exp key='Comp'>
82              <f key='sem/label' value='GOAL'/>
                <constraint key='NP'>
84                <f value='NP' key='form/cat'/>
                  <f key="gram/case" value="6"/>
86              </constraint>
              </exp>
88          </real>
          </exp>
90      </real>
      </exp>
92    <link key='col/Vsup[posednout]' ref='posednout_V'>
        <map key='self' loc='#self' rem='ACT'/>
94      <map key='poss' loc='POSS' rem='PAT'/>
        <f key='sem/aspect' value='inch'/>
96    </link>
      <link key='col/Vsup[hnát]' ref='hnát_V'>
98      <map key='self' loc='#self' rem='ACT'/>
        <map key='poss' loc='POSS' rem='PAT'/>
100     <f key='sem/aspect' value='dur'/>
      </link>
102   <link key='col/Vsup[zmocnit_se]' ref='zmocnit_se_V'>
        <map key='self' loc='#self' rem='ACT'/>
104     <map key='poss' loc='POSS' rem='PAT'/>
        <f key='sem/aspect' value='inch'/>
106   </link>
      <link key='col/Vsup[přepadnout]' ref='přepadnout_V'>
108     <map key='self' loc='#self' rem='ACT'/>
        <map key='poss' loc='POSS' rem='PAT'/>
110     <f key='sem/aspect' value='inch'/>
      </link>
112   <link key='col/Vsup[pocítit]' ref='pocítit_V'>
        <map key='self' loc='#self' rem='PAT'/>
114     <f key='sem/aspect' value='inch'/>
      </link>
116   <link key='col/Vsup[přemáhat]' ref='přemáhat_V'>
        <map key='self' loc='#self' rem='PAT'/>
118     <f key='sem/aspect' value='term'/>
      </link>
120   <link key='col/Vsup[potlačovat]' ref='potlačovat_V'>
        <map key='self' loc='#self' rem='PAT'/>
122     <f key='sem/aspect' value='term'/>
      </link>
124   <link key='col/Vsup[odolat]' ref='odolat_V'>
        <map key='self' loc='#self' rem='PAT'/>
126     <f key='sem/aspect' value='term'/>
      </link>
```

```
128      <link key='col/Vsup[podlehnout]' ref='podlehnout_V'>
           <map key='self' loc='#self' rem='PAT'/>
130        <f key='sem/aspect' value='inch'/>
         </link>
132      <link key='col/Vsup[propadnout]' ref='propadnout_V'>
           <map key='self' loc='#self' rem='PAT'/>
134        <f key='sem/aspect' value='inch'/>
         </link>
136      <link key='col/Vsup[zahořet]' ref='zahořet_V'>
           <map key='self' loc='#self' rem='PAT'/>
138        <f key='sem/aspect' value='inch'/>
         </link>
140      <link key='col/Vsup[vzplát]' ref='vzplát_V'>
           <map key='self' loc='#self' rem='PAT'/>
142        <f key='sem/aspect' value='inch'/>
         </link>
144      <link key='col/Vsup[planout]' ref='planout_V'>
           <map key='self' loc='#self' rem='PAT'/>
146        <f key='sem/aspect' value='dur'/>
         </link>
148      <link key='col/Vsup[poddávat_se]' ref='poddávat_se_V'>
           <map key='self' loc='#self' rem='PAT'/>
150        <f key='sem/aspect' value='inch'/>
         </link>
152      <link key='col/Vsup[podřídit_se]' ref='podřídit_se_V'>
           <map key='self' loc='#self' rem='PAT'/>
154        <f key='sem/aspect' value='inch'/>
         </link>
156      <link key='col/Vsup[ukojit]' ref='ukojit_V'>
           <map key='self' loc='#self' rem='PAT'/>
158        <f key='sem/aspect' value='term'/>
           <f key='sem/caus' value='true'/>
160      </link>
         <link key='col/Vsup[vzbudit]' ref='vzbudit_V'>
162        <map key='self' loc='#self' rem='PAT'/>
           <f key='sem/aspect' value='inch'/>
164        <f key='sem/caus' value='true'/>
         </link>
166      <link key='col/Vsup[probouzet]' ref='probouzet_V'>
           <map key='self' loc='#self' rem='PAT'/>
168        <f key='sem/aspect' value='inch'/>
           <f key='sem/caus' value='true'/>
170      </link>
         <link key='col/Vsup[vyvolávat]' ref='vyvolávat_V'>
172        <map key='self' loc='#self' rem='PAT'/>
           <f key='sem/aspect' value='inch'/>
174        <f key='sem/caus' value='true'/>
         </link>
176      <link key='col/Vsup[rozněcovat]' ref='rozněcovat_V'>
           <map key='self' loc='#self' rem='PAT'/>
178        <f key='sem/aspect' value='inch'/>
           <f key='sem/caus' value='true'/>
180      </link>
         <link key='col/Aatr[silný]' ref='silný_A'/>
182      <link key='col/Aatr[neodolatelný]' ref='neodolatelný_A'/>
         <link key='constr[hořet_t]' ref='hořet_touhou_MWE'/>
184      <link key='constr[vznítit_t]' ref='vznítit_touhu_MWE'/>
         <link key='constr[tělesná_t]' ref='tělesná_touha_MWE'/>
186      <link key='constr[hnán_t]' ref='hnán_touhou_MWE'/>
         <link key='constr[t_srdce]' ref='touha_srdce_MWE'/>
188      <link key='constr[t_se_zmocnila]' ref='touha_se_zmocnila_MWE'/>
         <lunit name='potřeba' type='trans'>
190        <desc key='default'>vnitřní puzení</desc>
           <link key='sem/syn' ref='potřeba_N'/>
192        <link key='trans/no[trang]' ref='trang_N'/>
         </lunit>
194      <lunit name='žádost' type='trans'>
           <desc key='default'>fanatická touha</desc>
196        <link key='sem/syn[žádost]' ref='žádost_N'/>
           <link key='sem/syn[posedlost]' ref='posedlost_N'/>
198        <link key='trans/no[begjær]' ref='begjær_N'/>
         </lunit>
200      <lunit name='přání' type='trans'>
           <desc key='default'>mírná touha</desc>
```

```
202        <link key='sem/syn' ref='přání_N'/>
           <link key='trans/no[ønske]' ref='ønske_N'/>
204      </lunit>
         <lunit name='stesk' type='trans'>
206        <desc key='default'>touha po něčem aktuálně nepřítomném</desc>
           <link key='sem/syn' ref='stesk_N'/>
208        <link key='trans/no[lengsel]' ref='lengsel_N'/>
         </lunit>
210    </lunit>
       <lunit name='objekt' type='sense'>
212      <desc key='default'>GOAL.{objekt/cíl} k němuž směřuje FORCE.{vnitřní duševní potřeba} ACT.{někoho}</desc>
         <link key="sem/ext/metonymy" ref="síla"/>
214    </lunit>
     </lunit>
```

A.22   ønske_N.xml

```
     <lunit name='ønske_N' type='lemma'>
2      <include>_tmpl_N:neut:n1</include>
       <usage key='default'>
4        <f value='1848' key='form/stat/freq[LKB]'/>
       </usage>
6      <usage key='singular'>
         <f value='0.736' key='form/stat/rfreq[LKB]'/>
8        <constraint key='sg'>
           <f value='sg' key='gram/num'/>
10       </constraint>
       </usage>
12     <exp key="core">
         <real key="N" type="word">
14         <exp key="base">
             <real key="ønske" type="morpheme">
16             <form key="root">
                 <f key="form/src" value="ønske"/>
18               <f key="form/base" value="ønske"/>
               </form>
20           </real>
           </exp>
22       </real>
       </exp>
24     <exp key='phrase'>
         <real type='phrase' key='om_Comp'>
26         <gen>phrase</gen>
           <usage key='default'>
28           <f value='0.519' key='form/stat/rfreq[LKB]'/>
           </usage>
30         <usage key='singular'>
             <f value='0.938' key='form/stat/rfreq[LKB]'/>
32           <constraint key='default'>
               <f value='sg' key='gram/num'/>
34           </constraint>
           </usage>
36         <exp key='core'>
             <include>@THIS/core</include>
38           <f key='sem/label' value='FORCE'/>
           </exp>
40         <exp key='om_PP'>
             <include>om_Pre/phrase</include>
42           <real type='phrase' key='PP'>
               <gen>phrase</gen>
44             <exp key='Comp'>
                 <f key='sem/label' value='GOAL'/>
46               <constraint key='VinfP'>
                   <f value='VinfP' key='form/cat'/>
48                 <usage key='default'>
                     <f value='0.638' key='form/stat/rfreq[LKB]'/>
50                 </usage>
                 </constraint>
52               <constraint key='NP'>
                   <f value='NP' key='form/cat'/>
54                 <f value='false' key='sem/human'/>
                 </constraint>
```

```
56          <constraint key='at_S'>
              <f value='at_S' key='form/cat'/>
58            <usage key='default'>
                <f value='0.070' key='form/stat/rfreq[LKB]'/>
60            </usage>
            </constraint>
62        </exp>
        </real>
64      </exp>
      </real>
66  </exp>
    <link key='col/Vsup[ha]' ref='ha_V'>
68    <map key='self' loc='#self' rem='PAT'/>
      <f key='sem/aspect' value='dur'/>
70  </link>
    <link key='col/Vsup[ytre]' ref='ytre_V'>
72    <map key='self' loc='#self' rem='PAT'/>
      <f key='sem/aspect' value='inch'/>
74  </link>
    <link key='col/Vsup[uttrykke]' ref='uttrykke_V'>
76    <map key='self' loc='#self' rem='PAT'/>
      <f key='sem/aspect' value='inch'/>
78  </link>
    <link key='col/Vsup[uttale]' ref='uttale_V'>
80    <map key='self' loc='#self' rem='PAT'/>
      <f key='sem/aspect' value='inch'/>
82  </link>
    <link key='col/Vsup[oppfylle]' ref='oppfylle_V'>
84    <map key='self' loc='#self' rem='PAT'/>
      <f key='sem/aspect' value='term'/>
86    <f key='sem/caus' value='true'/>
    </link>
88  <link key='col/Aatr[sterk]' ref='sterk_A'/>
    <link key='col/Aatr[brennende]' ref='brennende_A'/>
90  <link key='constr[høyeste_ø]' ref='høyeste_ønske_MWE'/>
    <link key='constr[etter_ø]' ref='etter_ønske_MWE'/>
92  <link key='trans/cs[přání]' ref='přání_N'/>
    <lunit name='vilje' type='sense'>
94    <desc key='default'>FORCE.{indre lyst} (til ACT.{noen}) til å realisere et GOAL.{mål}</desc>
    </lunit>
96  <lunit name='høflighet' type='sense'>
      <desc key='default'>høflighetsuttryk av et ønske (fra ACT.{noen} om et GOAL.{mål} til BEN.{noen})</desc>
98    <link key='constr[alle_gode_ø]' ref='alle_gode_ønsker_MWE'/>
      <link key='constr[beste_ø]' ref='beste_ønsker_MWE'/>
100   </lunit>
    </lunit>
```

A.23   přání_N.xml

```
    <lunit name='přání_N' type='lemma'>
2     <include>_tmpl_N:neut:stavení</include>
      <usage key='default'>
4       <f value='6305' key='form/stat/freq[SYN2005]'/>
      </usage>
6     <usage key='singular'>
        <f value='0.829' key='form/stat/rfreq[SYN2005]'/>
8       <constraint key='sg'>
          <f value='sg' key='gram/num'/>
10      </constraint>
      </usage>
12    <exp key='core'>
        <real type='word' key='N'>
14        <exp key='base'>
            <real type='morpheme' key='přání'>
16            <form key='base'>
                <f value='přání' key='form/src'/>
18              <f value='přání' key='form/base'/>
              </form>
20          </real>
          </exp>
22      </real>
      </exp>
```

```
24    <link key='trans/no' ref='ønske_N'/>
      <lunit name='touha' type='sense'>
26      <desc key='default'>FORCE.{vnitřní touha} ACT.{někoho} realizovat nějaký GOAL.{cíl}</desc>
        <exp key='phrase'>
28        <real type='phrase' key='Inf_Comp'>
            <gen>phrase</gen>
30          <usage key='default'>
              <f value='0.099' key='form/stat/rfreq[SYN2005]'/>
32          </usage>
            <usage key='singular'>
34            <f value='0.942' key='form/stat/rfreq[LKB]'/>
              <constraint key='default'>
36              <f value='sg' key='gram/num'/>
              </constraint>
38          </usage>
            <exp key='core'>
40            <f key='sem/label' value='FORCE'/>
              <include>@THIS/core</include>
42          </exp>
            <exp key='attr'>
44            <f key='sem/label' value='GOAL'/>
              <constraint key='VinfP'>
46              <f value='VinfP' key='form/cat'/>
              </constraint>
48          </exp>
          </real>
50      </exp>
        <link key='col/Vsup[mít]' ref='mít_V'>
52        <map key='self' loc='#self' rem='PAT'/>
          <f key='sem/aspect' value='dur'/>
54      </link>
        <link key='col/Vsup[pojmout]' ref='pojmout_V'>
56        <map key='self' loc='#self' rem='PAT'/>
          <f key='sem/aspect' value='inch'/>
58      </link>
        <link key='col/Vsup[projevit]' ref='projevit_V'>
60        <map key='self' loc='#self' rem='PAT'/>
          <f key='sem/aspect' value='inch'/>
62      </link>
        <link key='col/Vsup[vyslovit]' ref='vyslovit_V'>
64        <map key='self' loc='#self' rem='PAT'/>
          <f key='sem/aspect' value='inch'/>
66      </link>
        <link key='col/Vsup[vyjádřit]' ref='vyjádřit_V'>
68        <map key='self' loc='#self' rem='PAT'/>
          <f key='sem/aspect' value='inch'/>
70      </link>
        <link key='col/Vsup[uskutečnit]' ref='uskutečnit_V'>
72        <map key='self' loc='#self' rem='PAT'/>
          <f key='sem/aspect' value='term'/>
74      </link>
        <link key='col/Vsup[splnit]' ref='splnit_V'>
76        <map key='self' loc='#self' rem='PAT'/>
          <f key='sem/aspect' value='term'/>
78        <f key='sem/caus' value='true'/>
        </link>
80      <link key='col/Vsup[vyplnit]' ref='vyplnit_V'>
          <map key='self' loc='#self' rem='PAT'/>
82        <f key='sem/aspect' value='term'/>
          <f key='sem/caus' value='true'/>
84      </link>
        <link key='col/Vsup[vyhovět]' ref='vyhovět_V'>
86        <map key='self' loc='#self' rem='PAT'/>
          <f key='sem/aspect' value='term'/>
88        <f key='sem/caus' value='true'/>
        </link>
90      <link key='col/Vsup[respektovat]' ref='respektovat_V'>
          <map key='self' loc='#self' rem='PAT'/>
92      </link>
        <link key='col/Vsup[vyslyšet]' ref='vyslyšet_V'>
94        <map key='self' loc='#self' rem='PAT'/>
        </link>
96      <link key='col/Vsup[řídit_se]' ref='řídit_se_V'>
          <map key='self' loc='#self' rem='PAT'/>
```

```
 98         </link>
            <link key='col/Vsup[splnit_se]' ref='splnit_se_V'>
100           <map key='self' loc='#self' rem='ACT'/>
              <f key='sem/aspect' value='term'/>
102         </link>
            <link key='col/Aatr[zbožný]' ref='zbožný_A'/>
104         <link key='col/Aatr[splněný]' ref='splněný_A'/>
            <link key='col/Aatr[toužebný]' ref='toužebný_A'/>
106         <link key='col/Aatr[výslovný]' ref='výslovný_A'/>
            <link key='col/Aatr[tajný]' ref='tajný_A'/>
108         <link key='col/Aatr[vroucný]' ref='vroucný_A'/>
            <link key='col/Aatr[jediný]' ref='jediný_A'/>
110         <link key='col/Aatr[poslední]' ref='poslední_A'/>
            <link key='constr[na_p]' ref='na_přání_MWE'/>
112         <link key='constr[podle_p]' ref='podle_přání_MWE'/>
            <link key='constr[nejvroucnější_p]' ref='nejvroucnější_přání_MWE'/>
114    </lunit>
       <lunit name='projev' type='sense'>
116      <desc key='default'>formální výraz zdvořilosti přáním (BEN.{někomu}, dosáhnout nějakého GOAL.{cíle}, od ACT.{někoho}
         <exp key='phrase'>
118        <real type='phrase' key='k_Comp'>
             <gen>phrase</gen>
120          <usage key='default'>
               <f value='0.007' key='form/stat/rfreq[SYN2005]'/>
122          </usage>
             <exp key='core'>
124            <include>@THIS/core</include>
             </exp>
126          <exp key='GOAL'>
               <f key='sem/label' value='GOAL'/>
128            <constraint key='NPgen'>
                 <f value='NP' key='form/cat'/>
130              <f key="gram/case" value="2"/>
                 <f key="sem/human" value="false"/>
132            </constraint>
             </exp>
134          <exp key='BEN'>
               <f key='sem/label' value='BEN'/>
136            <constraint key='NPdat'>
                 <f value='NP' key='form/cat'/>
138              <f key="gram/case" value="3"/>
                 <f key="sem/human" value="true"/>
140            </constraint>
             </exp>
142          <exp key='EVENT'>
               <include>k_Pre/phrase</include>
144            <real type='phrase' key='PP'>
                 <gen>phrase</gen>
146              <exp key='Comp'>
                   <f key='sem/label' value='EVENT'/>
148                <constraint key='NP'>
                     <f value='NP' key='form/cat'/>
150                  <f key="gram/case" value="3"/>
                     <f key="sem/human" value="false"/>
152                </constraint>
                 </exp>
154            </real>
             </exp>
156        </real>
         </exp>
158      <link key='col/Aatr[upřímný]' ref='upřímný_A'/>
         <link key='constr[p_všeho_nejlepšího]' ref='přání_všeho_nejlepšího_MWE'/>
160      <link key='comp/pri[blahopřání]' ref='blahopřání_N'/>
         <link key='trans/no[gratulasjon]' ref='gratulasjon_N'/>
162      <link key='trans/no[lykkeønskning]' ref='lykkeønskning_N'/>
         <lunit name='písemné' type='sub-sense'>
164        <desc key='default'>písemný projev</desc>
           <link key='col/Aatr[vánoční]' ref='vánoční_A'/>
166        <link key='col/Aatr[novoroční]' ref='novoroční_A'/>
           <link key='trans/no' ref='gratulasjonskort_N'/>
168      </lunit>
       </lunit>
170  </lunit>
```

A.24   behov_N.xml

