LUDMILA VESELOVSKÁ

THE EXTENDED VERBAL PROJECTION IN CZECH: Three Variants of the verb *be*[1]

1. The Structure of VP

In this paper I assume a minimalist structure of VP based on the analyses of Pollock (1989), Larson (1989), and Chomsky (1995), which divide the verbal projection into several separate heads. There are several reasons to accept this analytic verbal projection for Czech. First, the Czech verbal paradigm is comprised of several **analytic verbal forms** illustrated in the following examples (1) and (2). Notice the distribution of the verbal elements - it is not free and it is impossible to describe the acceptable/ unacceptable word orders without referring to each of the elements in some unique way.

(1) *Já **jsem / bych** včera **viděl** Marii.*
I am_{AUX} / $would_{AUX}$ yesterday saw Mary
'I saw / would see Mary yesterday.'

(2) (a) Ty **bys** určitě **býval** někoho **viděl**.
you $would_{AUX}$ certainly was_{AUX} somebody saw
'You would certainly have seen somebody.'

(b) *Ty **bys** určitě **býval** někoho **viděl**.*
you **$would_{AUX}$** certainly **be_{PATR}** somebody **saw_{PART}**
'You would certainly have seen somebody'

word order (i) ***Býval bys** asi **viděl** všechno.*
(ii) ***Viděl bys** asi **býval** všechno.*

The second reason for accepting an analytic structure for VP is the **distribution of the verb** with respect to other (adverbial / subject) constituents, as in (3).

(3) (a) S-Aux--ADV

***Emil** (??čitelně) **bude** (?čitelně) psát dopis (čitelně).*
Emil (??legibly) **$will_{AUX}$** (?legibly) **write** letter (legibly)
'Emil will write the letter legibly.'

(b) Aux-S, non-salient as declarative

***Bude Emil** psát dopis?(*.)*

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[1] *A preliminary version of this paper was read at the conference Čeština: Univerzália a specifika (Brno, October 2003) and will appear in Czech in the collection of papers of that conference.*

will$_{AUX}$ Emil write letter
'Will Emil write a letter?'

Other reasons for the proposed analytic verbal structure can be found in the rich verbal **morphology** (presuming some relation between morphology and structure) and in a theoretical framework which claims a parallel/ universal structure among lexical **categories** and their projections.

The structure of extended verbal projection used in this paper is schematically demonstrated in (4). It is comprised of four heads: two in the predicate (thematic) core of the verbal projection: V and (light) *v**, and two on the level (in the domain) of the finite/ clausal projection: T and C. Chomsky (1995) labels the heads V and T as "lexical" and the heads C and v* as "functional."

(4) The bare sentence structure with a transitive verb

$[_{CP}\ C\ [_{TP}\ \mathbf{T}\ [_{vP}\ v\ [_{VP}\ \mathbf{V}$ *C*-**T** ..... functional/clausal domain
v-**V** ..... predicate/thematic core

The heads of the verbal projection are related to the assignment of structural and lexical (Oblique) Cases according to (5) and (6). The Case reflects an agreement (Agree) between the verbal head carrying the feature <+D> and the nominal element in its domain.

(5) **Structural Case**

(a) NOM is the result of Agree between T_{fin} and +D (in the SPEC(v*))
(b) ACC is the result of Agree between *v** and +D (in the SPEC(V))

(6) **Lexical Case** is the result of Agree between a case assigning verbal head V and/ or P.

2. Distinctions between the positions in the functional vs. thematic domains

Looking at the properties of the Czech verb *be*, it is clear that they can be stated only with respect to each specific usage of this verb. [These different usages are important justifications for the categorical distinctions in (4). The most striking distinction can be found contrasting (a) the auxiliary forms of *be* used for the analytic past/ conditional and (b) its other forms (including future auxiliary, passive auxiliary, copula, and existential *be*). I now exemplify these in this section.[2]

The example (7) shows a distinct ability to reduce the 2sg auxiliary *"jsi"* to a bound morpheme *"-s"*. The example (7a) illustrates that the reduction is possible with

[2] *The following distinctions were noticed in the studies by Kopečný (1962) and Komárek (1978), and in a generative framework in Toman (1980), Veselovská (1995, Chapter 4), and Veselovská & Karlík (2004, Chapter 3).*

the past/ conditional auxiliary $AUX_{P/C}$, while (7b) shows it can't occur with the other forms of *be*, i.e. with the passive auxiliary, copula and existential *be*.[3]

(7) **Reduction**

(a) (i) *Proč **jsi** často chválil Petra?*
Why AUX_{2S} often praised $Peter_{ACC}$
'Why did you often praise Peter?'

(ii) Proč(**-s)** často(**-s)** chválil(**-s)** Petra?
Why-AUX_{2S} often-AUX_{2S} praised-AUX_{2S} $Peter_{ACC}$

(b) (i) *Proč **jsi** často chválen/unavený/studentem/doma?*
Why ACE_{2S} often praised/ tired/ student/ at home
'Why are you often praised/ tired/ a student/ at home?'

(ii) * *Proč(**-s)** často(**-s)** chválen(**-s)** /unavený/studentem/doma?*
Why-ACE_{2S} often-ACE_{2S} praised-ACE_{2S} / tired/ student/ at home

The example (8a) demonstrates that the Czech past AUX_{AGR} copula has a distribution of a C2 clitic (for more details see Franks & King (2000), Toman (2000)), while the other forms of the verb *be* exemplified in (8b) as ACE_{AGR} have the standard distribution of free morphemes in Czech, including initial and final positions.[4]

(8) **Distribution** (clitic) *Toman (1980, 2000), Franks & King (2000).*

(a) (i) C*hválil / unavil **jsem/bych** Petra*
Praised / Exhausted was/would(AUX_{1S}) $Peter_{ACC}$
'I (would) praise(d)/exhaust(ed) Peter.'

(ii) ****Jsem / *Bych** chválil / unavil Petra.*

(b) (i) *Chválen/Unavený/Studentem/Doma **jsem** stále.*
Praised /Tired /Student /At home ACE_{1S} allways
'I am always praised/ tired/a student/ at home.'

