

Annotation

The presented thesis is focused on the Czech word order of contextually non-bound verbal modifications. It monitors whether there is a basic order in the contextually non-bound part of the sentence (significantly predominant in frequency) in the surface word order (cf. *narodit se v Brn v roce 1950* vs. *narodit se v roce 1950 v Brn*; literally *to be born in Brno in 1950* vs. *to be born in 1950 in Brno*). At the same time, we try to find out the factors influencing the word order (such as the form of modifications, their lexical expression or the effect of verbal valency). Finally, we briefly compare the word order tendencies in Czech and German. For the verification of the objectives, mainly the data from the *Prague Dependency Treebank* are used. The work is based on the theoretical principles of Functional Generative Description. Research results demonstrate that, at least in some cases, it is possible to detect certain general tendencies to use preferably one of two possible surface word order sequences in Czech.

Abstract

The aim of the doctoral thesis is to describe particular aspects of the Czech (and partly also German) word order in the sentences coming mainly from journalistic texts.

The first part examines the role of different types of verbal modifications in sentence information structure (known also as topic-focus articulation). On the basis of the percentage how often the sentence members appear in the data of the *Prague Dependency Treebank 2.0* as contextually bound and non-bound,¹ a scale of the contextual boundness was established (initially, only for non-clause verbal modifications). This scale implies that the free verbal modifications representing Criterion, Concession, Temporal (when), Exception, Temporal (temporal parallel, contemporaneous) and the participant Actor (which often takes the syntactic function of subject) are usually contextually bound. On the contrary, the free verbal modifications expressing Extent, Manner, Heritage, Result, Intent, Direction (which way) and

¹ The contextual boundness is assessed in accordance with its annotations in the *Prague Dependency Treebank*.

Aim are often contextually non-bound. The resulting scale is compared with a similar scale of topicality described by Ludmila Uhlířová (1974).

Subsequently, the scale of contextual boundness was established also for verbal modifications expressed as a clause. It turns out that a verbal modification in form of a clause provides the strong tendency to be a contextually non-bound sentence element in the sentence information structure, according to data of the *Prague Dependency Treebank*. In particular, the dependent clauses expressing Manner, Patient, Effect and Result are contextually non-bound in the vast majority of cases.

To some extent, these scales may reflect general trends in word order of a Czech sentence (if the word order of the sentence is objective, i.e. the topic part precedes the focus).

Further, the attention was concentrated on the contextually non-bound part of the sentence. We examined pairwise contextually non-bound verbal modifications from the *Prague Dependency Treebank 2.0* to see whether one of their possible word order arrangements has a significantly predominant frequency (whether it is more common to use such phrasing as *Narodil se v roce 1950 v Brně* or *Narodil se v Brně v roce 1950*; literally: *He was born in 1950 in Brno* or *He was born in Brno in 1950*). Again a distinction between verbal modifications expressed as a clause and as a non-clause was maintained.

The research results demonstrate that, in some cases, it is possible to observe particular tendencies to certain word order positions of contextually non-bound non-clausal verbal modifications (e.g. Extent – Patient; Manner – Patient; Temporal /when/ – Locative; Temporal /when/ – Patient; Addressee – Patient), at least in the data of the *Prague Dependency Treebank*. In other cases, however, certain pairs of verbal modifications do not seem to prefer any surface order (in terms of frequency), from the viewpoint of surface syntax (e.g. Patient / Complement; Patient / Means).

In terms of surface shape of the sentence, it is possible to find both word order positions (more or less represented in the corpus) for most pairs of contextually non-bound non-clausal verbal modifications. Each pair then exhibits only a certain tendency (of different strength) to a particular mutual position.

The results of this part of work are compared mainly with the systemic ordering as proposed in Sgall et al. (1980) with awareness of the fact that the systemic ordering has been determined for the deep word order, while the presented work concentrates on the surface word order.

For the contextually non-bound sentence members expressed as a dependent clause, the data from the *Prague Dependency Treebank 2.0* demonstrate that clauses (at least some

types of them) have a tendency to appear after the non-clausal modifications. This tendency corresponds to the already known word order phenomenon (the so called End Weight Principle) – longer sentence parts usually follow the shorter ones (cf. e.g. *Mluvnice češtiny 3* 1987, P. Sgall et al. 1980, Š. Zikánová 2006). According to our data, a similar tendency can be traced especially for contextually non-bound clauses in the role of Actor, Patient, Aim or Cause. However, this is not always the case. For example, contextually non-bound dependent clauses expressing Result or Condition can be found in both positions (before and after the non-clausal modifications) in significant proportions. Therefore, the form of a clause does not need to be a decisive factor influencing the resulting word order.