```
   <lunit name='behov_N' type='lemma'>
2    <include>_tmpl_N:neut:n1</include>
     <usage key='default'>
4      <f value='4926' key='form/stat/freq[LKB]'/>
     </usage>
6    <usage key='singular'>
       <f value='0.871' key='form/stat/rfreq[LKB]'/>
8      <constraint key='sg'>
         <f value='sg' key='gram/num'/>
10     </constraint>
     </usage>
12   <exp key="core">
       <real key="N" type="word">
14       <exp key="base">
           <real key="behov" type="morpheme">
16           <form key="root">
               <f key="form/src" value="behov"/>
18             <f key="form/base" value="behov"/>
             </form>
20         </real>
         </exp>
22     </real>
     </exp>
24   <exp key='phrase'>
       <real type='phrase' key='for_Comp'>
26       <gen>phrase</gen>
         <usage key='default'>
28         <f value='0.643' key='form/stat/rfreq[LKB]'/>
         </usage>
30       <usage key='singular'>
           <f value='0.987' key='form/stat/rfreq[LKB]'/>
32         <constraint key='default'>
             <f value='sg' key='gram/num'/>
34         </constraint>
         </usage>
36       <exp key='core'>
           <include>@THIS/core</include>
38         <f key='sem/label' value='FORCE'/>
         </exp>
40       <exp key='for_PP'>
           <include>for_Pre/phrase</include>
42         <real type='phrase' key='PP'>
             <gen>phrase</gen>
44           <exp key='Comp'>
               <f key='sem/label' value='GOAL'/>
46             <constraint key='NP'>
                 <f value='NP' key='form/cat'/>
48               <f value='false' key='sem/human'/>
               </constraint>
50             <constraint key='VinfP'>
                 <f value='VinfP' key='form/cat'/>
52               <usage key='default'>
                   <f value='0.310' key='form/stat/rfreq[LKB]'/>
54               </usage>
               </constraint>
56             <constraint key='at_S'>
                 <f value='at_S' key='form/cat'/>
58               <usage key='default'>
                   <f value='0.011' key='form/stat/rfreq[LKB]'/>
60               </usage>
               </constraint>
62           </exp>
           </real>
64       </exp>
       </real>
66   </exp>
     <link key='col/Vsup[ha]' ref='ha_V'>
68     <map key='self' loc='#self' rem='PAT'/>
       <f key='sem/aspect' value='dur'/>
70   </link>
     <link key='col/Vsup[dekke]' ref='dekke_V'>
72     <map key='self' loc='#self' rem='PAT'/>
```

```
        <f key='sem/aspect' value='term'/>
74      <f key='sem/caus' value='true'/>
      </link>
76    <link key='col/Vsup[redusere]' ref='redusere_V'>
        <map key='self' loc='#self' rem='PAT'/>
78      <f key='sem/aspect' value='term'/>
        <f key='sem/caus' value='true'/>
80    </link>
      <link key='col/Vsup[skape]' ref='skape_V'>
82      <map key='self' loc='#self' rem='PAT'/>
        <f key='sem/aspect' value='inch'/>
84      <f key='sem/caus' value='true'/>
      </link>
86    <link key='col/Vsup[se]' ref='se_V'>
        <map key='self' loc='#self' rem='PAT'/>
88    </link>
      <link key='col/Aatr[økende]' ref='økende_A'/>
90    <link key='col/Aatr[spesiell]' ref='spesiell_A'/>
      <link key='col/Aatr[sterk]' ref='sterk_A'/>
92    <link key='col/Aatr[akutt]' ref='akutt_A'/>
      <link key='col/Natr[menneske]' ref='menneske_N'/>
94    <link key='col/Natr[bruker]' ref='bruker_N'/>
      <link key='col/Natr[kunde]' ref='kunde_N'/>
96    <link key='constr[etter_b]' ref='etter_behov_MWE'/>
      <link key='constr[ved_b]' ref='ved_behov_MWE'/>
98    <link key='trans/cs' ref='potřeba_N:nutnost'/>
    </lunit>
```

A.25   potřeba_N.xml

```
    <lunit name='potřeba_N' type='lemma'>
2     <include>_tmpl_N:fem:žena</include>
      <exp key='core'>
4       <real type='word' key='N'>
          <exp key='base'>
6           <real type='morpheme' key='potřeba'>
              <form key='base'>
8               <f value='potřeba' key='form/src'/>
                <f value='potřeba' key='form/base'/>
10            </form>
            </real>
12        </exp>
        </real>
14    </exp>
      <lunit name='nutnost' type='sense'>
16      <desc key='default'>FORCE.{pragmatická či naturalistická síla} nutící ACT.{někoho} dosáhnout nějakého GOAL.{cíle}</d
        <exp key='phrase'>
18        <real type='phrase' key='Inf_Comp'>
            <gen>phrase</gen>
20          <exp key='core'>
              <f key='sem/label' value='FORCE'/>
22            <include>@THIS/core</include>
            </exp>
24          <exp key='attr'>
              <f key='sem/label' value='GOAL'/>
26            <constraint key='VinfP'>
                <f value='VinfP' key='form/cat'/>
28            </constraint>
            </exp>
30        </real>
          <real type='phrase' key='Gen_Comp'>
32          <gen>phrase</gen>
            <exp key='core'>
34            <include>@THIS/core</include>
              <f key='sem/label' value='FORCE'/>
36          </exp>
            <exp key='attr'>
38            <f key='sem/label' value='GOAL'/>
              <constraint key='NPgen'>
40              <f value='NP' key='form/cat'/>
                <f key="gram/case" value="2"/>
42              <f key="sem/human" value="false"/>
```

```
                  </constraint>
44            </exp>
            </real>
46      </exp>
        <link key='sem/syn' ref='nutnost_N'/>
48      <link key='col/Vsup[mít]' ref='mít_V'>
          <map key='self' loc='#self' rem='PAT'/>
50        <f key='sem/aspect' value='dur'/>
        </link>
52      <link key='col/Vsup[pocítit]' ref='pocítit_V'>
          <map key='self' loc='#self' rem='PAT'/>
54        <f key='sem/aspect' value='inch'/>
        </link>
56      <link key='col/Vsup[uspokojit]' ref='uspokojit_V'>
          <map key='self' loc='#self' rem='PAT'/>
58        <f key='sem/aspect' value='term'/>
          <f key='sem/caus' value='true'/>
60      </link>
        <link key='col/Vsup[odpovídat]' ref='odpovídat_V'>
62        <map key='self' loc='#self' rem='PAT'/>
        </link>
64      <link key='col/Vsup[přizpůsobit_se]' ref='přizpůsobit_se_V'>
          <map key='self' loc='#self' rem='PAT'/>
66      </link>
        <link key='col/Aatr[základní]' ref='základní_A'/>
68      <link key='col/Aatr[lidský]' ref='lidský_A'/>
        <link key='col/Aatr[sociální]' ref='sociální_A'/>
70      <link key='col/Aatr[individuální]' ref='individuální_A'/>
        <link key='col/Aatr[osobní]' ref='osobní_A'/>
72      <link key='col/Aatr[naléhavý]' ref='naléhavý_A'/>
        <link key='col/Aatr[denní]' ref='denní_A'/>
74      <link key='constr[podle_p]' ref='podle_potřeby_MWE'/>
        <link key='constr[v_případě_p]' ref='v_případě_potřeby_MWE'/>
76      <link key='constr[tělesná_p]' ref='tělesná_potřeba_MWE'/>
        <lunit name='obecná' type='trans'>
78        <desc key='default'>obecná nutnost</desc>
          <link key='sem/syn' ref='nutnost_N'/>
80        <link key="trans/no" ref="behov_N"/>
        </lunit>
82      <lunit name='instiktivní' type='trans'>
          <desc key='default'>vnitřní, instinktivní</desc>
84        <link key='sem/syn[puzení]' ref='puzení_N'/>
          <link key='sem/syn[nutkání]' ref='nutkání_N'/>
86        <link key="trans/no" ref="trang_N"/>
        </lunit>
88      <lunit name='užitek' type='trans'>
          <desc key='default'>praktická</desc>
90        <link key='sem/syn[užitek]' ref='užitek_N'/>
          <link key='sem/syn[použití]' ref='použití_N'/>
92        <link key="trans/no" ref="bruk_N"/>
        </lunit>
94    </lunit>
      <lunit name='nástroj' type='sense'>
96      <desc key='default'>INSTR.{nástroj} potřebný pro ACT.{někoho} k výkonu nějakých GOAL.{aktivit} (v rámci nějakého FIELD.{oboru, obl
        <exp key="phrase">
98        <real type='phrase' key='na_Comp'>
            <gen>phrase</gen>
100         <exp key='core'>
              <include>@THIS/core</include>
102           <f key='sem/label' value='INSTR'/>
            </exp>
104         <exp key='na_PP'>
              <include>na_Pre/phrase</include>
106           <real type='phrase' key='PP'>
                <gen>phrase</gen>
108             <exp key='Comp'>
                  <f value='GOAL' key='sem/label'/>
110               <constraint key='NP'>
                    <f value='NP' key='form/cat'/>
112                 <f key="gram/case" value="4"/>
                    <f key="sem/human" value="false"/>
114               </constraint>
                </exp>
116           </real>
```

```
            </exp>
118       </real>
          <real type='phrase' key='k_Comp'>
120         <gen>phrase</gen>
            <exp key='core'>
122           <include>@THIS/core</include>
              <f key='sem/label' value='INSTR'/>
124         </exp>
            <exp key='k_PP'>
126           <include>k_Pre/phrase</include>
              <real type='phrase' key='PP'>
128             <gen>phrase</gen>
                <exp key='Comp'>
130             <f value='GOAL' key='sem/label'/>
                  <constraint key='NP'>
132                 <f value='NP' key='form/cat'/>
                    <f key="gram/case" value="3"/>
134                 <f key="sem/human" value="false"/>
                  </constraint>
136             </exp>
              </real>
138         </exp>
          </real>
140       <real type='phrase' key='pro_Comp'>
            <gen>phrase</gen>
142         <exp key='core'>
              <include>@THIS/core</include>
144           <f key='sem/label' value='INSTR'/>
            </exp>
146         <exp key='pro_PP'>
              <include>pro_Pre/phrase</include>
148           <real type='phrase' key='PP'>
                <gen>phrase</gen>
150             <exp key='Comp'>
                <f value='FIELD' key='sem/label'/>
152               <constraint key='NP'>
                    <f value='NP' key='form/cat'/>
154                 <f key="gram/case" value="4"/>
                    <f key="sem/human" value="false"/>
156               </constraint>
                </exp>
158           </real>
            </exp>
160       </real>
        </exp>
162     <link key='sem/syn' ref='vybavení_N'/>
        <link key='sem/syn' ref='výbava_N'/>
164     <link key='sem/syn' ref='pomůcka_N'/>
        <link key='trans/no' ref='utstyr_N'/>
166     <link key='constr[sportovní_p]' ref='sportovní_potřeby_MWE'/>
        <link key='constr[kuchyňské_p]' ref='kuchyňské_potřeby_MWE'/>
168   </lunit>
    </lunit>
```

A.26   drøm_N.xml

```
<lunit name='drøm_N' type='lemma'>
2    <include>_tmpl_N:masc:m1</include>
     <usage key='default'>
4      <f value='2968' key='form/stat/freq[LKB]'/>
     </usage>
6    <usage key='singular'>
       <f value='0.682' key='form/stat/rfreq[LKB]'/>
8      <constraint key='sg'>
         <f value='sg' key='gram/num'/>
10     </constraint>
     </usage>
12   <exp key="core">
       <real key="N" type="word">
14       <exp key="base">
           <real key="drøm" type="morpheme">
16           <form key="base">
```

```
                      <f key="form/src" value="drøm"/>
18                    <f key="form/base" value="drøm"/>
                    </form>
20              </real>
            </exp>
22        </real>
      </exp>
24    <exp key='phrase'>
        <real type='phrase' key='om_Comp'>
26        <gen>phrase</gen>
          <usage key='default'>
28          <f value='0.186' key='form/stat/rfreq[LKB]'/>
          </usage>
30        <usage key='singular'>
            <f value='0.842' key='form/stat/rfreq[LKB]'/>
32          <constraint key='default'>
              <f value='sg' key='gram/num'/>
34          </constraint>
          </usage>
36        <exp key='core'>
            <include>@THIS/core</include>
38        </exp>
          <exp key='om_PP'>
40          <include>om_Pre/phrase</include>
            <real type='phrase' key='PP'>
42            <gen>phrase</gen>
              <exp key='Comp'>
44              <constraint key='NP'>
                  <f value='NP' key='form/cat'/>
46                <f value='false' key='sem/human'/>
                </constraint>
48              <constraint key='VinfP'>
                  <f value='VinfP' key='form/cat'/>
50                <usage key='default'>
                    <f value='0.248' key='form/stat/rfreq[LKB]'/>
52                </usage>
                </constraint>
54              <constraint key='at_S'>
                  <f value='at_S' key='form/cat'/>
56                <usage key='default'>
                    <f value='0.034' key='form/stat/rfreq[LKB]'/>
58                </usage>
                </constraint>
60            </exp>
            </real>
62        </exp>
        </real>
64    </exp>
      <link key='trans/cs' ref='sen_N'/>
66    <lunit name='nattdrøm' type='sense'>
        <desc key='default'>IMAGE.{sansebilder} (med THEME.{innhold}) i bevisstheten når ACT.{noen} sover</desc>
68      <exp key='phrase'>
        <real type='phrase' key='om_Comp'>
70        <gen>phrase</gen>
          <exp key='core'>
72          <f key='sem/label' value='IMAGE'/>
          </exp>
74        <exp key='om_PP'>
            <real type='phrase' key='PP'>
76            <gen>phrase</gen>
              <exp key='Comp'>
78              <f key='sem/label' value='THEME'/>
              </exp>
80          </real>
          </exp>
82      </real>
      </exp>
84    <link key='col/Vsup[drømme]' ref='drømme_V'>
        <map key='self' loc='#self' rem='PAT'/>
86      <f key='sem/aspect' value='dur'/>
      </link>
88    <link key='col/Vsup[tyde]' ref='tyde_V'>
        <map key='self' loc='#self' rem='PAT'/>
90    </link>
```

```
        <link key='constr[i_d]' ref='i_drømme_MWE'/>
92      <link key='constr[vond_d]' ref='vond_drøm_MWE'/>
     </lunit>
94   <lunit name='ønske' type='sense'>
        <desc key='default'>FORCE.{sterk og lang indre lyst} (til ACT.{noen}) til å realisere et GOAL.{mål}</desc>
96      <exp key='phrase'>
          <real type='phrase' key='om_Comp'>
98          <gen>phrase</gen>
            <exp key='core'>
100           <f key='sem/label' value='FORCE'/>
            </exp>
102         <exp key='om_PP'>
              <real type='phrase' key='PP'>
104             <gen>phrase</gen>
                <exp key='Comp'>
106               <f key='sem/label' value='GOAL'/>
                </exp>
108           </real>
            </exp>
110       </real>
        </exp>
112     <link key='col/Vsup[ha]' ref='ha_V'>
          <map key='self' loc='#self' rem='PAT'/>
114       <f key='sem/aspect' value='dur'/>
        </link>
116     <link key='col/Vsup[realisere]' ref='realisere_V'>
          <map key='self' loc='#self' rem='PAT'/>
118       <f key='sem/aspect' value='term'/>
        </link>
120     <link key='col/Vsup[virkeliggjøre]' ref='virkeliggjøre_V'>
          <map key='self' loc='#self' rem='PAT'/>
122       <f key='sem/aspect' value='term'/>
        </link>
124     <link key='col/Aatr[gammel]' ref='gammel_A'/>
        <link key='col/Aatr[hemmelig]' ref='hemmelig_A'/>
126     <link key='constr[innerste_d]' ref='innerste_drømmer_MWE'/>
     </lunit>
128 </lunit>
```

A.27 sen_N.xml

```
    <lunit name='sen_N' type='lemma'>
2     <include>_tmpl_N:masc:hrad:les</include>
      <usage key='default'>
4       <f value='15932' key='form/stat/freq[SYN2005]'/>
      </usage>
6     <usage key='singular'>
        <f value='0.613' key='form/stat/rfreq[SYN2005]'/>
8       <constraint key='sg'>
          <f value='sg' key='gram/num'/>
10      </constraint>
      </usage>
12    <exp key='core'>
        <real type='word' key='N'>
14        <exp key='base'>
            <real type='morpheme' key='sen'>
16            <form key='base'>
                <f key='form/src' value='s\en'/>
18              <f key='form/base' value='sen'/>
              </form>
20          </real>
          </exp>
22        <form key="NS6[sně]">
            <usage key="invalid">
24            <f key="form/stat/freq" value="#invalid"/>
            </usage>
26        </form>
          <form key="NP6[sních]">
28          <usage key="invalid">
              <f key="form/stat/freq" value="#invalid"/>
30          </usage>
          </form>
```

