ANALYTIC PASSIVES IN CZECH

Ludmila Veselovská & Petr Karlík

INTRODUCTION: DEFINING THE PROBLEM

Like other languages, Czech also has pairs of sentences clearly related both in their form and in their meaning. The example (1) illustrates the phenomena of passivisation which is the topic of our paper. According to the traditional terminology (1a) demonstrates an **active** structure and (1b) the related **passive** structure.

(1)	(a)	*Petr chválí Pavla* ⇒	(b)	*Pavel je chválen Petrem*
		Peter praises Paul ⇒		Paul is praised by Peter

The semantic relation between (1a) and (1b) can be stated as an intuition that both examples describe the same extralinguistic situation and have 'similar truth values" (each implies the other). The formal similarity between (1a) and (1b) follows from the fact that both examples contain close to identical lexical material. The distinctions between (1a) and (1b) can be summarised as follows.

(2) (a) **Morphology**:

(i) the constituent which is in Nominative in (1a) is in Instrumental in (1b),
(ii) the constituent which is in Accusative in (1a) is in Nominative in (1b),
(iii) the verb which is finite in (1a) is non-finite in (1b);

(b) **Lexical material**: (1b) contains an additional lexical item, namely a finite form of a verb být (*'be')*, which is not present in (1a);

(c) **Change in neutral (unmarked) linear order**: the constituent which is preverbal in (1a) is postverbal in (1b), and the constituent which is postverbal in (1a) is preverbal in (1b).

Because of time and space reasons we are not going to refer to all works which have dealt with the process of passivisation. The analysis of passive structures is a necessary part of any scientific linguistic framework and it often represents a hallmark for general theoretical concepts and overall methodology. Thus Czech linguistics in the second half of the 20th century approaches the topic accentuating the functional aspects of the passive.[1]

[1] *In more contemporary frameworks, studies by Ivan Poldauf (1940, 1969) give a representative Prague School structuralist approach and a detail comparison of Czech and English passive structures. A related functional generative linguists (*Encyklopedický slovník češtiny, *2002: 146) analyse Czech passive in terms of the functional sentence perspective, e.g. as a means of de-thematisation / de-topicalisation of the agent and/or thematisation of the patient (see e.g. Petr Sgall, 1972). On the other hand, the proponents of the multilevel valency theory (see e.g.* Encyklopedický slovník češtiny, *2002: 118) refer*
(see the next page)

Present transformational generative grammar of a Chomskian type concentrates on formal properties and characteristics of passive structures which have not yet been in the centre of attention of Czech linguistics. In the following paper we are going to discuss the formal properties of the Czech analytic passive structures in (1b) using the contemporary stage of development of the Chomskyan framework. Our analysis of passives is thus also meant to show that even languages with rich inflection and relatively free constituent order, like Czech, can successfully be described in terms of generative grammar, and that such an analysis can contribute to the development of the general linguistic theory as well.

1 THE DESCRIPTION OF THE PASSIVE STRUCTURES

1.1 Passive transformation

The traditional analysis (based on the intuitive classical theories) describes the distinctions summarised in (2) as the surface distinction in syntactic structure caused by the change of the verbal element in (1a/b). In this sense classical grammar perceives the formal distinctions between (1a) and (1b) as a kind of transformation, though it does not use the terminology.[2] The following (3) gives a schematic description of such a transformation starting as a structure (1a) and resulting in (1b).[3]

(3) **Transformation T_1**

(a) $[NP^1]_{NOM} - [V^1_{lex}]_{fin} - [NP^2]_{ACC} \Rightarrow$ **(b)**
(b) $[NP^2]_{NOM} - [V^2_{\textit{be}}]_{fin} - [V^1_{lex}]_{part} - [NP^1]_{INSTR}$

The description of T_1 in (3) is obviously neither precise nor full formalisation of all possible structures; e.g. it does not cover the cases in which the active variant contains a subordinate clause in the position of the ACC constituent. Because clauses are not morphologically case marked, the passive variant of this constituent is identical.

(see previous page)

back to Bohumil Havránek (1928: 15), stating that the main function of passive is to influence the propositional hierarchy. This idea dates back to František Daneš (1968) and Miroslav Grepl (1973). All the above authors take the passive deagentisation for a kind of agent backgrounding / anonymising / generalisation. In their view, moreover, the process of passivisation results in lowering the level of activity (bringing out a level of stative interpretation of the verb). Within Czech linguistics there is no detailed discussion of the pragmatic and stylistic aspects of passivisation but it is widely accepted that the passive is a multi-functional structure. Full bibliography of all the studies will be provided at the end of Part 2.

[2] *The term transformation is used in this section only with a general meaning of 'structural change', because it is exactly the theoretical concept of transformation which differentiates many analyses of the passive structures. In section 2.2 we are going to define the notion of transformation with respect to the framework used in our analysis.*

[3] *The features of verbal tense and agreement are described only schematically in (3). For a detailed discussion of the morphology of V^1 and V^2 in (3) see section 1.5.4.*

We are also going to ignore all the possible changes in the linear order, one of which is illustrated in (4).

(4) (a) *Petr sliboval Pavlovi, že přijde* $\Rightarrow$*(b)*
Peter$_{NOM}$ promised Paul$_{DAT}$ that arrives$_{3SM}$ $\Rightarrow$ (b)
'Peter promised to Paul that he arrives.'

(b) *Pavlovi bylo slibováno (Petrem), že přijde*
Paul$_{DAT}$ was promised (Peter$_{INSTR}$) that arrives$_{3SN}$
'It was promised to Peter (by Paul) that he arrives.'

Nor does the transformation T_1 in (3) reflect the cases like (5), with an additional infinitive, or (6), in which the active variant (a) contains (apart from NP_{NOM} and NP_{ACC}) another NP or prepositional phrase PP. The case of such additional NP or NP within PP remains unchanged in the passive structures in (b).[4]

(5) (a) *Petr nutil Pavla k odchodu* $\Rightarrow$*(b)*
Peter$_{NOM}$ forced Paul$_{ACC}$ to leave $\Rightarrow$ (b)
'Peter forced Paul to leave.'

(b) *Pavel byl nucen (Petrem) k odchodu*
Paul$_{NOM}$ was forced (Peter$_{INSTR}$) to leave
'Paul was forced to leave.'

(6) (a) *Petr sliboval Pavlovi žvýkačku* $\Rightarrow$*(b)*
Peter$_{NOM}$ promised Paul$_{DAT}$ chewing-gum$_{ACC}$ $\Rightarrow$ (b)
'Peter promised a chewing gum to Paul.'

(b) *žvýkačka byla slibována (Petrem) Pavlovi*
chewing-gum$_{NOM}$ was promised (Peter$_{INSTR}$) Paul$_{DAT}$
'The chewing gum was promised to Paul by Peter.'

Importantly, the trivial formalisation of T_1 in (3) is not able to capture the process in which the active variant does not contain a transitive verb and some kind of process of passivisation still takes place. The examples of the so called **impersonal passive** in (7) and (8) have verbs selecting at least one complement in some some other than nominative/Accusative case, i.e. $NP_{GEN/DAT/INSTR}$ in Czech or PP .[5]

(7) (a) *Učitel nadržuje děvčatům* $\Rightarrow$*(b)*
teacher$_{NOM}$ favours$_{3SM}$ girls$_{DAT}$ $\Rightarrow$ (b)
'The teacher favours girls.'

(b) *Je nadržováno děvčatům* (*učitelem)*
is$_{3S}$ favoured$_{3SN}$ girls$_{DAT}$ (teacher$_{INSTR}$)

[4] *Similar examples are discussed here in section 5.4 below.*
[5] *For more detailed analysis of the impersonal passive see section 6.2 below.*

'Girls are favoured (by the teacher).'

(8) (a) *Členové hlasují o stanovách* $\Rightarrow$ *(b)*
members$_{NOM}$ vote$_{3P}$ about statutes$_{LOC}$ $\Rightarrow$ (b)
'The members vote about the statutes'

(b) *Je hlasováno o stanovách (členy).*
is$_{3S}$ voted$_{3SN}$ about statuses$_{LOC}$ (members$_{INSTR}$)
'The statutes are voted about (by the members).'

To capture the examples (7)/(8) we introduce a description of a transformation T_2 in (9) where the label $[NP]_{OBL}$ markes $[NP]_{GEN/DAT/INSTR}$.

(9) **Transformation T_2**

(a) $[NP^1]_{NOM} - [V^1_{lex}]_{fin} - [NP^2]_{OBL}$ **/ PP** $\Rightarrow$ **(b)**
(b) $[NP^1]_{INSTR} - [V^2_{\textit{be}}]_{fin} - [V^1_{lex}]_{part} - [NP^2]_{OBL}$ **/ PP**

In the partial transformation T_2 the NP_{NOM} constituent in (a) behaves like in (T_1) – i.e. it becomes NP_{INSTR} in (b). The NP_{OBL} or PP in (a), however, remains unchanged and the unmarked word order remains unchanged, too.[6]

1.2 Some Problems of the Notation

The formalisation of transformations T_1 and T_2 in (3) and (9) signal the need for double valency of the active verb. This requirement seems to be supported by the examples in (10) which demonstrate that a verb without an external (left-side) Argument cannot have a passive counterpart (impersonal T_2) in Czech.

(10) (a) *Petrovi pomalu otrnuje* $\Rightarrow$ *(b)*
Peter$_{DAT}$ slowly forgets$_{3SN}$ $\Rightarrow$ (b)
'Peter has slowly forgotten about the pain.'

(b) * *Je pomalu otrnováno Petrovi*
* is$_{3SN}$ slowly forgotten$_{3SN}$ Peter$_{DAT}$

The following example (11) demonstrates the impossibility of transformations T_1/T_2 with verbs which do not have any internal (right-side) Argument NP or PP. Notice that although the verb can have an adverbial adjunct, contrary to (7) and (8) the transformation T_2 cannot take place either.

(11) (a) *Petr spí (v posteli)* $\Rightarrow$ *(b)*

[6] *The transformation T_1 and T_2 are distinct also with respect to the verbal morphology showing the agreement with subject (AGR). While the passive structures arising according to T_1 have an overt surface subject and this subject is reflected by verbal morphology, the passive structures arising via T_2 do not seem to be able to have any overt subject, and the verbal morphology signals a default 3rd person singular neuter.*

Peter$_{NOM}$ sleeps (in bed). ⇒ (b)
'Peter sleeps in bed.'

(b) **(Petrem) je spáno v posteli.*
*(Peter$_{INSTR}$) is$_{3S}$ slept$_{3SN}$ in bed.

The distinction between subcategorised vs. free complements of the verb, which seems to be the reason for the distinction between (7)/(8) and (11), is not expressed in the description of the transformation T_2 in (9).[7]

Thus the formalisations of the passive transformation T_1 / T_2 in (3) / (9) are far from ideal representations of the relevant language process. On one side it would be superior to conflate both of them into one more general formula, but on the other side, even in their more detailed form they are not able to capture adequately the complexity of the process.

1.3 Base Structures of the Passive Transformation

The T_1 / T_2 formulas cannot either express a number of restrictions on passivisation and considering the Czech data, the theoretical nature of transformation is endangered, too, especially if it is to be understood as a derivation of some secondary structure (b) from a primary/basic/initial structure (a).

However, though it is usually possible to derive the passive (b) from the active (a), the contrary is more problematic. It is because the active structure must have an (Agent) subject, and this is not obligatorily present in the passive (b). The following (12) shows again that according to the descriptive transformation T_1 in (3) the NP$_{NOM}$ subject of (a) becomes NP$_{INSTR}$ in (b).

(12) (b) *Petr byl operován dr. Crhou* ⇐ *(a)*
Peter$_{NOM}$ was operated dr.Crha$_{INSTR}$ ⇐ (a)

(a) *Dr. Crha operoval Petra*
Dr. Crha$_{NOM}$ operated Peter$_{ACC}$

If the passive structure does not contain the NP$_{INSTR}$, as is the case in e.g. (13), the assumed base (active) structure can be derived only in some general (unmarked/ default) format with at best some kind of perhaps predictable semantic features.[8]

---

[7] *A different selection (a complement vs. adjunct distinction for a specific item) by individual lexical items within distinct languages (or dialects/idiolects of a language) can result in a different level of acceptability of (11b). As the following example shows, its English translation is grammatical.*

(i) Peter slept in a bed. ⇒ A bed was slept in (by Peter).

[8] *The morphology on active verb has to be marked for some generic subject in any case, in (13) we use the generic 3rdplural[+HUMAN]. Notice, moreover, that with some idiomatic passive sentences the active counterparts with non-metaphorical reading cannot be logically reconstructed.*

(i) Blbci jsou rovnoměrně rozeseti po celém světě ⇐ ?? rozesel blbce po celém světě
idiots are equally spread over whole world ⇐ *?? spread idiots over whole world*

(see the next page)

(13) (b) *Petr byl operován včera* ⇐ *(a)*
Peter$_{NOM}$ was operated yesterday ⇐ (a)

(a) *Včera operovali Petra*
yesterday operated$_{3P[+HUM?]}$ Peter$_{ACC}$
'Yesterday they operated on Peter.'

1.3.1 Active and Passive Verb Forms

Still, if relation between sentences (1a) and (1b) in the descriptive transformation T_1 in (3) is understood as a mechanical algorithm, each passive structure has to have some perhaps only formal active counterpart. This is not true in Czech either. Compare the following examples in (14) and (15), which demonstrate Czech verbal morphology used to express a complex of temporal features in combination with the features of aspect. (14) gives a full paradigm of the imperfective [-PERF] verb *chválit* 'to praise' in which each tense has its active and passive forms.

(14) *chválit* ('to praise') = [-PERF]

(a)	*Petr chválí Pavla* ⇒ Peter$_{NOM}$ praises$_{PRES}$ Paul$_{ACC}$ 'Peter praises Paul.'		(a')	*Pavel je chválen Petrem* Paul$_{NOM}$ is$_{PRES}$ praised Peter$_{INSTR}$ 'Paul is praised by Peter.'
(b)	*Petr chválil Pavla* ⇒ Peter$_{NOM}$ praised$_{PAST}$ Paul$_{ACC}$		(b')	*Pavel byl chválen Petrem* Paul$_{NOM}$ was$_{PAST}$ praised Peter$_{INSTR}$
(c)	*Petr bude chválit Pavla* ⇒ Peter$_{NOM}$ will$_{FUT}$ praise Paul$_{ACC}$		(c')	*Pavel bude chválen Petrem* Paul$_{NOM}$ be$_{FUT}$ praised Peter$_{INSTR}$

The examples in (15) show the same active vs. passive couples for the [+PERF]ective *pochválit* 'to have praised'. As schematically demonstrated in(15a) Czech perfective verbs do not have a present tense.[9] The Czech finite AUX (used to form the analytic passive), however, is not perfective, and it can have a full paradigma of three tenses, including the present. Given this, the Czech passive sentences with a perfective verb as in (15a⇒) have no active counterpart which could be taken for a base structure (15a) for the transformation T_1. Alternatively, the process of passivisation is to be redefined or deprived of the ability to refer to temporal and aspectual features.

(15) *pochválit* ('to have praised') = [+PERF]

(a)	**Petr pochvál-?? Pavla* ⇒ *Peter$_{NOM}$ praise$_{PRES}$ Paul$_{ACC}$ 'Peter praises Paul.'		*Pavel je pochválen Petrem* Paul$_{NOM}$ is$_{PRES}$ praised Peter$_{INSTR}$ 'Paul is praised by Peter.'

(see previous page)

'Idiots are equally spread all over the world.'

(b) *Petr pochválil Pavla* ⇒ *Pavel byl pochválen Petrem*
Peter$_{NOM}$ praised$_{PAST}$ Paul$_{ACC}$ Paul$_{NOM}$ was$_{PAST}$ praised Peter$_{INSTR}$

(c) *Petr pochválí Pavla* ⇒ *Pavel bude pochválen Petrem*
Peter$_{NOM}$ praise$_{FUT}$ Paul$_{ACC}$ Paul$_{NOM}$ be$_{FUT}$ praised Peter$_{INSTR}$

Traditional grammar takes the structures in (14) or (15) for parallel structures, considering that the verbal forms differ in one grammatical category, namely the **category of voice**: the (a/b/c) forms in the left column, i.e. *chválím*, *chválíš…* ('I praise' 'you praise'...) express an **active voice** and *jsem chválen*, *jsi chválen…* ('I am praised', 'you are praised'...) in (⇒) express a **passive voice**.[10]

It is probably also the parallelism between the structures in (14)/(15) that suggest taking voice for a morphological category of verb. Apart from that, however, the reason for this concept is the analogy rooted in Latin classical tradition, i.e. it is based on the following deduction:

(16)(a) The semantic anf functional relation between the Czech expressions *chválím / jsem chválen* ('I praise' / 'I am praised') is the same as the relation between the Latin *laudo / laudor*;
(b) one member of the couple, namely the active Czech *chválím* and Latin *laudo* are formed with a bound morpheme;
(c) the Latin passive *laudor* is also formed by a suffix, and therefore the Czech passive *jsem chválen* must be a kind of morphological form (affix), too.

This approach, however, results in some problems even within the traditional framework. In the following sections we are going to mention some properties of the Czech 'passive voice' which make this verbal form special and distinct from the other parts of the Czech verbal paradigms.[11]

(see previous page)

[9] *The Czech verbal morphology does not have a present for perfectives because as demonstrated in (14a) compared with (15c), the present tense morphology of [-PERF] is interpreted as a future with [+PERF].*

[10] *We are not going to discuss the complete active and passive paradigms including the oppositions differing in Tense feature, i.e.* chválil bych *('would praise") and* byl bych chválen *('would have praised"), imperatives* chval *('praise!") vs.* buď chválen *('be praised!"), and infinitives* chválit *('to praise") vs.* být chválen *('to be praised"); such discussion would make the material complex without changing anything in our analysis.*

[11] *As for the appropriate morphological form of the passive verb in Czech, the results (b) of the passive transformations T_1 and T_2 applied to (a) seem to be similar to (c).*

(a) Zedníci v opravují školu ⇒ *(b)* Škola je opravována zedníky
Masons$_{NOM}$ repair school$_{ACC}$ *School$_{NOM}$ is repaired masons$_{INSTR}$*
(c) Škola se opravuje
School$_{NOM}$ REFL repairs$_{3S}$

(a) Poslanci hlasovali o zákonu ⇒ *(b)* Bylo hlasováno o zákonu poslanci
MPs$_{NOM}$ woted about law *(It) was woted$_{3SN}$ about law MPs$_{INSTR}$*
(c) Hlasovalo se o zákonu.
(It) woted$_{3SN}$ REFL about law

(see the next page)

The decision whether the so called passive form *jsem chválen* ('I am praised') really is a morphological variant of a given verb (as is postulated by traditional grammar) should be based on an analysis of the whole complex of the verbal paradigm.