(ii) ***Jsem** stále chválen/unavený/studentem/doma.*
(iii) *Chválen/unavený/studentem/domastále **nejsem.***

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[3] *To simplify exposition, from now on the past and conditional auxiliaries are represented by the past auxiliary form only (labeled as AUX_{AGR}). The passive **A**uxiliary, **C**opula and **E**xistential* be *will usually be exemplified by the passive auxiliary only (labeled as ACE_{AGR}), which can be expected to be the element minimally distinct from the past auxiliary.*

[4] *The verb in final position usually requires some kind of stress which is most salient with negated verbs as in (8b/iii). The same stress is however excluded with AUX in (8a/ii).*

Another distinction between the two contrasted forms concerns negation. (9b) shows that when the verbal complex is negated, the passive auxiliary/ copula/ existential *be* (ACE) carries the negative prefix *ne-*. The contrasting (9a) shows that $AUX_{P/C}$ cannot carry the negative prefix *ne-* and that negation must appear with the participle.

(9) **Negation**

(a) *Já jsem* ***ne****-chválil*
I AUX_{1S} not-praised
'I did not praise.'

(a') **Já* ***ne****-jsem chválil*
*I not-AUX_{1S} praised

(b) *Já* ***ne****-jsem chválen/-unavený/-student/-doma.*
I not-ACE_{1S} praised /-tired /-a student /-at home
'I am not praised /-tired /-a student /-at home

The example in (10) demonstrates that in elliptic contexts the AUX in (a) is not able to represent the whole structure, though ACE in (b) can (in fact must) serve this purpose.

(10) **Ellipsis**

(a) *Chválil jsi Petra?* - **Ano, jsem. / Ano, chválil.*
Praised ACE_{2S} $Peter_{ACC}$? - *Yes, $ACE_{1S.}$ / Yes, $praised_{SM}$.
'Did you praise Peter? - Yes, I did.'

(b) *Jsi chválen často?* - *Ano, jsem. / *Ano, chválen.*
AUX_{2S} praised often? - Yes, AUX_{1S} / *Yes, $praised_{SM}$.
'Are you praised often? - Yes, I am.'

The following Table demonstrates some specific colloquial (regional) forms written in bold letters in (11). These forms are never used for AUX, while they are rather frequent as the ACE forms of *be*, especially in the Morava region.

(11) **Moravian dialectal forms of *být* ('be')**

Past AUX		**ACE: passive aux/copula/existential *be***	
(a)	*Já jsem/***(j)su* *chválil* I AUX_{1S} praised 'I praised'	(a')	*Já* *(j)su* *chválen / -zlý / -studentem / -doma* I ACE_{1S} praised /-nasty /-a student /-at home 'I am praised/nasty/a student/at home.'
(b)	*Ty-***s** *chválil* you+AUX_{2S} praised 'You praised'	(b')	**Ty-***s** *chválen/ -zlý / -studentem / -doma* *you+ ACE_{2S} praised/-nasty /-a student /-at home 'You are praised/nasty/a student/at home'
(c)	*Ty jsi/***seš* *chválil* you AUX_{2S} praised 'You praised'	(c')	*Ty* *seš* *chválen / -zlý/ -studentem / -doma* you ACE_{2S} praised /-nasty/-a student /-at home 'You are praised/nasty/a student/at home'

The Table (12) shows the distribution of the initial parenthetic *j-* in the paradigm of the verb *be*, which is distinct for the two contrasted forms. Notice, at the same time, the existence of the zero morpheme used for the AUX_{3sg} and not for the ACE_{3sg}.

(12) **Standard/primary *j-* and secondary/colloquial *(j-)* / Zero AUX_{3S}**

Past AUX: (j-), $\emptyset_3$		**ACE: passive aux/copula/existential: j-,** ***** $\emptyset_3$	
(a)	*Já **(j)sem** chválil.* I AUX_{1S} praised 'I praised.'	(a')	*Já **jsem** chválen.* I ACE_{1S} praised 'I am praised.'
(b)	*Ty **(j)si** chválil.* You AUX_{2S} praised 'You praised.'	(b')	*Ty **jsi** chválen.* You ACE_{2S} praised 'You are praised.'
(c)	*On ***je/Ø** chválil.* He AUX_{3S} praised 'He praised.'	(c')	*On **je/*Ø** chválen.* he ACE_{3S} praised 'He is praised.'

Apart from the zero morpheme illustrated in (12c), there exists also a kind of partial complementary distribution between the AUX_{1sg} and an overt pronominal subject. The left column in the table (13) demonstrates that with AUX_{1sg}, the verbal complex requires the presence of either overt AUX_{1sg} or a pronominal 1sg subject (or both). The same choice is not available for ACE, where the 1sg pronominal subject cannot license the absence of ACE_{1sg}. The relevant contrast is clear from (13c/c'), while (b) and (b') illustrate the standard dropping of a pronominal subject in Czech.

(13) **AUX / pronoun complementarity**

Past AUX		**ACE: passive aux/copula/existential *be***	
(a)	***Já jsem** chválil Petra* I AUX_{1S} praised $Peter_{ACC}$ 'I praised Peter.'	(a')	***Já jsem** chválen od Petra* I ACE_{1S} praised by Peter 'I am praised by Peter.'
(b)	*Chválil **jsem** Petra* praised AUX_{1S} $Peter_{ACC}$	(b')	*Chválen **jsem** od Petra* praised ACE_{1S} by Peter
(c)	***Já** chválil Petra* I praised $Peter_{ACC}$	(c')	***Já** chválen od Petra* *I praised by Peter

Another distinction between the two forms of the verb *be* concerns their paradigmatic richness. Table (14) demonstrates the paradigm of the past auxiliary, which is restricted to the unique (present) singular/ plural forms. The contrasting other kinds of *be* (ACE) can appear also in infinitive, imperative and periphrastic future forms.