```
32        </real>
        </exp>
34      <exp key='phrase'>
          <real type='phrase' key='o_Comp'>
36          <gen>phrase</gen>
            <usage key='default'>
38            <f value='0.055' key='form/stat/rfreq[SYN2005]'/>
            </usage>
40          <usage key='singular'>
              <f value='0.632' key='form/stat/rfreq[LKB]'/>
42            <constraint key='default'>
                <f value='sg' key='gram/num'/>
44            </constraint>
            </usage>
46          <exp key='core'>
              <include>@THIS/core</include>
48          </exp>
            <exp key='o_PP'>
50            <include>o_Pre/phrase</include>
              <real type='phrase' key='PP'>
52              <gen>phrase</gen>
                <exp key='Comp'>
54                <constraint key='NP'>
                    <f value='NP' key='form/cat'/>
56                  <f key="gram/case" value="6"/>
                  </constraint>
58              </exp>
              </real>
60          </exp>
          </real>
62      </exp>
        <link key='col/Aatr[krásný]' ref='krásný_A'/>
64      <link key='col/Aatr[erotický]' ref='erotický_A'/>
        <link key='trans/no' ref='drøm_N'/>
66      <lunit name='noční' type='sense'>
          <desc key='default'>IMAGE.{prožitky} THEME.{představ a dějů} (ACT.{někoho}) ve spánku</desc>
68        <exp key='phrase'>
            <real type='phrase' key='o_Comp'>
70            <gen>phrase</gen>
              <exp key='core'>
72              <f key='sem/label' value='IMAGE'/>
              </exp>
74            <exp key='o_PP'>
                <real type='phrase' key='PP'>
76                <gen>phrase</gen>
                  <exp key='Comp'>
78                  <f key='sem/label' value='THEME'/>
                  </exp>
80              </real>
              </exp>
82          </real>
          </exp>
84        <link key='col/Vsup[zdát_se]' ref='zdát_se_V'>
            <map key='self' loc='#self' rem='ACT'/>
86          <f key='sem/aspect' value='dur'/>
          </link>
88        <link key='col/Vsup[snít]' ref='snít_V'>
            <map key='self' loc='#self' rem='PAT'/>
90          <f key='sem/aspect' value='dur'/>
          </link>
92        <link key='col/Aatr[děsivý]' ref='děsivý_A'/>
          <link key='col/Aatr[hrůzný]' ref='hrůzný_A'/>
94        <link key='col/Aatr[ošklivý]' ref='ošklivý_A'/>
          <link key='col/Aatr[podivný]' ref='podivný_A'/>
96        <link key='col/Aatr[tíživý]' ref='tíživý_A'/>
          <link key='col/Aatr[divoký]' ref='divoký_A'/>
98        <link key='col/Aatr[horečnatý]' ref='horečnatý_A'/>
          <link key='constr[zlý_s]' ref='zlý_sen_MWE'/>
100       <link key='constr[ve_s]' ref='ve_snách_MWE'/>
        </lunit>
102     <lunit name='přání' type='sense'>
          <desc key='default'>FORCE.{silná a dlouhodobá touha} (ACT.{někoho}) realizovat nějaký GOAL.{cíl}</desc>
104       <exp key='phrase'>
            <real type='phrase' key='o_Comp'>
```

```
106        <gen>phrase</gen>
           <exp key='core'>
108          <f key='sem/label' value='FORCE'/>
           </exp>
110        <exp key='o_PP'>
             <real type='phrase' key='PP'>
112            <gen>phrase</gen>
               <exp key='Comp'>
114              <f key='sem/label' value='GOAL'/>
               </exp>
116          </real>
           </exp>
118      </real>
         <real type='phrase' key='Inf_Comp'>
120        <gen>phrase</gen>
           <usage key='default'>
122          <f value='0.004' key='form/stat/rfreq[SYN2005]'/>
           </usage>
124        <exp key='core'>
             <f key='sem/label' value='FORCE'/>
126          <include>@THIS/core</include>
           </exp>
128        <exp key='attr'>
             <f key='sem/label' value='GOAL'/>
130          <constraint key='VinfP'>
               <f value='VinfP' key='form/cat'/>
132          </constraint>
           </exp>
134      </real>
       </exp>
136    <link key='col/Vsup[mít]' ref='mít_V'>
         <map key='self' loc='#self' rem='PAT'/>
138      <f key='sem/aspect' value='dur'/>
       </link>
140    <link key='col/Vsup[splnit_se]' ref='splnit_se_V'>
         <map key='self' loc='#self' rem='ACT'/>
142      <f key='sem/aspect' value='term'/>
       </link>
144    <link key='col/Vsup[spřádat]' ref='spřádat_V'>
         <map key='self' loc='#self' rem='PAT'/>
146      <f key='sem/aspect' value='inch'/>
       </link>
148    <link key='col/Vsup[oddávat_se]' ref='oddávat_se_V'>
         <map key='self' loc='#self' rem='PAT'/>
150      <f key='sem/aspect' value='dur'/>
       </link>
152    <link key='col/Vsup[rozplynout_se]' ref='rozplynout_se_V'>
         <map key='self' loc='#self' rem='ACT'/>
154      <f key='sem/aspect' value='term'/>
       </link>
156    <link key='col/Vsup[naplnit]' ref='naplnit_V'>
         <map key='self' loc='#self' rem='PAT'/>
158      <f key='sem/aspect' value='term'/>
         <f key='sem/caus' value='true'/>
160    </link>
       <link key='col/Vsup[uskutečnit]' ref='uskutečnit_V'>
162      <map key='self' loc='#self' rem='PAT'/>
         <f key='sem/aspect' value='term'/>
164      <f key='sem/caus' value='true'/>
       </link>
166    <link key='col/Aatr[dětský]' ref='dětský_A'/>
       <link key='col/Aatr[dávný]' ref='dávný_A'/>
168    <link key='col/Aatr[odvěký]' ref='odvěký_A'/>
       <link key='constr[nejtajnější_s]' ref='nejtajnější_sny_MWE'/>
170  </lunit>
     </lunit>
```

A.28   tanke_N.xml

```
<lunit name='tanke_N' type='lemma'>
2   <include>_tmpl_N:masc:m1</include>
    <usage key='default'>
```

```
 4        <f value='8242' key='form/stat/freq[LKB]'/>
       </usage>
 6     <usage key='singular'>
         <f value='0.545' key='form/stat/rfreq[LKB]'/>
 8       <constraint key='sg'>
           <f value='sg' key='gram/num'/>
10       </constraint>
       </usage>
12     <exp key="core">
         <real key="N" type="word">
14         <exp key="base">
             <real key="tanke" type="morpheme">
16             <form key="base">
                 <f key="form/src" value="tanke"/>
18               <f key="form/base" value="tanke"/>
               </form>
20           </real>
           </exp>
22       </real>
       </exp>
24   <lunit name='forestilling' type='sense'>
       <desc key='default'>IMAGE.{et mentalt bilde} om THEME.{noe} i bevisstheten til ACT.{noen}</desc>
26     <exp key='phrase'>
         <real type='phrase' key='om_Comp'>
28         <gen>phrase</gen>
           <usage key='default'>
30           <f value='0.111' key='form/stat/rfreq[LKB]'/>
           </usage>
32         <usage key='singular'>
             <f value='0.514' key='form/stat/rfreq[LKB]'/>
34           <constraint key='default'>
               <f value='sg' key='gram/num'/>
36           </constraint>
           </usage>
38         <exp key='core'>
             <include>@THIS/core</include>
40           <f key='sem/label' value='IMAGE'/>
           </exp>
42         <exp key='om_PP'>
             <include>om_Pre/phrase</include>
44           <real type='phrase' key='PP'>
               <gen>phrase</gen>
46             <exp key='Comp'>
                 <f key='sem/label' value='THEME'/>
48               <constraint key='NP'>
                   <f value='NP' key='form/cat'/>
50                 <f value='false' key='sem/human'/>
                 </constraint>
52               <constraint key='VinfP'>
                   <f value='VinfP' key='form/cat'/>
54                 <usage key='default'>
                     <f value='0.080' key='form/stat/rfreq[LKB]'/>
56                 </usage>
                 </constraint>
58               <constraint key='at_S'>
                   <f value='at_S' key='form/cat'/>
60                 <usage key='default'>
                     <f value='0.191' key='form/stat/rfreq[LKB]'/>
62                 </usage>
                 </constraint>
64             </exp>
             </real>
66         </exp>
         </real>
68     <real type='phrase' key='på_Comp'>
         <gen>phrase</gen>
70       <usage key='default'>
           <f value='0.178' key='form/stat/rfreq[LKB]'/>
72       </usage>
         <usage key='singular'>
74         <f value='0.975' key='form/stat/rfreq[LKB]'/>
           <constraint key='default'>
76           <f value='sg' key='gram/num'/>
           </constraint>
```

```
78        </usage>
          <exp key='core'>
80          <include>@THIS/core</include>
            <f key='sem/label' value='IMAGE'/>
82        </exp>
          <exp key='på_PP'>
84          <include>på_Pre/phrase</include>
            <real type='phrase' key='PP'>
86            <gen>phrase</gen>
              <exp key='Comp'>
88              <f key='sem/label' value='THEME'/>
                <constraint key='NP'>
90                <f value='NP' key='form/cat'/>
                  <f value='false' key='sem/human'/>
92              </constraint>
                <constraint key='VinfP'>
94                <f value='VinfP' key='form/cat'/>
                  <usage key='default'>
96                  <f value='0.186' key='form/stat/rfreq[LKB]'/>
                  </usage>
98              </constraint>
                <constraint key='at_S'>
100               <f value='at_S' key='form/cat'/>
                  <usage key='default'>
102                 <f value='0.186' key='form/stat/rfreq[LKB]'/>
                  </usage>
104             </constraint>
              </exp>
106         </real>
          </exp>
108     </real>
      </exp>
110   <link key='col/Vsup[tenke]' ref='tenke_V'>
        <map key='self' loc='#self' rem='PAT'/>
112     <f key='sem/aspect' value='dur'/>
      </link>
114   <link key='col/Vsup[ha]' ref='ha_V'>
        <map key='self' loc='#self' rem='PAT'/>
116     <f key='sem/aspect' value='dur'/>
      </link>
118   <link key='col/Vsup[lede]' ref='lede_V'>
        <map key='self' loc='#self' rem='PAT'/>
120     <f key='sem/aspect' value='dur'/>
      </link>
122   <link key='col/Vsup[føre]' ref='føre_V'>
        <map key='self' loc='#self' rem='PAT'/>
124     <f key='sem/aspect' value='dur'/>
      </link>
126   <link key='constr[med_t_på]' ref='med_tanke_på_MWE'/>
      <link key='constr[ved_t_på]' ref='ved_tanken_på_MWE'/>
128   <link key='constr[ha_t_for]' ref='ha_tanke_for_MWE'/>
      <link key='constr[med_t_for]' ref='med_tanke_for_MWE'/>
130   <link key='constr[ha_h_t]' ref='ha_høye_tanker_MWE'/>
      <link key='constr[t_skjøt]' ref='tanken_skjøt_gjennom_hode_MWE'/>
132   <link key="trans/cs" ref="myšlenka_N"/>
    </lunit>
134   <lunit name='forstand' type='sense'>
      <desc key='default'>CAP.{den menneskelige evnen til å tenke}</desc>
136   <link key='constr[den_menneskelige_t]' ref='den_menneskelige_tanke_MWE'/>
      <link key="trans/cs[myšlení]" ref="myšlení_N"/>
138   <link key="trans/cs[mysl]" ref="mysl_N"/>
    </lunit>
140   <lunit name='mengde' type='sense'>
      <desc key='default'>QUANT.{en liten mengde} av PAT.{noe}</desc>
142   </lunit>
    </lunit>
```

A.29 myšlenka_N.xml

```
  <lunit name='myšlenka_N' type='lemma'>
2   <include>_tmpl_N:fem:žena</include>
    <usage key='default'>
```

```
4        <f value='19290' key='form/stat/freq[SYN2005]'/>
       </usage>
6      <usage key='singular'>
         <f value='0.539' key='form/stat/rfreq[SYN2005]'/>
8        <constraint key='sg'>
           <f value='sg' key='gram/num'/>
10       </constraint>
       </usage>
12     <exp key='core'>
         <real type='word' key='N'>
14         <exp key='base'>
             <real type='morpheme' key='myšlenka'>
16             <form key='base'>
                 <f value='myšlenka' key='form/src'/>
18               <f value='myšlenka' key='form/base'/>
               </form>
20           </real>
           </exp>
22       </real>
       </exp>
24     <exp key='phrase'>
         <real type='phrase' key='o_Comp'>
26         <gen>phrase</gen>
           <usage key='default'>
28           <f value='0.014' key='form/stat/rfreq[SYN2005]'/>
           </usage>
30         <usage key='singular'>
             <f value='0.448' key='form/stat/rfreq[SYN2005]'/>
32           <constraint key='default'>
               <f value='sg' key='gram/num'/>
34           </constraint>
           </usage>
36         <exp key='core'>
             <include>@THIS/core</include>
38           <f key='sem/label' value='IMAGE'/>
           </exp>
40         <exp key='o_PP'>
             <include>o_Pre/phrase</include>
42           <real type='phrase' key='PP'>
               <gen>phrase</gen>
44             <exp key='Comp'>
                 <f key='sem/label' value='THEME'/>
46               <constraint key='NP'>
                   <f value='NP' key='form/cat'/>
48                 <f key="gram/case" value="6"/>
                 </constraint>
50             </exp>
             </real>
52         </exp>
         </real>
54       <real type='phrase' key='Inf_Comp'>
           <gen>phrase</gen>
56         <usage key='default'>
             <f value='0.035' key='form/stat/rfreq[SYN2005]'/>
58         </usage>
           <usage key='singular'>
60           <f value='0.865' key='form/stat/rfreq[SYN2005]'/>
             <constraint key='default'>
62             <f value='sg' key='gram/num'/>
             </constraint>
64         </usage>
           <exp key='core'>
66           <include>@THIS/core</include>
           </exp>
68         <exp key='attr'>
             <constraint key='VinfP'>
70             <f value='VinfP' key='form/cat'/>
             </constraint>
72         </exp>
         </real>
74       <real type='phrase' key='Gen_Comp'>
           <gen>phrase</gen>
76         <exp key='core'>
             <include>@THIS/core</include>
```

```
 78        </exp>
          <exp key='attr'>
 80         <constraint key='NPgen'>
             <f value='NP' key='form/cat'/>
 82          <f key="gram/case" value="2"/>
             <f key="sem/human" value="false"/>
 84        </constraint>
          </exp>
 86      </real>
        <real type='phrase' key='na_Comp'>
 88       <gen>phrase</gen>
         <usage key='default'>
 90        <f value='0.044' key='form/stat/rfreq[SYN2005]'/>
         </usage>
 92       <usage key='singular'>
          <f value='0.789' key='form/stat/rfreq[SYN2005]'/>
 94        <constraint key='default'>
            <f value='sg' key='gram/num'/>
 96        </constraint>
         </usage>
 98       <exp key='core'>
          <include>@THIS/core</include>
100       </exp>
         <exp key='na_PP'>
102        <include>na_Pre/phrase</include>
          <real type='phrase' key='PP'>
104         <gen>phrase</gen>
            <exp key='Comp'>
106          <constraint key='NP'>
              <f value='NP' key='form/cat'/>
108           <f key="gram/case" value="4"/>
             </constraint>
110         </exp>
          </real>
112       </exp>
        </real>
114    </exp>
      <link key='col/Vsup[napadnout]' ref='napadnout_V'>
116     <map key='self' loc='#self' rem='ACT'/>
        <map key='self' loc='POSS' rem='PAT'/>
118     <f key='sem/aspect' value='inch'/>
      </link>
120    <link key='col/Vsup[zrodit_se]' ref='zrodit_se_V'>
        <map key='self' loc='#self' rem='ACT'/>
122     <f key='sem/aspect' value='inch'/>
      </link>
124    <link key='col/Vsup[znepokojovat]' ref='znepokojovat_V'>
        <map key='self' loc='#self' rem='ACT'/>
126     <map key='self' loc='POSS' rem='PAT'/>
        <f key='sem/aspect' value='dur'/>
128    </link>
      <link key='col/Vsup[přivyknout]' ref='přivyknout_V'>
130     <map key='self' loc='#self' rem='PAT'/>
      </link>
132    <link key='col/Vsup[uvyknout]' ref='uvyknout_V'>
        <map key='self' loc='#self' rem='PAT'/>
134    </link>
      <link key='col/Vsup[odvyknout]' ref='odvyknout_V'>
136     <map key='self' loc='#self' rem='PAT'/>
      </link>
138    <link key='col/Vsup[propadnout]' ref='propadnout_V'>
        <map key='self' loc='#self' rem='PAT'/>
140     <f key='sem/aspect' value='inch'/>
      </link>
142    <link key='col/Vsup[vnuknout]' ref='vnuknout_V'>
        <map key='self' loc='#self' rem='PAT'/>
144     <map key='self' loc='POSS' rem='ADDR'/>
        <f key='sem/aspect' value='inch'/>
146     <f key='sem/caus' value='true'/>
      </link>
148    <link key='col/Vsup[prosazovat]' ref='prosazovat_V'>
        <map key='self' loc='#self' rem='PAT'/>
150     <f key='sem/aspect' value='dur'/>
      </link>
```

```
152    <link key='col/Vsup[podporovat]' ref='podporovat_V'>
         <map key='self' loc='#self' rem='PAT'/>
154    <f key='sem/aspect' value='dur'/>
       </link>
156    <link key='col/Vsup[zaobírat_se]' ref='zaobírat_se_V'>
         <map key='self' loc='#self' rem='PAT'/>
158    <f key='sem/aspect' value='dur'/>
       </link>
160    <link key='col/Vsup[zabývat_se]' ref='zabývat_se_V'>
         <map key='self' loc='#self' rem='PAT'/>
162    <f key='sem/aspect' value='dur'/>
       </link>
164    <link key='col/Vsup[pohrávat_si]' ref='pohrávat_si_V'>
         <map key='self' loc='#self' rem='PAT'/>
166    <f key='sem/aspect' value='dur'/>
       </link>
168    <link key='col/Vsup[koketovat]' ref='koketovat_V'>
         <map key='self' loc='#self' rem='PAT'/>
170    <f key='sem/aspect' value='dur'/>
       </link>
172    <link key='col/Vsup[smířit_se]' ref='smířit_se_V'>
         <map key='self' loc='#self' rem='PAT'/>
174    <f key='sem/aspect' value='inch'/>
       </link>
176    <link key='col/Vsup[nadchnout_se]' ref='nadchnout_se_V'>
         <map key='self' loc='#self' rem='PAT'/>
178    <f key='sem/aspect' value='inch'/>
       </link>
180    <link key='col/Vsup[utřídit]' ref='utřídit_V'>
         <map key='self' loc='#self' rem='PAT'/>
182    <f key='sem/aspect' value='dur'/>
       </link>
184    <link key='col/Vsup[formulovat]' ref='formulovat_V'>
         <map key='self' loc='#self' rem='PAT'/>
186    <f key='sem/aspect' value='inch'/>
       </link>
188    <link key='col/Vsup[vyjádřit]' ref='vyjádřit_V'>
         <map key='self' loc='#self' rem='PAT'/>
190    <f key='sem/aspect' value='inch'/>
       </link>
192    <link key='col/Vsup[připustit]' ref='připustit_V'>
         <map key='self' loc='#self' rem='PAT'/>
194    <f key='sem/aspect' value='inch'/>
       </link>
196    <link key='col/Vsup[zapudit]' ref='zapudit_V'>
         <map key='self' loc='#self' rem='PAT'/>
198    <f key='sem/aspect' value='term'/>
       </link>
200    <link key='col/Vsup[zavrhnout]' ref='zavrhnout_V'>
         <map key='self' loc='#self' rem='PAT'/>
202    <f key='sem/aspect' value='term'/>
       </link>
204    <link key='col/Vsup[strhnout]' ref='strhnout_V'>
         <map key='self' loc='#self' rem='ACT'/>
206    <f key='sem/aspect' value='inch'/>
       </link>
208    <link key='col/Aatr[základní]' ref='základní_A'/>
       <link key='col/Aatr[ústřední]' ref='ústřední_A'/>
210    <link key='col/Aatr[kacířský]' ref='kacířský_A'/>
       <link key='col/Aatr[hříšný]' ref='hříšný_A'/>
212    <link key='col/Aatr[bláznivý]' ref='bláznivý_A'/>
       <link key='col/Aatr[neodbytný]' ref='neodbytný_A'/>
214    <link key='col/Aatr[revoluční]' ref='revoluční_A'/>
       <link key='constr[utkvělá_m]' ref='utkvělá_myšlenka_MWE'/>
216    <link key='constr[m_bleskla_hlavou]' ref='myšlenka_bleskla_hlavou_MWE'/>
       <lunit name='představa' type='sense'>
218    <desc key='default'>IMAGE.{myšlený obraz / představa} ACT.{někoho} o THEME.{něčem}</desc>
       <f value='o_Comp' key='select/phrase[o]'/>
220    <f value='na_Comp' key='select/phrase[na]'/>
       <exp key="phrase">
222      <real type='phrase' key='na_Comp'>
           <gen>phrase</gen>
224        <exp key='core'>
             <f value='IMAGE' key='sem/label'/>
```