1.4 Considering the Verbal Paradigm

In his thorough discussion of the verbal system in Czech František Kopečný (1962: 95) analysed the analytical past tense as a '**morphologically analytic form**' (MAF), claiming that the past verbal form *chválil jsem* ('I praised') - though it superficially consists of two morphemes - [AUX+past participle] - is in fact a simple (synthetic) verbal form. In the following sections we accept his arguments together with his terminology for this form. However, for the Czech analytic passive we are going to use the term '**analytic form**' (AF), foreseeing thus our conclusion resulting from a thorough comparison of past and passive forms.

The initial observation one can make comparing the analytic passive *jsem chválen* ('I am praised') and the past *chválil jsem* ('I praised') is that both the forms consist of two discrete verbal elements: first, a form of an **auxiliary** *být* ('be') and, second, a **participle** of a lexical verb.[12] This general similarity, however, proves to be the only characteristic which a careful comparison of the Czech analytic past and passive forms can substantiate/ justify. In the following sections we are going to demonstrate a number of widely known tests which show that the two forms deserve distinct analyses.

1.4.1 The Participles following the Auxiliaries

The distinctions between the Czech past morphological analytic form (MAF) and the passive analytic form (AF) are signalled already by a distinction between the participles. The past MAF consists of the AUX and L-Participle (active participle[13]), while the passive AF uses the Passive Participle is formed from the infinitival stem with the consonant -n-/-t- followed by a gender agreement morphology.[14]

(see previous page)

Traditional grammars call (c) the reflexive passive. Comparing (b) and (c), however, one can show many syntactic properties which make the so called reflexive passive distinct from the analytic passive (see e.g. Karlík, 2003). Therefore we are not going to discuss the reflexive passive here.

[12] *In his detailed typological study Edward Keenan (1985) shows that a periphrastic (analytic) passive in all Indo-European languages contains an auxiliary which is identical, or similar, to the auxiliary used to form a past Tense.*

[13] *The Czech L-Participle is formed from the infinitival stem with the consonant -l- followed by a gender agreement morphology. It originated in Old Slavic as a deverbal adjective and it combined with a copula to form nominal predicates. (See also Rudolf Růžička (1963)). Synchronically, this L-participle is used in Czech to form the analytic past, conditional and past conditional.*

[14] *In this section we provide a brief comparison of the L- and Passive Participles. For a detailed discussion of the latter see below in sections 5 and 7.*

A natural distinction between the verbal complexes comprising the participial components concerns transitivity. The L-Participles (forming the non-finite component of the past MAF) are both transitive (allowing a complement with structural ACC) and intransitive. On the other hand, the Passive Participles (see also examples (7) and (8) above) are formed from verbs which cannot have an ACC complement.[15]

(17) (a) *Já jsem chváli-**l-a** Marii* ⇒ (b) *Marie je chvále-**n-a***
I_{NOM} AUX_{1S} praised $Mary_{ACC}$ $Mary_{NOM}$ is_{3FS} praised
'I praised Mary.' 'Mary was praiased.'

(c) *Já jsem spa-**l-a**.* ⇒ (d) **Bylo spá-**n-o**.*
I_{NOM} AUX_{1S} slept .*It was slept
'I slept.'

Apart from transitivity, the Czech past MAF is formed relatively regularly from all verbs, while the passive participle is often idiosyncratic, and its productivity is also restricted by some other factors. As for syntactic characteristics, the following examples of ungrammatical co-ordinations in (18b/c) indicate that there can be even a categorial distinction between the participles.

(18) (a) *Já jsem šel a já jsem byl unaven.*
I AUX_{1S} went and I AUX_{1S} was tired.
'I went and I was tired.'

(b) **Já jsem šel a byl unaven.*
* I AUX_{1S} went and was tired

(c) **Já jsem byl unaven a přece šel.*
* I AUX_{1S} was tired and still went
?? 'I was tired and still going.'

Assuming the generally accepted principle that coordination requires like constituents, these examples strongly suggest that the two kinds of participles do not share their category.

---

[15] *With the exception of some few Czech verbs with double Accusatives. Passivisation usually shows which Accusative is a structural and which is a kind of a quirky Case used possibly as a result of some lexical-semantic fusion – as in the following example a fusion of a 'teach-learn' verb.*

(i) Petr učil Marii matematiku ⇒ (b) Marie byla učena matematiku.
$Peter_{NOM}$ taught $Mary_{ACC}$ $math_{ACC}$ ⇒ *$Mary_{NOM}$ was taught $math_{ACC}$*
'Peter taught Mary math.' 'Mary was taught math.'

(c) *Matematika byla učena Marii.
**$Math_{NOM}$ was taught $Mary_{ACC}$.*

1.5 The Distinction between the Auxiliaries in Analytic Past and Passive

The main distinction between the verbal complexes of the Czech analytic past and passive is based on the comparison of the AUX components. If both complexes were paradigmatic forms of a verb, the AUX would have to be analysed as free grammatical morpheme equivalent to e.g. the bound verbal morphology. However, in this section we are going to demonstrate that the AUX components of the analytic past and passive are far from being the same, in spite of the fact that they are both forms of the verb *být* ('be') and in most contexts they have identical form.[16]

1.5.1 Clitic Position

The finite form of the Czech auxiliary *být* ('be') in the past 'morphologically analytic form' (MAF) is a **clitic**, while the finite form of the auxiliary *být* ('be') in the passive 'analytic form' (AF) is not. The example (19a/ii) illustrate that the past MAF is ungrammatical in the sentence initial position which is unavailable for the Czech C2 clitics but acceptable for the passive AUX *být* ('be') in (19b/ii).[17]

(19) (a) (i) C*hválil / unavil* ***jsem*** *Petra*
(I) Praised/Exhausted AUX_{1S} $Peter_{ACC}$
'I praised/exhausted Peter.'

(ii) ****Jsem*** *chválil / unavil Petra.*
AUX_{1S} praised/exhausted $Peter_{ACC}$

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

(ii) ***Jsem*** *stále chválen/unavený/studentem/doma.*
AM_{1S} always praised/tired/student/at home
'I am always praised/ tired/ a student/ at home.'

Apart from the passive participle *chválen* ('praised'), (19b) provides examples of a Czech adjective predicate *unavený* ('tired'), a nominal predicate *studentem* ('student') and an Adv/PP *doma* ('at home') to demonstrate that with respect to the observed criterion the finite auxiliary of the passive behaves exactly like the copula/existential verb *být* ('be').

---

[16] *Some of the diagnostics used in the following sections are used already in Kopečný (1962) and the works inspired by him, e.g. Miroslav Komárek (1978: 106). In a generative framework a detailed discussion of these properties appears in Jindřich Toman (1980) or Ludmila Veselovská (1995, Chapter 4).*

[17] *Descriptive characteristics of various types of clitics (including Czech) can be found in e.g. Voss & Veselovská (1998) or Franks & King (2000). For more discussion concerning the initial position see also Toman (2000) who discusses apparent exceptions from the obligatory pattern.*

1.5.2 Clitic Reduction

Another property of Czech clitics is their tendency to become phonetically reduced and to 'lean' (cliticise) on some phonetically prominent element. The following example (20) shows that the 2nd person singular form, i.e. *jsi* ('are$_{2S}$'), can be reduced to a kind of bound morpheme *–s*, which can appear on several hosts.

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

(b) *Proč-**s** často chválil Petra?*
Why-AUX$_{2S}$ often praised Peter$_{ACC}$

(c) *Proč často-**s** chválil Petra?*

(d) *Proč často chválil-**s** Petra?*

In the above example (20), the AUX was a part of the past MAF. A contrasting (21) shows that the same reduction is impossible with the AUX is a component of the passive AF.

(21) (a) *Proč **jsi** často chválen/unavený/studentem/doma?*
Why AUX$_{2S}$ often praised/ tired/ student/ at home
'Why are you often praised/ tired/ a student/ at home?'

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

(c) ** Proč často-**s** chválen/unavený/studentem/doma?*

` (d) ** Proč často chválen/unavený/studentem/doma -**s**?*

1.5.3 Colloquial/Dialectal Forms and Zero Morphemes

The distinctions between the AUXs of the past MAF and passive AT include also the formal realisation of the paradigm. In standard Czech, the AUX of the passive AF contains an initial **prothetic consonant *j-***.[18] The forms without the consonant are taken for secondary / colloquial / restricted to certain contexts (e.g. negation).On the other hand, with the AUX of past MAF the form without this initial consonant *j-* is taken as standard and the forms with *j-* are secondary / influenced by spelling (see Komárek (1978: 105)).

The acceptable varieties are listed in (22). Apart from the initial prothetic consonant *j-*, notice that in (c) the 3rd singular/plural AUX of past MAF is a **zero**

[18] *In Old Slavonic the prothetic consonant* j- *was preposed to the words starting above all with an 'e-' vowel; compare the Latin* est *and Czech* jest *('to be'). The process reflects a tendency for alternating syllabic sonority (a CV-CV pattern) in Old Slavic: prothetic consonants were inserted to prevent hiatic structures from becoming a part of the following words.*

morpheme, while the AUX of the passive AF in (c') must have an overt form *je/jsou* ('is$_{3S/P}$ ') identical with the forms of the copula/existential *be*.

(22) **Standard/primary *j-* and secondary/colloquial *(j-)* / Zero AUX$_{3S}$**

	Past MAF: (j-), *Ø*$_3$		**Passive AF: j-, *** *Ø*$_3$
(a)	*Já* ***(j)sem*** *chválil.* I AUX$_{1S}$ praised 'I praised.'	(a')	*Já* ***jsem*** *chválen.* I AUX$_{1S}$ praised 'I am praised.'
(b)	*Ty* ***(j)si*** *chválil.* You AUX$_{2S}$ praised 'You praised.'	(b')	*Ty* ***jsi*** *chválen.* You AUX$_{2S}$ praised 'You are praised.'
(c)	*On* ****je/Ø*** *chválil.* He AUX$_{3S}$ praised 'He praised.'	(c')	*On* ***je/*Ø*** *chválen.* he AUX$_{3S}$ praised 'He is praised.'

The following (23b) recalls the possibility of reduction mentioned in the preceding section 1.5.2. (23a/c) moreover demonstrate that in those cases where reduction is not possible, Moravian dialects use a distinct class of agreement morphology for the passive AUX$_{1/2S}$ and copula/existential *být* ('be')*: su* ('am$_{1S}$')*, seš* ('are$_{2S}$'). The examples in the left column show that these dialectal forms are never used with the AUX$_{1/2S}$ of a past MAF.[19]

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

	Past morphological analytic form		**Passive analytic form** (+copula/existential *be*)
(a)	*Já jsem/*****(j)su*** *chválil* I AUX$_{1S}$ praised 'I praised'	(a')	*Já* ***(j)su*** *chválen / -zlý / -studentem / -doma* I AUX$_{1S}$ 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+AUX$_{2S}$ 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 AUX$_{2S}$ praised /-nasty/-a student /-at home 'You are praised/nasty/a student/at home'

In the following examples (24)(a/b) illustrate that Czech is a pro-drop language and can thus drop the personal pronoun. (24)(c) shows that in 1st singular, the presence of the personal pronoun is able to compensate for the absence of the AUX$_{1S}$ of past MAF. The examples on the right give the analogical passive AF forms demonstrating

[19] *Whenever possible in this section, we are going to use the copula/existential* 'be' *together with the passive AUX, to demonstrate that with respect to the chosen criteria passive AUX (and not the past AUX) patterns together with the more lexical forms.*

in (24)(c') that the complementarity of AUX_{1S} and personal pronoun does not apply with the AF. [20]

(24) **AUX / pronoun complementarity**

	Past morphological analytic form		**Passive analytic form**
(a)	***Já jsem*** *chválil Petra* I AUX_{1S} praised Peter 'I praised Peter.'	(a')	***Já jsem*** *chválen od Petra* I AUX_{1S} praised by Peter 'I am praised by Peter.'
(b)	*Chválil* ***jsem*** *Petra* praised AUX_{1S} Peter	(b')	*Chválen* ***jsem*** *od Petra* praised AUX_{1S} by Peter
(c)	***Já*** *chválil Petra* I praised Peter	(c')	****Já*** *chválen od Petra* *I praised by Peter

1.5.4 Morphological Paradigm

The following example (25a/b/c) demonstrates that the morphological paradigm of AUX in the Czech past MAF (i.e. in combination with the past L-participle) is reduced to unmarked present morphology. On the other hand, the finite AUX of the passive AF (as well as the copula/existential *být* 'be') can be used in the imperative (25a'), the infinitive (25b') and the future form *budu* ('will-be') (25c').

(25) **Imperative / Infinitive / Future of AUX *být* ('be')**

	Past morphological analytic form		**Passive analytic form** (+copula/existential *be*)
IMP	(a) **Chválil* ***bud'!*** *praised AUX_{IMP}	(a')	*Chválen* ***bud'!*** praised AUX_{IMP} 'Be praised!'
INF	(b) **(Musel)* ***být*** *chválil.* *(had to)AUX_{INF} praised	(b')	*(Musel)* ***být*** *chválen/-zlý/-studentem/-doma.* (had to) AUX_{INF} praised /-nasty /-a student /-at home 'He had to be praised.'
FUT	(c) **Já* ***budu*** *chválil.* *I AUX_{FUT} praised	(c')	*Já* ***budu*** *chválen/-zlý/-studentem/-doma.* I AUX_{FUT} praised /-nasty /-a student /-at home 'I will be praised /-tired /-a student /-at home.'

1.5.5 Iterative Aspect

Another distinction between the two AUXs concerns the morpheme expressing progressive aspect. The finite AUX of the Czech passive AF can express progressive iteration, as illustrated in (26), by the aspectual suffix ***-va-*** on the passive participle (26a), as well as on the AUX (26b) or both. The contrasting example (27) demonstrates that with the past MAF the aspectual morpheme ***-va-*** can appear only on the past participle, i.e. the finite AUX is not able to appear in the progressive form.

[20] *Why this can happen only in the 1st singular form is unknown to us.*

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

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

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

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

1.5.6 Negation

Another clear distinction between the past and passive finite AUXs can be found in their distinct combinations for expressing negation. In Czech the sentence negation is expressed by a negative prefix ***ne-***. As illustrated in (28a), with the past MAF the grammatical position of this negative prefix *ne-* is on the past participle. The contrasting (28b) shows that with the passive AF, the sentence negative prefix appears on the AUX.[21]

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

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

1.5.7 Ellipsis

The ability to carry a negative prefix (and perhaps also the clitic characteristics) seem to be a source of another distinction between the AUXs. The following example (29a) shows that in short answers the AUX of the passive AF can replace the whole verbal complex (while the passive participle cannot). In the parallel (29b) the AUX of the past MAF is illustrated as ungrammatical and the shortest possible answer contains the L-participle.[22]

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

---

[21] *For the possibility of negating the passive participles see section 7.1.5 below.*

[22] *The feature distribution between their AUX and participle components is identical with past MAF and passive AF. The verbal agreement features are therefore not crucial for*

(see the next page)

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

1.5.8 A Conclusion based on the Comparison of the Auxiliaries and Participles

The above sections demonstrated a number of distinctions between the AUXs involved in forming the past and passive verbal complexes. By all the criteria applied, the Czech past AUX showed a higher level of grammaticalisation and lack of independence. This past AUX behaves like a free equivalent of the bound verbal morphology - i.e. it encodes (i) a person-number agreement ending plus (ii) indicative characteristics of mood signalled by an initial morpheme (stem) ***js-.*** This feature complex is comparable with the feature content of the AUX used to form the Czech conditional, as illustrated in (30). In (30a) we show a past AUX combined with the L-Participle to form the past MAF. In (30b) the same L-Participle combines with a conditional AUX. This conditional AUX signals the combination of (i) agreement features together with (ii) conditional morpheme (stem) ***by-***.

(30) (a) *Já **js-em** chválil*
I AUX_{IND-1S} $praised_{L-PRT}$
'I praised'

(b) *Já **by-ch** chválil*
I $AUX_{COND-1S}$ $praised_{L-PRT}$
'I would praise'

On the other hand, with respect to the tests demonstrated in (19) -(29), the finite AUX used to form a Czech passive AF behaved identically with a copula or existential verb *být* ('be'). In other words, it was repeatedly revealing properties typical for lexical verbs. As for feature characteristics, passive AUX was able to carry the features of (i) person/number agreement, (ii) aspect, (iii) tense, (iv) modality.

Given the above clear distinction between the AUX components, it is far from obvious that the analytic passive represents a kind of verbal paradigm like the analytic past tense. Consequently, if a passive form is not a part of verbal paradigm, the analogy in (16c) is incorrect for Czech. Consequently one cannot claim that the passive transformation involves only a morphological change within a single (verbal) category. The observation stated in (2b) is to be taken more seriously, because the properties of the passive AUX demonstrate that the passive structures do contain some additional lexical material with respect to their active counterparts.

2 PASSIVISATION IN TRANSFORMATIONAL GENERATIVE GRAMMAR

The preceding Section 1 has summarised several imperfections in a traditional transformational description and explanation for formating the analytic passive in Czech. We mentioned problems with semantic equivalence and the definition of the

---

(see previous page)

grammaticality (in the correct answer in (29b) the participle does not show the features of the 1st person singular).

base (active) structure. Many arguments were presented to demonstrate that active and passive verbal forms are not an optional paradigmatic variation in Czech. All those data suggest that the passive transformation is not tenable in the form of T_1 in (3).