The next part of the work examines the influence of valency on the word order. For that purpose, we use the valency lexicon for Czech verbs – *Valenční slovník českých sloves* (2008) – and attempt to verify which verbal modifications can act as obligatory in the sentence (it means which of them must be present in the deep structure from the semantic point of view). The results were compared with the description of valency of sentence parts in German by W. Flämig (1991). It appears that non/possibilities to be an obligatory verbal modification in a sentence are very similar, almost the same in Czech and German.

On the basis of frequency of the free modifications in the valency frames of verbs in the role of an obligatory modification, we have established the following “scale of obligatoriness”²:

Direction (to where) – Direction (from where) – Locative – Manner – Direction (which way) – Extent – Temporal (from when / to when).

At the same time, it appears that one verbal valency frame may contain (at least according to *Valenční slovník českých sloves*) several obligatory participants (participants are understood in correspondence with Functional Generative Description, i.e. as Actor, Patient, Addressee, Effect and Origo), but not several obligatory free verbal modifications (as, for example, Temporal or Locative modification, modification of Manner, Concession, Cause etc.). The only exception are free modifications expressing Temporal “from when – to when” and Directional “from where – to where” which, however, may be understood as one complex Temporal or one complex Directional modification. This information could be another criterion for distinguishing between participants and free verbal modifications.

One aim of the work was to verify the verbal valency as a word order factor on the data of the *Prague Dependency Treebank 2.0* (PDT). The PDT data demonstrated, for example,

² The modifications that are obligatory most often are at the beginning of the scale; those being obligatory in minimum cases are at the end.

that a non-clausal contextually non-bound modification of Direction (to where) behaves similarly in both cases, i.e. whether it is obligatory or optional.³ In both cases, it has a tendency to appear after the other optional verbal modifications, i.e. rather toward the end of the sentence. A more detailed description of word order of other types of obligatory verbal modifications is given in the final section of the thesis. In some cases, the evaluation of the influence of valency on the word order was limited by a relatively low occurrence of obligatory modifications in the corpus. However, the gained data seem to demonstrate that verbal valency need not to be the strongest word order factor.

The last aim of the work was to examine several chosen types of verbal modifications (the Locative and Temporal modifications and the modification of Manner) expressed by pronominal adverbs (*někde, někdy, nějak* – *irgendwo, irgendwann, irgendwie*; in English *somewhere, sometimes, somehow*) in terms of their position in the sentence, in other words to observe whether some of their ordering is significantly predominant in frequency (the mentioned lemmas have been chosen due to the fact that the modifications expressed by them have a uniform form, length, very similar degree of lexical meaning and they are probably contextually non-bound in most cases). This aim was tested for both Czech and German – in the data of the Czech national corpus *Český národní korpus* for Czech and *Digitales Wörterbuch der deutschen Sprache* for German.

The probe demonstrated that both Czech and German allow using both ordering of the examined pairs of words. However, it seems that one of the orderings is preferred by some of the pairs. In both languages, it is probably more common to use e.g. the phrases with the order time – space, i.e. “někdy někde“ – “irgendwann irgendwo” (“sometimes somewhere”).

In conclusion, the work demonstrates that it is possible to observe some general word order tendencies in the Czech surface word order of journalistic texts, i.e. some contextually non-bound verbal modifications tend to a certain type of ordering,⁴ which may be used, for example, in automatic text processing.

³ Obligatoriness and optionality of modifications were evaluated according to the valency lexicon *PDT-Vallex*.

⁴ E. g. Locative – Patient; Patient – Accompaniment; Patient – Direction (to where); Addressee – Patient; Patient – Effect; Temporal (when) – Patient; Manner – Locative; Manner – Direction (to where); Temporal (when) – Locative; Temporal (how long) – Patient; Extent – Patient; Manner – Patient; Conditional clause – non-clausal modification; non-clausal modification – clause in role of Actor; non-clausal modification – clause in role of Patient; non-clausal modification – clause in role of Aim; non-clausal modification – causal clause; adjectival Patient – Actor in form of infinitive; nominal Actor – nominal Patient etc.