```
226        </exp>
           <exp key='na_PP'>
228          <real type='phrase' key='PP'>
               <gen>phrase</gen>
230            <exp key='Comp'>
                 <f value='THEME' key='sem/label'/>
232            </exp>
             </real>
234        </exp>
         </real>
236      </exp>
         <link ref='představa_N' key='sem/syn'/>
238      <link key='trans/no' ref='tanke_N:forestilling'/>
      </lunit>
240    <lunit name='záměr' type='sense'>
         <desc key='default'>FORCE.{potenciální záměr/úmysl} ACT.{někoho} realizovat nějaký GOAL.{cíl}</desc>
242      <f value='Inf_Comp' key='select/phrase[Inf]'/>
         <f value='Gen_Comp' key='select/phrase[Gen]'/>
244      <f value='na_Comp' key='select/phrase[na]'/>
         <exp key="phrase">
246        <real type='phrase' key='Inf_Comp'>
             <gen>phrase</gen>
248          <exp key='core'>
               <f key='sem/label' value='FORCE'/>
250          </exp>
             <exp key='attr'>
252            <f key='sem/label' value='GOAL'/>
             </exp>
254        </real>
           <real type='phrase' key='Gen_Comp'>
256          <gen>phrase</gen>
             <exp key='core'>
258            <f value='FORCE' key='sem/label'/>
             </exp>
260          <exp key='attr'>
               <f value='GOAL' key='sem/label'/>
262          </exp>
           </real>
264        <real type='phrase' key='na_Comp'>
             <gen>phrase</gen>
266          <exp key='core'>
               <f value='FORCE' key='sem/label'/>
268          </exp>
             <exp key='na_PP'>
270            <real type='phrase' key='PP'>
                 <gen>phrase</gen>
272              <exp key='Comp'>
                   <f value='GOAL' key='sem/label'/>
274                <constraint key='NP'>
                     <f value='NP' key='form/cat'/>
276                  <f key="gram/case" value="4"/>
                     <f key="sem/human" value="false"/>
278                </constraint>
               </exp>
280            </real>
           </exp>
282        </real>
         </exp>
284      <link ref='záměr_N' key='sem/syn[záměr]'/>
         <link ref='úmysl_N' key='sem/syn[úmysl]'/>
286      <link key='col/Aatr[postranní]' ref='postranní_A'/>
         <link key='col/Aatr[spásný]' ref='spásný_A'/>
288      <link key='trans/no[tanke]' ref='tanke_N:forestilling'/>
         <link key='trans/no[idé]' ref='idé_N'/>
290    </lunit>
      <lunit name='idea' type='sense'>
292      <desc key='default'>GOAL.{(ideový) cíl/záměr} ACT.{někoho/něčeho}</desc>
         <f value='Inf_Comp' key='select/phrase[Inf]'/>
294      <exp key="phrase">
           <real type='phrase' key='Inf_Comp'>
296          <gen>phrase</gen>
             <exp key='core'>
298            <f key='sem/label' value='GOAL'/>
             </exp>
```

```
300        <exp key='attr'>
              <f key='sem/label' value='GOAL'/>
302        </exp>
          </real>
304     </exp>
        <link ref='idea_N' key='sem/syn[idea]'/>
306     <link key='trans/no' ref='idé_N'/>
      </lunit>
308  </lunit>
```

A.30   idé_N.xml

```
    <lunit name='idé_N' type='lemma'>
2     <include>_tmpl_N:masc:m1</include>
      <usage key='default'>
4       <f value='3892' key='form/stat/freq[LKB]'/>
      </usage>
6     <usage key='singular'>
        <f value='0.615' key='form/stat/rfreq[LKB]'/>
8       <constraint key='sg'>
          <f value='sg' key='gram/num'/>
10      </constraint>
      </usage>
12    <exp key="core">
        <real key="N" type="word">
14        <exp key="base">
            <real key="idé" type="morpheme">
16            <form key="base[idé]">
                <f key="form/src" value="idé"/>
18              <f key="form/base" value="idé"/>
              </form>
20          </real>
          </exp>
22      </real>
      </exp>
24    <exp key='phrase'>
        <real type='phrase' key='om_Comp'>
26        <gen>phrase</gen>
          <usage key='default'>
28          <f value='0.209' key='form/stat/rfreq[LKB]'/>
          </usage>
30        <usage key='singular'>
            <f value='0.786' key='form/stat/rfreq[LKB]'/>
32          <constraint key='default'>
              <f value='sg' key='gram/num'/>
34          </constraint>
          </usage>
36        <exp key='core'>
            <include>@THIS/core</include>
38        </exp>
          <exp key='om_PP'>
40          <include>om_Pre/phrase</include>
            <real type='phrase' key='PP'>
42            <gen>phrase</gen>
              <exp key='Comp'>
44              <constraint key='NP'>
                  <f value='NP' key='form/cat'/>
46                <f value='false' key='sem/human'/>
                </constraint>
48              <constraint key='VinfP'>
                  <f value='VinfP' key='form/cat'/>
50                <usage key='default'>
                    <f value='0.104' key='form/stat/rfreq[LKB]'/>
52                </usage>
                </constraint>
54              <constraint key='at_S'>
                  <f value='at_S' key='form/cat'/>
56                <usage key='default'>
                    <f value='0.171' key='form/stat/rfreq[LKB]'/>
58                </usage>
                </constraint>
60              <constraint key='sp_S'>
```

```
            <f value='sp_S' key='form/cat'/>
62          <usage key='default'>
              <f value='0.109' key='form/stat/rfreq[LKB]'/>
64          </usage>
          </constraint>
66      </exp>
      </real>
68    </exp>
    </real>
70  <real type='phrase' key='til_Comp'>
      <gen>phrase</gen>
72    <usage key='default'>
        <f value='0.046' key='form/stat/rfreq[LKB]'/>
74    </usage>
      <usage key='singular'>
76      <f value='0.628' key='form/stat/rfreq[LKB]'/>
        <constraint key='default'>
78        <f value='sg' key='gram/num'/>
        </constraint>
80    </usage>
      <exp key='core'>
82      <include>@THIS/core</include>
        <f key='sem/label' value='IMAGE'/>
84    </exp>
      <exp key='til_PP'>
86      <include>til_Pre/phrase</include>
        <real type='phrase' key='PP'>
88        <gen>phrase</gen>
          <exp key='Comp'>
90          <f key='sem/label' value='GOAL'/>
            <constraint key='NP'>
92            <f value='NP' key='form/cat'/>
              <f value='false' key='sem/human'/>
94          </constraint>
            <constraint key='VinfP'>
96            <f value='VinfP' key='form/cat'/>
              <usage key='default'>
98              <f value='0.028' key='form/stat/rfreq[LKB]'/>
              </usage>
100         </constraint>
            <constraint key='sp_S'>
102           <f value='sp_S' key='form/cat'/>
              <usage key='default'>
104             <f value='0.061' key='form/stat/rfreq[LKB]'/>
              </usage>
106         </constraint>
          </exp>
108       </real>
        </exp>
110   </real>
      <real type='phrase' key='med_Comp'>
112     <gen>phrase</gen>
        <usage key='default'>
114       <f value='0.017' key='form/stat/rfreq[LKB]'/>
        </usage>
116     <usage key='singular'>
          <f value='1.0' key='form/stat/rfreq[LKB]'/>
118       <constraint key='default'>
            <f value='sg' key='gram/num'/>
120       </constraint>
        </usage>
122     <exp key='core'>
          <include>@THIS/core</include>
124       <f key='sem/label' value='GOAL'/>
        </exp>
126     <exp key='med_PP'>
          <include>med_Pre/phrase</include>
128       <real type='phrase' key='PP'>
            <gen>phrase</gen>
130         <exp key='Comp'>
              <f key='sem/label' value='GOAL'/>
132           <constraint key='NP'>
                <f value='NP' key='form/cat'/>
134             <f value='false' key='sem/human'/>
```

```
                  </constraint>
136               <constraint key='VinfP'>
                    <f value='VinfP' key='form/cat'/>
138                 <usage key='default'>
                      <f value='0.176' key='form/stat/rfreq[LKB]'/>
140                 </usage>
                  </constraint>
142             </exp>
              </real>
144         </exp>
          </real>
146       <real type='phrase' key='i_Comp'>
            <gen>phrase</gen>
148         <exp key='core'>
              <include>@THIS/core</include>
150           <f key='sem/label' value='GOAL'/>
            </exp>
152         <exp key='i_PP'>
              <include>i_Pre/phrase</include>
154           <real type='phrase' key='PP'>
                <gen>phrase</gen>
156             <exp key='Comp'>
                  <f key='sem/label' value='ACT'/>
158               <constraint key='NP'>
                    <f value='NP' key='form/cat'/>
160                 <f value='false' key='sem/human'/>
                  </constraint>
162             </exp>
              </real>
164         </exp>
          </real>
166     </exp>
        <link key='col/Vsup[ha]' ref='ha_V'>
168       <map key='self' loc='#self' rem='PAT'/>
          <f key='sem/aspect' value='dur'/>
170     </link>
        <link key='col/Vsup[få]' ref='få_V'>
172       <map key='self' loc='#self' rem='PAT'/>
          <f key='sem/aspect' value='inch'/>
174     </link>
        <link key='col/Vsup[gi]' ref='gi_V'>
176       <map key='self' loc='#self' rem='PAT'/>
          <map key='poss' loc='POSS' rem='ADDR'/>
178       <f key='sem/aspect' value='inch'/>
          <f key='sem/caus' value='true'/>
180     </link>
        <link key='col/Vsup[lansere]' ref='lansere_V'>
182       <map key='self' loc='#self' rem='PAT'/>
          <f key='sem/aspect' value='inch'/>
184     </link>
        <link key='col/Vsup[utvikle]' ref='utvikle_V'>
186       <map key='self' loc='#self' rem='PAT'/>
          <f key='sem/aspect' value='inch'/>
188     </link>
        <link key='col/Aatr[god]' ref='god_A'/>
190     <link key='col/Aatr[dårlig]' ref='dårlig_A'/>
        <link key='col/Aatr[ny]' ref='ny_A'/>
192     <link key='col/Aatr[politisk]' ref='politisk_A'/>
        <link key='col/Aatr[dum]' ref='dum_A'/>
194     <link key='col/Aatr[genial]' ref='genial_A'/>
        <link key='col/Aatr[abstrakt]' ref='abstrakt_A'/>
196     <link key='col/Aatr[grunnleggende]' ref='grunnleggende_A'/>
        <lunit name='urbilde' type='sense'>
198       <desc key='default'>IMAGE.{allmennbegrep, urbilde} i bevisstheten til ACT.{noen}</desc>
          <usage key="default">
200         <f key="style/domain" value="phil"/>
          </usage>
202       <link key='trans/cs[idea]' ref='idea_N'/>
          <link key='trans/cs[myšlenka]' ref='myšlenka_N:idea'/>
204     </lunit>
        <lunit name='forestilling' type='sense'>
206       <desc key='default'>IMAGE.{god forestilling / kunnskap} om THEME.{noe} i bevisstheten til ACT.{noen}</desc>
          <f key='select/phrase' value='om_Comp'/>
208       <exp key="phrase">
```

```
         <real type='phrase' key='om_Comp'>
210         <gen>phrase</gen>
           <exp key='core'>
212           <f key='sem/label' value='IMAGE'/>
           </exp>
214         <exp key='om_PP'>
            <real type='phrase' key='PP'>
216           <gen>phrase</gen>
             <exp key='Comp'>
218            <f key='sem/label' value='THEME'/>
             </exp>
220        </real>
          </exp>
222      </real>
        </exp>
224    <link key='constr[fiks_i]' ref='fiks_idé_MWE'/>
       <link key='sem/syn[forestilling]' ref='forestilling_N'/>
226    <link key='trans/cs' ref='představa_N'/>
      </lunit>
228  <lunit name='innfall' type='sense'>
       <desc key='default'>FORCE.{plutselig innfall} (til ACT.{noen}) om å realisere et GOAL.{mål}</desc>
230    <f key='select/phrase[om]' value='om_Comp'/>
       <f key='select/phrase[med]' value='med_Comp'/>
232    <exp key="phrase">
         <real type='phrase' key='om_Comp'>
234        <gen>phrase</gen>
           <exp key='core'>
236          <f key='sem/label' value='FORCE'/>
           </exp>
238        <exp key='om_PP'>
            <real type='phrase' key='PP'>
240           <gen>phrase</gen>
             <exp key='Comp'>
242            <f key='sem/label' value='GOAL'/>
             </exp>
244        </real>
          </exp>
246      </real>
        </exp>
248    <link key='sem/syn[innfall]' ref='innfall_N'/>
       <link key='trans/cs' ref='nápad_N'/>
250    <link key='constr[rik_på_i]' ref='rik_på_idéer_MWE'/>
      </lunit>
252  <lunit name='plan' type='sense'>
       <desc key='default'>IMAGE.{grunnleggende tanke, plan eller utkast} (til ACT.{noen}) som grunn til å nå et GOAL.{mål}
254    <f key='select/phrase[om]' value='om_Comp'/>
       <f key='select/phrase[til]' value='til_Comp'/>
256    <exp key="phrase">
         <real type='phrase' key='om_Comp'>
258        <gen>phrase</gen>
           <exp key='core'>
260          <f key='sem/label' value='IMAGE'/>
           </exp>
262        <exp key='om_PP'>
            <real type='phrase' key='PP'>
264           <gen>phrase</gen>
             <exp key='Comp'>
266            <f key='sem/label' value='GOAL'/>
             </exp>
268        </real>
          </exp>
270      </real>
        </exp>
272    <link key='sem/syn[plan]' ref='plan_N:hensikt'/>
       <link key='sem/syn[utkast]' ref='utkast_N'/>
274    <link key='trans/cs' ref='nápad_N'/>
      </lunit>
276  <lunit name='mening' type='sense'>
       <desc key='default'>GOAL.{mening el. innhold} i ACT.{et kunstverk}</desc>
278    <f key='select/phrase' value='i_Comp'/>
       <link key='trans/cs' ref='myšlenka_N:idea'/>
280  </lunit>
    </lunit>
```

A.31   nápad_N.xml

```
    <lunit name='nápad_N' type='lemma'>
2     <include>_tmpl_N:masc:hrad</include>
      <usage key='default'>
4       <f value='8300' key='form/stat/freq[SYN2005]'/>
      </usage>
6     <usage key='singular'>
        <f value='0.697' key='form/stat/rfreq[SYN2005]'/>
8       <constraint key='sg'>
          <f value='sg' key='gram/num'/>
10      </constraint>
      </usage>
12    <exp key='core'>
        <real type='word' key='N'>
14        <exp key='base'>
            <real type='morpheme' key='nápad'>
16            <form key='base'>
                <f key='form/src' value='nápad'/>
18              <f key='form/base' value='nápad'/>
              </form>
20          </real>
          </exp>
22      </real>
      </exp>
24    <lunit name='myšlenka' type='sense'>
        <desc key='default'>FORCE.{náhlá myšlenka} ACT.{někoho} realizovat nějaký GOAL.{cíl}</desc>
26      <exp key='phrase'>
          <real type='phrase' key='Inf_Comp'>
28          <gen>phrase</gen>
            <usage key='default'>
30            <f value='0.075' key='form/stat/rfreq[SYN2005]'/>
            </usage>
32          <usage key='singular'>
              <f value='0.963' key='form/stat/rfreq[LKB]'/>
34            <constraint key='default'>
                <f value='sg' key='gram/num'/>
36            </constraint>
            </usage>
38          <exp key='core'>
              <f key='sem/label' value='FORCE'/>
40            <include>@THIS/core</include>
            </exp>
42          <exp key='attr'>
              <f key='sem/label' value='GOAL'/>
44            <constraint key='VinfP'>
                <f value='VinfP' key='form/cat'/>
46            </constraint>
            </exp>
48        </real>
          <real type='phrase' key='na_Comp'>
50          <gen>phrase</gen>
            <usage key='default'>
52            <f value='0.019' key='form/stat/rfreq[SYN2005]'/>
            </usage>
54          <usage key='singular'>
              <f value='0.590' key='form/stat/rfreq[SYN2005]'/>
56            <constraint key='default'>
                <f value='sg' key='gram/num'/>
58            </constraint>
            </usage>
60          <exp key='core'>
              <include>@THIS/core</include>
62            <f key='sem/label' value='FORCE'/>
            </exp>
64          <exp key='na_PP'>
              <include>na_Pre/phrase</include>
66            <real type='phrase' key='PP'>
                <gen>phrase</gen>
68              <exp key='Comp'>
                <f value='GOAL' key='sem/label'/>
70                <constraint key='NP'>
                  <f value='NP' key='form/cat'/>
72                  <f key="gram/case" value="4"/>
```