We conclude that, above all, it is not possible to perceive a transformation as a process which applies a mechanical algorithm (e.g. transformation T_1) to an existing base structure (a) to derive a new structure (b) using the same lexical repertory and with no change of meaning.

In this paper we want to show an alternative analysis of the Czech analytic passive applying a more contemporary concept of transformational process. We want to demonstrate that the modern generative framework is able to explain the phenomena in more general terms and with a higher degree of explanatory accuracy.

2.1 Transformational and Lexicalist Theories of Passivisation

A process of passivisation was described as a transformation sui generis in the earlier studies by Noam Chomsky (see Chomsky 1957, Chapter 5 and 1965, Chapter 2). In the period of the Extended Standard Theory Chomsky divided the original complex transformation into two relatively independent processes (see Chomsky, 1972). Passive structure was presented as a result of (i) a movement of the active-object NP into the position of a passive-subject, and (ii) independent movement of the active-subject NP into the position of passive-agent-instrumental PP. [23]

Also in the 70s a first influential lexicalist theory arises within a generative framework represented by a detailed study by Robert Freidin. He discusses above all the adjectival properties of passive participles and proposes that active and passive verbal forms are independent formatives appearing in the Lexicon (see Freidin, 1975, Chapter 2). For Freidin participles are of primarily adjectival character and the Lexicon lists them as a basic form preceding the related verbal lexemes. Freidin's notion of categorial distinctions, however, is not strict, and he follows Chomsky (1970) in allowing lexical items to not in fact always have a full categorial specification. Friedin's analysis was followed by e.g. Joan Bresnan (1977, 1982) and other studies within lexical functional grammar, which does not employ transformations at all (e.g. Höhle (1978)).

Lexicalist theories of the passive propose that the active and passive morphology is already added to the stem in the Lexicon and their projection therefore results in autonomous (independent and therefore distinct) syntactic structures. The ability of a verb to form a passive, is an information stored in the Lexicon, and there is no purely structural restriction on passivisation. In an extreme form such lexicalist hypotheses can result in claiming that all the observed similarities between active and passive structures are a result of a pure chance.

On the other branch of possible analyses, Freidin's (1975) lexicalist study was rejected by e.g. Thomas Wasow (1977) who provided a number of arguments in favour of a transformational approach. This descriptively rich study proposed an analysis based on an explicit relation between active and passive structures. The author distinguishes between adjectival and verbal passives, provides a wide range of

[23] *In a given period see similar analysis in e.g. Lakoff and Ross (1976).*

diagnostics to argue for their categorial specificity, and claimes a transformational relation only for verbal passives.[24]

In the following generative era of Government and Binding, Chomsky (see e.g. Chomsky (1981:48-50)) supplemented his passive transformations (object to subject movement and subject to PP_{INSTR} movement) by a Case Filter, proposing that the non-verbal characteristics of passive participles (wrt to ACC Case assignment) are a result of its neutralised verbal character.[25]

In this period, the transformational theories of the passive assume that in the process of passivisation the syntactic positions of a base structure are changed and consequently also the government relations. The change in government results in the change of morphology of the specific lexical items. These analyses usually notice that the loss of Argument Θ1 in the passive structure correlates with the loss of a structural Accusative case. In elementary form this correlation was stated by Luigi Burzio as follows in (31).[26]

(31) **Burzio's Generalisation (see Burzio 1986:178-9, 184)**

a) A verb which lacks an external Argument fails to assign Accusative Case.
b) A verb which fails to assign Accusative Case fails to theta-mark an external Argument.

2.2 Minimalist Transformations

None of the influential contemporary transformational frameworks accept the concept of transformation as it was introduced in section 1.1, i.e. as an algorithm expressing a linear and morphological change leading from a base (primary, deep) structure to some derived (secondary, surface) structure.[27] Since the end of the 60s, sentences (1a) and (1b) are still taken as related, but the relation is not stated in terms of their mutual

---

[24] *Some of Wasow's diagnostics are going to be applied in this study in sections 4 and 7.3.*

[25] *Similar analyses within the G&B framework can be found in e.g. Oswaldo Jaeggli (1986) or in the independent study by Paul Postal (1986), who provides a wide range of (English) data-based argumentation in favour of the transformational approach.*

[26] *The possible realisation of the Agent theta role is discussed here in 7.1.3. As for the lack of Accusative in the passive structures, see a detailed, cross-linguistic and summarising study by Baker, Johnson and Roberts (1989, Chapter 4). The authors claim that the absorption of Accusative is a less general phenomena than the lack of the Agent Theta role. We assume that the structural characteristics are language specific and the data are obscured by the existence of non-structural quirky Accusatives which are not subject to Burzio's Generalisation (31).*

[27] *In early Chomskyan grammar the initial (base, kernel) sentence was identified as the active structure, alternatively as some active-like semantic structure (see e.g. Charles Fillmore, 1968). In the present transformational approach this concept is still possible in frameworks referring to the notions of 'diathesis', i.e. a mechanism correlating a hierarchy of grammatical functions/roles (assuming a subject-object asymmetry) with some semantic/thematic hierarchy. Those notions are more frequent in typologically oriented studies, for Slavic see e.g. the influential studies by Chrakovski (1974, 1981). For Czech a similar concept of transformation is still used in more popular linguistic studies and textbooks e.g. Grepl & Karlík (1998) or Příruční mluvnice češtiny (1995).*

relation but in terms of the relation of each of them to some shared more general (deeper) structure.

In this study we are going to analyse the passive structures in Czech using the concept of transformation as it appears in the later period of Principles and Parameters, i.e. in the 90s and at the break of the century. From the original Government and Binding framework we accept the modular approach to the language system. As for structural and processual terminology we are going to use Minimalist concepts.[28]

Minimalism uses the term transformation for a universal structure-building mechanism. A transformation is a process which applies to the Numeration (a set of lexical items selected from the Lexicon) to build a structure which will at the end of the derivation be interpretable at both the Acoustic and the Interpretation interfaces. To 'converge," the elements in the structure must contain only interpretable features, which means that the uninterpretable features must be checked and eliminated in a relevant phase of the derivation. The features are checked by transformations which enlarge the structure bottom-up, i.e. all the changes are taking place at the top of the structure and are motivated by the feature content of the highest lexical element/head. (32) gives the two kinds of transformations, both of which enlarge the structure and are motivated by the need to check the uninterpretable feature of the top head.

(32) **Typology of Transformations** (see Chomsky, 1995)

a) **Merge**, which adds a new element from the Numeration set to the top of the existing structure,
b) **Move,** which moves an accessible element from within the existing structure to the top position.

The transformation Move in (32b) is closer to the classical concept of transformation because it removes parts of already existing structure based on their categorial characteristics and syntactic complexity.[29]

The merged/moved elements contain a (categorial) feature which is required to match (and thus check and usually also eliminate) a 'strong feature" of a structure's topmost head. The processes of Merge and Move are triggered by the need to check the strong feature of this head, and to do so the Merge/Movement of a simple feature could suffice. The idiosyncratic properties of a language specific Lexicon and independent principles licensing extraction, however, usually require more syntactic (and phonetic) material to Merge/Move and the moved feature thus 'pied pipes" more material.

Because of the way transformations are motivated, Minimalism claims that all transformations are feature-checking and therefore all are obligatory. In this view

[28] *Most of the terminology is discussed with Czech examples in Encyklopedický slovník češtiny (2002) and related to Czech traditional grammar in Veselovská (2001c).*

[29] *For the moment (and with respect to the phenomenadiscussed) we can see no principled distinction between Move leaving traces and the more current Copy theory of movement. Whichever proves to be superior is in our view applicable to our analysis.*

active and passive structures, no matter how similar they may be, have to start with distinct Numeration sets.[30]

2.3 The Verbal Projection

In this section we introduce the structure of a verbal phrase which we will use to analyse Czech analytic passives later on.

2.3.1 The Lexical and Light Verbal Heads

For our analysis of the Czech analytic passive we accept the following three assumptions:

(a) verbal Arguments are generated in the minimal domain of the verbal head, i.e. inside the V^{max},
(b) during the derivation the Arguments can move to higher positions in the tree,
(c) the verbal head can move from its base generated position to some hierarchically higher head position as well.

We will work with the split VP projection based on the structures used in e.g. Jean-Yves Pollock (1989), Margaret Speas (1990) or Richard Larson (1988, 1990).[31] As for the number and labels of the functional heads dominating the verb, we generally accept the minimalist account as presented in Chomsky (1995), i.e. we are going to restrict their number to only those which are signalled by some regular and overt means. Therefore we are going to use

(i) '**V**' for a lexical head related to the subcategorisation of internal verbal Arguments,
(ii) '***v****' for a head of the so called 'light' verb related to the projection of the external Argument (thematic subject, i.e. the highest theta role Θ1), and
(iii) '**T**' for a functional projection related to the verbal grammatical categories, namely to modality. This is also a possible position for establishing verbal agreement with a subject. [32]

The relations among the above heads is as schematically shown in (33).

(33) (a) TP → T, *v**P
(b) *v**P → *v**, VP

---

[30] *It is beyond the scale of this study to decide to which extent the minimalist transformation remains transformational in the traditional sense and to which extent it in fact incorporates a lexicalist approach.*

[31] *A split VP for the Czech verbal complexes is discussed and used in e.g. Veselovská (1995) and Petr Kosta 2001. For the most contemporary framework for Slavic languages see e.g. Željko Bošković (2002).*

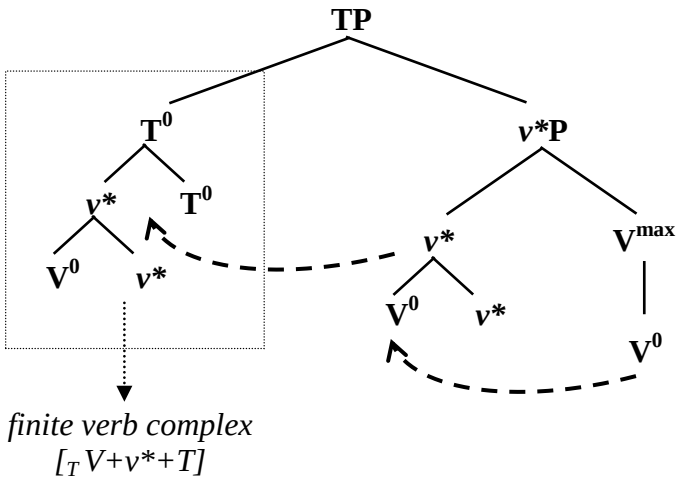
[32] *The label used for this perhaps complex functional head was INFL, I, AGR^S+T etc. We are going to use a kind of conflated form of this head, just in section 7.2 we will propose the possible existence of a separate functional head Aspect.*

In a standard verbal projection the head *v** has a strong categorial feature, for which we use the notation <+V>, which it checks by transformation Move (32b); *v** attracts the closest verbal element, i.e. the head V. A transitive verb is therefore a complex head [$_{v*}$V+*v**] resulting from the unification of V and *v**:

As for the verbal functional head T, we assume that a finite T has (i) an agreement feature [+AGR], or better a strong feature <+D> / <+EPP> , which attracts a subject DP to the position of SPEC(T), and (ii) a verbal feature <+V> which attracts a verbal complex [$_{v*}$V+*v**].

The following scheme in (34) demonstrates the extended verbal projection described above. It is a multi-level projection with co-indexed heads which (following Jane Grimshaw (1990)) become united at least at LF. The broken arrows illustrate the proposed movements of verbal elements.[33]

(34) Unification of the extended verbal projection: V→*v**→T



A finite verb is according to the scheme (34) a complex of several abstract syntactic levels/heads (V,*v**,T). Each head is supposed to ordinary have a separate morphohological representation. However, the concrete realisation of the complex depends on language specific lexical entries for the verbal paradigm, i.e. the LF complex *[$_T$ V+v*+T]* can be phonetically realised by one free morpheme with a complex internal structure or by several free (more or less complex) morphemes.

2.3.2 Generating the Verbal Arguments

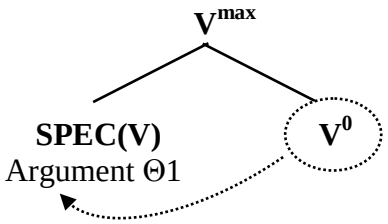
As for the positions in which the subcategorised verbal Arguments enter the structure, we will accept the Larsonian shell (Larson (1988)) in assuming that the Arguments are generated in the positions of specifiers (SPECs) of relevant verbal heads. We also

[33] *The feature content of T and the specification of the features as strong vs. weak is language specific. Therefore the proposed movements can take place within the syntactic derivation (in the form of phrasal or head-to-head movement to satisfy 'strong features') or at the level of LF (in the form appropriate for the LF movements to satisfy 'weak features').*

accept Richard Kayne's (1991) claim concerning the uniqueness of the SPEC position. Because a unique SPEC position allows generating only one Argument related to one head, the analyticity of the verbal projection, as proposed in (33) and (34), namely the presence of the light verb *v**, is a necessary condition for transitivity.

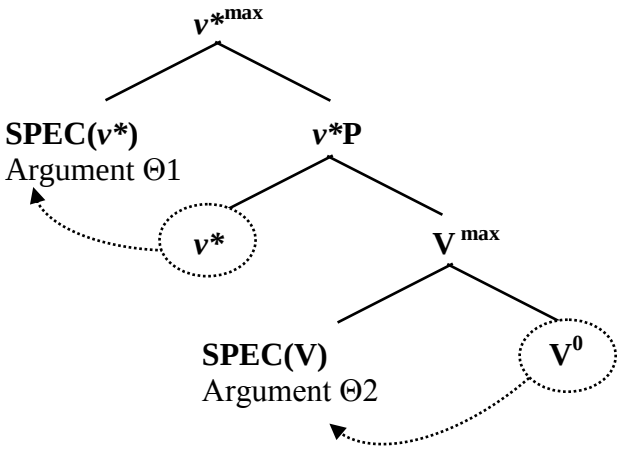
The base generated structure of an intransitive / unAccusative[34] verb is illustrated in (35): it does not need a double-level structure of V and *v**, because one head is enough to generate the Argument with a single Theta role Θ1.[35]

(35) Intransitive VP: the head V^0 assigns Θ1 to its SPEC(V)



However, a standard transitive projection must apart from V generate also a light verb *v**, as demonstrated in (36). The highest (Agent/left-side) Theta role Θ1 is located in the position of the SPEC of *v**, while the SPEC of V is occupied by a second (Object/right-side) Theta role Θ2.[36]

(36) Transitive *v**P, with *v** [__+V] assigning Θ1 to its SPEC(*v**).[37]



[34] *Given the concept of the bare phrase structure (Chomsky 1995) and parametrised directionality the distinction between intransitives and unAccusatives is for our analysis irrelevant.*

[35] *For proposals of structures like (35) and (36) see e.g. Haegemann & Guéron (1999).*

[36] *For a detailed discussion concerning the VP internal hypothesis see Speas (1990) or Koopman & Sportiche (1988, 1991).*

[37] *We are using the simple* v* *[__+V] formate to express the subcategorial/complement selection properties of the head:* v* *[__+V] means that* v* *has/selects a V complement (most likely* V^{max}*).*

2.3.3 Structural Case

Although Minimalism proclaims its rejection of the Theories of Case and Theta (which dealt with assigning Theta Roles and their licensing via abstract Case) and tries to achieve the same explanatory force applying the feature checking procedure via the relation Agree, the descriptive generalisations of Case and Theta Theories remain valid, so we are going to use their terminology. We thus assume that a lexical entry subcategorises (selects) its Argument within its minimal domain and that these Arguments must be formally licensed. The formal licensing of DPs we are going to call Case, and we are going to distinguish lexical and structural Cases.[38]

The schemes in (34), (35) and (36) enable us to describe the mechanism of structural Case assignment with the Czech verb. We assume that Case assignment is a result of the active role of verbal heads in the process of derivation, namely, as suggested in Chomsky (1995: Chapter 2) in discussing the role of AGR heads, we assume that a structural Case can arise only when the case assigning verbal head (and perhaps also the DP itself) moves. Such "inductive" case assignment is standard with structural Nominative moving into SPEC(TP), and we are going to extend this notion here to structural Accusative as well. The assumed verbal structural case assigning conditions are summarised in (37) below.

(37) **Verbal Structural Case**

(a) NOM is assigned in SPEC of an activated *v**, i.e. after the attraction of *v**→ T,
(b) ACC is assigned in SPEC of an activated V, i.e. after the attraction of V→ *v**.

In our analysis of the Czech passive structures we are first going to concentrate on the structural explanation of the properties of the passive AUX exemplified in detail in the previous section 1.5. Then we will pay more attention to the second component of the analytic passive: to the passive participle.

3 PAST AND PASSSIVE FINITE AUXILIARY *BE*

In the above section 1.5 we listed a number of distinctions between the finite AUXs used to form the Czech analytic past and passive. Traditional diagnostics indicate that the past AUX is a highly grammaticalised free inflectional morpheme (compare the

[38] *The division into lexical (oblique) and structural (configurational) Case in Slavic is discussed in e.g. a detailed study by Leonard Babby (1987:116). The author proposes a Case Hierarchy which states that in a derivation lexical Case assignment precedes the structural Case: the Lexical Case is assigned at the beginning of the derivation because it is a result of a specific lexical subcategorisation. Structural Case follows, because it depends on a specific structure. Steven Franks (1995:95-96) accepts Babby's Case Hierarchy, calls the lexical Case an inherent Case and relates the levels of the Case assignment to the levels of derivation: the inherent [+Oblique] case is assigned at the D-Structure and the structural [-Oblique]) Case at the S-Structure. We accept the above hypotheses and will refer to them later on.*

term MAF 'morphologically analytic form'), while the passive AUX shares most of its properties with a lexical verb (with the copula/existential *být* 'be'). The notion of grammaticalisation and MAF vs. AF terminology is just a way to expositorily distinguish the observed morpho-syntactic distinctions.[39]

We propose that the universal structure of a verbal projection as described in the preceding section 2.3 is able to capture some of the distinctions between the past and passive AUXs through distinct **distribution** of these elements in the tree.