(14) **Morphological Paradigms**

Past AUX	**ACE: passive aux/copula/existential *be***

IMP	(a)	**Chválil **bud'!*** *praised AUX_{IMP}	(a')	*Chválen **bud'!*** praised ACE_{IMP} 'Be praised!'
INF	(b)	**(Musel) **být** chválil.* *(had to)AUX_{INF} praised	(b')	*(Musel) **být** chválen/-zlý/-studentem* (had to) ACE_{INF} praised /-nasty /-a student 'He had to be praised/nastyz/student.'
FUT	(c)	**Já **budu** chválil.* *I AUX_{FUT} praised	(c')	*Já **budu** chválen/-zlý/-studentem.* I ACE_{FUT} praised /-nasty /-a student 'I will be praised /-tired /-a student.'

As for the category of aspect, the following example shows in (15b/ii) the possible presence of an aspectual suffix in ACE, which is not possible with AUX. In an analytic past the aspect can appear only on the verbal participle in (15a/i), but not on the AUX itself in (15a/ii).

(15) **Aspect (Iterative)**

(a) (i) *Já jsem chválil /chválí-**va**-l*
I ACE_{1S} praised /$praised_{PROG}$
'I praised / was repeatedly praising.'

(ii) **Já bý-**vá**-m chválil /chválí-**va**-l*
*I $ACE_{PROG/1S}$ praised / $praised_{PROG}$

(b) (i) *Já jsem chválen /chválí-**vá**-n*
I AUX_{1S} praised /$praised_{PROG}$
'I am praised (repeatedly).'

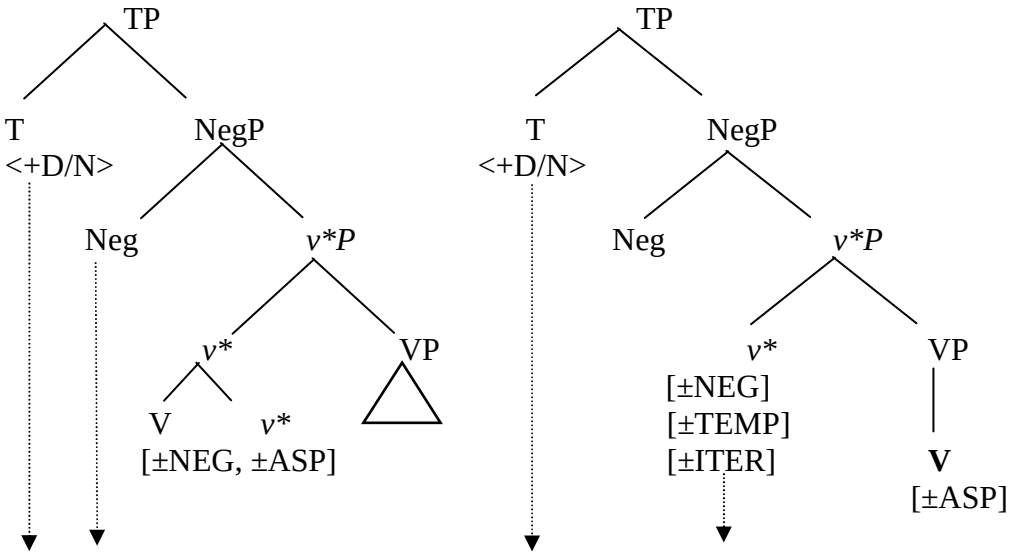
(ii) *Já bý-**vá**-m chválen /chválí-**vá**-n.*
I $AUX_{PROG/1S}$ praised / $praised_{PROG}$
'I am being praised (repeatedly).'

Referring to the distinctions exemplified in (7)-(15) Veselovská & Karlík (2004, Chapter 3) propose structures for the two forms of the verb *be* as schematically illustrated in (16). The trees show that we proposed to generate the past/conditional AUX in the clausal domain, as the head T (which in Czech at least, most likely correlates with clausal modality).[5]

(16) Veselovská & Karlík (2004)

(a) Past. AUX (b) Passive ACE

[5] *Though the head is labeled as T (Tense/Temporal) in (4) I do not assume that this is the position of the [+TENSE] feature in Czech. If Czech has such a feature at all, it is more likely located in the domain of v*/VP.*



jsem *(ne-) schválil*
AUX_{1sg} (not-) praised
'I (not) praised'

Já -- *(ne-)* ***jsem/su***
I (not-)ACE_{1sg}
'I am (not) praised'

chválena
praised

Assuming the distinct base positions for the AUX and ACE elements, the locations of the verbal features [±NEG/ASP/ITER] as proposed above can explain the distinctions discussed earlier in this section. The base positions also reflect the traditional categorial distinction between 'auxiliary' and 'lexical' verbs *be*.

3. Two Kinds of Copula *be*

Discussing the properties of the verb *be* in section 2, I was treating the forms of the passive auxiliary, copula, and existential *be* as the same (labelling them ACE), because when contrasted with the past/conditional auxiliary, they do behave in fully comparable fashion. In this section, however, I will demonstrate some distinctions among these elements. I am going to argue that all these distinctions can be best explained in light of the analytic verbal projections proposed in (4).

The distinctions I am going to show in this section will concern the copula *be*, which in Czech (as in many other Slavic languages) can be complemented by nominal predicates in the form of both nominative and instrumental. These options are illustrated in (17).

(17) *Petr je* ***student / studentem*** NP_{NOM} + be + NP_{NOM},/NP_{INSTR}
Peter is **student$_{NOM/INSTR}$**
'Peter is a student.'

I will propose that the distinctions between the structures *be* + NP_{NOM} and *be* + NP_{INSTR} are the result of (a) distinct structural positions of the verb *být* and (b) distinct characteristics of the nominal complex predicate.

The distinctions between the copulas *be* + NP_{NOM} and *be* + NP_{INSTR} are discussed in many studies in part because it is a phenomenon shared by many Slavbic languages. As for such authors working in a generative framework, see e.g. Franks (1995). The Russian example in (18a) is taken from the study by Ludmila Geist (1997), which I will refer to as (GR) in the following text. The (b) Polish example is from Adger and Ramchand (2001).