```
                        <f key="sem/human" value="false"/>
74                    </constraint>
                    </exp>
                  </real>
76              </exp>
            </real>
78        </real>
          <real type='phrase' key='s_Comp'>
80          <gen>phrase</gen>
            <usage key='default'>
82            <f value='0.016' key='form/stat/rfreq[SYN2005]'/>
            </usage>
84          <usage key='singular'>
              <f value='0.904' key='form/stat/rfreq[SYN2005]'/>
86            <constraint key='default'>
                <f value='sg' key='gram/num'/>
88            </constraint>
            </usage>
90          <exp key='core'>
              <include>@THIS/core</include>
92            <f key='sem/label' value='GOAL'/>
            </exp>
94          <exp key='s_PP'>
              <include>s_Pre/phrase</include>
96            <real type='phrase' key='PP'>
                <gen>phrase</gen>
98              <exp key='Comp'>
                <f value='GOAL' key='sem/label'/>
100              <constraint key='NP'>
                  <f value='NP' key='form/cat'/>
102                <f key="gram/case" value="7"/>
                  <f key="sem/human" value="false"/>
104              </constraint>
                </exp>
106            </real>
            </exp>
108        </real>
        </exp>
110      <link key='col/Vsup[zrodit_se]' ref='zrodit_se_V'>
          <map key='self' loc='#self' rem='ACT'/>
112        <f key='sem/aspect' value='inch'/>
        </link>
114      <link key='col/Vsup[vzejít]' ref='vzejít_V'>
          <map key='self' loc='#self' rem='ACT'/>
116        <f key='sem/aspect' value='inch'/>
        </link>
118      <link key='col/Vsup[vnuknout]' ref='vnuknout_V'>
          <map key='self' loc='#self' rem='PAT'/>
120        <map key='self' loc='POSS' rem='ADDR'/>
          <f key='sem/aspect' value='inch'/>
122        <f key='sem/caus' value='true'/>
        </link>
124      <link key='col/Vsup[zamítnout]' ref='zamítnout_V'>
          <map key='self' loc='#self' rem='PAT'/>
126        <f key='sem/aspect' value='term'/>
          <f key='sem/caus' value='true'/>
128      </link>
          <link key='col/Vsup[uskutečnit]' ref='uskutečnit_V'>
130        <map key='self' loc='#self' rem='PAT'/>
          <f key='sem/aspect' value='term'/>
132        <f key='sem/caus' value='true'/>
        </link>
134      <link key='col/Vsup[zaujmout]' ref='zaujmout_V'>
          <map key='self' loc='#self' rem='ACT'/>
136      </link>
          <link key='col/Aatr[dobrý]' ref='dobrý_A'/>
138      <link key='col/Aatr[špatný]' ref='špatný_A'/>
          <link key='col/Aatr[skvělý]' ref='skvělý_A'/>
140      <link key='col/Aatr[bláznivý]' ref='bláznivý_A'/>
          <link key='col/Aatr[geniální]' ref='geniální_A'/>
142      <link key='col/Aatr[ztřeštěný]' ref='ztřeštěný_A'/>
          <link key='col/Aatr[originální]' ref='originální_A'/>
144      <link key='col/Aatr[výborný]' ref='výborný_A'/>
          <link key='col/Aatr[báječný]' ref='báječný_A'/>
146      <link key='col/Aatr[neotřelý]' ref='neotřelý_A'/>
```

```
         <link key='col/Aatr[šílený]' ref='šílený_A'/>
148      <link key='col/Aatr[pošetilý]' ref='pošetilý_A'/>
         <link key='col/Aatr[spásný]' ref='spásný_A'/>
150      <link key='col/Aatr[praštěný]' ref='praštěný_A'/>
         <link key='col/Aatr[úžasný]' ref='úžasný_A'/>
152      <link key='constr[oplývat]' ref='oplývat_nápady_MWE'/>
         <link key='trans/no[ide_innfall]' ref='idé_N:innfall'/>
154      <link key='trans/no[ide_plan]' ref='idé_N:plan'/>
       </lunit>
156   <lunit name='právní' type='sense'>
        <desc key='default'>EVENT.{vznik podmínek pro ACT.{nějaké právo} / ACT.{práva samotného}}</desc>
158     <usage key="default">
          <f key="style/domain" value="jur"/>
160     </usage>
       </lunit>
162  </lunit>
```

A.32   hensikt_N.xml

```
    <lunit name='hensikt_N' type='lemma'>
2     <include>_tmpl_N:masc:m1</include>
      <usage key='default'>
4       <f value='1829' key='form/stat/freq[LKB]'/>
      </usage>
6     <usage key='singular'>
        <f value='0.902' key='form/stat/rfreq[LKB]'/>
8       <constraint key='sg'>
          <f value='sg' key='gram/num'/>
10        </constraint>
      </usage>
12    <exp key="core">
        <real key="N" type="word">
14        <exp key="base">
            <real key="hensikt" type="morpheme">
16            <form key="base">
                <f key="form/src" value="hensikt"/>
18              <f key="form/base" value="hensikt"/>
              </form>
20          </real>
          </exp>
22        </real>
      </exp>
24    <exp key="phrase">
        <real type='phrase' key='med_Comp'>
26        <gen>phrase</gen>
          <usage key='default'>
28          <f value='0.187' key='form/stat/rfreq[LKB]'/>
          </usage>
30        <usage key='singular'>
            <f value='0.974' key='form/stat/rfreq[LKB]'/>
32          <constraint key='default'>
              <f value='sg' key='gram/num'/>
34            </constraint>
          </usage>
36        <exp key='core'>
            <include>@THIS/core</include>
38          <f key='sem/label' value='GOAL'/>
          </exp>
40        <exp key='med_PP'>
            <include>med_Pre/phrase</include>
42          <real type='phrase' key='PP'>
              <gen>phrase</gen>
44            <exp key='Comp'>
                <f key='sem/label' value='INSTR'/>
46              <constraint key='NP'>
                  <f value='NP' key='form/cat'/>
48                <f value='false' key='sem/human'/>
                </constraint>
50              <constraint key='VinfP'>
                  <f value='VinfP' key='form/cat'/>
52                <usage key='default'>
                    <f value='0.070' key='form/stat/rfreq[LKB]'/>
```

```
54              </usage>
                </constraint>
56          </exp>
            </real>
58      </exp>
        </real>
60      <real type='phrase' key='i_Comp'>
          <gen>phrase</gen>
62        <exp key='core'>
            <include>@THIS/core</include>
64          <f key='sem/label' value='GOAL'/>
          </exp>
66        <exp key='i_PP'>
            <include>i_Pre/phrase</include>
68          <real type='phrase' key='PP'>
              <gen>phrase</gen>
70            <exp key='Comp'>
                <f key='sem/label' value='INSTR'/>
72              <constraint key='NP'>
                  <f value='NP' key='form/cat'/>
74                <f value='false' key='sem/human'/>
                </constraint>
76            </exp>
            </real>
78        </exp>
        </real>
80    </exp>
      <link key='constr[med_h]' ref='med_hensikt_MWE'/>
82    <link key='constr[ha_til_h]' ref='ha_til_hensikt_MWE'/>
      <link key='constr[i_den_h]' ref='i_den_hensikt_MWE'/>
84    <link key='constr[med_den_h]' ref='med_den_hensikt_MWE'/>
      <link key='constr[i_ond_h]' ref='i_ond_hensikt_MWE'/>
86    <link key='constr[ha_liten_h]' ref='ha_liten_hensikt_MWE'/>
      <link key='constr[h_helliger_middelet]' ref='hensikten_helliger_middelet_MWE'/>
88    <link key='constr[ha_gode_h]' ref='ha_gode_hensikter_MWE'/>
        <link key='constr[edlere_h]' ref='edlere_hensikt_MWE'/>
90    <lunit name='plan' type='subsense'>
        <desc key='default'>GOAL.{et mål tenkt eller planlagt} av ACT.{noen} (som INSTR.{et instrument eller en gjerning} sk
92      <link key='trans/cs[záměr]' ref='záměr_N'/>
        <link key='trans/cs[úmysl]' ref='úmysl_N'/>
94    </lunit>
      <lunit name='formål' type='subsense'>
96      <desc key='default'>GOAL.{et mål eller mening} som INSTR.{et instrument eller en gjerning} skal tjene til</desc>
        <link key='trans/cs[účel]' ref='účel_N'/>
98      <link key='trans/cs[smysl]' ref='smysl_N'/>
      </lunit>
100 </lunit>
```

A.33 záměr_N.xml

```
<lunit name='záměr_N' type='lemma'>
2     <include>_tmpl_N:masc:hrad</include>
      <usage key='default'>
4       <f value='7400' key='form/stat/freq[SYN2005]'/>
      </usage>
6     <usage key='singular'>
        <f value='0.700' key='form/stat/rfreq[SYN2005]'/>
8       <constraint key='sg'>
          <f value='sg' key='gram/num'/>
10      </constraint>
      </usage>
12    <exp key='core'>
        <real type='word' key='N'>
14        <exp key='base'>
            <real type='morpheme' key='záměr'>
16            <form key='base'>
                <f key='form/src' value='záměr'/>
18              <f key='form/base' value='záměr'/>
              </form>
20          </real>
          </exp>
22        <form key="NS6[záměře]">
```

```
           <usage key="invalid">
24             <f key="form/stat/freq" value="#invalid"/>
           </usage>
26       </form>
       </real>
28   </exp>
     <exp key='phrase'>
30     <real type='phrase' key='Inf_Comp'>
         <gen>phrase</gen>
32       <usage key='default'>
           <f value='0.125' key='form/stat/rfreq[SYN2005]'/>
34       </usage>
         <usage key='singular'>
36         <f value='0.933' key='form/stat/rfreq[SYN2005]'/>
           <constraint key='default'>
38           <f value='sg' key='gram/num'/>
           </constraint>
40       </usage>
         <exp key='core'>
42         <f key='sem/label' value='FORCE'/>
           <include>@THIS/core</include>
44       </exp>
         <exp key='attr'>
46         <f key='sem/label' value='GOAL'/>
           <constraint key='VinfP'>
48           <f value='VinfP' key='form/cat'/>
           </constraint>
50       </exp>
       </real>
52     <real type='phrase' key='na_Comp'>
         <gen>phrase</gen>
54       <exp key='core'>
           <include>@THIS/core</include>
56         <f key='sem/label' value='FORCE'/>
         </exp>
58       <exp key='na_PP'>
           <include>na_Pre/phrase</include>
60         <real type='phrase' key='PP'>
             <gen>phrase</gen>
62           <exp key='Comp'>
             <f value='GOAL' key='sem/label'/>
64             <constraint key='NP'>
               <f value='NP' key='form/cat'/>
66             <f key="gram/case" value="4"/>
               <f key="sem/human" value="false"/>
68             </constraint>
             </exp>
70         </real>
         </exp>
72     </real>
       <real type='phrase' key='s_Comp'>
74       <gen>phrase</gen>
         <exp key='core'>
76         <include>@THIS/core</include>
           <f key='sem/label' value='GOAL'/>
78       </exp>
         <exp key='s_PP'>
80         <include>s_Pre/phrase</include>
           <real type='phrase' key='PP'>
82           <gen>phrase</gen>
             <exp key='Comp'>
84           <f value='PAT' key='sem/label'/>
               <constraint key='NP'>
86               <f value='NP' key='form/cat'/>
               <f key="gram/case" value="7"/>
88               <f key="sem/human" value="false"/>
               </constraint>
90           </exp>
           </real>
92       </exp>
       </real>
94   </exp>
     <link key='col/Vsup[pojmout]' ref='pojmout_V'>
96     <map key='self' loc='#self' rem='PAT'/>
```

```
              <f key='sem/aspect' value='inch'/>
 98       </link>
          <link key='col/Vsup[mít]' ref='mít_V'>
100           <map key='self' loc='#self' rem='PAT'/>
              <f key='sem/aspect' value='dur'/>
102       </link>
          <link key='col/Vsup[provést]' ref='provést_V'>
104           <map key='self' loc='#self' rem='PAT'/>
              <f key='sem/aspect' value='term'/>
106       </link>
          <link key='col/Vsup[uskutečnit]' ref='uskutečnit_V'>
108           <map key='self' loc='#self' rem='PAT'/>
              <f key='sem/aspect' value='term'/>
110       </link>
          <link key='col/Vsup[splnit]' ref='splnit_V'>
112           <map key='self' loc='#self' rem='PAT'/>
              <f key='sem/aspect' value='term'/>
114       </link>
          <link key='col/Vsup[upustit]' ref='upustit_V'>
116           <map key='self' loc='#self' rem='PAT'/>
              <f key='syn/frame[vallex25]' value='4'/>
118           <f key='sem/aspect' value='term'/>
          </link>
120       <link key='col/Vsup[podpořit]' ref='podpořit_V'>
              <map key='self' loc='#self' rem='PAT'/>
122           <f key='sem/aspect' value='dur'/>
              <f key='sem/caus' value='true'/>
124       </link>
          <link key='col/Vsup[zmařit]' ref='zmařit_V'>
126           <map key='self' loc='#self' rem='PAT'/>
              <f key='sem/aspect' value='term'/>
128           <f key='sem/caus' value='true'/>
          </link>
130       <link key='col/Vsup[překazit]' ref='překazit_V'>
              <map key='self' loc='#self' rem='PAT'/>
132           <f key='sem/aspect' value='term'/>
              <f key='sem/caus' value='true'/>
134       </link>
          <link key='col/Vsup[zkřížit]' ref='zkřížit_V'>
136           <map key='self' loc='#self' rem='PAT'/>
              <f key='sem/aspect' value='term'/>
138           <f key='sem/caus' value='true'/>
          </link>
140       <link key='col/Vsup[zhatit]' ref='zhatit_V'>
              <map key='self' loc='#self' rem='PAT'/>
142           <f key='sem/aspect' value='term'/>
              <f key='sem/caus' value='true'/>
144       </link>
          <link key='col/Vsup[schválit]' ref='schválit_V'>
146           <map key='self' loc='#self' rem='PAT'/>
              <f key='sem/aspect' value='dur'/>
148           <f key='sem/caus' value='true'/>
          </link>
150       <link key='col/Vsup[oznámit]' ref='oznámit_V'>
              <map key='self' loc='#self' rem='PAT'/>
152           <f key='sem/aspect' value='inch'/>
          </link>
154       <link key='col/Vsup[sledovat]' ref='sledovat_V'>
              <map key='self' loc='#self' rem='PAT'/>
156           <f key='sem/aspect' value='dur'/>
          </link>
158       <link key='col/Vsup[pochopit]' ref='pochopit_V'>
              <map key='self' loc='#self' rem='PAT'/>
160       </link>
          <link key='col/Vsup[prohlédnout]' ref='prohlédnout_V'>
162           <map key='self' loc='#self' rem='PAT'/>
          </link>
164       <link key='col/Vsup[vysvětlit]' ref='vysvětlit_V'>
              <map key='self' loc='#self' rem='PAT'/>
166       </link>
          <link key='col/Vsup[zdařit_se]' ref='zdařit_se_V'>
168           <map key='self' loc='#self' rem='PAT'/>
              <f key='sem/aspect' value='term'/>
170       </link>
```

```
        <link key='col/Vsup[podařit_se]' ref='podařit_se_V'>
172       <map key='self' loc='#self' rem='PAT'/>
          <f key='sem/aspect' value='term'/>
174     </link>
        <link key='col/Vsup[projednat]' ref='projednat_V'>
176       <map key='self' loc='#self' rem='PAT'/>
        </link>
178     <link key='col/Vsup[realizovat]' ref='realizovat_V'>
          <map key='self' loc='#self' rem='PAT'/>
180       <f key='sem/aspect' value='term'/>
        </link>
182     <link key='col/Aatr[podnikatelský]' ref='podnikatelský_A'/>
        <link key='col/Aatr[původní]' ref='původní_A'/>
184     <link key='col/Aatr[investiční]' ref='investiční_A'/>
        <link key='col/Aatr[strategický]' ref='strategický_A'/>
186     <link key='col/Aatr[dlouhodobý]' ref='dlouhodobý_A'/>
        <link key='col/Aatr[vlastní]' ref='vlastní_A'/>
188     <link key='col/Aatr[jasný]' ref='jasný_A'/>
        <link key='col/Aatr[výchovný]' ref='výchovný_A'/>
190     <link key='col/Aatr[umělecký]' ref='umělecký_A'/>
        <link key='constr[se_z]' ref='se_záměrem_MWE'/>
192     <link key='constr[vyšší_z]' ref='vyšší_záměr_MWE'/>
        <link key='constr[to_je_z]' ref='to_je_záměr_MWE'/>
194     <desc key='default'>FORCE.{představa/vůle} ACT.{někoho} realizovat nějaký GOAL.{cíl} (s nějakým PAT.{objektem})</desc>
        <link key='sem/syn' ref='úmysl_N'/>
196     <link key='trans/no[hensikt]' ref='hensikt_N'/>
        <link key='trans/no[plan]' ref='plan_N:hensikt'/>
198   </lunit>
```

A.34 úmysl_N.xml

```
    <lunit name='úmysl_N' type='lemma'>
2     <include>_tmpl_N:masc:hrad</include>
      <usage key='default'>
4       <f value='4881' key='form/stat/freq[SYN2005]'/>
      </usage>
6     <usage key='singular'>
        <f value='0.807' key='form/stat/rfreq[SYN2005]'/>
8       <constraint key='sg'>
          <f value='sg' key='gram/num'/>
10      </constraint>
      </usage>
12    <exp key='core'>
        <real type='word' key='N'>
14        <exp key='base'>
            <real type='morpheme' key='úmysl'>
16            <form key='base'>
                <f key='form/src' value='úmysl'/>
18              <f key='form/base' value='úmysl'/>
              </form>
20          </real>
          </exp>
22        <form key="NS6[úmysle]">
            <usage key="invalid">
24            <f key="form/stat/freq" value="#invalid"/>
            </usage>
26        </form>
        </real>
28    </exp>
      <exp key='phrase'>
30      <real type='phrase' key='Inf_Comp'>
          <gen>phrase</gen>
32        <usage key='default'>
            <f value='0.351' key='form/stat/rfreq[SYN2005]'/>
34        </usage>
          <usage key='singular'>
36          <f value='0.990' key='form/stat/rfreq[LKB]'/>
            <constraint key='default'>
38            <f value='sg' key='gram/num'/>
            </constraint>
40        </usage>
          <exp key='core'>
```