We propose that the distinctions between the AUXs in passive AF and past MAF as described in 1.3.1 can be explained by generating the AUX of the past MAF in the position T in the structure in (34) while the AUX of a passive AF is generatet (merged) in the position of *v**. This proposal is described in more detail and commented on in the following section.

3.1 The Position of the AUX of the Czech Past MAF

Our approach to the analysis of a verbal projection pressuposes an analytic concept of a extended projection, i.e. a projection layered according to the categories distributed into separate functional heads ("FH"), of which the scheme in (39) is one concrete example. The existence of such FHs is a part of any current analysis. We are assuming the concept of FHs as defended in e.g. the study by Jamal Ouhalla (1991), in which the author claims that the number of active functional heads is language specific, as is also specific the distribution of formal features into those heads.

The simplified scheme in (39) below illustrates the location of the components of a Czech past MAF *jsem schválil* ('AUX_{1S} praised'), together with the distribution hypothesised here of verbal categorial features.

The scheme is based on adopting Baker's Mirror Principle. This principle is derived from the Head Movement Constraint originally proposed by Lisa Travis (1984). In Baker (1988) HMC is reduced to a variation on the Empty Category Principle (see Chomsky, 1981, 1986), i.e. related to a requirement on proper government of the trace of a removed element.

(38) (a) **Head Movement Constraint** (Baker, 1988:53)
An X^0 may only move into the Y^0 which properly governs it.

The Head Movement Constraint (HMC), together with the introduction of a number of FHs, seems to provide clues for the ordering of words and morphemes and as such it was introduced in Baker (1985) as the 'Mirror Principle' (38b).[40]

---

[39] *The distinction in the level of grammaticalisation we take as a signal of ongoing diachronic change—progressive grammaticalisation in the sense of e.g. Tesniére (1959). As for the diachronic development of the verb* be *in Indo-European and English in a generative framework, see e.g. Ian Roberts (1985, 1991) works which include diachronic study of passive AUXs.*

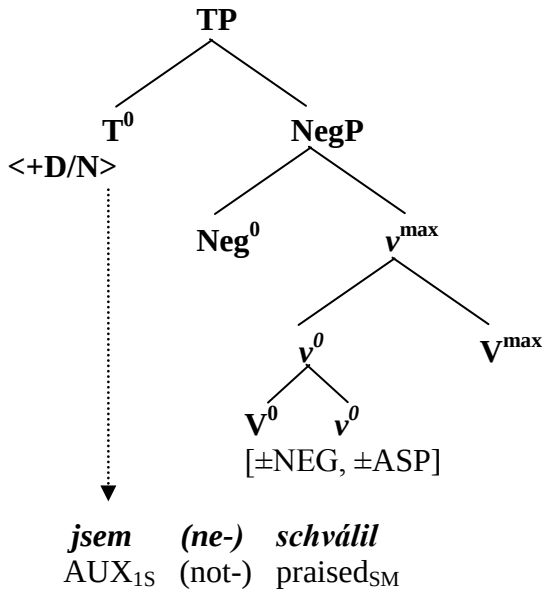
[40] *The Mirror Principle (38b) can be predicted within a framework which allows only left adjunction or substitution (cf. Kayne, 1994), and assumes the adjacency requirement on head movement that makes it impossible to skip an intervening head, e.g. HMC. The Mirror Principle is therefore widely accepted. Its implementation, however, depends on*

(see the next page)

(38)) (b) **Mirror Principle (Baker, 1985)**
The order of affixes on a verb reflects the order in which operations on the verb have taken place.

Given (38b) we now build the scheme (39) with Neg (Negation head) between T and *v**. This lower position ensures that the AUX in a past MAF will not be able to carry a negative prefix, as demonstrated in (28) above.

(39) The Position of the AUX of the Czech Past MAF: T^0



The functional head T in the scheme (34)/(39) is one of the positions in which the agreement morphology is checked, as marked by a feature <+D/N> in (39), and it therefore now follows that the finite AUX of the past MAF will carry this agreement inflection and not the inflection of e.g. an infinitive or imperative.

The exact distribution of the features [+ASP, +T] between V and *v** will not be determined here. In any case we assume that those features are features of the verbal projection and not of T. This structure thus predicts that the AUX of the past MAF cannot carry any Tense itself, but rather appears in a present/unmarked form. [41]

(see previous page)

the complexity of the extended projections being used and above all on the number of features which a specific author is willing to locate in one functional head. None of the above mentioned criteria make the choice of underlying analysis unique, given that the procedure of checking features is not fully worked out. Thus even within the most elaborate extended projections of VP, very different results can be achieved, as evidenced by the obviously distinct analyses in e.g. Pollock (1993) or Hilda Koopman (1993).

[41] *In Czech Past tense is expressed by a combination of the L-participle and indicative AUX, and there is no obvious finite past morpheme in Czech.*

According to (39) the Czech AUX in the past MAF is categorially T with a subcategorisation given in (40).[42]

(40) ***být* ('be'): T, [__+V]** ..... grammatical formative / free inflectional morpheme.[43]

Because the subcategorisation requires the category T to have a verbal sister/complement, it guarantees the distribution of AUXs in combination with the L-participle.

The categorial label T ensures the formal properties of the AUX as described in 1.5. The fact that it is a functional head, moreover, reflects its high level of grammaticalisation and possibly even its clitic characteristics, because the functional head T has always been related to grammatical formatives and in Chomsky (1981) it was even labeled INFL to reflect its complementarity with verbal flection. The terminology used by Kopečný (1962: 95) to define the grammatical nature and inflectional nature of the AUX in a past MAF refer to these same characteristics.

In the scheme (39) we do not make any exact claim concerning the position of the L-participle. It seems standard to call it "a verb," and since it has no restriction related to transitivity we assume it represents a complex [$_{v*}$V+*v**]. As for the distribution of agreement features between the AUX and L-participle, the process is described in more detail in Veselovká (2002a).[44]

3.2 The Position of the AUX of the Czech passive AF

The following scheme (41) shows the finite AUX in a passive AF generated as a head of the 'light verb' *v** with the proposed subcategorisation *být: v**, [__ +V], parallel to (40). This scheme uses a feature distribution similar to that in (39). The feature distribution explains the characteristics of the passive AUX (generated in *v**).[45] The position of the AUX in *v** in (41) explains a number of properties of the passive AUX illustrated in 1.5.: its ability to carry negation, modality, and aspect, in other words its fully verbal characteristics. The position in *v** is also a very important for the definition of the following passive participle, which is the sister/complement of *v**. We will discuss this topic later on.

---

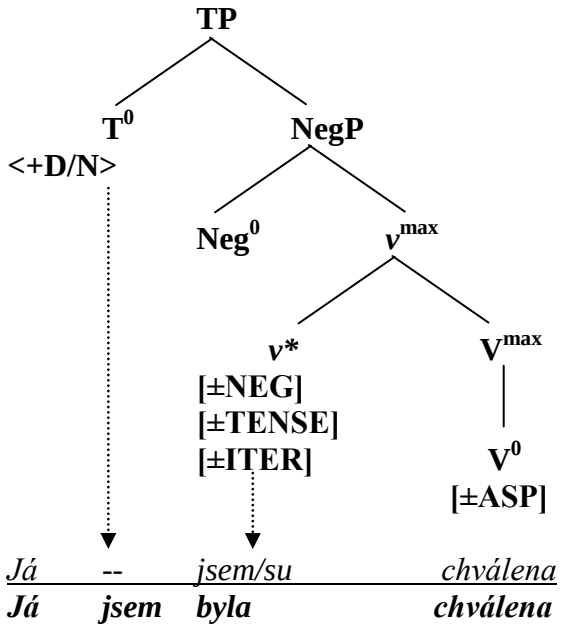
[42] *The blank in (40) signals the position of the element (here the AUX 'be'), and the following bracketted [+V] is the categorial feature of the subcategorised complement (in Minimalist terms the feature <+V> which the AUX carries and has to check).*

[43] *The full (idiosyncratic) paradigm for the lexical item být ('be') with the subcategorisation (40) is in the left column of the examples (22) and (23):* (j)sem/(j)su, (j)si/'s, Ø, (j)sme, (j)ste, (j)sou..

[44] *Veselovká (2002a) claims that the agreement can be formed in two phases: first between the subject in SPEC(*v**) and the participle in* v*, *and second between the functional heads D and T in the position SPEC(T). This cyclic approach suggests that NOM case can be licensed by the L-participle itself, as suggested by the existence of covert/empty AUXs in (22c) and (24c). According to (36a) NOM is assigned by v*, plausibly after the LF unification of the verbal extended projection.*

[45] *The distribution of the features of [+Aspect] and [+Iteration] in (41) is based on the discussion in the following section 4.1. For the discussion of future tense, see section 7.2.*

(41) The Position of the AUX of the Czech passive AF: *v**



3.3 A Note about the Subcategorisation of the verb *be*

In (40) we mentioned a subcategorisation of the Czech verb *být* ('be') which is used as an AUX in the past MAF. It is repeated in (42a). (42b) is a subcategorisation proposed for the *be* which is used as the AUX with the passive AF, and (42c/d) gives the subcategorisation of the copula and existential *be*, demonstrating that the subcategorisation of the Czech verb *být* ('be') in fact allows a sister/complement of any category. Possible restrictions on its use should thus be more a problem of licensing the complement than of the features of the verb *být* ('be') *be*.

(42) (a) **být: T, [__+V]** ..... AUX in past MAF
(b) **být: *v**, [__ +V]** ..... AUX in passive AF
(c) **být: V, [__+N/Adj]** ..... copula
(d) **být: V, [__+Adv/PP]** ..... existential *be*

However, (42) seems not to reflect the general feeling of the contrasts between the two AUXs. Notice that in (42a) and (42b) the AUXs are distinguished only by their own categorial label (T vs. *v**) although our diagnostics showed substantial distinctions between the two. On the other hand we demonstrated that there are hardly any distinctions between (42b) and (42c/d). In the next Section we are going to bring the (42) closer to the intuitive division; namely we are going to propose that after a more careful analysis of the passive participle, there is hardly any syntactic distinction between the AUX in (42b) and the copula in (42c). Both of them select a [+N, +V] complement, and a Czech passive participle can satisfy this subctegorisation in the same way as the AP part of the verbo-nominal predicate as in (42c).

4 CATEGORIAL CHARACTERISTICS OF THE PASSIVE PARTICIPLE

Our analysis of the analytic Czech passive is based on analyses of both of its components. After dealing with the AUX in the preceding sections we are going to look more closely at the past participle. We are going to argue that a number of specific properties of the passive participle can be explained if we accept a more complex categorial characterisation of this element.

We want to show that passive participles are syntactically derived adjectives combined in expected fashion with an unmarked copula. This approach requires an analytic notion of the verbal projection as proposed in (36). We want also to show that if the transitive verbal complex [$_{v*}$ V+*v**] is filled by two separate elements instead of one, namely if the head *v** does not c-command VP (attracting its head V) as in (36), but instead *v** c-commands an AP syntactically derived from a V head, the resulting structure will show exactly the properties attributed to passive structures. Our analysis will be able to show that Burzio's Generalisation (31) is then a consequence of such a phase-by-phase derivation.

In the following sections we are going to evaluate the verbal properties of the passive participles. We are going to argue that passive participles show (i) a restricted set of verbal characteristics and (ii) a correspondingly augmented set of properties typical for adjectives.[46]

4.1 Aspect

The existing influential analyses of Czech verbal aspect are far from being compatible, so therefore we must briefly summarise our concept of the phenomena. We believe that the problems of these analyses are based on complexity of the phenomena: what is traditionally called 'Aspect' is plausibly a complex of several distinct features which as a combinatorial whole is interpreted in terms of progressiveness /length /repetitiveness /perfectivity etc. applied to the verbal stem.

4.1.1 [±LS/A] Aspect

The following (43) summarises our characterisation of one of the Aspect features in Czech.

(43) **[±LS/A] Aspect** - It is an **interpretable feature** present in the categorial feature complex of the category V.
- Its positive value is interpreted as "limiting the State and/or Action" .

[46] *The following sections apply the tests used in the classical study by Wasow (1977), who uses both semantic and syntactic arguments to distinguish between adjectival and verbal passive participles. Similar diagnostics are used in Edward Keenan (1985) for several typologically distinct languages, in Jaeggli (1986), or Levin & Rappaport (1989). The same diagnostics are also used in the detailed study of Russian participles by Maaike Schoorlemmer (1995).*

The [±LS/A] Aspect is thus a semantic feature in Czech which is an integral part of a specific verbal entry in the Lexicon. If a Verb is selected into the Numeration set, it is selected together with its [±LS/A] Aspect feature. The range of the feature is [+LS/A] for perfective verbs $V_{[+LS/A]}$, or unmarked for imperfective $V_{[\pm LS/A]}$.[47]

The traditional test using the combination with aspectual verbs seems to be a reliable diagnostic for the Aspect feature: only [±LS/A] Aspect infinitives in (44a) can combine with aspectual verbs like *začínat* ('start') , while the [+LS/A] Aspect infinitives in (44b) are completely ungrammatical.

(44) **Combination of aspectual verbs with Aspect [±LS/A]**

(a) **start + $V_{[\pm LS/A]}$**

= začíná pršet, chválit, psát, psávat, opisovat, přepisovat, brát
'starts to - rain, - praise, -write, -write, -copy, -copy, -take'

(b) ***start + $V_{[+LS/A]}$**

*= *začíná zapršet, pochválit, opsat, přepsat, vzít, dát…*
'starts to -rain, -praise, -copy, -copy, -take, -give'

The lexicalist hypothesis for Czech [LS/A] Aspect embodied in (43) is supported also by the possibility of idiosyncratic and idiomatic, non-paradigmatic derivation of forms with distinct settings of the [±LS/A] feature.[48]

4.1.1.1 The Resultative feature [±R]

Apart from a restricted ability with temporal aspect verbs, the feature of [LS/A] Aspect is also relevant for semantically salient combinations with temporal adverbials. The verbs containing a feature of "achieving the result" (resultatives [+R]) together with the feature of [±LS/A] show distinct compatibilities with adverbials denoting lasting vs. momentary action. The following examples (45) illustrate the property using the contrasting adverbials *hodinu / za hodinu* ('for an hour / in an hour').

(45) **Combination of [±R] and [±LS/A]**

(a) **[±R] and [±LS/A] for an hour / *in an hour**

*Petr bledl / psal / opisoval úkol hodinu / *za hodinu*
Peter turned-white / wrote / copied homework for an hour / *in an hour
‚Peter was turning white / writing / copying the homework for an hour.'

---

[47] *We are going to interpret the ambiguous (unmarked) structures by assuming that the feature [±LS/A] results in a (default) imperfective interpretation.*

[48] *In the examples in this section, e.g. in (44a/b) the reader can notice the range of unpredictable prefixes and stem changes which signal this kind of Aspect, which that often cannot be adequately translated into English in the absence of more syntactic context.*

(b) **[+R] and [+LS/A] *for an hour/ in an hour**

*Petr zbledl / napsal / opsal úkol *hodinu / za hodinu*
Peter turned-white / wrote / copied homework *for an hour / in an hour
‚Peter turned white / wrote / copied the homework in an hour.'

4.1.2 Iteration [±ITER]

A completely different phenomenon, in our view, is a kind of aspectual iteration which traditional Czech grammar (see e.g. Kopečný, 1962) has labelled 'the third aspect". If any Czech Aspect is to be represented by a separate functional head inside the extended verbal projection, the feature [+ITER] is a plausible candidate. [±ITER] is an optional feature which is a part of the verbal paradigm. In the unmarked form the category of V is [-ITER].

(46) **Iteration [±ITER]** - Is an **optional interpretable feature** of a Czech verb
- It is interpreted as "repeating the State and/or Action"

To support (46) we can compare the verbal category of [±ITER] with the nominal category of [±PLURAL]: not only is the interpretive distinction between singular and plural nouns comparable with the distinctions between [±ITER] verbs; the similarity of the two contrasts is found especially in the productivity and systematic regularity of the morphological patterns.[49]

(47) (a) [±PLURAL] is an optional nominal feature which is expressed by a predictable morphology and forms a part of regular nominal paradigm.

(b) [±ITER] is an optional verbal feature which is expressed by a predictable morphology (suffixes '***-á/-íva-a-'***) and is a part of regular verbal paradigm.

In both cases the regularity and predictability is bound to the presence of another feature on the lexical head category.

(48) (a) [+PLURAL] requires the presence of a feature [+COUNTABLE],
(b) [+ITER] requires the presence of the feature [±LS/A].

On the other hand, comparing [PLURAL] with [ITER] Aspect, we can find some distinctions as well: e.g. the feature of number is expressed by a inflectional morpheme fused with the feature of Case, while the feature of [ITER] Aspect is carried by a separate morpheme traditionally analysed as a separate affix. The distinction, however, may reflect only distinct diachronic processes and does not necessarily undermine (46).

[49] *For similar hypothesis see already Wolfgang Dressler (1968) and also the comments relating progressive forms to number in Robert Fiengo (1974).*

4.1.3 Aspect of passive participles: Action vs. State

According to (43) the **[±LS/A] Aspect** is a categorial feature of the lexical V, and selecting a lexical verb into a Numeration must result in selecting a [±LS/A] Aspect. If the Czech passive participles can carry the marked feature of [+LS/A] they should contain a verbal lexical entry. As for interpretation, traditional grammar interestinglz makes a distinction between passive participles carrying a distinct feature setting of [±LS/A] in combination with Tense. In the present tense, the passive participles formed from [±LS/A] imperfective verbs are interpreted as actions, as in (49a), while the passive participles derived from the [+LS/A] verbs are statives/ resultatives, as in (49b).[50]

(49) (a) **[±LS/A]** *Já jsem chválen .*
I am praised$_{[\pm LS/A]}$ ..... action
'I am (just being) praised.'

(b) **[+LS/A]** *Křeslo je zhotoveno z bambusu*
Armchair is made$_{[+LS/A]}$ from bamboo..... state
'The armchair is made from bamboo.'