(18) (a) Rus. *Sergej byl* ***žurnalistom***$_{ISTR}$
Sergej byl ***žurnalist***$_{NOM}$
'Sergej was journalist'

(b) Pol. *Ewa jest* ***studentką***$_{ISTR}$
Ewa jest ***studentka***$_{NOM}$
'Eve is student.'

The above mentioned authors look for distinctions between the *be* + NP_{NOM} (be_{NOM}) and *be* + NP_{INSTR} (be_{NOM}) structures, and in the following paragraphs I will apply some of their criteria and observations to Czech data. [6]

The example (19) demonstrates a distinct ability of the copulas to be located in the Focus position in the sentence. According to GR (=Geist, 1997, for Russian) the copula be_{NOM} in (a) cannot be focused, while the copula be_{INSTR} in (b) is able to carry the main stress. The Czech equivalents of the GR examples show, however, that the same does not apply in Czech. The informants accept both possibilities.[7]

(19) **Focalisation** A: *Karel asi není učitel.*
Karel perhaps isn't a teacher

(a) B: GR*/C? *Ale ne, Karel učitel* ***je***.
Oh no, Karel teacher$_{NOM}$ **is.**
'Oh no, Charles **IS** a teacher.'

(b) B: GR OK/ C? *Ale ne, Karel učitelem* ***je***.
Oh no, Karel teacher$_{INSTR}$ **is.**

The example in (20) illustrates the ability of the two copulas to express some aspectual features, namely an interpretation as a process and repetitive action. It seems that (a) be_{NOM} has a restricted ability to refer to a process or repetitions when compared with

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[6] *I have checked the acceptability of the Czech examples with about 100 non-linguistic university students. Their evaluation was never unambiguous. In the examples below ? signals a dismissal in a substantial number, though not a majority, of cases.*

[7] *The marking (*GR) in this and the following examples means that the given structure is according to Geist (1997) unacceptable in Russian. The (?C) indicates a Czech acceptability evaluation. The Czech evaluations were clearly influenced by the fact that the* NP_{INSTR} *form was by all (mostly young) informants perceived as archaic and hyper-correct, and this resulted in their labelling it as ?.*

(b) b_{INSTR}, which permits this usage. A similar conclusion is also suggested by the contrast in (21), which illustrates a compatibility of the two copulas with phrasal verbs, which additionally in Czech do not tolerate perfective verbal complements. The evaluations in (20] and (21] are again stronger for Russian.

(20) **Only BE$_{INSTR}$ is "Countable":**

*Karel byl **dvakrát/každý den** učitelem / (GR*/C?) učitel*
Karel was **twice/every day** teacher$_{INSTR}$ / (GR*/C?) teacher$_{NOM}$/
'Karel was a teacher twice/every day.'

(21) **Only BE$_{INSTR}$ can follow an aspectual V:**

*Karel **přestal** být učitelem / (GR*/C?) učitel*
Karel **stopped** be teacher$_{INSTR}$ / (GR*/C?) teacher$_{NOM}$
'Karel stopped being a teacher.'

The contrast in process versus stative readings correlates with the ability of the copulas to be related with a locational adverbial. The following example (22) demonstrates that a PP of location in (a), i.e. with be_{NOM}, cannot be interpreted as an adverbial related to the copula but only as a PP attribute. The adverbial interpretation is, however, possible with the be_{INSTR} in (22b). These interpretations are signalled by the position of the PP—the post-verbal position is the position of a PP attribute, while the preverbal position of the PP tends to be interpreted as adverbial.

(22) **Only BE$_{INSTR}$ can modified by Locality:**

(a) *Karel byl (GR*/C?**v Berlíně**) učitel (**v Berlíně**)*
Karel was (GR*/C? in Berlin) teacher$_{NOM}$ (in Berlin).
'Karel was a teacher in Berlin.'

(b) *Karel byl (**v Berlíně**) učitelem (GR*/C? **v Berlíně**)*
Karel was (in Berlin) teacher$_{INSTR}$ (GR*/C? in Berlin)
'Karel was a teacher (while) in Berlin.'

On the other hand, we obtain a clearer evaluation for the Czech data in examples like those in (23). As mentioned already in traditional descriptive grammars of Czech, the be_{INSTR} is a preferred form in cases when the copula has a participial form. Though these be_{INST} structures are generally perceived as archaic, the contrasting be_{NOM} forms were rejected by most of the informants.

(23) **Participial BE$_{INSTR}$**

(a) ***Jsa** učitelem připojil se Karel ke stávce.*
Being teacher$_{INSTR}$ joined REFL Karel to strike
'Being a teacher, Karel joined the strike.'

(b) **Jsa učitel připojil se Karel ke stávce.*

*Being teacher$_{NOM}$ joined REFL Karel to strike

Surprisingly strong evaluations were also obtained for the examples in (24), which are not illustrated for Russian in Geist (1997) but which are mentioned in Vladimír Šmilauer (1966). Most Czech informants preferred the *be$_{INSTR}$* when the copula has an infinitive form.

(24) **Infinitive BE$_{INSTR}$** (a) ? *Chtěl* ***být*** *hrdina.*
? wanted to-be hero$_{NOM}$
'He wanted to be a hero.'

(b) Chtěl **být** hrdinou.
wanted to-be hero$_{INSTR}$

Even stronger were the preferences in (25), where the subject is expressed by a relative pronoun. As mentioned in Šmilauer (1966), the fully grammatical form with *be$_{INSTR}$* contrasts strongly with the low level of acceptability of *be$_{NOM}$* in (25a).

(25) ...**WH$_{SUBJ}$ + be$_{INSTR}$**

(a) ***** *výstřel,* ***který/jež*** *byl signál útoku*
* shot which$_{NOM}$ was signal$_{NOM}$ attack
'The shot which was the signal for the attack.'

(a) *výstřel,* ***který/jež*** *byl signálem útoku*
shot which$_{NOM}$ was signal$_{INSTR}$ attack
'The shot which was the signal for the attack.'