```
42        <f key='sem/label' value='IMAGE'/>
          <include>@THIS/core</include>
44      </exp>
        <exp key='attr'>
46        <f key='sem/label' value='GOAL'/>
          <constraint key='VinfP'>
48          <f value='VinfP' key='form/cat'/>
          </constraint>
50      </exp>
      </real>
52    <real type='phrase' key='s_Comp'>
        <gen>phrase</gen>
54      <exp key='core'>
          <include>@THIS/core</include>
56        <f key='sem/label' value='IMAGE'/>
        </exp>
58      <exp key='s_PP'>
          <include>s_Pre/phrase</include>
60        <real type='phrase' key='PP'>
            <gen>phrase</gen>
62          <exp key='Comp'>
            <f value='PAT' key='sem/label'/>
64            <constraint key='NP'>
                <f value='NP' key='form/cat'/>
66              <f key="gram/case" value="7"/>
                <f key="sem/human" value="false"/>
68            </constraint>
            </exp>
70        </real>
        </exp>
72    </real>
    </exp>
74  <link key='col/Vsup[pojmout]' ref='pojmout_V'>
      <map key='self' loc='#self' rem='PAT'/>
76    <f key='sem/aspect' value='inch'/>
    </link>
78  <link key='col/Vsup[mít]' ref='mít_V'>
      <map key='self' loc='#self' rem='PAT'/>
80    <f key='sem/aspect' value='dur'/>
    </link>
82  <link key='col/Vsup[provést]' ref='provést_V'>
      <map key='self' loc='#self' rem='PAT'/>
84    <f key='sem/aspect' value='term'/>
    </link>
86  <link key='col/Vsup[upustit]' ref='upustit_V'>
      <map key='self' loc='#self' rem='PAT'/>
88    <f key='syn/frame[vallex25]' value='4'/>
      <f key='sem/aspect' value='term'/>
90  </link>
    <link key='col/Vsup[překazit]' ref='překazit_V'>
92    <map key='self' loc='#self' rem='PAT'/>
      <f key='sem/aspect' value='term'/>
94    <f key='sem/caus' value='true'/>
    </link>
96  <link key='col/Vsup[oznámit]' ref='oznámit_V'>
      <map key='self' loc='#self' rem='PAT'/>
98    <f key='sem/aspect' value='inch'/>
    </link>
100 <link key='col/Vsup[projevit]' ref='projevit_V'>
      <map key='self' loc='#self' rem='PAT'/>
102   <f key='sem/aspect' value='inch'/>
    </link>
104 <link key='col/Vsup[vyjevit]' ref='vyjevit_V'>
      <map key='self' loc='#self' rem='PAT'/>
106   <f key='sem/aspect' value='inch'/>
    </link>
108 <link key='col/Vsup[vzdát_se]' ref='vzdát_se_V'>
      <map key='self' loc='#self' rem='PAT'/>
110   <f key='sem/aspect' value='term'/>
    </link>
112 <link key='col/Vsup[chovat]' ref='chovat_V'>
      <map key='self' loc='#self' rem='PAT'/>
114   <f key='sem/aspect' value='dur'/>
    </link>
```

```
116    <link key='col/Vsup[vést]' ref='vést_V'>
         <map key='self' loc='#self' rem='PAT'/>
118      <f key='sem/aspect' value='dur'/>
       </link>
120    <link key='col/Vsup[tajit]' ref='tajit_V'>
         <map key='self' loc='#self' rem='PAT'/>
122      <f key='sem/aspect' value='dur'/>
       </link>
124    <link key='col/Vsup[prokázat]' ref='prokázat_V'>
         <map key='self' loc='#self' rem='PAT'/>
126      <f key='sem/aspect' value='dur'/>
       </link>
128    <link key='col/Vsup[popírat]' ref='popírat_V'>
         <map key='self' loc='#self' rem='PAT'/>
130    </link>
       <link key='col/Vsup[podsouvat]' ref='podsouvat_V'>
132      <map key='self' loc='#self' rem='PAT'/>
       </link>
134    <link key='col/Aatr[dobrý]' ref='dobrý_A'/>
       <link key='col/Aatr[zlý]' ref='zlý_A'/>
136    <link key='col/Aatr[špatný]' ref='špatný_A'/>
       <link key='col/Aatr[nekalý]' ref='nekalý_A'/>
138    <link key='col/Aatr[čistý]' ref='čistý_A'/>
       <link key='col/Aatr[čestný]' ref='čestný_A'/>
140    <link key='col/Aatr[vražedný]' ref='vražedný_A'/>
       <link key='col/Aatr[sebevražedný]' ref='sebevražedný_A'/>
142    <link key='col/Aatr[zřejmý]' ref='zřejmý_A'/>
       <link key='col/Aatr[ušlechtilý]' ref='ušlechtilý_A'/>
144    <link key='col/Aatr[vážný]' ref='vážný_A'/>
       <link key='col/Aatr[postivý]' ref='poctivý_A'/>
146    <link key='constr[s_ú]' ref='s_úmyslem_MWE'/>
       <link key='constr[postranní_ú]' ref='postranní_úmysly_MWE'/>
148    <link key='constr[zaječí_ú]' ref='zaječí_úmysly_MWE'/>
       <link key='constr[mít_v_ú]' ref='mít_v_úmyslu_MWE'/>
150    <link key='constr[ve_zlém_ú]' ref='ve_zlém_úmyslu_MWE'/>
       <link key='constr[mít_dobré_ú]' ref='mít_dobré_úmysly_MWE'/>
152    <desc key='default'>IMAGE.{vědomá představa/vůle} ACT.{někoho} realizovat nějaký GOAL.{cíl} (s nějakým PAT.{objektem})</desc>
       <link key='sem/syn' ref='záměr_N'/>
154    <link key='trans/no[hensikt]' ref='hensikt_N'/>
     </lunit>
```

A.35   formål_N.xml

```
     <lunit name='formål_N' type='lemma'>
2      <usage key='default'>
         <f value='1503' key='form/stat/freq[LKB]'/>
4      </usage>
       <usage key='singular'>
6        <f value='0.791' key='form/stat/rfreq[LKB]'/>
         <constraint key='sg'>
8          <f value='sg' key='gram/num'/>
         </constraint>
10     </usage>
       <exp key="core">
12       <real key="N" type="word">
           <gen>prefixation</gen>
14         <exp key="prefix">
             <include>_morph_pref_for</include>
16         </exp>
           <exp key="base">
18           <include>mål_N</include>
           </exp>
20       </real>
       </exp>
22     <exp key="phrase">
         <real type='phrase' key='med_Comp'>
24         <gen>phrase</gen>
           <usage key='default'>
26           <f value='0.168' key='form/stat/rfreq[LKB]'/>
           </usage>
28         <usage key='singular'>
             <f value='0.976' key='form/stat/rfreq[LKB]'/>
```

```
30          <constraint key='default'>
              <f value='sg' key='gram/num'/>
32          </constraint>
          </usage>
34        <exp key='core'>
            <include>@THIS/core</include>
36          <f key='sem/label' value='GOAL'/>
          </exp>
38        <exp key='med_PP'>
            <include>med_Pre/phrase</include>
40          <real type='phrase' key='PP'>
              <gen>phrase</gen>
42            <exp key='Comp'>
                <f key='sem/label' value='INSTR'/>
44              <constraint key='NP'>
                  <f value='NP' key='form/cat'/>
46                <f value='false' key='sem/human'/>
                </constraint>
48              <constraint key='VinfP'>
                  <f value='VinfP' key='form/cat'/>
50                <usage key='default'>
                    <f value='0.047' key='form/stat/rfreq[LKB]'/>
52                </usage>
                </constraint>
54            </exp>
            </real>
56        </exp>
        </real>
58      <real type='phrase' key='om_Comp'>
          <gen>phrase</gen>
60        <usage key='default'>
            <f value='0.007' key='form/stat/rfreq[LKB]'/>
62        </usage>
          <usage key='singular'>
64          <f value='1.0' key='form/stat/rfreq[LKB]'/>
            <constraint key='default'>
66            <f value='sg' key='gram/num'/>
            </constraint>
68        </usage>
          <exp key='core'>
70          <include>@THIS/core</include>
            <f key='sem/label' value='IMAGE'/>
72        </exp>
          <exp key='om_PP'>
74          <include>om_Pre/phrase</include>
            <real type='phrase' key='PP'>
76            <gen>phrase</gen>
              <exp key='Comp'>
78              <f key='sem/label' value='GOAL'/>
                <constraint key='NP'>
80                <f value='NP' key='form/cat'/>
                  <f value='false' key='sem/human'/>
82              </constraint>
                <constraint key='VinfP'>
84                <f value='VinfP' key='form/cat'/>
                  <usage key='default'>
86                  <f value='0.600' key='form/stat/rfreq[LKB]'/>
                  </usage>
88              </constraint>
              </exp>
90          </real>
          </exp>
92      </real>
      </exp>
94    <desc key='default'>GOAL.{et mål tenkt eller planlagt}  av ACT.{noen} (eller hans/hennes IMAGE.{forestilling om det}
      <link key='col/Aatr[god]' ref='god_A'/>
96    <link key='col/Aatr[ulik]' ref='ulik_A'/>
      <link key='col/Aatr[veldedig]' ref='veldedig_A'/>
98    <link key='col/Aatr[viktig]' ref='viktig_A'/>
      <link key='col/Aatr[praktisk]' ref='praktisk_A'/>
100   <link key='col/Aatr[forskjellig]' ref='forskjellig_A'/>
      <link key='col/Aatr[bestemt]' ref='bestemt_A'/>
102   <link key='col/Aatr[økonomisk]' ref='økonomisk_A'/>
      <link key='constr[ha_til_f]' ref='ha_til_formål_MWE'/>
```

```
104    <link key='constr[tjene_f]' ref='tjene_formål_MWE'/>
       <link key='constr[til_f]' ref='til_formål_MWE'/>
106    <link key='constr[med_f_ekteskap]' ref='med_formål_ekteskap_MWE'/>
       <link key='constr[høyere_f]' ref='høyere_formål_MWE'/>
108    <lunit name='mål' type='trans'>
         <desc key='default'>GOAL.{et mål eller mening} som INSTR.{et instrument eller en gjerning} skal tjene til</desc>
110      <link key='trans/cs[účel]' ref='účel_N'/>
         <link key='trans/cs[cíl]' ref='cíl_N'/>
112    </lunit>
       <lunit name='plan' type='trans'>
114      <desc key='default'>IMAGE.{et mål tenkt eller planlagt} (av ACT.{noen}) som INSTR.{et instrument eller en gjerning} skal tjene til
         <link key='trans/cs[záměr]' ref='záměr_N'/>
116    </lunit>
     </lunit>
```

A.36   účel_N.xml

```
  <lunit name='účel_N' type='lemma'>
2   <include>_tmpl_N:masc:hrad</include>
    <usage key='default'>
4     <f value='9735' key='form/stat/freq[SYN2005]'/>
    </usage>
6   <usage key='singular'>
      <f value='0.657' key='form/stat/rfreq[SYN2005]'/>
8     <constraint key='sg'>
        <f value='sg' key='gram/num'/>
10    </constraint>
    </usage>
12  <exp key='core'>
      <real type='word' key='N'>
14      <exp key='base'>
          <real type='morpheme' key='účel'>
16          <form key='base'>
              <f key='form/src' value='účel'/>
18            <f key='form/base' value='účel'/>
            </form>
20        </real>
        </exp>
22      <form key="NS6[účele]">
          <usage key="invalid">
24          <f key="form/stat/freq" value="#invalid"/>
          </usage>
26      </form>
      </real>
28  </exp>
    <exp key='phrase'>
30    <real type='phrase' key='Inf_Comp'>
        <gen>phrase</gen>
32      <exp key='core'>
          <f key='sem/label' value='GOAL'/>
34        <include>@THIS/core</include>
        </exp>
36      <exp key='attr'>
          <f key='sem/label' value='GOAL'/>
38        <constraint key='VinfP'>
            <f value='VinfP' key='form/cat'/>
40        </constraint>
        </exp>
42    </real>
      <real type='phrase' key='Gen_Comp'>
44      <gen>phrase</gen>
        <usage key='default'>
46        <f value='0.315' key='form/stat/rfreq[SYN2005]'/>
        </usage>
48      <usage key='singular'>
          <f value='0.737' key='form/stat/rfreq[SYN2005]'/>
50        <constraint key='default'>
            <f value='sg' key='gram/num'/>
52        </constraint>
        </usage>
54      <exp key='core'>
          <include>@THIS/core</include>
```

```
56          <f key='sem/label' value='GOAL'/>
         </exp>
58       <exp key='attr'>
           <f key='sem/label' value='INSTR'/>
60         <constraint key='NPgen'>
             <f value='NP' key='form/cat'/>
62           <f key="gram/case" value="2"/>
             <f key="sem/human" value="false"/>
64         </constraint>
         </exp>
66     </real>
     </exp>
68   <desc key='default'>GOAL.{cíl} INSTR.{nějaké věci či činu} (zamýšlený ACT.{někým})</desc>
     <link key='col/Vsup[mít]' ref='mít_V'>
70     <map key='self' loc='#self' rem='PAT'/>
       <f key='sem/aspect' value='dur'/>
72   </link>
     <link key='col/Vsup[sloužit]' ref='sloužit_V'>
74     <map key='self' loc='#self' rem='PAT'/>
       <f key='sem/aspect' value='dur'/>
76   </link>
     <link key='col/Vsup[splnit]' ref='splnit_V'>
78     <map key='self' loc='#self' rem='PAT'/>
       <f key='sem/aspect' value='term'/>
80   </link>
     <link key='col/Aatr[dobročinný]' ref='dobročinný_A'/>
82   <link key='col/Aatr[charitativní]' ref='charitativní_A'/>
     <link key='col/Aatr[prospěšný]' ref='prospěšný_A'/>
84   <link key='col/Aatr[komerční]' ref='komerční_A'/>
     <link key='col/Aatr[léčebný]' ref='léčebný_A'/>
86   <link key='col/Aatr[reklamní]' ref='reklamní_A'/>
     <link key='col/Aatr[bohulibý]' ref='bohulibý_A'/>
88   <link key='col/Aatr[humanitární]' ref='humanitární_A'/>
     <link key='col/Aatr[původní]' ref='původní_A'/>
90   <link key='col/Aatr[praktický]' ref='praktický_A'/>
     <link key='col/Aatr[vojenský]' ref='vojenský_A'/>
92   <link key='col/Aatr[rekreační]' ref='rekreační_A'/>
     <link key='col/Aatr[soukromý]' ref='soukromý_A'/>
94   <link key='col/Aatr[daný]' ref='daný_A'/>
     <link key='col/Aatr[vědecký]' ref='vědecký_A'/>
96   <link key='constr[za_ú]' ref='za_účelem_MWE'/>
     <link key='constr[mít_za_ú]' ref='mít_za_účel_MWE'/>
98   <link key='constr[pro_ú]' ref='pro_účely_MWE'/>
     <link key='constr[pro_ten_ú]' ref='pro_ten_účel_MWE'/>
100  <link key='constr[k_ú]' ref='k_účelu_MWE'/>
     <link key='constr[sloužit_ú]' ref='sloužit_účelu_MWE'/>
102  <link key='constr[za_ú_sňatku]' ref='za_účelem_sňatku_MWE'/>
     <link key='constr[ú_světí_prostředky]' ref='účel_světí_prostředky_MWE'/>
104  <link key='trans/no[formål]' ref='formål_N'/>
     <link key='trans/no[hensikt]' ref='hensikt_N:formål'/>
106 </lunit>
```

A.37   plan_N.xml

```
   <lunit name='plan_N' type='lemma'>
2    <include>_tmpl_N:masc:m1</include>
   <usage key='default'>
4      <f value='3547' key='form/stat/freq[LKB]'/>
   </usage>
6    <usage key='singular'>
     <f value='0.482' key='form/stat/rfreq[LKB]'/>
8      <constraint key='sg'>
         <f value='sg' key='gram/num'/>
10     </constraint>
   </usage>
12  <exp key="core">
     <real key="N" type="word">
14      <exp key="base">
         <real key="plan" type="morpheme">
16         <form key="base">
             <f key="form/src" value="plan"/>
18           <f key="form/base" value="plan"/>
```

```
              </form>
20          </real>
          </exp>
22      </real>
      </exp>
24    <lunit name='hensikt' type='sense'>
        <desc key='default'>IMAGE.{en forestilling} til ACT.{noen} om GOAL.{et mål eller en handling, løsning av et problem, osv.}</desc>
26      <exp key='phrase'>
          <real type='phrase' key='om_Comp'>
28          <gen>phrase</gen>
            <usage key='default'>
30            <f value='0.197' key='form/stat/rfreq[LKB]'/>
            </usage>
32          <usage key='singular'>
              <f value='0.116' key='form/stat/rfreq[LKB]'/>
34            <constraint key='default'>
                <f value='sg' key='gram/num'/>
36            </constraint>
            </usage>
38          <exp key='core'>
              <include>@THIS/core</include>
40            <f key='sem/label' value='IMAGE'/>
            </exp>
42          <exp key='om_PP'>
              <include>om_Pre/phrase</include>
44            <real type='phrase' key='PP'>
                <gen>phrase</gen>
46              <exp key='Comp'>
                  <f key='sem/label' value='GOAL'/>
48                <constraint key='NP'>
                    <f value='NP' key='form/cat'/>
50                  <f value='false' key='sem/human'/>
                  </constraint>
52                <constraint key='VinfP'>
                    <f value='VinfP' key='form/cat'/>
54                  <usage key='default'>
                      <f value='0.546' key='form/stat/rfreq[LKB]'/>
56                  </usage>
                  </constraint>
58                <constraint key='at_S'>
                    <f value='at_S' key='form/cat'/>
60                  <usage key='default'>
                      <f value='0.007' key='form/stat/rfreq[LKB]'/>
62                  </usage>
                  </constraint>
64                <constraint key='sp_S'>
                    <f value='sp_S' key='form/cat'/>
66                  <usage key='default'>
                      <f value='0.010' key='form/stat/rfreq[LKB]'/>
68                  </usage>
                  </constraint>
70              </exp>
              </real>
72          </exp>
          </real>
74        <real type='phrase' key='for_Comp'>
            <gen>phrase</gen>
76          <usage key='default'>
              <f value='0.128' key='form/stat/rfreq[LKB]'/>
78          </usage>
            <usage key='singular'>
80            <f value='0.422' key='form/stat/rfreq[LKB]'/>
              <constraint key='default'>
82              <f value='sg' key='gram/num'/>
              </constraint>
84          </usage>
            <exp key='core'>
86            <include>@THIS/core</include>
              <f key='sem/label' value='IMAGE'/>
88          </exp>
            <exp key='for_PP'>
90            <include>for_Pre/phrase</include>
              <real type='phrase' key='PP'>
92              <gen>phrase</gen>
```