This interpretive distinction is an argument for a categorial distinction. According to the typological categorial correlations, the feature [+ACTIVITY] is a prototypical feature of the category of verb, while the feature of [+STATE] is prototypically adjectival. The interpretation of passive participles thus signals their mixed categorial characteristics, namely that at least some of them (above all those derived from perfective verbs) show more adjectival than verbal properties.

As for the feature of **[±ITER] Aspect**, according to (46) it is an optional grammatical feature which is added to an existing verbal categorial stem: it is expressed by an affix ***-vá-*** preceding the participial affix ***-n/t-***. The following examples demonstrate that passive participles have, if any, at best a very restricted ability to carry an [+ITER] affix.

(50) (a) **Diktát byl psá-**vá-n** každý pátek*
* dictation was written$_{[+ITER]}$ every Friday
Roughly 'Dictations were being written each Friday.'

(b) **Ten test byl opiso-**vá-vá-n** docela pravidelně.*
* the test was copied$_{[+ITER]}$ rather regularly
Roughly 'The test was being copied rather regularly.'

Assuming that the [+ITER] Aspect (like the category of [NUMBER]) is not a feature located on the lexical V head but on some separate c-commanding verbal functional

[50] *In the past and future all Czech passive participles are ambiguous with respect to the action/ state distinction, i.e. both interpretations are possible depending on context; see Mluvnice češtiny II (1986: 173).*

head, the above examples show that such a verbal functional head may be not active (present) with passive participles.[51]

4.2 The Distribution of the Verbal Features between the AUX and Past Participle

The verbal features which can be realised on a Czech verb are (i) Tense [±TENSE], (ii) modality [±MOD] and (iii) Iterative Aspect [±ITER]. We are not going to discuss these features here in a lot of detail. We will only observe to which extent these verbal features are realised on separate constituents of the analytic passive verbal complex, namely on the AUX and on the passive participle. The distribution is demonstrated in the following (51). It shows that all those verbal features are morphologically realised on the AUX only and the participle (in bold) remains in the same form.[52]

(51) (a) [TENSE] *Jsem / jsem byla / budu* ***chválen***
I am$_{[PRES]}$ was$_{[PAST]}$ / will-be$_{[FUT]}$ praised

(b) [MOD] *Bych byla (bývala)* ***chválen***
I would be (have been)$_{[-REALIS]}$ praised

(c) [ITER] *Jsem / bývám* ***chválen***
I am$_{[-ITER]}$ am-being$_{[+ITER]}$ praised

The above example (51) thus illustrates that the passive participle is not able to reflect the features typical of the Czech verbal paradigms.

4.3 Verbal vs. adjectival inflection

A non-verbal characteristic of the passive participle is most clearly seen in its agreement morphology. Czech is a language which has a rich system of agreement morphology reflecting on another category the Phi features of a related nominal category. As illustrated in (52), the category related to the noun and reflecting its Phi features can be either a verb or an adjective. Verbal agreement (i.e. the agreement of the subject with relevant predicate) is signalled by an agreement in pronominal (D) features: i.e. features of person and number. The agreement of an adjective with its governing noun reflects nominal (N) features: i.e. the features of gender and number.[53]

(52) (a) **Verbal Agreement**: PERSON (+ Number)→ pronominal (D) features

já/ty/on/-a/-o *děl-**ám** / děl-**áš** / děl-**á***
I /you/he/she/it do$_{1S}$ / do$_{2S}$ /do$_{3SM/F/N}$

---

[51] *As discussed in e.g. Veselovská (2001b) the feature of NUMBER in Czech is plausibly located on a separate functional head above N, e.g. on D, while the feature of countability is a feature of the lexical category N.*

[52] *For the participial morphology see (53) below, and some further examples in section 1.5.5.*

[53] *For simplicity and space reasons we are going to ignore a more detailed discussion of number agreement, which is present in both cases. For Slavic unmarked and marked combinations see e.g. Franks (1995).*

(b) **Adjectival Agreement**: GENDER (+ Number) → nominal (N) features

*zelen-**ý** / zelen-**á** / zelen-**é***	*strom / střecha / jablko*
green_{SM} / green_{SF} / green_{SN}	tree_{SM} / roof_{SF} / apple_{SN}

The following example (53) shows that both components of the Czech analytic passive exhibit agreement with the subject constituent. However, the feature description demonstrates that the AUX reflects the features of PERSON (+ Number) defined above in (52a) as typical for a verbal agreement, while the passive participle morphologically realises the features of GENDER (+ Number) exemplified above in (52b) as typical for adjectival morphology.[54]

(53) *jse-**m** / js-**i** / je chvále-**n(ý)** / chválen-**a** / chválen-**o***
am_{1S} / are_{2S} / is_{3S} praised_{SM} / praised_{SF} / praised_{SN}
'I am/you are/(s)he/it is praised'

4.4 Adjectival Derivation

In the preceding sections we listed some properties of passive participles which indicate their mixed verbal and adjectival characteristics. According to Chomsky (1981:50) participles are a "neutralised category." He, however, uses the term rather vaguely and in the same study he labels the same structures in distinct ways. In our analysis of the Czech passive we assume that although some lexical items may have mixed characteristics, syntactic processing does not tolerate ambiguous labelling or neutralisation: i.e. each item must be uniquely labelled with respect to its category, which in a crucial way influences how syntactic derivation proceeds.

The categorial ambiguity observed with participles can, however, be a result of (i) a complex character of some lexical elements which consist of several parts with distinct categorial labels, and (ii) a cyclic derivation which allows a phase-by-phase composition of some morphologically complex structures. In other words, if a compound consisting of categorially distinct components is created during a process of building a syntactic structure, there may be distinct categorial labels used for the compound at distinct levels of the derivation.[55]

---

[54] *Arancha Mateos (2000) describes the two kinds of agreement with respect to obligatory vs. optional characteristics, demonstrating that the adjectival agreement seems to be cross-linguistically less ambiguous, less related to semantics and allows no optionality in its paradigms. For discussion and examples of the contrasting verbal vs. adjectival (compound / diachronically pronominal) agreement see e.g. Rochelle Lieber (1980), Bresnan (1982:21-24), Levin & Rappaport (1986), and Schoorlemmer (1995, Chapter 4). Compared with the languages discussed in the studies above, Czech morphology seems standard.*

[55] *For more aspects of apparent categorial ambiguity see Veselovská (2001d), which argues that distinct categorial labels also result from the existence of independent criteria relevant at different linguistic levels. Mixed categorial characteristics are then an argument in favour of the autonomy of the levels of phonology, morpho-syntax, and semantics and not an argument in favour of fuzzy or intermediate categories. In this study*

(see the next page)

4.4.1 Interpretation of the complex feature clusters

As for interpretation, in a modified valency theory as presented in e.g. Petr Karlík (2000) the categorially complex lexical elements are interpreted with respect to the following (54).

(54) **Interpretation of Categorial Features**

(A) **Inheritance**: the complex inherits the features of its components (the "Percolation Principle").
(B) **Priority of a Strong Feature:** in case of an incompatible feature complex, priority is given to the feature defined (within a given paradigm) as strong.
(C) **Transparency of weak features**: features which are compatible are weak and remain transparent.
(D) **Internal Opacity**: the features of the components which are combined within the Lexicon are opaque, with the exception of the features of the categorial head.

In this study we are going to propose a structural definition of transparency based on the notion of a syntactic head (and the projected phrasal category).

4.4.2 Syntactic Structure of a Derived Adjective

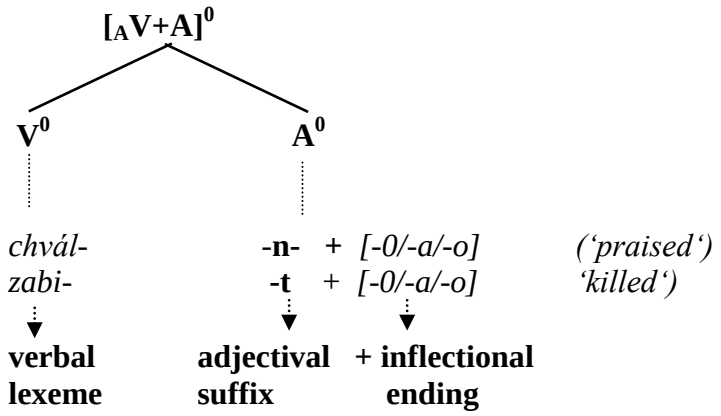
As for its syntactic structure, we take a passive participle for a kind of syntactically derived adjective. Its structure is exemplified in (55), which shows a categorial head A^0 compounded from three morphemes of a distinct kind, namely from (i) a lexical morpheme V^0, (ii) an adjectival derivational suffix A^0 (***-n-/-t-***), and (iii) an inflectional morpheme of adjectival Phi feature (Gender + Number) agreement.[56]

(see previous page)

we propose a syntactic analysis of a specific phenomenon, and therefore we will discuss primarily the morpho-syntactic characteristics related to it, rather than the more general question.

[56] *A plausible categorial label for these Phi features would be [+N]. This label would, however, require more detailed treatment which we will leave for future research. In this study we are going to call the Phi feature morpheme 'an (adjectival) agreement' morpheme/ending.*

(55) Passive Participle as a Derived (verbal) Adjective



As for complex words as in (55), a current generative framework generally accepts a 'mild' lexicalist hypothesis (as introduced in Chomsky, 1970), which proposes that some complex words are created by syntactic derivations, but others are a result of a lexical process, stored in the Lexicon and entering the derivation as one unit with opaque internal structure and interpretation. This study accepts such an intermediate position, too, assuming that depending on its characteristics, some morphology is of lexical origin while other morphology is syntactically derived. [57]

4.4.2.1 Lexical and Grammatical Elements of the Structure

In her influential comparative study Hagit Borer distinguishes between lexical and grammatical elements (see Borer, 1984) and proposes that it is the repertory of grammatical formatives which is responsible for the main distinctions between typologically distinct languages. She also develops the concept of distinct behaviours of the grammatical and lexical elements in her more contemporary Parallel Morphology (see Borer 1993, 1997). Borer claims that grammatical morphemes are stored in a separate module of Morphology and they are added to the lexical elements during the process of syntactic derivation.

A precise distinction for the process of insertion of grammatical elements into the syntactic derivation can be found in a detailed study by Joseph Emonds (2000). The author distinguishes two kinds of morphemes which are defined by their feature content:

(56) **Lexical vs. grammatical Morphemes**

(i) **Lexical items** contain idiosyncratic semantic features and must enter the derivation at its initial level of the phase. They are stored in the Lexicon.

[57] *The strong version of the lexicalist hypothesis (see e.g. Di Sciullo & Williams, 1987) takes all word-internal morphology for lexicon-internal. On the other hand, the syntactic approach (represented by e.g. Baker, 1988) derives all, or at least most morphology by a syntactic process. The intermediate position is typical for studies carried out in the framework of Distributed Morphology (see Halle & Marantz 1993).*

(ii) **Grammatical morphemes** contain only the features that a specific language accepts as grammaticalised (conceptual and grammatical features). These are stored in a separate module of the "Syntacticon".

The Syntacticon items can enter the derivation at three levels:

(57) **Levels of Insertion of Grammatical Morphemes**

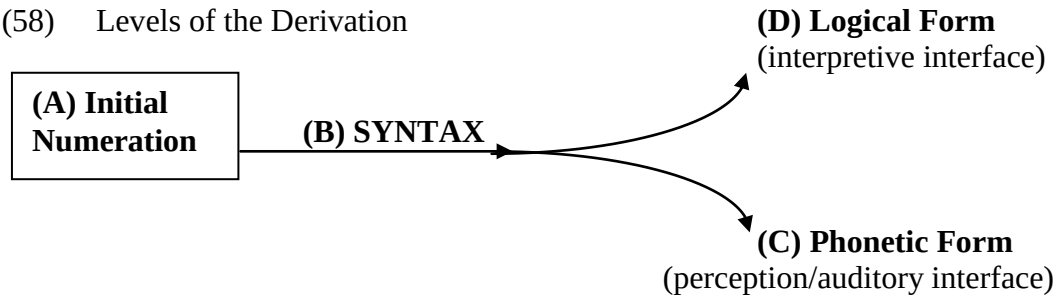
(A) the initial (Deep Structure/lexical) level of a phase,
(B) the syntactic processing preceding the end of a given phase (Spell Out),
(C) the level of PF, i.e. post-phasal insertion (concerns above all the morphemes traditionally labelled as inflection).

Emonds (2000) develops his tripartite insertion hypothesis with a number of examples and also illustrates the process for English derived passive adjectives in a way which is fully compatible with the analysis we propose here.[58]

4.4.2.2 Phases of Derivation

This study will use Emonds's hypothesis mentioned in the above section by distinguishing two kinds of morphemes characterised by their feature content with consequently distinct behaviours within syntactic processing. As for the possible levels of the phase in which the morphemes can get involved in the process of derivation, we suppose these are derived from a standard T-Model exemplified in (58). The three phases are numbered as (A) Initial Numeration, (B) Syntax (pre-Spell Out), (C) PF.

(58) Levels of the Derivation



We are not going to discuss other conditions determining the level of insertion (for details see the above cited literature), assuming only general principles of Procrastinate and structural economy.

[58] *A very similar though terminologically distinct conception from Borer's Parallel Morphology has also been applied in detail in the study of Russian participles by Maaike Schoorlemmer (1995). The tripartite level of insertion is used for the analysis of Czech derived nominals in Veselovská (2001a).*

4.4.3 Phase-by-phase Derivation of a Derived Adjective

Following a standard claim prevailingly generally accepted in a generative framework we do not expect that a transformation can change a categorial label of a specific lexical entry.[59] In conformity to this, the complex structure in (55) does not represent any categorial ambiguity because the hierarchy among the elements in (55) is defined by their position within the complex: the head within the word is determined following the Right Hand Head Rule.[60]

However, we propose that the complex word need not exist in its full complexity illustrated in (55) from the beginning of the derivation. Assuming the tripartite level of insertion of morphemes into the structure, the components of the complex in (55) clearly represent distinct kinds of morphemes and if so, some of them can enter the structure in several distinct syntactic phases.

As for the individual components in the derived (deverbal) adjective in (55): the **verbal stem** is a lexical morpheme with possibly idiosyncratic semantic features and it is therefore expected to be present in the Initial Numeration, i.e. in (58A). On the other hand, the final **agreement** morphology of the complex is an uninterpreted inflection and its insertion is likely to be as late as at PF, i.e. in (58C). The middle component - the **adjectival derivational suffix** is a grammatical element, too. As such, its presence in the structure is possible but not required in the initial Numeration. We propose that this productive adjectival suffix can be inserted to the derivation at all possible levels (58A/B/C). After the insertion of this A^0 morpheme the lexical head V^0 becomes opaque (non-head), and the complex is analysed as A^0. [61]

Depending on the level at which the A^0 head becomes active, we can distinguish three structures, all of which represent the $[_AV+A]$ complex as in (55).

4.4.3.1 Lexical Derivate

Because grammatical morphemes can in principle enter a derivation in any level, the complex V+A in (55) can be created already within the **Lexicon** and enter the Initial (semantic) Numeration as a whole. This derivate is a result of **lexical** process and its internal structure is syntactically opaque. Such a $[_AV+A]$ enters syntactic processing

---

[59] *In the Minimalist Program Chomsky (1995) repeats this proposal under the name of the Inclusiveness Condition, which does not allow a transformation to add any new material to a structure which has already been built. The author, however, does not take e.g. an inflection for a separate syntactic item, so his Inclusiveness Condition does not address structures like (55).*

[60] *The Right Hand Head Rule is discussed and justified in Rochelle Lieber (1980). It states that the categorial head of a complex (multi-categorial) element is its rightmost component.*

[61] *If (55) results from Merging separate components in a step-by-step manner the Right Hand Head Rule forces distinct categorial characteristics of the complex before and after the insertion of the right-most component. Such a change, however, does not mean a violation of the Inclusiveness Condition, because the complex is at each level of derivation defined as one specific category and the change is not a result of transformation in the traditional sense, here probably (32b), but of standard insertion of new material by a process of e.g. Merge, as in (32a).*

with a category of adjective (with a right-hand head A^0), projects according to its categorial label A and as an adjective is interpreted at the level of LF . At the perception/auditory (phonetic) level it shows a complex morphological structure with adjectival inflection. Its morphological structure is semantically transparent but syntactically opaque.

An example of such a verbal adjective is given in (59a): as will be demonstrated in the following sections with a number of examples, this lexical derivate has an adjectival 'long' (complex) inflection in Czech and a stative interpretation. Another sign of its origin within the Lexicon is its possible semantic opacity (semantic shift) with respect to the verbal stem.

(59) (a) *Petr je takový uzavře-* ***n - ý***
Peter is such closed$_{\text{-ADJ-AGR}}$
'Peter is introverted.'

The existence of categorially complex compounds inside the Lexicon is a non-controversial aspect of our analysis; any theory must allow for such vocabulary.

4.4.3.2 Syntactic Derivate

In this paper, however, we claim that the adjectival morpheme, is not always an autonomous semantic lexical item but can be a productive derivational morpheme with a specific interpretation (i.e. it is a member of the Czech Syntacticon). Consequently it need not be combined with the verb inside the Lexicon, but it can become the part of the structure V+A in (55) in some later level of a derivation.

If the head A^0 joins the V^0 in syntactic processing (before Spell Out), i.e. in (58B), the future $[_AV+A]$ complex first enters the derivation as a verbal head only, i.e. the initial Numeration contains only the V^0, and the V^0 realises its verbal subcategorisation in the initial level of derivation. It is only after the A^0 is added that the complex becomes adjectival, and as an adjective it will both appear at PF and be interpreted at LF (with no idiosyncratic semantic features but with a categorial characteristics of an adjective).

An example of such a syntactic $[_AV+A]$ derivate illustrating a so called adjectival passive is given in (59b). As illustrated and discussed in a number of examples in the following sections, this derivate shares most properties with (59a): it has a long inflection and preferably stative interpretation. Contrary to (59a), however, a syntactic derivate can carry some Aspect, has a very regular form and is semantically transparent.

(59) (b) Petr byl *(po)chvále-****n-ý***
Peter was praised$_{\text{-ADJ-AGR}}$
'Peter was praised.'