Both Geist (1997) and Adger & Ramchand (2001) discuss in detail the semantic characteristics of the two copulas. Their claims are summarised in (26).[8]

(26) **Semantics :** Geist (1997), Adger & Ramchand (2001)

be$_{INSTR}$ → **S-predicate (stage level predicate)**: assertion of an event of a certain type
be$_{NOM}$ → **I-predicate (individual level pr.)**: atomic property predicated of individual

Based on the above semantic distinction, the authors propose that the two copulas, though phonetically identical, represent two lexical entries and Geist (1997) moreover proposes to generate them in two distinct structures. According to her analysis, the **copula *be$_{NOM}$*** occurs in a simple structure containing three verbal heads: T, Neg, Pr(edicate)1; *be$_{NOM}$* is generated in T and Pr1 contains an empty category *e* (a small clause structure). The **copula *be$_{INSTR}$*** has a more complex structure containing as many as six verbal heads: T, Neg, Pr(edicate)1, Asp, V a Pr(redicate)2. *Be$_{INSTR}$* is generated

[8] *As for the terminology used here, I refer to the studies cited above.*

in the position of V (and then raises to Pr1), and the empty category *e* (a small clause head) occurs in the secondary predicate head Pr2.

4. Complex Transitive Predicate

I will not discuss in more detail the analysis proposed in Geist (1997), which is based on the structures already proposed in Franks (1995). The point important for the discussion in this paper is her position for ***be***$_{NOM}$ in the clausal domain, namely in the head T. Recall that in (16) I claimed that T is the position where the Czech past/conditional AUXs are base generated. The verbal projection of the form (4) does not contain any higher functional head above T with the exception of C. Though C can well be the surface position of the Czech C2 clitics, the agreement shown by the Czech AUXs signals that they must be generated lower than C. Thus, to simply accept the proposal of Geist (1997) for Czech would not allow me to explain the robust distinctions between past/ conditional AUX and (both) copulas as demonstrated in (7)-(15).

To support my analysis for Czech in (16), and not to reject a plausible analysis by Geist (1997), I want to point out some distinctions between Czech and Russian. One of them is the position of the negative prefix. Recall that in (9) I demonstrated that of the AUX_{AGR} cannot carry the negative prefix *ne-*, which must appear rather on the following participle. The same fact is illustrated again in (27a), which also shows that the case marking of the nominal predicate has no influence on the position of the negative prefix. The free negative particle can (marginally) appear in front of the nominal predicate, resulting in a partial (constituent) negation illustrated in (27b).

(27) (a) *Karel* ***nebyl*** *učitel/-em, ale školník/-em*
Karel not-was teacher$_{NOM/INSTR}$ but schoolkeeper$_{NOM/INSTR}$
'Karel wasn't a teacher but a schoolkeeper.'

(b) *Karel byl* ***ne*** *učitel/-em, ale školník/-em*
Karel was not teacher$_{NOM/INSTR}$ but schoolkeeper$_{NOM/INSTR}$
'Karel was not a teacher but a schoolkeeper.'

The example (27) shows that the position of the negative element in Czech is distinct from that of the negative element in Russian, as exemplified in Geist (1997). The Russian *be*$_{NOM}$ copula in (28a) shows in fact the properties of the Czech AUX demonstrated in (27a) in that it cannot carry the negative prefix. In Russian the negative prefix can be attached to the *be*$_{INSTR}$ only, as illustrated in (28b).

(28) (GR) (a) *Sergej* ***(*ne) byl (ne)*** *žurnalist a fotograf.*
Sergej **(*not) was** (not) journalist$_{NOM}$ but photographer$_{NOM}$
'Sergey was a journalist, not a photographer.'

(b) *Sergej* ***(ne) byl (ne)*** *žurnalistom a fotografom*
Sergej (not) was (not) journalist$_{ISTR}$ but photographer$_{ISTR}$

Another example which treats the Czech AUX and the Russian *be*$_{NOM}$ copula alike concerns the presence of the zero morpheme. The example in (29) shows that the

Russian be_{NOM}. has a zero morpheme for all persons in present tense, while the contrasting Russian be_{INSTR} must be overt in the presence of an overt subject.

(29) **θ morpheme** (GR) *Sergej žurnalist / *žurnalistom*
Sergej journalist$_{NOM/*INSTR}$
'Sergey is a journalist.'

As demonstrated above in (12), in Czech a zero morpheme (with the features 3sg) appears with the past AUX *be* but never with any of the other copulas. The example (12) also demonstrates Czech structures similar to the Russian ones, namely it shows the complementarity of an overt 1sg subject pronoun with AUX_{1sg}. And again, nothing like this is possible with Czech copulas, regardless of the case marking of the following predicate.

The similarity between one of the Czech auxiliaries and one of the Russian copulas brings to our attention an interesting fact. Though the above cited authors discuss in detail semantic distinctions between the two Russian copulas and relate other (formal) properties to a deep semantic difference, the comparison with the Czech data does not seem to support such a semantic basis. There is no reason to claim any semantic similarity between the Czech past AUX and the Russian be_{NOM} copula in spite of the fact that they share many formal characteristics. On the other hand, the Czech and Russian be_{NOM} copulas are close semantic equivalents, though they do *not* share crucial formal properties. This observation seems to support the hypothesis proposed in the study by Jamal Ouhalla (1991). This author claims that the core of the typological distinctions between languages is the repertory and exclusive properties of the functional elements in a given language (including the feature content of these language specific functional categories).[9]

Referring to Ouhalla's hypothesis I therefore keep the analysis of the Russian copula to Geist (1997), while for Czech I propose to generate both the copulas with predicate nominals in the thematic domain of the sentence. According to (4) this domain is comprised of two heads: *v** and V and thus allows us to express the distinction between the copulas in the terms of their structural positions. The structure proposed is given below in (30). In (30a) the verbal head be_{INSTR} assigns Oblique Instrumental Case

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[9] *We can see an example of the same phenomenon in Spanish, which encodes the semantic distinction between the Slavic predicate nouns in two phonetically distinct grammatical verbs. The two Czech/ Russian copulas are close semantic equivalents of the Spanish verbs* 'ser/ estar' *with adjectival/nominal predicates. The distinction is illustrated below in (a/b).*

(a) Soy 0/un/*el loco.
*I-am a/*the crazy ('I am crazy': permanent property)*

(b) Estoy 0/?un/*el loco.
*I-am ?a/*the crazy ('I am crazy': temporary behaviour)*

to the nominal predicate according to (6). In (30b) the be_{NOM} is a head light verb *v** and the nominal predicate enters an Agree relation (via the *v**) with the subject in SPEC(*v**).[10]

The dotted arrows show the further movement of the verbal heads to the higher heads, which presumably takes place during the process of derivation towards LF.