```
            <exp key='Comp'>
94            <f key='sem/label' value='GOAL'/>
              <constraint key='NP'>
96              <f value='NP' key='form/cat'/>
                <f value='false' key='sem/human'/>
98            </constraint>
              <constraint key='VinfP'>
100             <f value='VinfP' key='form/cat'/>
                <usage key='default'>
102               <f value='0.085' key='form/stat/rfreq[LKB]'/>
                </usage>
104           </constraint>
              <constraint key='sp_S'>
106             <f value='sp_S' key='form/cat'/>
                <usage key='default'>
108               <f value='0.108' key='form/stat/rfreq[LKB]'/>
                </usage>
110           </constraint>
            </exp>
112       </real>
        </exp>
114   </real>
      <real type='phrase' key='med_Comp'>
116     <gen>phrase</gen>
        <usage key='default'>
118       <f value='0.016' key='form/stat/rfreq[LKB]'/>
        </usage>
120     <exp key='core'>
          <include>@THIS/core</include>
122       <f key='sem/label' value='IMAGE'/>
        </exp>
124     <exp key='med_PP'>
          <include>med_Pre/phrase</include>
126       <real type='phrase' key='PP'>
            <gen>phrase</gen>
128         <exp key='Comp'>
              <f key='sem/label' value='PAT'/>
130           <constraint key='NP'>
                <f value='NP' key='form/cat'/>
132             <f value='false' key='sem/human'/>
              </constraint>
134           <constraint key='VinfP'>
                <f value='VinfP' key='form/cat'/>
136             <usage key='default'>
                  <f value='0.036' key='form/stat/rfreq[LKB]'/>
138             </usage>
              </constraint>
140           <constraint key='at_S'>
                <f value='at_S' key='form/cat'/>
142             <usage key='default'>
                  <f value='0.018' key='form/stat/rfreq[LKB]'/>
144             </usage>
              </constraint>
146         </exp>
          </real>
148     </exp>
        </real>
150   </exp>
      <link key='col/Vsup[ha]' ref='ha_V'>
152     <map key='self' loc='#self' rem='PAT'/>
        <f key='sem/aspect' value='dur'/>
154   </link>
      <link key='col/Vsup[utarbeide]' ref='utarbeide_V'>
156     <map key='self' loc='#self' rem='PAT'/>
        <f key='sem/aspect' value='term'/>
158   </link>
      <link key='col/Vsup[realisere]' ref='realisere_V'>
160     <map key='self' loc='#self' rem='PAT'/>
        <f key='sem/aspect' value='term'/>
162   </link>
      <link key='col/Vsup[gjennomføre]' ref='gjennomføre_V'>
164     <map key='self' loc='#self' rem='PAT'/>
        <f key='sem/aspect' value='term'/>
166   </link>
```

```
        <link key='col/Vsup[følge]' ref='følge_V'>
168         <map key='self' loc='#self' rem='PAT'/>
            <f key='sem/aspect' value='dur'/>
170     </link>
        <link key='col/Vsup[lykkes]' ref='lykkes_V'>
172         <map key='self' loc='#self' rem='PAT'/>
            <f key='sem/aspect' value='term'/>
174     </link>
        <link key='col/Aatr[konkret]' ref='konkret_A'/>
176     <link key='col/Aatr[stor]' ref='stor_A'/>
        <link key='col/Aatr[strategisk]' ref='strategisk_A'/>
178     <link key='col/Aatr[individuell]' ref='individuell_A'/>
        <link key='col/Aatr[opprinnelig]' ref='opprinnelig_A'/>
180     <link key='col/Aatr[langsiktig]' ref='langsiktig_A'/>
        <link key='col/Aatr[ambisiøs]' ref='ambisiøs_A'/>
182     <link key='constr[legge_fram_p]' ref='legge_fram_plan_MWE'/>
        <link key='constr[legge_p]' ref='legge_planer_MWE'/>
184     <link key='constr[ha_p_om]' ref='ha_planer_om_MWE'/>
        <link key='constr[gå_med_p_om]' ref='gå_med_planer_om_MWE'/>
186     <link key='constr[gå_etter_p]' ref='gå_etter_planen_MWE'/>
        <link key='trans/cs' ref='plán_N:záměr'/>
188     <lunit name='idé' type='subsense'>
            <desc key='default'>IMAGE.{en forestilling til ACT.{noen} om at} GOAL.{et mål} skulle realiseres</desc>
190         <f key='select/phrase' value='om_Comp'/>
            <link key='sem/syn[idé]' ref='idé_N:plan'/>
192         <link key='sem/syn[tanke]' ref='tanke_N:forestilling'/>
            <link key='sem/syn[hensikt]' ref='hensikt_N:plan'/>
194         <link key='trans/cs[úmysl]' ref='úmysl_N'/>
            <link key='trans/cs[záměr]' ref='záměr_N'/>
196     </lunit>
        <lunit name='forslag' type='subsense'>
198         <desc key='default'>IMAGE.{et forslag av ACT.{noen} om hvordan} å realisere GOAL.{et mål / løse et problem}</desc>
            <f key='select/phrase' value='for_Comp'/>
200         <link key='sem/syn[forslag]' ref='forslag_N'/>
            <link key='sem/syn[framlegg]' ref='framlegg_N'/>
202     </lunit>
      </lunit>
204   <lunit name='kart' type='sense'>
        <desc key='default'>IMAGE.{et schematisk bilde} med oversikt over PAT.{geografisk topologi av en by, land, byggning, osv.}</desc>
206     <exp key='phrase'>
          <real type='phrase' key='over_Comp'>
208         <gen>phrase</gen>
            <exp key='core'>
210           <include>@THIS/core</include>
              <f key='sem/label' value='IMAGE'/>
212         </exp>
            <exp key='over_PP'>
214           <include>over_Pre/phrase</include>
              <real type='phrase' key='PP'>
216             <gen>phrase</gen>
                <exp key='Comp'>
218               <f key='sem/label' value='PAT'/>
                  <constraint key='NP'>
220                 <f value='NP' key='form/cat'/>
                  </constraint>
222             </exp>
              </real>
224         </exp>
          </real>
226     </exp>
        <link key='trans/cs' ref='mapa_N'/>
228   </lunit>
    </lunit>
```

A.38   plán_N.xml

```
    <lunit name='plán_N' type='lemma'>
2     <include>_tmpl_N:masc:hrad</include>
      <usage key='default'>
4       <f value='18588' key='form/stat/freq[SYN2005]'/>
      </usage>
6     <usage key='singular'>
```

```
          <f value='0.659' key='form/stat/rfreq[SYN2005]'/>
 8        <constraint key='sg'>
            <f value='sg' key='gram/num'/>
10        </constraint>
        </usage>
12      <exp key='core'>
          <real type='word' key='N'>
14          <exp key='base'>
              <real type='morpheme' key='plán'>
16              <form key='base'>
                  <f key='form/src' value='plán'/>
18                <f key='form/base' value='plán'/>
                </form>
20            </real>
            </exp>
22          <form key="NS6[pláně]">
              <usage key="invalid">
24              <f key="form/stat/freq" value="#invalid"/>
              </usage>
26          </form>
          </real>
28      </exp>
        <lunit name='záměr' type='abstract'>
30        <desc key='default'>IMAGE.{záměr/představa} ACT.{někoho} o GOAL.{realizaci nějakého cíle či řešení problému}</desc>
          <exp key='phrase'>
32          <real type='phrase' key='Inf_Comp'>
              <gen>phrase</gen>
34            <usage key='default'>
                <f value='0.036' key='form/stat/rfreq[SYN2005]'/>
36            </usage>
              <usage key='singular'>
38              <f value='0.842' key='form/stat/rfreq[SYN2005]'/>
                <constraint key='default'>
40                <f value='sg' key='gram/num'/>
                </constraint>
42            </usage>
              <exp key='core'>
44              <f key='sem/label' value='IMAGE'/>
                <include>@THIS/core</include>
46            </exp>
              <exp key='attr'>
48              <f key='sem/label' value='GOAL'/>
                <constraint key='VinfP'>
50                <f value='VinfP' key='form/cat'/>
                </constraint>
52            </exp>
            </real>
54          <real type='phrase' key='Gen_Comp'>
              <gen>phrase</gen>
56            <exp key='core'>
                <include>@THIS/core</include>
58              <f key='sem/label' value='IMAGE'/>
              </exp>
60            <exp key='attr'>
                <f key='sem/label' value='GOAL'/>
62              <constraint key='NPgen'>
                  <f value='NP' key='form/cat'/>
64                <f key="gram/case" value="2"/>
                  <f key="sem/human" value="false"/>
66              </constraint>
              </exp>
68          </real>
            <real type='phrase' key='na_Comp'>
70            <gen>phrase</gen>
              <usage key='default'>
72              <f value='0.066' key='form/stat/rfreq[SYN2005]'/>
              </usage>
74            <usage key='singular'>
                <f value='0.510' key='form/stat/rfreq[SYN2005]'/>
76              <constraint key='default'>
                  <f value='sg' key='gram/num'/>
78              </constraint>
              </usage>
80            <exp key='core'>
```

```
            <include>@THIS/core</include>
82          <f key='sem/label' value='IMAGE'/>
          </exp>
84        <exp key='na_PP'>
            <include>na_Pre/phrase</include>
86          <real type='phrase' key='PP'>
              <gen>phrase</gen>
88            <exp key='Comp'>
              <f key='sem/label' value='GOAL'/>
90              <constraint key='NP'>
                <f value='NP' key='form/cat'/>
92                <f key="gram/case" value="4"/>
                <f key="sem/human" value="false"/>
94              </constraint>
            </exp>
96          </real>
          </exp>
98      </real>
        <real type='phrase' key='s_Comp'>
100        <gen>phrase</gen>
          <usage key='default'>
102          <f value='0.003' key='form/stat/rfreq[SYN2005]'/>
          </usage>
104        <exp key='core'>
            <include>@THIS/core</include>
106          <f key='sem/label' value='IMAGE'/>
          </exp>
108        <exp key='s_PP'>
            <include>s_Pre/phrase</include>
110          <real type='phrase' key='PP'>
              <gen>phrase</gen>
112            <exp key='Comp'>
              <f key='sem/label' value='PAT'/>
114                <constraint key='NP'>
                  <f value='NP' key='form/cat'/>
116                <f key="gram/case" value="7"/>
                  <f key="sem/human" value="false"/>
118                </constraint>
            </exp>
120          </real>
          </exp>
122      </real>
        </exp>
124      <link key='col/Vsup[pojmout]' ref='pojmout_V'>
          <map key='self' loc='#self' rem='PAT'/>
126        <f key='sem/aspect' value='inch'/>
        </link>
128      <link key='col/Vsup[sestavit]' ref='sestavit_V'>
          <map key='self' loc='#self' rem='PAT'/>
130        <f key='sem/aspect' value='inch'/>
        </link>
132      <link key='col/Vsup[mít]' ref='mít_V'>
          <map key='self' loc='#self' rem='PAT'/>
134        <f key='sem/aspect' value='dur'/>
        </link>
136      <link key='col/Vsup[provést]' ref='provést_V'>
          <map key='self' loc='#self' rem='PAT'/>
138        <f key='sem/aspect' value='term'/>
        </link>
140      <link key='col/Vsup[uskutečnit]' ref='uskutečnit_V'>
          <map key='self' loc='#self' rem='PAT'/>
142        <f key='sem/aspect' value='term'/>
        </link>
144      <link key='col/Vsup[splnit]' ref='splnit_V'>
          <map key='self' loc='#self' rem='PAT'/>
146        <f key='sem/aspect' value='term'/>
        </link>
148      <link key='col/Vsup[zmařit]' ref='zmařit_V'>
          <map key='self' loc='#self' rem='PAT'/>
150        <f key='sem/aspect' value='term'/>
          <f key='sem/caus' value='true'/>
152      </link>
        <link key='col/Vsup[překazit]' ref='překazit_V'>
154        <map key='self' loc='#self' rem='PAT'/>
```

```
       <f key='sem/aspect' value='term'/>
156    <f key='sem/caus' value='true'/>
     </link>
158  <link key='col/Vsup[zkřížit]' ref='zkřížit_V'>
       <map key='self' loc='#self' rem='PAT'/>
160    <f key='sem/aspect' value='term'/>
       <f key='sem/caus' value='true'/>
162  </link>
     <link key='col/Vsup[zhatit]' ref='zhatit_V'>
164    <map key='self' loc='#self' rem='PAT'/>
       <f key='sem/aspect' value='term'/>
166    <f key='sem/caus' value='true'/>
     </link>
168  <link key='col/Vsup[ztroskotat]' ref='ztroskotat_V'>
       <map key='self' loc='#self' rem='ACT'/>
170    <f key='sem/aspect' value='term'/>
     </link>
172  <link key='col/Vsup[selhat]' ref='selhat_V'>
       <map key='self' loc='#self' rem='ACT'/>
174    <f key='sem/aspect' value='term'/>
     </link>
176  <link key='col/Vsup[vyjít]' ref='vyjít_V'>
       <map key='self' loc='#self' rem='ACT'/>
178    <f key='sem/aspect' value='term'/>
     </link>
180  <link key='col/Vsup[schválit]' ref='schválit_V'>
       <map key='self' loc='#self' rem='PAT'/>
182    <f key='sem/aspect' value='dur'/>
       <f key='sem/caus' value='true'/>
184  </link>
     <link key='col/Vsup[realizovat]' ref='realizovat_V'>
186    <map key='self' loc='#self' rem='PAT'/>
       <f key='sem/aspect' value='term'/>
188  </link>
     <link key='col/Vsup[změnit]' ref='změnit_V'>
190    <map key='self' loc='#self' rem='PAT'/>
     </link>
192  <link key='col/Vsup[spočívat]' ref='spočívat_V'>
       <map key='self' loc='#self' rem='ACT'/>
194  </link>
     <link key='col/Aatr[původní]' ref='původní_A'/>
196  <link key='col/Aatr[strategický]' ref='strategický_A'/>
     <link key='col/Aatr[časový]' ref='časový_A'/>
198  <link key='col/Aatr[ďábelský]' ref='ďábelský_A'/>
     <link key='col/Aatr[temný]' ref='temný_A'/>
200  <link key='constr[mít_v_p]' ref='mít_v_plánu_MWE'/>
     <link key='constr[spřádat_p]' ref='spřádat_plány_MWE'/>
202  <link key='constr[jít_podle_p]' ref='jít_podle_plánu_MWE'/>
     <link key='constr[předložit_p]' ref='předložit_plán_MWE'/>
204  <link key='constr[územní_p]' ref='územní_plán_MWE'/>
     <link key='sem/syn' ref='záměr_N'/>
206  <link key='trans/no[plan]' ref='plan_N:hensikt'/>
   </lunit>
208  <lunit name='mapa' type='sense'>
     <desc key='default'>IMAGE.{schéma} zobrazující PAT.{geografickou topologii nějakého města, oblasti či budovy}</desc>
210    <link key='trans/no[kart]' ref='kart_N'/>
     <link key='trans/no[plan]' ref='plan_N:kart'/>
212  </lunit>
     <lunit name='rovina' type='abstract'>
214    <desc key='default'>rovina / úroveň / vrstva</desc>
     <link key='trans/no[plan]' ref='plan_2_N'/>
216  </lunit>
   </lunit>
```

A.39 mål_N.xml

```
   <lunit name='mål_N' type='lemma'>
2    <include>_tmpl_N:neut:n1</include>
     <usage key='default'>
4      <f value='5632' key='form/stat/freq[LKB]'/>
     </usage>
6    <usage key='singular'>
```

```
           <f value='0.780' key='form/stat/rfreq[LKB]'/>
8          <constraint key='sg'>
             <f value='sg' key='gram/num'/>
10         </constraint>
         </usage>
12     <exp key="core">
         <real key="N" type="word">
14         <exp key="base">
             <real key="mål" type="morpheme">
16             <form key="base">
                 <f key="form/src" value="mål"/>
18                 <f key="form/base" value="mål"/>
               </form>
20           </real>
           </exp>
22       </real>
       </exp>
24     <exp key="phrase">
         <real type='phrase' key='om_Comp'>
26         <gen>phrase</gen>
           <usage key='default'>
28           <f value='0.039' key='form/stat/rfreq[LKB]'/>
           </usage>
30         <usage key='singular'>
             <f value='0.894' key='form/stat/rfreq[LKB]'/>
32           <constraint key='default'>
               <f value='sg' key='gram/num'/>
34           </constraint>
           </usage>
36         <exp key='core'>
             <include>@THIS/core</include>
38           <f key='sem/label' value='IMAGE'/>
           </exp>
40         <exp key='om_PP'>
             <include>om_Pre/phrase</include>
42           <real type='phrase' key='PP'>
               <gen>phrase</gen>
44             <exp key='Comp'>
                 <f key='sem/label' value='GOAL'/>
46               <constraint key='NP'>
                   <f value='NP' key='form/cat'/>
48                 <f value='false' key='sem/human'/>
                 </constraint>
50               <constraint key='VinfP'>
                   <f value='VinfP' key='form/cat'/>
52                 <usage key='default'>
                     <f value='0.323' key='form/stat/rfreq[LKB]'/>
54                 </usage>
                 </constraint>
56               <constraint key='at_S'>
                   <f value='at_S' key='form/cat'/>
58                 <usage key='default'>
                     <f value='0.097' key='form/stat/rfreq[LKB]'/>
60                 </usage>
                 </constraint>
62             </exp>
             </real>
64         </exp>
         </real>
66       <real type='phrase' key='for_Comp'>
           <gen>phrase</gen>
68         <usage key='default'>
             <f value='0.083' key='form/stat/rfreq[LKB]'/>
70         </usage>
           <usage key='singular'>
72           <f value='0.776' key='form/stat/rfreq[LKB]'/>
             <constraint key='default'>
74             <f value='sg' key='gram/num'/>
             </constraint>
76         </usage>
           <exp key='core'>
78           <include>@THIS/core</include>
           </exp>
80         <exp key='for_PP'>
```