4.4.3.3 Post-syntactic Derivate

It is the stative (adjectival) interpretation (with the lack of idiosyncratic semantic features) that signals the LF presence of the adjectival head A^0 in the $[_AV+A]$ complex in (55a/b). And it is this interpretation which is missing with the third kind of derivate, in which the adjectival head A^0 becomes a part of the complex as late as at the

auditory-perceptual interface (PF) i.e. in (58C). In this case of a post-syntactic derivation the verbal stem V^0 enters the initial Numeration, selects verbal Arguments and goes through the whole syntactic process retaining its verbal character. Because the adjectival head is not inserted before Spell Out, it is not interpreted at Logical Form, so this interpretative interface analyses the V^0 as its head. Therefore the post-syntactic derivate is able to refer to a verbal activity and carry aspectual features. In this case, the only level where the adjectival morpheme is present is the phonetic level: its PF format is $[_A V+A]$ and includes the agreement morphology.

We propose that a passive participle used to form an analytic verbal passive is the best candidate for such a post-syntactic verbal adjective in Czech. (59c) shows a form characterised by a systematic 'passive' verbal subcategorisation, transparent meaning including a possible Aspect, and a 'short' adjectival agreement morphology.

(59)(c) Petr byl *chválí* ***- vá - n - Ø***
Peter was praised$_{+ASP+ADJ+AGR}$
'Peter was praised.'

Because the adjectival derivational morpheme ***-n-*** in (59c) enters the derivation only at PF, it is analogous to an agreement ending, i.e. to inflection, and therefore the verbal passive participle can be properly analysed as a part of the verbal categorial paradigm.[62]

4.4.3.4 Co-indexation and Agreement

The order of morphemes in (55) reflects, according to the Mirror Principle (38b), the hierarchy and ordering of the levels of the syntactic processing:

(60) (a) The **lexical stem** (V) is an element taken from Lexicon and a part of the initial Numeration set.
(b) A **derivational suffix** (A) becomes the head of the V+A complex as soon as it enters the derivation and serves as head at LF.
(c) An **agreement inflectional morpheme**: Uninterpretable features (N) enter the derivation at PF and have no influence on the syntactic category of the complex.

The agreement morphemes exemplified in (55) and mentioned in (60c) reflect the Phi features of a nominal complex which occupies the position of structural subject of the passive participle. In generative grammar such agreement morphology (with participles) has been studied especially in e.g. French and Italian. Most cited is the hypothesis presented in the study by Richard Kayne (1989), who claims that the participle morphology is result of the relation between the participle and a nominal element which moves from the deep object position to a structural subject position. On its way to the high periphery of an extended verbal projection this nominal element

[62] *Contrary to the participial morphology, in the preceding sections we provided a number of arguments showing that the AUX used to form the analytic passive can*not *be taken as an equivalent of inflection.*.

generated as a right sister to V passes through the SPEC(V) (in Kayne's work through the V-adjunct), and it is this SPEC-head relation which results in participial agreement.[63]

We accept the idea that the adjectival agreement signals a SPEC-head relation. Contrary to Kayne's original proposal, however, we do not generate an object as a right-hand sister to V, but, as illustrated in (36) we take the SPEC(V) position as the base position of the internal Argument. Therefore we propose that SPEC(V) and V is the structure in which the internal Argument (later on a structural subject of the passive) and the participle enter the relation Agree.

In the preceding sections we proposed that the agreement inflectional morpheme is inserted into the structure late in the derivation at PF. The morpheme, however, reflects a co-indexation which is established in the level of the derivation when the elements sensitive to the agreement relation appear in each other's checking domain. The element requiring the coindexation is the adjectival affix (60b) which has to receive some Phi features. Therefore we assume that the coindexation takes place as soon as the adjectival affix enters the derivation, although the morphological realisation is always at PF.

In the case of the lexical derived adjective demonstrated in (59a), the coindexation takes place immediately after the initial Merge of the noun to the domain of the $[_{A}V+A]$ head. The process of (i) abstract feature coindexation and (ii) realisation of agreement morphology is thus dissociated into two stages, and the resulting morphology is agglutinating (more complex and always separable from the adjectival suffix).

With the syntactic derivates (59b), the co-indexation can take in a level of syntactic processing, because in the initial Numeration the complex is syntactically defined as V. Still, even in this case the process of co-indexation is dissociated from its morphological realisation and the resulting PF form is therefore again agglutinating (what Czech grammar calls the complex/long agreement).

With post-syntactic adjectives, i.e. the true verbal passives demonstrated in (59c), the processes of co-indexation and morphological realisation take place on the same level: at PF. We propose that Czech's short (simple/participial) agreement morphology signals this simultaneous abstract co-indexation and morphological realisation, i.e. these different morphological forms reveal a difference in derivational history.[64]

In the next sections we are going to demonstrate the phase-by-phase derivation of the Czech analytic passive with transitive and intransitive verbs, trying to predict their distribution based on the general syntactic principles developed up to this point.

---

[63] *The structural SPEC-head relation for agreement morphology is also accepted in e.g. Borer & Wexler (1992). For an alternative see Claire Lefevbre (1988), who claims that the agreement relation is defined under government, with the participles V being the governing and the nominal element the governed element.*

[64] *For the distinction between short and long morphology see section 7.1.1.*

5 DERIVATION OF IMPERFECT PASSIVE PARTICIPLES

The verbal passive participles (post-lexical verbal derivates) are formed from lexical stems which are present in the initial Numeration in the same form as those resulting in active verbal forms. In the following subsections we are going to describe in more detail the process of deriving the Czech analytic passive, proposing that it takes place in several subsequent levels/phases as ordered below.

(61) (a) Initial projection of the verbal head V, which is taken from the Lexicon and listed in the initial Numeration. The verbal head realises its subcategorisation on the level of V, i.e. of its internal Argument Θ2.

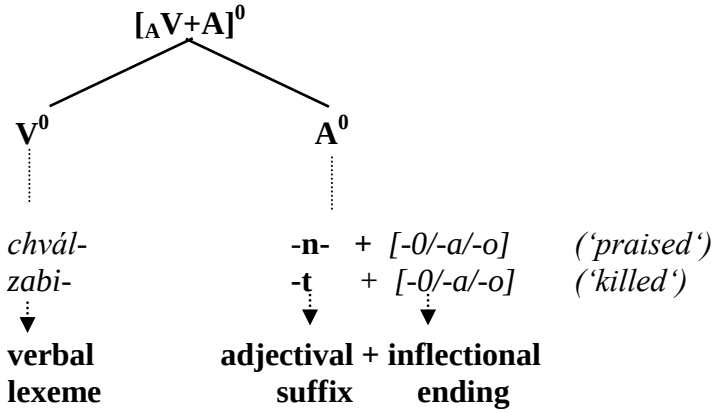
(b) Merge and projection of the light verb *v** (plus subsequent Merge and projection of the functional head T).

(c) Inserting of the derivational affix of the category A (projection of the verbal derivate $[_{A}V+A]$.Because this A is inserted on the right of the word, it becomes the head, i.e., it projects. As a result, the projected phrase becomes an AP. That is, in the rest of syntactic processing, it acts as an AP.

5.1 Projection of the lexical verbal head V

We proposed the structure of imperfective [±LS/A] passive participles in (55) of the preceding section 4.4 and repeat the scheme here for convenience as (62). The following (63) repeat the examples of the $[_{A}V+A]$ derivates as they were introduced and briefly described in (59b/c) in section 4.4.

(62) The structure of Passive Participle as a Derived (verbal) Adjective



(63) (a) Lexical Derivate
*Petr je takový uzavře- **n - ý***
Peter is such closed$_{-ADJ-AGR}$
'Peter is introverted.'

(b) Syntactic Derivate
*Petr byl (po)chvále-**n-ý***
Peter was praised$_{-ADJ-AGR}$
'Peter was praised.'

(c) Post-syntactic Derivate
*Petr byl chválí **- vá - n - Ø***
Peter was praised$_{+ASP+ADJ+AGR}$
'Peter was praised.'

Assuming that in (63b/c) the adjectival head is not connected with the verbal stem in the Lexicon, the active verbal forms (a) *chválím*, *chválíš*… ('I praise, you praise') and the passive verbal forms (b) *jsem chválen*, *jsi chválen*… ('I am praised, you are praised') are projections of the same Lexical item which enters the initial Numeration.

As proposed in Chomsky (1995), each lexical entry is characterised by (possibly idiosyncratic) semantic features, (interpretable and uninterpretable) syntactic features, and phonetic features (including all idiosyncratic paradigmatic changes.) As minimal syntactic information in a lexical entry we will assume the following (64).[65]

(64) **The Lexical Entry**

(a) Categorial label[66]
(b) (i) Theta Grid (semantic valency, the number/list of the Argument roles),
(ii) Inherent (lexical, idiosyncratic) Cases, if these realise some of the Argument roles mentioned in (i)[67]

5.1.1 An Example of an open class Subcategorisation

To illustrate the process of a derivation of an analytic passive form, let us start with the lexical entry c*hvál- (*'praise') which enters the initial Numeration with the following syntactic information.[68]

(65) Syntactic subcategorisation of *chvál-* ('praise') (a) [+V][-N],
(b) Agent, Patient

The Theta Grid of (65b) requires generating a verbal projection which allows the realisation of two Arguments, i.e. the structure of the transitive verb given in (36) of Part 1, i.e. the *v**P with the light verb head (with the context/subcategorial feature) *v** [__VP] Because there is no information about oblique Case marking, the Theta roles are to be realised in the unmarked way, i.e. as NP/DP Arguments licensed by configurational Cases based on the structural relations suggested in (37) of Part 1.

Consider another possible Czech lexical entry *nadrž-ov-/-u-* (‚favour')as given in (66). What the information in (66b/ii) about oblique Dative Case means is that the

---

[65] *Unfortunately the generative model pays less attention to the format of lexical items than to syntactic principles. We are not going to try to solve this complex problem here and so will use only information/features relevant for our analysis.*

[66] *For our purposes we will use here the simple categorial repertory based on the distinction between the [±N] and [±V] features; see Chomsky (1970). The category labels are in the ideal case based on semantic characteristics, but not only on that. For some more discussion above see the introduction to section 4.4 and the footnote 55 of Part 1.*

[67] *For the notion of lexical case see footnote 38 of Part 1.*

[68] *Apart from (65), the lexical entry also contains the semantic features which will give it the correct interpretation at LF and the Czech phonetic feature format.*

DP with the internal role of Recipient will have to be realised by a lexical (inherent) Case.[69]

(66) Syntactic subcategorisation of *nadrž-ov-/-u-* ('favour')

(a) [+V][-N],
(b) (i) Agent, Recipient,
(ii) Dative

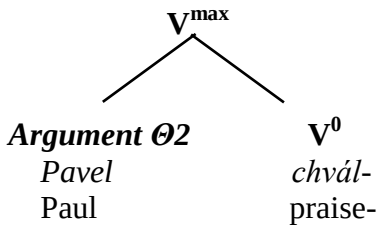
With the inflecting open category of verbs in Czech the verbal stem is never realised as bare. The lexical entries in (65)/(66) enter an initial Numeration, and in the process of the building up the structure they combine with other morphological elements that are accessible during the process of derivation, i.e. those stored in the Syntacticon.

5.1.2 The Verbal component of the Passive Participle

A lexical item with the [+V] feature denotes an action/state located in a temporal frame. Its verbal character is also reflected by its ability to carry a marked value of the Aspectual feature [±LS/A]. The verbal character of the passive participle is therefore supported by the presence of the features [+ACTIVITY] and [±LS/A], which were both exemplified in (49) and (50) of Part 1. Another proof of the verbal character of the passive participle is the Theta Grid of the stem. Although it has a modified valency with respect to the active verbal form, it is clearly selecting arguments like a verb.

Assuming that the verbal stem V^0 is listed in the initial Numeration and enters the derivation, it projects according to universal phrasal projection rules and creates the position of SPEC(V), which is the position with the theta role of Argument Θ2 (the position where the relevant Argument is Merged). The part of the transitive verbal structure (projection of the lexical head V) introduced in (36) of Part 1 is repeated here as (67).

(67)



[69] *For the purpose of our discussion we also assume that the lexical entries (65) and (66) are marked as [±LS/A], i.e. they are imperfective. The value of the [±LS/A] feature need not be in fact specified for each lexical entry. In Czech, the value of [+LS/A] correlates with the absence of a verbal prefix, while the verbal prefixes usually mean [±LS/A]. Though the system is clearly more complex than this, we believe that a complete study will allow one to derive the feature of Aspect directly from independent factors, one being simply the categorial feature of V in (65a) and (66a).*

5.2 The Projection of the light verb *v**

5.2.1 Derivation of an active verbal form

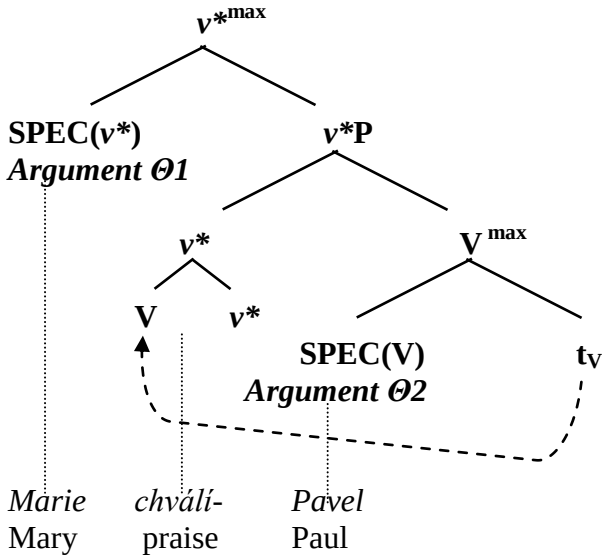
A complex verbal projection of a transitive verb also contains, apart from the head V, a light verb head *v**. It can moreover be c-commanded by a functional projection T, the presence of which is signalled by the presence of the feature [+Finit(ness)]. Such a complex extended projection was shown in (36)of Part 1 and described briefly in (33) of Part 1, which we repeat here for convenience

(68) (a) TP → T, *v**P
(b) *v**P → *v**, VP

As mentioned in subsection 2.3, the verbal heads *v** and T have <+V> features, and the verbal lexical head V is checking these <+V> features by undergoing subsequent head movement. The resulting complex contains only verbal categories, and a lexical item representing the [$_T$V+*v**+T]) complex is a full fledged verb.

If such a verb subcategorises for Arguments, they are Merged in SPEC(V) and SPEC(v*), as illustrated in (36) of Part 1, repeated here as (69). In (69) we use the Argument Θ1: *Marie* and Argument Θ2: *Pavel*. The verb *chváli-* 'praise' is shown in the position of *v**, where it moves from V. The arrow connects the *v** and V heads.

(69) Transitive *v**P, with *v** [__+V] assigning Θ1 to its SPEC(*v**).



As for the licensing of the external Argument Θ1 generated in the position of SPEC(*v**), a finite functional head T attracts this Argument DP to the position of SPEC(T), which is an Argument position with structural NOM as stated in (70a) which repeats the (37) of Part 1 for convenience.

(70) **Verbal Structural Case**

(a) NOM is assigned in SPEC of an activated *v**, i.e. after the attraction of *v**→ T,
(b) ACC is assigned in SPEC of an activated V, i.e. after the attraction of V→ *v**.

In Czech the Argument [Θ1, NOM] is also reflected in the form of a verbal agreement morpheme containing Person and Number features.

As for the internal Argument, the lexical Verbs in (67)/(69) assign a Θ2 of Patient to the position of SPEC(V). According to (70b) this role is licensed in the verbal structure *v**P after syntactic processing, and its unmarked morphological marking is a structural ACC.

(71) (a) *chvál-ím, -íš…, -it* [*Pavl-a*]
praise $_{1S / 2S....., -INF}$ [Paul$_{ACC}$]$_{Θ2}$

For the lexical item with an entry like *nadržovat* (‘favour‘), illustrated in (66), the internal Argument Θ2 of Recipient is generated in SPEC(V). The marked feature (66c) defines a lexical/ inherent/ oblique Case DAT, which is assigned immediately to the SPEC(V) position in the structural (SPEC-head) relation .

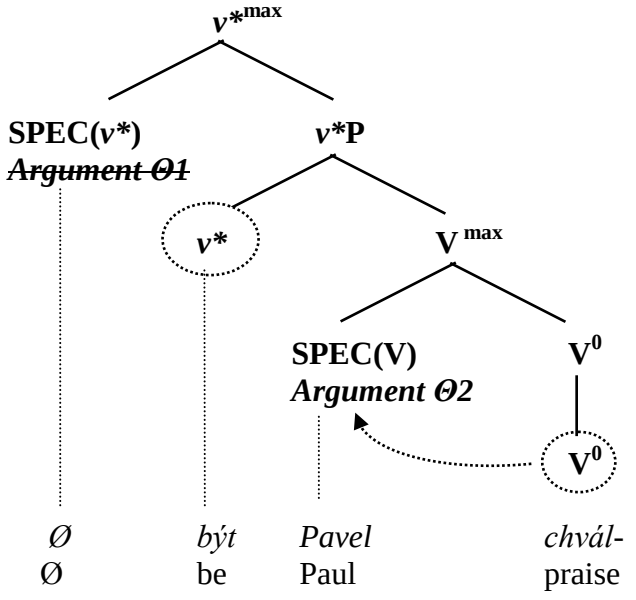
(71) (b) *nadrž-uji, -eš…, -ovat* [*Pavl-ovi*]
favour $_{1S / 2S....., -INF}$ [Paul$_{DAT}$]$_{Θ2}$.
‘I/You/to favour Paul‘

5.2.2 The Light Verb in the Passive Structure: Burzio’s Generalisation

In the scheme (42) of Part 1 we concluded that a number of characteristics of the passive AUX show that this AUX *be* is located in the position *v** . The verb *být* (‘be‘) has no thematic frame, and without a syntactic unification with the verbal head the position of *v** is not able to transfer the Theta Roles of the verb V to the position SPEC(*v**). In other words, by filling the head *v** with an AUX *být* (‘be‘), the Argument Θ1 present in the subcategorisation frame of the V cannot be realised in the same way as it is with the active verbal forms after *v** incorporates the head V.