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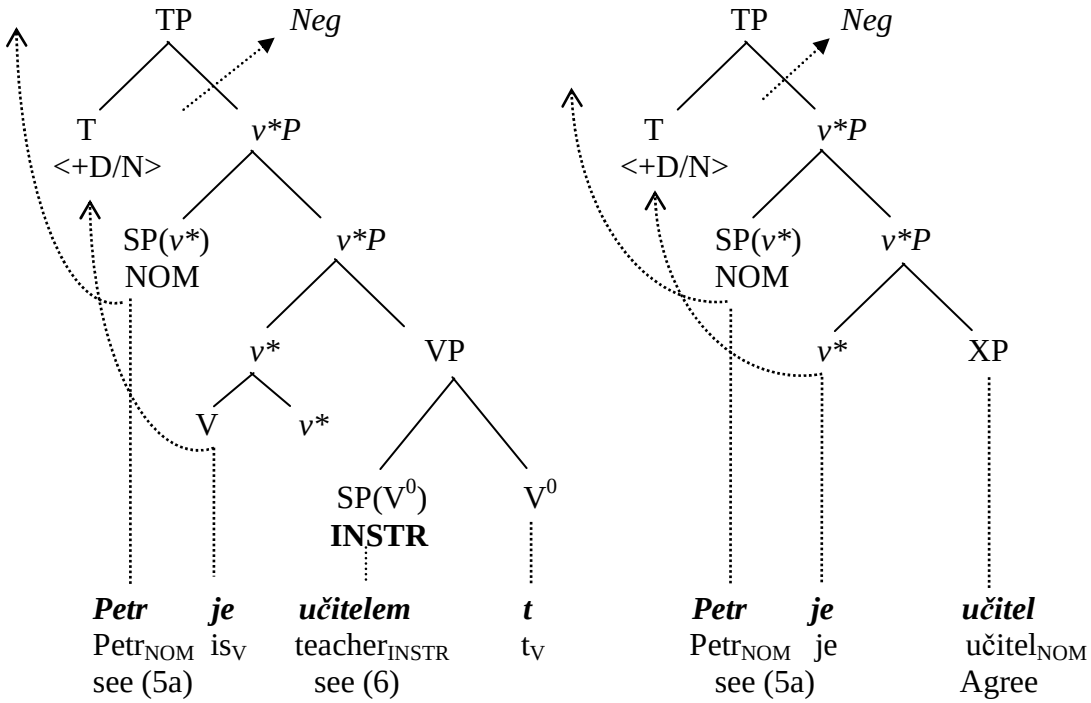
(30) (a) Case assigning **lexical V** (b) Projection of the **light verb *v****



Notice that the surface realisations of (30a) and (30b) above are identical. A speaker must have a reason to build the more complex structure (30a) in some cases. I propose that the reason for the apparently uneconomical structure with a lexical V is related to the semantic specificity of be_{INSTR}. The position of be_{INSTR} in the lexical head V allows its specific interpretation (indicating a non-permanent, unstable property; see Šmilauer, 1966). As a lexical head this copula must be present in a primary Numeration and according to (6) is able to assign an Oblique Case to its SPEC. Its presence in the primary Numeration is at the same time a plausible reason why the copula be_{INSTR} can

[10] *In Veselovská & Karlík (2004) we also propose the same analysis (i.e. a base position in* v**) for the auxiliary* be *used in the Czech periphrastic passive. The similarity is supported by the same behaviour of the copula(s) and the passive AUX with respect to the criteria illustrated in (7)-(15).*

carry the feature of Focus and can express Aspect (see (19)/(20)/(21)). Moreover, the double projection of *v**-V also provides a position for the VP adverbial in (22).

On the other hand, the Czech data suggest that the 'verbal' interpretation of the be_{INSTR} is not vital for most speakers, and that the complex structure (30a) is in modern Czech being replaced by the more economical (30b). The fact that in spite of the economy factor, there are still some structures with a prevailing usage of the complex (30a) suggests that the reasons for its usage need not be solely semantic. The more complex structure seems to also be required for the realisation of participle and infinitive forms, as demonstrated in (23)-(24).[11]

The structure (30b) with be_{NOM} generated in the position of the light verb *v** results in an interpretation of the predicate nominal as a stable, permanent, inherent property or listing in a larger group of elements (see Šmilauer, 1966). This copula is a grammatical element with no idiosyncratic semantic features. This copula cannot assign any Case, but its absence in a primary Numeration allows an Agree relation between SPEC(V) and SPEC(*v**).[12]

In the following Chapter I am going to discuss in more detail the concept of agreement which licenses the structure of the Czech be_{NOM} copula, as schematically represented in (30b) above.

5. AGREE

The concept of Agree is of growing importance in the most recent Minimalist framework. It is departing from its original/ traditional purely morphological interpretation and becoming a term expressing a structural relation (with a possible but not necessary morphological reflection). Without further discussion I will assume the concept of Agree as introduced in Chomsky (1999) and applied and justified in Adger & Ramchand (2001). According to this notion of Agree, the structure in (30a) with the copula be_{INSTR} can be schematically represented as (31).