```
            <include>for_Pre/phrase</include>
82          <real type='phrase' key='PP'>
              <gen>phrase</gen>
84          <exp key='Comp'>
              <constraint key='NP'>
86              <f value='NP' key='form/cat'/>
                <f value='false' key='sem/human'/>
88              </constraint>
            </exp>
90          </real>
          </exp>
92        </real>
          <real type='phrase' key='med_Comp'>
94          <gen>phrase</gen>
            <usage key='default'>
96            <f value='0.038' key='form/stat/rfreq[LKB]'/>
            </usage>
98          <usage key='singular'>
              <f value='0.894' key='form/stat/rfreq[LKB]'/>
100           <constraint key='default'>
                <f value='sg' key='gram/num'/>
102           </constraint>
            </usage>
104         <exp key='core'>
              <include>@THIS/core</include>
106           <f key='sem/label' value='GOAL'/>
            </exp>
108         <exp key='med_PP'>
              <include>med_Pre/phrase</include>
110           <real type='phrase' key='PP'>
                <gen>phrase</gen>
112           <exp key='Comp'>
                <f key='sem/label' value='INSTR'/>
114             <constraint key='NP'>
                  <f value='NP' key='form/cat'/>
116               <f value='false' key='sem/human'/>
                </constraint>
118             <constraint key='VinfP'>
                  <f value='VinfP' key='form/cat'/>
120               <usage key='default'>
                    <f value='0.032' key='form/stat/rfreq[LKB]'/>
122               </usage>
                </constraint>
124           </exp>
            </real>
126         </exp>
          </real>
128       <real type='phrase' key='på_Comp'>
            <gen>phrase</gen>
130         <usage key='default'>
              <f value='0.025' key='form/stat/rfreq[LKB]'/>
132         </usage>
            <usage key='singular'>
134           <f value='0.789' key='form/stat/rfreq[LKB]'/>
              <constraint key='default'>
136             <f value='sg' key='gram/num'/>
              </constraint>
138         </usage>
            <exp key='core'>
140           <include>@THIS/core</include>
              <f key='sem/label' value='QUANT'/>
142         </exp>
            <exp key='på_PP'>
144           <include>på_Pre/phrase</include>
              <real type='phrase' key='PP'>
146             <gen>phrase</gen>
                <exp key='Comp'>
148               <f key='sem/label' value='PAT'/>
                  <constraint key='NP'>
150                 <f value='NP' key='form/cat'/>
                    <f value='false' key='sem/human'/>
152               </constraint>
                  <constraint key='sp_S'>
154                 <f value='sp_S' key='form/cat'/>
```

```
                  <usage key='default'>
156                  <f value='0.099' key='form/stat/rfreq[LKB]'/>
                  </usage>
158              </constraint>
              <constraint key='at_S'>
160              <f value='at_S' key='form/cat'/>
                  <usage key='default'>
162                  <f value='0.014' key='form/stat/rfreq[LKB]'/>
                  </usage>
164              </constraint>
            </exp>
166          </real>
          </exp>
168      </real>
      </exp>
170  <lunit name='kvantitet' type='abstract'>
      <desc key='default'>QUANT.{kvantitet}</desc>
172  <f key='select/phrase' value='på_Comp'/>
      <exp key="phrase">
174    <real type='phrase' key='for_Comp'>
          <gen>phrase</gen>
176        <exp key='core'>
            <f key='sem/label' value='QUANT'/>
178        </exp>
          <exp key='for_PP'>
180          <real type='phrase' key='PP'>
              <gen>phrase</gen>
182            <exp key='Comp'>
                <f key='sem/label' value='PAT'/>
184            </exp>
            </real>
186        </exp>
        </real>
188    </exp>
      <lunit name='størrelse' type='sense'>
190      <desc key='default'>QUANT.{størrelse} på PAT.{noe}</desc>
        <link key="trans/cs[míra]" ref="míra_N"/>
192      <link key="trans/cs[rozměr]" ref="rozměr_N"/>
        <link key="trans/cs[velikost]" ref="velikost_N"/>
194    </lunit>
      <lunit name='mengde' type='sense'>
196      <desc key='default'>QUANT.{en mengde} av PAT.{noe}</desc>
        <link key="trans/cs[míra]" ref="míra_N"/>
198      <link key="trans/cs[množství]" ref="množství_N"/>
      </lunit>
200    <lunit name='areal' type='sense'>
        <desc key='default'>QUANT.{en målenhet for areal} satt lik 1000m2</desc>
202    </lunit>
      <lunit name='målekar' type='sense'>
204      <desc key='default'>målekar / måleredskap</desc>
        <link key="trans/cs[odměrka]" ref="odměrka_N"/>
206    </lunit>
      <lunit name='multiplum' type='sense'>
208      <desc key='default'>QUANT.{multiplum (størrelse som går opp i en annen uten rest)}</desc>
        <usage key="math">
210        <f key="style/domain" value="math"/>
        </usage>
212      <link key="trans/cs[dělitel]" ref="dělitel_N"/>
      </lunit>
214    <lunit name='limit' type='sense'>
        <desc key='default'>QUANT.{grense / limit} for PAT.{noe}</desc>
216      <link key="trans/cs[míra]" ref="míra_N"/>
      </lunit>
218    <lunit name='tid' type='sense'>
        <desc key='default'>tidspunkt</desc>
220    </lunit>
      </lunit>
222  <lunit name='endepunkt' type='abstract'>
      <desc key='default'>GOAL.{endepunkt} for ACT.{noe(n)}</desc>
224  <link key="trans/cs[cíl]" ref="cíl_N"/>
      <link key='col/Vsup[nå]' ref='nå_V'>
226    <map key='self' loc='#self' rem='PAT'/>
        <f key='sem/aspect' value='term'/>
228    </link>
```

```
         <link key='col/Vsup[forfølge]' ref='forfølge_V'>
230        <map key='self' loc='#self' rem='PAT'/>
           <f key='sem/aspect' value='dur'/>
232      </link>
         <lunit name='merke' type='sense'>
234        <desc key='default'>GOAL.{merke} som skal treffes (av ACT.{noen})</desc>
           <link key="trans/cs[terč]" ref="terč_N"/>
236      </lunit>
         <lunit name='linje' type='sense'>
238        <desc key='default'>GOAL.{linje} som det gjelder å nå fram til (av ACT.{noen})</desc>
           <usage key="math">
240          <f key="style/domain" value="sport"/>
           </usage>
242        <link key='col/Vsup[score]' ref='score_V'>
             <map key='self' loc='#self' rem='PAT'/>
244          <f key='sem/aspect' value='term'/>
           </link>
246        <link key="trans/cs[branka]" ref="branka_N"/>
           <link key="trans/cs[gól]" ref="gól_N"/>
248      </lunit>
         <lunit name='formål' type='sense'>
250        <desc key='default'>GOAL.{formål el. endepunkt} som INSTR.{noe} skal tjene til eller som ACT.{noe(n)} skal nå</des
           <f key='select/phrase[om]' value='om_Comp'/>
252        <f key='select/phrase[for]' value='for_Comp'/>
           <f key='select/phrase[med]' value='med_Comp'/>
254        <exp key="phrase">
             <real type='phrase' key='for_Comp'>
256            <gen>phrase</gen>
               <exp key='core'>
258              <f key='sem/label' value='GOAL'/>
               </exp>
260            <exp key='for_PP'>
                 <real type='phrase' key='PP'>
262                <gen>phrase</gen>
                   <exp key='Comp'>
264                  <f key='sem/label' value='INSTR'/>
                   </exp>
266              </real>
               </exp>
268          </real>
           </exp>
270        <link key='col/Aatr[langsiktig]' ref='langsiktig_A'/>
           <link key='col/Aatr[viktig]' ref='viktig_A'/>
272        <link key='col/Aatr[overordnet]' ref='overordnet_A'/>
           <link key='col/Aatr[felles]' ref='felles_A'/>
274        <link key='col/Aatr[klar]' ref='klar_A'/>
           <link key='col/Aatr[politisk]' ref='politisk_A'/>
276        <link key='col/Aatr[konkret]' ref='konkret_A'/>
           <link key='col/Aatr[endelig]' ref='endelig_A'/>
278        <link key='col/Aatr[ambisiøs]' ref='ambisiøs_A'/>
           <link key='constr[uten_m]' ref='uten_mål_MWE'/>
280        <link key='constr[fremme_sine_m]' ref='fremme_sine_mål_MWE'/>
           <link key='constr[sette_seg_som_m]' ref='sette_seg_som_mål_MWE'/>
282        <link key='constr[m_helliger_middelet]' ref='målet_helliger_middelet_MWE'/>
           <link key="trans/cs[účel]" ref="účel_N"/>
284      </lunit>
       </lunit>
286    <lunit name='måltid' type='sense'>
         <desc key='default'>måltid</desc>
288      <link key="trans/cs[jídlo]" ref="jídlo_N"/>
         <link key="trans/cs[chod]" ref="chod_N"/>
290    </lunit>
       <lunit name='melking' type='sense'>
292      <desc key='default'>en gangs melking</desc>
       </lunit>
294  </lunit>
```

A.40   cíl_N.xml

```
    <lunit name='cíl_N' type='lemma'>
2     <include>_tmpl_N:masc:stroj</include>
      <usage key='default'>
```

```
 4        <f value='28056' key='form/stat/freq[SYN2005]'/>
       </usage>
 6     <usage key='singular'>
         <f value='0737' key='form/stat/rfreq[SYN2005]'/>
 8       <constraint key='sg'>
           <f value='sg' key='gram/num'/>
10       </constraint>
       </usage>
12     <exp key='core'>
         <real type='word' key='N'>
14         <exp key='base'>
             <real type='morpheme' key='cíl'>
16             <form key='base'>
                 <f key='form/src' value='cíl'/>
18               <f key='form/base' value='cíl'/>
               </form>
20           </real>
           </exp>
22       </real>
       </exp>
24     <exp key='phrase'>
         <real type='phrase' key='Inf_Comp'>
26         <gen>phrase</gen>
           <usage key='default'>
28           <f value='0.091' key='form/stat/rfreq[SYN2005]'/>
           </usage>
30         <usage key='singular'>
             <f value='0.967' key='form/stat/rfreq[SYN2005]'/>
32           <constraint key='default'>
               <f value='sg' key='gram/num'/>
34           </constraint>
           </usage>
36         <gen>phrase</gen>
           <exp key='core'>
38           <f key='sem/label' value='GOAL'/>
             <include>@THIS/core</include>
40         </exp>
           <exp key='attr'>
42           <f key='sem/label' value='GOAL'/>
             <constraint key='VinfP'>
44             <f value='VinfP' key='form/cat'/>
             </constraint>
46         </exp>
         </real>
48       <real type='phrase' key='Gen_Comp'>
           <gen>phrase</gen>
50         <usage key='default'>
             <f value='0.228' key='form/stat/rfreq[SYN2005]'/>
52         </usage>
           <exp key='core'>
54           <include>@THIS/core</include>
             <f key='sem/label' value='GOAL'/>
56         </exp>
           <exp key='attr'>
58           <f key='sem/label' value='INSTR'/>
             <constraint key='NPgen'>
60             <f value='NP' key='form/cat'/>
               <f key="gram/case" value="2"/>
62             <f key="sem/human" value="false"/>
             </constraint>
64         </exp>
         </real>
66       <real type='phrase' key='pro_Comp'>
           <gen>phrase</gen>
68         <usage key='default'>
             <f value='0.007' key='form/stat/rfreq[SYN2005]'/>
70         </usage>
           <usage key='singular'>
72           <f value='0.601' key='form/stat/rfreq[SYN2005]'/>
             <constraint key='default'>
74             <f value='sg' key='gram/num'/>
             </constraint>
76         </usage>
           <exp key='core'>
```

```
78        <include>@THIS/core</include>
          <f key='sem/label' value='GOAL'/>
80      </exp>
        <exp key='pro_PP'>
82        <include>pro_Pre/phrase</include>
          <real type='phrase' key='PP'>
84          <gen>phrase</gen>
            <exp key='Comp'>
86          <f key='sem/label' value='INSTR'/>
              <constraint key='NP'>
88              <f value='NP' key='form/cat'/>
                <f key="gram/case" value="4"/>
90              <f key="sem/human" value="false"/>
              </constraint>
92          </exp>
          </real>
94        </exp>
        </real>
96    </exp>
      <link key='col/Vsup[mít]' ref='mít_V'>
98      <map key='self' loc='#self' rem='PAT'/>
        <f key='sem/aspect' value='dur'/>
100   </link>
      <link key='col/Vsup[dosáhnout]' ref='dosáhnout_V'>
102     <map key='self' loc='#self' rem='PAT'/>
        <f key='sem/aspect' value='term'/>
104   </link>
      <link key='col/Vsup[splnit]' ref='splnit_V'>
106     <map key='self' loc='#self' rem='PAT'/>
        <f key='sem/aspect' value='term'/>
108   </link>
      <link key='col/Vsup[stanovit]' ref='stanovit_V'>
110     <map key='self' loc='#self' rem='PAT'/>
        <f key='sem/aspect' value='inch'/>
112     <f key='sem/caus' value='true'/>
      </link>
114   <link key='col/Vsup[vytyčit]' ref='vytyčit_V'>
        <map key='self' loc='#self' rem='PAT'/>
116     <f key='sem/aspect' value='inch'/>
        <f key='sem/caus' value='true'/>
118   </link>
      <link key='col/Vsup[vymezit]' ref='vymezit_V'>
120     <map key='self' loc='#self' rem='PAT'/>
        <f key='sem/aspect' value='inch'/>
122     <f key='sem/caus' value='true'/>
      </link>
124   <link key='col/Vsup[vytknout]' ref='vytknout_V'>
        <map key='self' loc='#self' rem='PAT'/>
126     <f key='sem/aspect' value='inch'/>
        <f key='sem/caus' value='true'/>
128   </link>
      <link key='col/Vsup[klást]' ref='klást_V'>
130     <map key='self' loc='#self' rem='PAT'/>
        <f key='sem/aspect' value='dur'/>
132   </link>
      <link key='col/Vsup[sledovat]' ref='sledovat_V'>
134     <map key='self' loc='#self' rem='PAT'/>
        <f key='sem/aspect' value='dur'/>
136   </link>
      <link key='col/Vsup[trefit]' ref='trefit_V'>
138     <map key='self' loc='#self' rem='PAT'/>
        <f key='sem/aspect' value='term'/>
140   </link>
      <link key='col/Vsup[minout]' ref='minout_V'>
142     <map key='self' loc='#self' rem='PAT'/>
        <f key='sem/aspect' value='term'/>
144   </link>
      <link key='col/Vsup[minout_se]' ref='minout_se_V'>
146     <map key='self' loc='#self' rem='PAT'/>
        <f key='sem/aspect' value='term'/>
148   </link>
      <link key='col/Vsup[zasáhnout]' ref='zasáhnout_V'>
150     <map key='self' loc='#self' rem='PAT'/>
        <f key='sem/aspect' value='term'/>
```

```
152       </link>
          <link key='col/Vsup[přestřelit]' ref='přestřelit_V'>
154         <map key='self' loc='#self' rem='PAT'/>
            <f key='sem/aspect' value='term'/>
156       </link>
          <link key='col/Vsup[dorazit]' ref='dorazit_V'>
158         <map key='self' loc='#self' rem='DIR3'/>
            <f key='sem/aspect' value='term'/>
160       </link>
          <link key='col/Vsup[dospět]' ref='dospět_V'>
162         <map key='self' loc='#self' rem='DIR3'/>
            <f key='sem/aspect' value='term'/>
164       </link>
          <link key='col/Vsup[dojít]' ref='dojít_V'>
166         <map key='self' loc='#self' rem='DIR3'/>
            <f key='sem/aspect' value='term'/>
168       </link>
          <link key='col/Vsup[dojet]' ref='dojet_V'>
170         <map key='self' loc='#self' rem='DIR3'/>
            <f key='sem/aspect' value='term'/>
172       </link>
          <link key='col/Vsup[doběhnout]' ref='doběhnout_V'>
174         <map key='self' loc='#self' rem='DIR3'/>
            <f key='sem/aspect' value='term'/>
176       </link>
          <link key='col/Aatr[hlavní]' ref='hlavní_A'/>
178       <link key='col/Aatr[konečný]' ref='konečný_A'/>
          <link key='col/Aatr[strategický]' ref='strategický_A'/>
180       <link key='col/Aatr[vzdělávací]' ref='vzdělávací_A'/>
          <link key='col/Aatr[dlouhodobý]' ref='dlouhodobý_A'/>
182       <link key='col/Aatr[stanovený]' ref='stanovený_A'/>
          <link key='col/Aatr[základní]' ref='základní_A'/>
184       <link key='col/Aatr[společný]' ref='společný_A'/>
          <link key='col/Aatr[konkrétní]' ref='konkrétní_A'/>
186       <link key='col/Aatr[jasný]' ref='jasný_A'/>
          <link key='col/Aatr[inflační]' ref='inflační_A'/>
188       <link key='col/Aatr[prioritní]' ref='prioritní_A'/>
          <link key='col/Aatr[kýžený]' ref='kýžený_A'/>
190       <link key='constr[bez_c]' ref='bez_cíle_MWE'/>
          <link key='constr[s_c]' ref='s_cílem_MWE'/>
192       <link key='constr[prosazovat_c]' ref='prosazovat_své_cíle_MWE'/>
          <link key='constr[stanovit_si_za_c]' ref='stanovit_si_za_cíl_MWE'/>
194       <link key='trans/no' ref='mål_N:endepunkt'/>
          <lunit name='abstraktní' type='sub-sense'>
196         <desc key='default'>GOAL.{smysl / závěr / účel} INSTR.{nějaké věci či činu} (zamýšlený ACT.{někým})</desc>
          </lunit>
198       <lunit name='konkrétní' type='sub-sense'>
            <desc key='default'>GOAL.{konečný bod} INSTR.{nějakého pohybu} (zamýšlený ACT.{někým})</desc>
200       </lunit>
        </lunit>
```