To illustrate the proposed properties of the structure with respect to Theta Role and Case assignment, we repeat here the modified scheme (69) as (72).

(72)



Although the verb *být* ('be') cannot project the Theta Role of Argument Θ1 into its SPEC, the discussion in section 1.5 demonstrates that the passive AUX can fully satisfy the verbal features of the extended projection, including the checking of the <+V> feature of the head T. This is an important condition for convergence of the structure because without this process the structure proposed in (72) cannot license any Argument.

As stated in (70b), a structural ACC is a result of the attraction V→*v**, and given that this movement does not take place in (72) , there is no ACC in the passive structure in (72).

On the other hand, following (70a), it is the attraction of *v**→T (signalled by finite morphology) that licenses the structural NOM. Therefore NOM can be assigned only after the Merge of the functional head T with features <+V> and <+D/N> . The feature <+V> on T attracts the *v**→T movement, and because the Argument Θ2 in its position in SPEC(V) is in the checking domain of the head T, it can check the feature <+D/N> of T and be marked by NOM.

According to our analysis Burzio's Generalisation in (31) of Part 1 summarises two consequences of one cause. The lack of Θ2 and of ACC result from inserting two separate elements into the complex structure of the transitive verb, i.e. into the complex [$_{v*}$V+*v**]. The insertion of an AUX in v* disallows incorporation of V into v*, and this results in (i) the impossibility of assigning Θ2 of V to SPEC(*v**), and (ii) the impossibility of assigning ACC to SPEC(V) by means of the 'activated' V.

5.2.3 A Comparison of the Active and Passive Projections

According to (69), the structure of VP further projects by Merging of the head *v** which carries a feature <+V>. This feature must be checked, and the checking can be done in the two ways stated in (32) of Part 1 (i) In the active structures exemplified in (69), the feature <+V> of *v** is checked by a transformation Attract (32b) of Part 1, i.e. by V→*v**. The second way of checking the feature <+V> of *v** takes place in passive structures as in (72), where the feature is checked by Merge (32a) of Part 1, i.e. by insertion of a separate element (the verb *být* ('be') into the position of *v**. Once the feature is checked by Merge, the Attract transformation V→*v** cannot take place any more because it would be unmotivated.

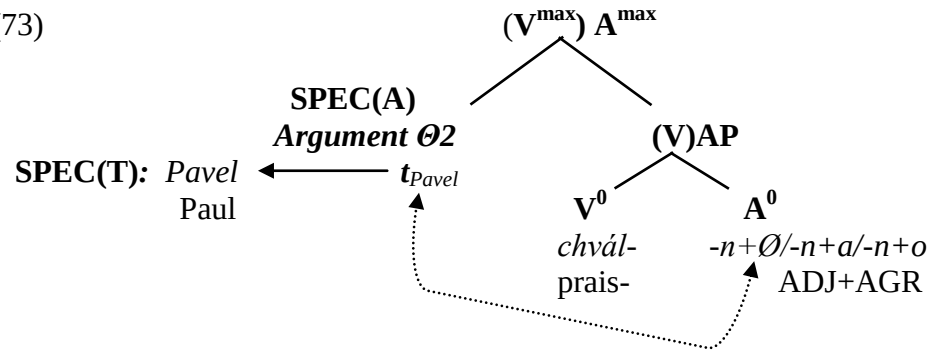
We assume that the need to realise the full Theta Grid (stated in the subcategorisation of a specific verbal item) is optional, so that the initial semantic Numeration does not have to include an item marked as an Argument with Θ1. If so, the active and passive projections are syntactically equivalent: they are able to check the relevant feature of *v** either synthetically, by one complex verbal form [$_{v*}$V+*v**] or analytically, by two separate syntactic units *v** and V.

5.3 Insertion of the Derivational Morpheme

According to our analysis. as the last phase of the derivation of a verbal passive clause, the verbal stem V is complemented by a derivational head of the category A (the adjectival *–n/-t* suffix). At the phonological level this morpheme becomes the head of the structure [$_{A}$V+A] and can be co-indexed with the trace of the Argument Θ2, (***t***$_{Paul}$) generated in SPEC(V) and attracted to SPEC(T). This modified scheme we

give in (73); the solid arrow indicates attraction to SPEC(T) and the broken arrow the agreement relation.

(73)



The suffix *-n-/-t* is of category Adjective, and as such it can (and in Czech must) be overtly marked for agreement. The co-indexation of the A morpheme with the nominal features in its checking domain (SPEC-head agreement) takes place in (73), and the resulting inflectional morphology reflects the Phi features of Gender/ Number/ Case. Because the insertion of the agreement morphology takes place in the same level as the co-indexation, the resulting adjectival morphology is of the 'short' type: *-n+Ø/-n+a/-n+o,* or *-t+Ø/-t+a/-t+o*. The singular paradigm is exemplified in (74).

(74) *chvále-**n**+Ø / chvále-**n+a** / chvále**n**+**o***
praised$_{ADJ+SM}$ / praised$_{ADJ+SF}$ / praised$_{ADJ+SN}$

The mutual compatibility of the derived adjective and a light verb v* is ensured by the subcategorisation of the verb *být* ('be'). As mentioned in (42c) in section 3.3 the verb *být* ('be') selects non-verbal complements in the form of AP.[70]

5.4 The distinction between the Structural and Lexical Cases

The reason why the passive structure cannot license its internal Argument by ACC is due to the nature of Accusative case. As stated in (70b), Accusative is a structural / configuration case in Czech and is assigned to the position SPEC(V) only after the transformation V→*v** (which reflects/ indicates the transitivity of active verbs). Lexical case, which the verb selects in its subcategorial frame, is assigned immediately after the Argument enters a derivation and is located in SPEC(V).[71]

Because the position of the non-Accusative Arguments is in SPEC(V), they should be susceptible to being attracted by the strong feature <+D> of the finite head T. However, their passivisation, i.e. movement to SPEC(T), is not possible, because oblique case we claim is a morphological realisation of an underlying PP structure (the P is realised as bound case morpheme on its object, and as such is not able to

[70] *More discussion about the verbs selecting passive participles see 7.1.6.*

[71] *The concept of structural versus lexical case is discussed in footnote 38 of Part 1. For Slavic languages this distinction is crucially utilised in e.g. Franks (1995) and Veselovská (2001a).*

check the <D> feature on T. Moreover, after a movement to SPEC(T), an Argument must be assigned structural nominative, and no DP can carry more than one case.

As for the non-Accusative adjuncts to verbs which are generated in some position other than SPEC(V), they can appear with passive participles. They keep their form as well as their obligatory/ optional characteristics of complementation, as seen in the following examples.

(75)

(a) *Petr přemlouvá Pavla k odchodu* ⇒ *Pavel je přemlouván k odchodu*
Peter$_{NOM}$ convinces Paul$_{ACC}$ for leave ⇒ Paul$_{NOM}$ is convinced for leave
'Peter is convincing Paul to leave.' 'Paul is being convinced to leave.'

(b) *Petr přemlouvá *Ø / Pavla* ⇒ *Pavel je přemlouván *Ø / k odchodu*
Peter$_{NOM}$ convinces *Ø / Paul$_{ACC}$ ⇒ Paul$_{NOM}$ is convinced *Ø / for leave
'Peter convinces *Ø / Paul.' 'Paul is convinced *Ø / to leave.'

Consider also the sentences in (76) which illustrate a regular Czech verb selecting a direct object ACC and an indirect object DAT. As expected, in (76b) ACC can be passivised (with the DAT unchanged) while in (76c) the DAT cannot be, nor is it possible to form an impersonal passive in (76d).

(76) *Petr slibuje všem děvčatům velkou pusu*
Peter$_{NOM}$ promises all girls$_{DAT}$ big kiss$_{ACC}$
‚Peter is promising a big kiss to the girls.'

(a) ⇒ *Velká pusa je slibována všem děvčatům.*
big kiss$_{NOM}$ is promised all girls$_{DAT}$

(b) ⇒ * *Všechna děvčata jsou slibována velkou pusu.*
* all girls$_{NOM}$ are promised big kiss$_{ACC}$

(c) ⇒ * *je pro slibováno všem děvčatům velkou pusu*
* is *pro* promised$_{3SN}$ all girls$_{DAT}$ big kiss$_{ACC}$

On the other hand, no matter how its exact analysis would look, the Accusative in (77) is *not* assigned by the verb but is rather the so called "adverbial Accusative"(NP adverb) used for Czech temporal adverbials. This adjunct ACC cannot be passivised as (77b) demonstrates. The selected complement of the verb in (77) is the DAT, which cannot be passivised either in (77c). An impersonal passive structure is nonetheless possible, as seen in (77d) with both the DAT and non-verbal ACC adjunct unchanged.

(77) *Petr nadržuje děvčatům celou dobu*
Peter$_{NOM}$ favours girls$_{DAT}$ all time$_{ACC}$
'Peter is favouring the girls all the time.'

(a) ⇒ * *Celá doba je nadržována děvčatům.*
all time$_{NOM}$ is favoured girls$_{DAT}$

(b) ⇒ * *Děvčata jsou nadržována celou dobu .*
* girls$_{NOM}$ are favoured all time$_{ACC}$

(c) ⇒ *Je pro nadržováno děvčatům celou dobu.*
is *pro* favours$_{3SN}$ girls$_{DAT}$ all time$_{ACC}$
'The girls are favoured all the time.'

5.5 Formal and Logical Presence of the Theta Role Θ1-Agent

In the analytic passive structures derived from transitive verbs the position of Theta Role Θ1-Agent cannot be assigned because the head of the light verb *v** does not incorporate the Theta Frame of the lower V: the insertion of the verb *být* ('be') in the v* head blocks the attraction V→*v**. As for interpretation, however, the following comparison with the reflexive passive shows that the possibility of an Agent is not lost, in spite of the fact that the Argument Θ1 cannot be realised as NOM.

(78)	A:	*To okno bylo rozbito včera.*	B:	*Kdo to udělal?*
		the window was broken yesterday	-	who it did
		'The window was broken yesterday.'		- Who did
(79)	A:	*To okno se rozbilo včera.*	B:	**Kdo to udělal?*
		the window REFL broke yesterday	-	*who it did
		'The window broke yesterday.'	-	*'Who did it?'

The presence of a logical subject is also revealed by the possible use of an intentional adverbial which implies an agent of the activity (e.g. *schválně/ úmyslně*, intentionally/ on purpose').

(80) *Schůze byla **schválně / úmyslně** rozpuštěna (předsedou)*
meeting$_{NOM}$ was intentionally/purposely dissolved (chairman$_{3SN}$)
'The meeting was dissolved intentionally/on purpose (by a chairman).'
(The chairman did it intentionally/on purpose.)

The implicit presence of a logical Agent (Argument Θ1) in such sentences in fact supports our analysis. If the passive participle is a post-syntactic [$_{A}$V+A] derivate, it enters the logical interface as a verb, and the adjectival suffix is present only at PF. In this situation, though it cannot be present with overt NOM case, the LF interface forces some interpretation of Argument Θ1 from the Theta Frame of the verb.

5.5.1 Agent in the Instrumental Case

The interpretation of Argument Θ1 is possible at LF although the passive structure is not able to license more than one Argument at the syntactic level (the non-case marked internal Argument is assigned NOM after the attraction v*→T). With NOM not available, the Thematic Role of Agent can be phonetically realised only as an adjunct, i.e. it gets Case from some independent source. In Czech, as in other languages, at least some of the passive structures can express the Agent in the form of [DP, INST] or a full PP A number of theories reflect the fact that the INSTR DP shows many characteristics of a semantic Argument of the passive verb, e.g. a detailed study by Jane Grimshaw (1990: 109/132), who labels this instrumental DP an A-adjunct (i.e. an Argument Adjunct).

Several theories also try to explain the choice / form of such an A-adjunct as instrumental. The classical proposal made by Fillmore (1968) argues that the instrumental Agents have a PP structure. We accept this solution, claiming that morphological INSTR in Czech is (like any other oblique case) a bound morpheme realising an empty preposition, i.e. here DP_{INSTR} has a PP structure. Instrumental is a morphological case which inherently expresses a range of meanings and does not exclude the role of the active Argument Θ1. Apart from instrumental this interpretation is possible with (only) overt PPs, one of which is exemplified in (81) below. (81b) demonstrates in addition that the presence of INSTR does not depend on the feature/presence of T.[72]

(81) (a) *Pavel je chválen* *Petrem$_{INSTR}$* / *od Petra*
Paul is praised Peter$_{INSTR}$ / by Peter
'Paul is praised by Peter.'

(b) *být chválen* *někým$_{INSTR}$* / *od Petra*
to be praised Peter$_{INSTR}$ / by Peter
'to be praised by Peter.'

In this study we accept the PP (adjunct) analysis of the Czech instrumental. We assume that adjuncts are optional, which makes them distinct from the obligatory arguments.

The following examples at first seem to argue against the non-obligatory nature of instrumental Agents. 73

(82) *Ten dům* *byl projektován* **Ø / francouzským architektem*
the house$_{NOM}$ was designed *Ø / French architect$_{INSTR}$
'The house was designed by a French architect.'

---

[72] *Fillmore (1968) proposes that the (optional) Agent interpretation is a result of the nature of the preposition used. The same role could be attributed to the Czech bound inflectional morpheme of the instrumental case. This case would then be in Czech interpreted in the same way as (i) Agent (on a par with NOM) or (ii) Instrument (alternating with an overt preposition).*

[73] *The Theta Roles of passive participles are compared with active verbs with a focus on the presence of a logical Agent in Chomsky (1965, Chapter 2), Wasow (1977, section 4.3), Jaeggli (1986, section 6), Afarli (1989, Chapter 1.2) and Schoorlemmer (1995, Chapter 3). In the following section 5.5.1 we discuss the interpretation of the instrumental Agents, conceiving of it as optional. This is in accord with the typological generalisation presented in Keenan (1985: 247), who claims that many languages have optional Agents with passives but that no attested language has obligatory Agents with passives. Štícha (1984: 96) has collected statistical data showing that in languages which allow Agents of passives the majority of passives are still without Agents. The proportion of passives with Agents can also be influenced by the word order in a given language: in languages with a fixed constituent order (like English) the number of passives with sentence final (rhematised)* by-*Agents is going to be much higher than in languages which can rhematise the Agent postverbally without passivisation (like Czech).*

We want to argue that the above example is not ungrammatical due to the INSTR being missing. Rather, the structure is not salient because its informational value is too poor. Its predicate does not bring any new (rhematic) information which would not be present already in the meaning of the structural subject. As illustrated in (83), if some other new information is added which can fill the information gap (by taking the role of contrastive rheme), the sentence becomes grammatical although still missing the INSTR.

(83) (a) *Ten dům byl projektován a ne postaven jen tak spontánně.*
the house was designed and not built only spontaneously
'That house was designed and not just built in some spontaneous way.'

(b) *Právě proto, že ten dům byl projektován, řada jeho vlastností je nezvyklá.*
just because (that) the house was projected number its properties is unusual
'It is because the house has been designed, that a number of its properties are unusual.'

(c) *Ten dům byl projektován včera / dva roky / velmi zodpovědně*
the house was projected yesterday / for two years / very responsibly
'The house was (being) designed yesterday / for two years / with a high responsibility.'

No claim for obligatory A-Adjuncts can be supported by (84) either, because the INSTR in (84) is neither obligatory nor interpreted as the instrumental Agent.

(84) (a) *Náhrdelník je vykládán *Ø / diamanty*
necklace is inlaid *Ø / $\text{diamonds}_{\text{INSTR}}$
'The necklace is inlaid with diamonds.'

The INSTR in (84a) is a lexical/ oblique case appearing with the Czech verb *vyklád-* 'inlay' to carry another standard semantic role of INSTR, i.e. that of a complement which expresses the Instrument. The following example (84b) demonstrates that an (optional) $\text{Agent}_{\text{INSTR}}$ can in fact co-occur with this INSTR complement. The ungrammaticality of (84a) is therefore caused by the lack of the obligatory Argument ($\text{Instrument}_{\text{INSTR}}$) of the verb and not by the lack of $\text{Agent}_{\text{INSTR}}$.

(84) (b) *Náhrdelník je (právě) klenotníkem vykládán brilianty.*
necklace is (just) goldsmith_{INSTR} inlaid diamonds_{INSTR}
'The necklace is just being inlaid by a goldsmith with diamonds.'

We have no ambition to define here an exact general process of interpretation for verbal Arguments. But we still want to bring attention to the fact that in Czech the order of the instrumental DP seems to play a role in the interpretation of a passive clause. In other words, the position of the Instrumental Adjunct with respect to the VP projection seems to be relevant, as seen in the following example. (85) suggests that the unmarked (most likely) interpretation requires an Agent reading for the DP which

is adjacent to the past participle.[74] The same interpretation is more problematic with the inverted order.

(85) (a) *Dopis byl psán Petrem perem.*
letter was written $\text{Peter}_{\text{INSTR}}$ $\text{pen}_{\text{INSTR}}$.
'The letter was written by Peter with a pen.'

(b) *??Dopis byl psán* $\textit{perem}_{\textit{INSTR}}$ $\textit{Petrem}_{\textit{INSTR}}$.
??letter was written $\text{pen}_{\text{INSTR}}$ $\text{Peter}_{\text{INSTR}}$.

We therefore suggest that the Agent interpretation is analysed late at the interpretative interface (LF), and that the top Argument Θ1 interpretation is assigned to the closest c-commanding NP/DP, if present and compatible with such an interpretation. The Instrumental PP may than get the Agent interpretation due to its proximity to the VP domain.

6 EXTERNAL DISTRIBUTION OF THE PASSIVE PARTICIPLE

We have argued that the form of the components of the analytic passive in Czech is basically the result of the need to check the feature <+V> of the head *v**. This triggers the insertion of the verb *být* ('be') into the position of *v**. The form of the passive also depends on the need to realise the Theta Grid of the active verb. An active transitive verb which is realised in a synthetic way by one complex [$_{v*}$V+*v**] can license its internal argument, and the Merge of this single complex with T allows overt realisation of the NOM subject (external argument), too.