When the verbal head V enters the derivation (on the right of the scheme), it becomes a Probe for its feature content (in the scheme (31) in the right dotted frame) and enters in the relation Agree with the merged nominal complex *učitel* 'teacher'. As a result of this relation the nominal complex receives Instrumental. We assume that this

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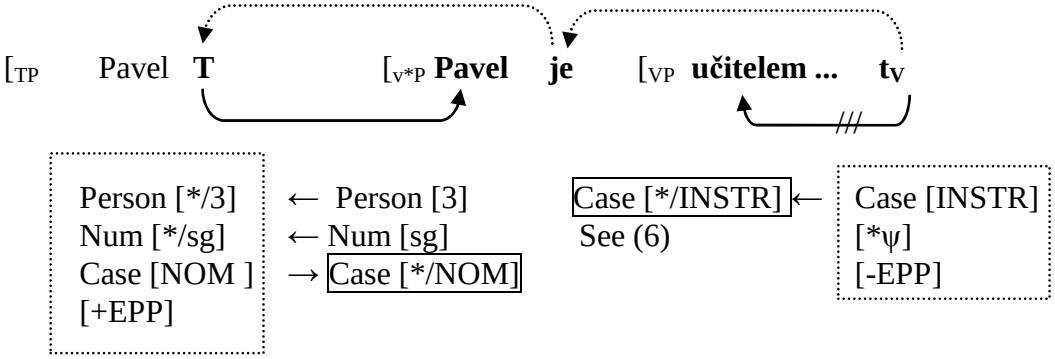
[11] *I have no principled explanation at the moment for the strong preference of the* be_{INSTR} *copula in relative clauses, as in (25). This may be related to the ability/ inability of the nominal predicate to agree with the subject expressed by the relative pronoun.*

[12] *Using the concept of tripartite levels of insertion of grammatical morphemes as in Emonds (2000), I assume that some kinds of grammatical elements are not part of the primary Numeration though their presence is required (and their features checked) during the process of derivation. If the needed grammatical elements contribute to interpretation, they are inserted during the syntactic derivation, and if not, then at PF.*

Case assignment disallows further Agree with the referential/ nominal features of *učitel* 'teacher' and the features [*ψ] of the head V thus remains unvalued.[13]

(31) ***Pavel je učitelem.***
Paul$_{NOM}$ is teacher$_{INSTR}$



The upper dotted arrows show the head movement of the copula to the higher functional projections. When the new head T merges into the structure as a Probe with the feature content listed in the left dotted frame in (31), the copula raises to T and as the head T enters the Agree relation with the merged nominal complex *Pavel*. This Agree results in the Nominative on the latter and at the same time in the setting of the features of Person and Number, which in Czech is a choice within the paradigm of the finite verb.[14]

The following examples in (32) show that in the structures with *be$_{INSTR}$*, the copula always agrees with the feature content (Number and Gender) of the nominative subject.

(32) (a) ***Marie byla /*byl učitelem*** *na učilišti několik let.*
Mary$_{FS.NOM}$ was$_{FS}$ / *was$_{MS}$ teacher$_{MS.INSTR}$ on apprentice several years.
'Mary was an apprentice school teacher for several years,'

(b) ***Ty knihy jsou /*je výsměchem*** *dobrého vkusu.*
The books$_{FP.NOM}$ are$_{P}$ / *is$_{S}$ offence$_{S.INSTR}$ of a good taste
'The books offend good taste.'

On the other hand, (33) demonstrates that contrary to *be$_{INSTR,}$* the *be$_{NOM}$* copula can agree with the nominal predicate as well. As for Number features, (33a/b) show that *be$_{NOM}$* must agree with either the NOM subject or the NOM predicate depending on their feature content: the one that has a more marked feature content (i.e. is a Plural) determines the agrement.

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[13] *For the explanation of the blocking effect of a lexical / Oblique Case see Chomsky (1999) and Adger & Ramchand (2001).*

[14] *For some more details concerning subject--verb agreement in Czech analytic verbal forms, see also Veselovská 2002.*

(33) (a) ***Ty knihy jsou / *je vyložený brak.***
the books$_P$ are / *is a real trash$_S$.
'The books are real trash'

(b) ***Čas jsou /*je peníze***.
Time$_S$ *is /are money$_P$
'Time is money'

The following example (34) shows another specific property of the relation between the agreement and feature content of the subject/ predicate couple. First, if the predicate is expressed by a pronoun, it cannot be related to *be$_{INSTR}$* (i.e. the predicate must rather be a NOM) as in (34a) and, second, the *be$_{NOM}$* copula must agree with the pronoun no matter whether it is subject or predicate as in (34b).[15]

(34) (a) *To strašidlo jsem **já / *mnou***
the monster am I$_{NOM/*INSTR}$
'The monster is me.'

(b) (i) *To/Pavel ***je / jsem** já.*
it/Pavel *is / am I$_{NOM}$
'This/Paul is me.'

(ii) *Já **jsem /*je** Pavel.*
I am /*is Pavel$_{NOM}$
'I am Paul."

My analysis of the agreement relation with the *be$_{NOM}$* copula is based on the hypothesis that the predicate is a less complex nominal structure than a subject/ object DP. In his detailed study of nominal projection Zamparelli (2000) introduces several functional heads dominating the lexical projection of N when the latter serves as an argument. He labels them Strong Determiner, Predicate Determiner, Numeral, Kind Determiner, Numeral, etc. A nominal predicate can plausibly lack some of the high functional projections. Adger & Ramchand (2001) use more abstract terms and divide the nominal projections into those which can satisfy the referential feature [δ] of the verbal Probe (a

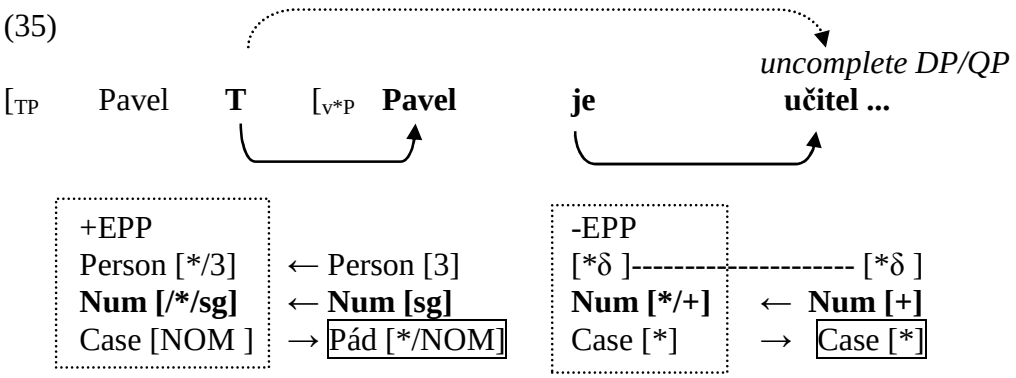
[15] *Copular structures with both subject and predicate pronouns are not common. In those which sound pragmatically acceptable it seems that the first (=subject?) pronoun is preferred for agreement. I leave such structures for some future research.*

