

Czech Temporal Adjuncts

(Hana Strachoňová, Masaryk University, Brno)

We present novel data and analysis concerning Czech temporal adjuncts. We focus on two types of the temporal adjuncts (TAs): *až do* + NP_GEN (*až do rána* ‘until morning’) and *nejméně* + NP_ACC (*nejméně hodinu* ‘at least one hour’). TAs can be combined with negated perfective predicates (2), while their use in sentences with perfective predicates lacking negation leads to ungrammaticality (1). From the semantic point of view there are two principal ways to explain the contrast: first type of explanation claims that TAs behave as negative polarity items (NPIs) and their ungrammaticality in sentences with un-negated perfective verbs stems from their NPI nature (see Bosković&Gajewski 2009). The second approach is based on aspectual properties of TAs and it explains the distribution of TAs in terms of their aspectual sensitivity (TAs occur only with homogeneous predicates); negation simply reverses entailments from supersets to subsets making TAs compatible even with perfective verbs (see Dočekal 2011). We chose the latter strategy due to the fact, that a lot of Czech data shows that TAs are perfectly acceptable with un-negated imperfective predicates (3) – fact that is hardly explainable in the NPI analysis. We gathered around 1500 Czech sentences containing TAs (data obtained from the corpus SYN2010 – the latest representative electronic corpus of contemporary Czech, a subcorpus of the Czech National Corpus – CNC) and classified them. Our intention was to find the accurate definition of the semantic context enabling the use of TAs. Our main claim is that the use of TAs is a subject to homogeneity requirement. Following Csirmaz (2006) and Dočekal&Kučerová (2009) a.o. we divide aspect into two types: the external one (grammatical) expressed in terms of perfectivity and the internal one (lexical) defined as difference between telicity and atelicity. The analysis of data showed that TAs can occur in the sentences with imperfective predicates as well as in sentences with perfective ones but the latter group is strictly limited to atelic predicates. Our conclusion is then that TAs are sensitive to the lexical aspect, particularly they require the lexical aspect of their sentence to be atelic. We follow von Stechow (2002) a.o. in defining atelicity in terms of homogeneity: only homogeneous predicates are atelic (P is homogeneous if it has the subinterval property: $P(t): \forall t' [t' \subset t \rightarrow P(t')]$). To investigate whether the homogeneity hypothesis is right, we made the corpus search mentioned earlier and categorized the sentences containing TAs into 4 groups: (a) sentences with simple atelic predicates (4), (b) sentences containing predicates carrying superlexical prefixes (5), (c) sentences with modal verbs located above the perfective verbs in the syntactic structure (6) and (d) sentences containing negated predicates (7) – the group (a) behaves according to the hypothesis, the group (d) behaves well also because negation reverses entailments for time intervals. The group (c): superlexical prefixes differ from lexical prefixes by not encoding resultativity (see Svenonius 2004), so even if the superlexically prefixed verb is perfective, it remains atelic. The group (c): modal verbs present very interesting case because only some types of modality (e.g. possibility as in (5)) allow TAs. We will show how this follows from the compositional nature of the lexical aspect. We conclude our corpus study by summary: the semantic criterion for the use of TAs is the homogeneity of the event, the homogeneity can arise either from the lexical semantic of the predicate (atelic verbs-imperfectives, simple atelic perfectives or superlexical prefix carrying verbs) or from the application of other operators on the syntactic structure (modal verb, negation).

- (1) *Petr dočetl knihu* *až do neděle / nejméně hodinu.
 Petr read: 3Sg Past **Perf** the book: AccSg until Sunday / at least one hour.
 ('Petr finished reading the book until Sunday / at least one hour.')
- (2) *Petr nedočetl knihu až do neděle / nejméně hodinu.*
 Petr **NEG** read: 3Sg Past **Perf** the book: AccSg until Sunday / at least one hour.
 'Petr didn't finish reading the book until Sunday / at least one hour.'
- (3) *Petr četl knihu až do neděle / nejméně hodinu.*
 Petr read: 3Sg Past **Impf** the book: AccSg until Sunday / at least one hour.
 'Petr has been reading the book until Sunday / at least one hour.'
- (4) *...nechám tu před branami až do poledne (...) skupinu vojáků.*
leave: 1SG Pres Perf here outside the gates until the noon a group of soldiers
 'I will leave a group of soldiers outside the gates until noon.'
- (5) *Povaříme [jídlo] nejméně hodinu.*
 cook: 1 Pl Pres **Perf** [the dish] for at least one hour.
 'We will continue to cook at least for an hour.'
- (6) *Výstavu (...) mohou zájemci navštívit až do konce října.*
 exhibition: AccSg can: 3Pl those interested: 1Pl visit: Inf **Perf** until the end of October.
 'Those interested can visit the exhibition until the end of October.'
- (7) *Jeho zbytky (...) nikdo nenajde nejméně dalších padesát tisíc let.*
 his:Acc remain: AccPl nobody NEG find: 3Sg Pres **Perf** at least next fifty thousands years
 'Nobody will find his remains at least next fifty thousands years.'

BOŠKOVIĆ, Željko & Jon Gajewski. 2009. *Semantic correlates of the NP/DP parameter*. In *Proceedings of NELS 39*.

CSIRMAZ, Aniko. Particles and a two-component theory of aspect. In K. É. Kiss (ed) *Event structure and the left periphery of Hungarian*. Dordrecht: Springer, 2006; s. 1-31.

DOČEKAL, Mojmir (2011): *Negation, Aspect and Time Conjunctions*. Formal Approaches to Slavic Languages 20, MIT, Cambridge, USA, 13.–15. 5. 2011

DOČEKAL, Mojmir & Ivona KUČEROVÁ. Bound Ability Readings of Imperfective Verbs: A case for Presupposition. In *Sborník z konference Czech in Formal Grammar*, 2009; s. 39-50.

KLEIN, Wolfgang. *Time in Language*. London and New York: ROUTLEDGE Taylor and Francis group, 2004.

von STECHOW, Arnim. 2002. German seit 'since' and the ambiguity of german perfect. In *More than words. A Festschrift für Dieter Wunderlich*, ed. Ingrid Kaufman & Barbara Stiebels, 393—432. Berlin: Akademie Verlag.

SVENONIUS, Peter. Slavic Prefixes and Morphology: An Introduction to the Nordlyd volume. In P. Svenonius (ed.) *Nordlyd 32.2, special issue on Slavic prefixes*. CASTL, Tromsø, 2004; s. 177–204.

Czech National Corpus - SYN2010. Ústav Českého národního korpusu FF UK, Praha 2010. Available from WWW: <<http://www.korpus.cz>>.