(i) On je/*jsem já a já jsem/*je on.
*He is/*am I and I am /*is he..*

close equivalent to the feature <+D>) and those, which can satisfy the feature [ψ] (an equivalent of the Phi features of <+N>).[16]

Assuming such a structural deficiency of a NOM predicate, the structures with *be*$_{NOM}$ can be analysed as proposed in (35). The light verb *v** head enters the derivation (on the right on the scheme) with its feature content (in the right dotted frame) and becomes a Probe. Its features are set in the relation Agree with the nominal complex *učitel* 'teacher' merged with *v**, which, however, is deficient. Consequently the referential [δ] feature of the Probe remains unvalued and Case remains unassigned. On the other hand, because Case does not block the feature sharing between the copula and the Goal, the nominal [ψ] features of copula-Probe can be set if the Goal *učitel* 'teacher' has some marked [ψ] features (i.e. Plural or Person features).

(35)



In the next phase of the derivation, after the copula substitutes for the new head T, it becomes a Probe with the feature content listed in the left dotted frame in (35). As the head T it enters the Agree relation with the merged nominal complex *Pavel* in SPEC(v*), which is a full DP. Because the Agree relation satisfies the referential [δ] feature of the Probe, this Agree results in the Nominative marking of the subject. It also results in the setting of the [*ψ] features of Person/ Number on the copula in case they had not been set in the previous phase. The copula in (35) enters the Agree relation with both the nominal predicate and the subject. I therefore conclude that the NOM Case is transferred to the predicate via the copula.

This multi-level setting of the Probe feature content seems to be supported by structures with the expletive subject *to* ('it$_{3SN}$'), which never allow *be*$_{INSTR}$ as demonstrated in (34a/b), with the copula agreement always reflecting the nominal predicate features. These structures prove that the lower domain in v*-V remains open for feature setting if the referential feature [*δ] is valued by an expletive lacking Phi [ψ] features.

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[16] *For Czech nominal structures see similar discussions in e.g. Veselovská (2001, 2002). For present purposes it is important that Czech nominal complexes show clear signs of being composed of several projections, even though the feature content of these separate functional heads is clearly not fully comparable to e.g. the English system.*

6. Conclusion

In this paper I wished to illustrate and account for a number of distinctions between three kinds of the Czech verb *be*. First I contrasted the properties typical of the past/ conditional AUX (clitic) with those of the other auxiliaries, the copulas and existential *be*. I concluded that the whole range of contrasts can be explained by referring to the distinct positions where the forms of the verb *be* are generated. I proposed that the past/ conditional AUX (clitic) is generated in the clausal domain, in the head T, while the other forms of the verb *be* are generated lower, in the thematic domain v*-V.

In the second part of the paper I compared some semantic and formal properties of two Czech copulas: the be_{NOM} copula which is followed by a nominal predicate in the Nominative Case and a phonetically identical be_{INSTR} copula whose nominal predicate in the Instrumental Case. Comparing the Czech structures with some Russian data I proposed that the distinctions between the copulas can also be expressed in structural terms, namely as the distinction between the positions in V and in v*.

The following (36) summarises the proposed analysis of the three kinds of the Czech verb *be,* with a brief list of the characteristics discussed in the sections 2 and 3-4.

(36) **(a) be_{INSTR} copula : V, [D_{INSTR}]**

(i) temporary /limited interpretation, non-substantive property (Šmilauer, 1966)
(ii) present in the primary Numeration: → assigns INSTR,
→ can be focused,
→ has Aspect,
→ can host a VP adjunct
(iii) has a full verbal paradigm, including participle and infinitive forms,
(iv) is being replaced by be_{NOM} in current speech.

(b) be_{NOM} copula : *v

(i) permanent, substantive property, situating within a set (Šmilauer, 1966)
(ii) grammatical element with conceptual features only (no theta role)
(iii) not present in the primary Numeration
(iv) the structure allows/ requires Agree to license a predicate

(c) $be_{PRET/COND}$ AUX : T

(i) grammatical element with no interpretive LF features of its own
(ii) post-syntactic/PF insertion as a 'flection'

In section 5, I demonstrated the process of the Agree relation applying in copular structures. I showed that the be_{INSTR} copula acts as a verbal head assigning a lexical Case, while the be_{NOM} copula relates structures whose predicates have deficient feature content. The lack of a referential feature [*δ] on the predicate nominal results in the multilevel setting of the features of the Probe which enters several Agree relations with several Goals. This process is summarised below in (37)

(37) **Multi-level Agree**

(a) (Local) Agree inside v*P: Probe v*, Goal: [ψ] of the predicate nominal

(b) (Local) Agree inside TP: Probe T, Goal DP [+δ] in SPEC(v*) → [NOM]

If the FF of T remains still incomplete (the Goal is an expletive)

(c) (Non-local) Agree: probe T, goal: closest [ψ]
i.e. v*/predicate NP (the domain is still open)

Many problems and data remained unexplained, e.g. a more principled formal motivation for the position of the elements in the structure, some obligatory paradigms, or copular structures with expletives and many others. The discussion nonetheless clearly shows that a range of detailed Czech data provides highly promising material for analysis in a developed theoretical framework and thus deserves to be carefully investigated in future research.

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Ludmila Veselovská
Katedra anglistiky a amerikanistiky
Filozofická fakulta UP
Křížkovského 10
771 80 Olomouc

lidave@aix.upol.cz