This ability is lost in passives because the two heads V and v* are filled separately. But on the other hand, the new derivate constructed from V of the category A is [+N], and as such it can be licensed by an agreement with the Phi features of some related nominal head. The initial step in our analysis is based on the above assumption. We claim that the external distribution of the passive participles follows from the need to license (i) the [+N] participle and (ii) the arguments which have been generated in the initial level as complements of the V head.

The variety of distribution of the passive participle in Czech is illustrated in (86). The list demonstrates the passive participle as a part of (a/b) the analytic/impersonal passive with the AUX *být* ('be'), (c) the non-paradigmatic perfect with *mít* ('have') *'have'*), (d) an adjunct-complement.

(86) (a) *Pavel je **chválen** Petrem*
Paul_{NOM} is praised $\text{Peter}_{\text{INSTR}}$ ('Paul is praised by Peter.')

(b) *Je **nadržováno** děvčatům.*
pro is favoured $\text{girls}_{\text{DAT}}$ ('Girls are favoured.')

(c) *Pavel má odměnu **slíbenou**.*
Paul_{NOM} has $\text{reward}_{\text{ACC}}$ promised ('Paul was promised a reward.')

[74] *See also example (84b) above.*

(d) ***Chválen*** *Petrem, Pavel se nadýmal pýchou.*
praised $Peter_{INSTR}$ $Paul_{NOM}$ REFL burst $pride_{INSTR}$
'Praised by Peter, Paul was bursting with pride.'

In the following subsections we will address the derivations of (86a/b/c). The structure of the adjunct-complement in (86d) we leave for future research.

6.1 Overview of Analytic Passives

The following sections are going to briefly repeat the derivations of the Czech analytic passive, discussing in more detail the system of how the structures and its components converge.

6.1.1 Generating the Verbal Head and Argument Θ2

Let's start with the analysis of the Czech analytic passive (86a) repeated in the following example.

(87) (a) *Pavel je **chválen** Petrem*
$Paul_{NOM}$ is praised $Peter_{INSTR}$
'Paul is praised by Peter.'

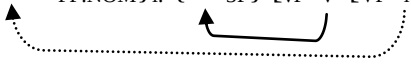
(b) *Ženy jsou **chváleny** Petrem*
$Women_{NOM}$ are praised $Peter_{INSTR}$
'Women are praised by Peter.'

In (71) and (73) we proposed a subcategorisation of the verb *chválit*'praise': V, [__D], <Θ1, Θ2>. In the first stage of derivation (the projection of the lexical V head) the Arguments Θ1 / Θ2 can project only partially: namely, the Θ2 (*Pavel/ženy* 'Paul/women') is generated in the SPEC(V). After the Merge of *v** with a strong <+V> feature in (72) the feature of *v** is checked by inserting the light verb *být* ('be'). Because the attraction of V→*v** does not take place, (i) the structure loses the ability to assign a structural Accusative in SPEC(V). Moreover (ii), a separate light verb *v** can not incorporate the Theta Grid of V to license the Argument Θ1 of V in its SPEC(*v**). On the other hand, the verb *být* ('be') in *v** can carry the 'verbal finite' features of [TENSE], [MOD)], [ITER] and check the feature <+V> of the head T to license the Argument Θ2 as Nominative.

These initial levels of the process were illustrated in (72) and (73). The resulting structure is shown in the schematic (88). The co-indexed traces t_x reflect the previous stages of the derivation: the broken arrow the (phrasal NP) movement of the nominal Argument from SPEC(V) to SPEC(*v**) and SPEC(T), and the full arrow the (head) movement of the light verb *v** to T.

(88) (a) *Pavel* *je* *chvál-en*
(b) *Ženy.* *jsou* *chvále-n-y*

$[_{TP}\ \{Paul_{MS.NOM}\}_i \quad \{is_{3S}\} \quad [_{vP}\ t_v \quad [_{VP}\ t_i\ praised_{ADJ+MS.NOM}]$
$[_{TP}\ \{women_{FP.NOM}\}_i. \ \{are_{3P}\} \ [_{vP}\ t_v \quad [_{VP}\ t_i\ praised_{ADJ+\ FP.NOM}]$



6.1.1. Licensing of the adjectival derivates

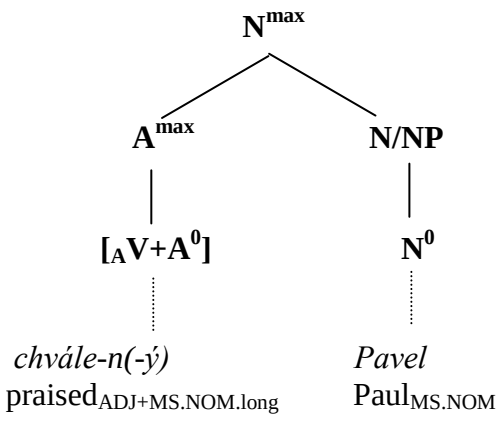
A participle is an adjectival category and as such it is licensed in Czech by an adjectival agreement. As described in 4.4.3.4 in Part 1, we take it that the agreement morphology signals a syntactic relation to an A head with some nominal features. Assuming that the SPEC-head relation is the prototypical agreement relation, the adjectival head (suffix) in the $[_A V+A]$ complex can enter an agreement relation with the Phi features of the structural object, i.e. Argument Θ2, generated in SPEC(V/A).

As for the feature content of the agreement, some of them are integral parts of the nominal constituent Θ2, e.g. Gender, while others are acquired by the nominal complex in some later stage of derivation, e.g. Case. Therefore we conclude that the agreement consists of both (i) a process of co-indexation which relates the two heads when the agree relation holds, and (ii) a realisation of the features of the co-indexed nominal complex on the adjectival head A (in the form of inflectional morphology}.

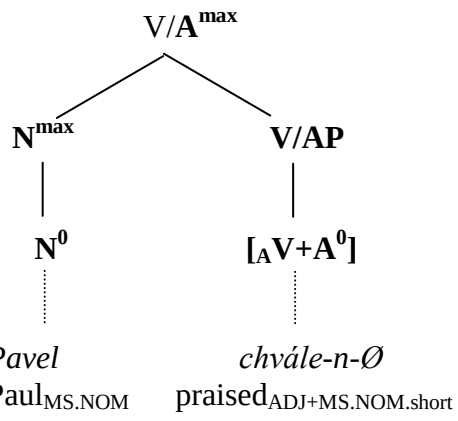
Because–contrary to lexical adjectives—the passive participle is a post-syntactic adjectival derivate $[_A V+A]$, the adjectival head A comes to be coindexed with the nominal element at some later stage of the derivation. We proposed that for the Czech analytic passive with a "short agreement" ending it is as late as at PF. This late co-indexation seems to result in a restricted case paradigm with passive participles. In Czech they can morphologically express all three genders (M/F/N) and both numbers (S/P). As for Case, however, they appear only with structural Cases. In (86a) we demonstrated a Nominative in an analytic passive. For the paradigm, structure and more discussion of the Accusative forms in Czech see section 6.3 below.

In (89) we illustrate the SPEC – head relation which results in adjective agreement morphology. We demonstrate the distinction between lexical adjectival modifiers and passive participles (i.e. syntactic and post-syntactic derivates). The scheme in (89a) shows a structure of a nominal head N with an adjectival AP in the position of (multiple) SPEC(N). The scheme in (89b) shows a passive participle in the structure proposed in (73), i.e. as an adjectival derivate with a nominal constituent in its SPEC(A). Notice that the categorial labels of the resulting constituents are distinct: (89a) is a nominal projection N^{max}, while (89b) is a projection of A^{max}.

(89) (a) nominal phrase with an AP premodifier



(b) passive participle with Argument Θ2



We assume that the category A (adjective) has a strong <+N> feature which must be checked by some N head. This occurs in Czech via coindexation, which is, at PF, morphologically realised as overt adjectival agreement inflection. For the coindexation heads N and A must enter the relation Agree, i.e. they must be in a checking domain of each other. This holds for both structures in (89a/b), and therefore both of them can be co-indexed and both the structures converge. 75

The distinction between (89a/b), however becomes more significant if and when the nominal complex N^{max} bears an oblique case. This distinction supports our analysis which postulates a PP structure for oblique cases. If the nominal complex N^{max} in (89a) is in an oblique case, i.e. is c-commanded by a preposition, the presence of such a P has no influence to the relation between the N and A heads: they remain in a mutual checking domain. Therefore the structural vs. oblique case distinction plays no role with the morphology of adjectival modifiers in (89a); Czech lexical adjectives can agree with the noun they modify in all Czech cases.[76]

We get a different consequence in (89b)), however, if the N^{max} in the SPEC(A) carries some oblique case, i.e. if it is a PP. [77] If this N^{max} is indeed P^{max} , the head of the complex is in fact a preposition P, and the presence of such a head preposition (although it is in Czech often phonologically realised only as a bound morpheme on the nominal head) prevents an Agree (checking) relation between the N and A heads.[78] The adjectival head in this situation is not able to check its <+N> feature (with the Phi features of a coindexed N) and the structure does not converge.[79]

The paradigm of Czech agreement morphology contains features of Gender/Number fused with Case, and this is the reason why the structures of type (89b) can appear only in positions which are marked by a structural case. With Accusative (??), the case becomes a part of the Phi feature cluster which the participle receives in the V - SPEC(V) relation. As stated in (70a) and illustrated in (72) , structural Nominative is the result of the relation of the Argument Θ2 to the finite

---

[75] *In (89b) the constituent is labelled as V/AP to signal that the complex head of a post-syntactic derivate $[_AV+A]$ passes through the initial and syntactic phases of derivation as a Verb. This also explains the interpretation of the Argument in its SPEC as a direct object.*

[76] *For examples and some more discussion of lexical attributive adjectives as in (89a) see also section 7.3 below.*

[77] *This happens if the verb subcategorises for an Argument with a lexical/oblique case. The lexical case (i.e. the P) is then present in the structure from the beginning of the derivation, although it does not get realised in its canonical position of a head P at PF but, instead, as a bound inflectional morpheme at N.*

[78] *Oblique case assignment is a relation between the V and P heads. The P interferes with the Agree relation of N (which is inside the PP) and A, which becomes a head of the $[_AV+A]$ complex after the oblique case (P) is assigned.*

[79] *Moreover, for some reason in the Accusative (the paradigm is illustrated in (94) below), the combination of [+Masculine, +Human] does not have verbal (short) participial morphology but always requires the adjectival (long) version.*

(i) Petr už má *slíben-a / slíben-ého pejska.
Peter already has promised $_{MS/ACC*short/long}$*. a doggie*$_{MS+HUM/ACC}$*.*
Peter has already been promised a doggie.'

AUX *být* (’be’) after it moves from *v** to T , i.e. the Nominative case becomes a part of the cluster after the Argument Θ2 moves into the position of a structural subject, i.e. to SPEC(T).

6.2. Impersonal Passives

In the introductory section in the structures (7) and (8) of Part 1, we demonstrated that Czech also allows so-called impersonal passives with intransitive verbs. We repeat those examples in (90), together with the agreement features and an impersonal subject marked as pro_{3SN}.

(90) (a) pro *Je nadržováno děvčatům* (*učitelem)*
pro_{3SN} is_{3S} $favoured_{3SN}$ $girls_{DAT}$ ($teacher_{INSTR}$)
‘Girls are favoured (by the teacher).’

(b) pro *Je hlasováno o stanovách (členy).*
pro_{3SN} is_{3S} $voted_{3SN}$ about $statutes_{LOC}$ ($members_{INSTR}$)
‘The statutes are voted about (by the members).’

We demonstrated that this kind of impersonal passive requires in Czech a verb which subcategorises for an internal Argument with an oblique case, i.e. which selects non-Accusative complements (of the PP or $NP_{GEN/DAT/INSTR}$ type). The oblique case (in the form of PP) is assigned to Argument Θ2 immediately after this argument Merges in the SPEC(V) of its subcategorising verb. For example, the verbal stem *nadrž-ov-/-u-* (‘favour‘) selects the Argument Θ2 [+Dat]. Because this [+Dat] selection is a part of the lexical entry (it is an inherent part of the V stem entering the Numeration), it cannot be changed during the process of derivation.

In the next level the *v**P Merges with the functional projection T, which has a strong feature <+V> and carries [TENSE], [MOD] and [ITER] features. Apart from (or because of) that, the head T assigns a structural Nominative. The examples in (90) have an impersonal, non-referential expletive pro_{3SN}, in SPEC(T) and thus conform to the descriptive validity of the Extended Projection Principle (see Chomsky, 1981, Chapter 3), requiring the presence of a structural subject in a clause. In Minimalism, the EPP can be reformulated as a non-interpretable case feature <+D/N> of a finite functional head T, which has to be checked by a DP. This feature must be checked even if the insertion/Merge of a grammatical verb such as *být* (’be’) in the head *v** disallows the attraction V→*v** and therefore the projection of Argument Θ1 in SPEC(*v**). In this case the strong feature <+D/N> of T can only be checked by Argument Θ2, generated in SPEC(V), which must move to the position of a structural subject in SPEC(T).

Recall, however, that in the examples (90) above the non-Accusative Argument Θ2 is a PP and hence cannot check a <+D/N> feature. The SPEC position therefore must be occupied by an expletive pro_{3SN} if such an expletive is in the repertory of a given language (a part of its Syntacticon). Such an expletive triggers the default agreement .3SN on the finite AUX, as exemplified on (90).

As for this default agreement, the following data shows that the participle must also have a default agreement, as in (91a); in (91b) it agrees with the Argument Θ2 *Pavlovi* (’$Paul_{SM.DAT}$’) and the result is not acceptable. The non-grammatical (91c) shows clearly that Argument Θ2 with a lexical (subcategorised) Dative cannot enter

an agreement relation with the participle (the oblique Dative cannot be rewritten by a structural Nominative and the oblique Argument Θ2 cannot become a subject). We propose that this is because such an Argument is a PP.

(91) (a) *Je nadržováno Pavlovi/ženám*
pro$_{3SN}$ is$_{3S}$ favoured$_{3SN.NOM}$ Paul/women$_{SM/FM.DAT}$
'Paul/Women are favoured.'

(b) **Je nadržovanému Pavlovi*
pro$_{3SN}$ is$_{3S}$ favoured$_{3SM.DAT}$ Paul$_{DAT}$

(c) **Pavel je nadržován/-o.*
*Paul$_{NOM}$ is$_{3S}$ favoured$_{3SM/N.NOM}$

The ungrammaticality of (91d) shows that regardless of agreement, the structure cannot license some other Argument Θ1 (e.g. *Petr*) with a Nominative. The only possibility for introducing an Agent interpretation is demonstrated in (91e), where an Agent interpretation can be assigned (at the level of Logical Form) to an Instrumental DP or PP; see also section 5.5.1.

(91) (d) **Petr je nadržován/-o Pavlovi.*
*Peter$_{NOM}$ is favoured/-o Pavlovi$_{DAT}$

(e) *Je nadržováno Pavlovi Petrem / od Petra.*
pro$_{3SN}$ is favoured Paul $_{DAT}$ Petrm$_{INSTR}$ / from Peter
'Paul is favoured by Peter.'

We propose that the participle is co-indexed with the default *pro$_{3SN}$* because the A suffix on the participle must check its feature <+N> with some Phi features. The oblique PP is not a possible target for the Agree, so *pro$_{3SN}$* is the next closest candidate, provided it is inside the checking domain of the A head.

With our analysis the default agreement on the AUX is unproblematic because *pro* will appear in the SPEC-head relation with respect to the AUX (in *v** or T). The nature of the default agreement on the participle, however, is not so clear, because the distance between the [$_{A}$V+A] complex in V and *pro* in SPEC(v*) is too far. The explanation for this long-distance agreement is suggested by the example (90), which indicates that the impersonal passive requires a post-syntactic derivate with short agreement morphology.[80]

(92) (a) *Je nadržováno / *-ané děvčatům*
pro$_{3SN}$ is$_{3S}$ *favoured$_{3SN.sh\ ort/*long}$ girls$_{DAT}$*
'Girls are favoured.'

(b) *Je hlasováno / *-ané o stanovách*
pro$_{3SN}$ is$_{3S}$ *voted$_{3SN\ short/*long}$ about statuses$_{LOC}$*
'The statutes are voted about.'

[80] *For more details see the discussion in section 7.1.1.*

Although in this paper we did not show many distinctions between the copula and the passive AUX, there should be some, given that the former is plausibly V and the latter a light verb *v**. As a light verb *v**, the passive AUX may be missing in the initial (lexical semantic) level of the Numeration, which would make possible a relation between SPEC(*v**) and V in (69).

6.3. Accusative Passive Participles

In (86c) we exemplified the passive participle used in Czech in combination with the verb *mít* (‘have’). We repeat the example below in (93) with more detailed description of the feature distribution.[81]

(93) *Pavel* *má* ***slíbenou***. *odměnu*
Paul$_{MS.NOM}$ has$_{3S}$ promised$_{FS.ACC}$ reward$_{FS.ACC}$
’Paul was promised a reward.’

The table (94) below illustrates the Czech paradigm of the passive participle in the Accusative, which is used with the verb *mít* (’have’). Notice that it has specific forms for Gender and Number. Thus with the exception of Case, which is restricted to Accusative, this participle has a paradigm comparable to that of the Czech (gender-marked) adjectives.

(94) ’Peter was promised a trip /a reward / a bike / trips / rewards / bikes.’

Petr	*má*	(a)	***slíbe-n-Ø***	*zájezd*	(‘trip)	M[-HUM]S/ACC
		(b)	***slíbe-n-ou***	*odměnu*	(’reward’)	FS/ACC
		(c)	***slíbe-n-o***	*kolo*	(’bike’)	NS/ACC
		(d)	***slíbe-n-é***	*zájezdy*	(’trips’)	MP/ACC
		(e)	***slíbe-n-é***	*odměny*	(’rewards’)	FP/ACC
		(f)	***slíbe-n-á***	*kola*	(‘bikes’)	NP/ACC
Peter$_{MS.NOM}$ has$_{MS}$		promised				

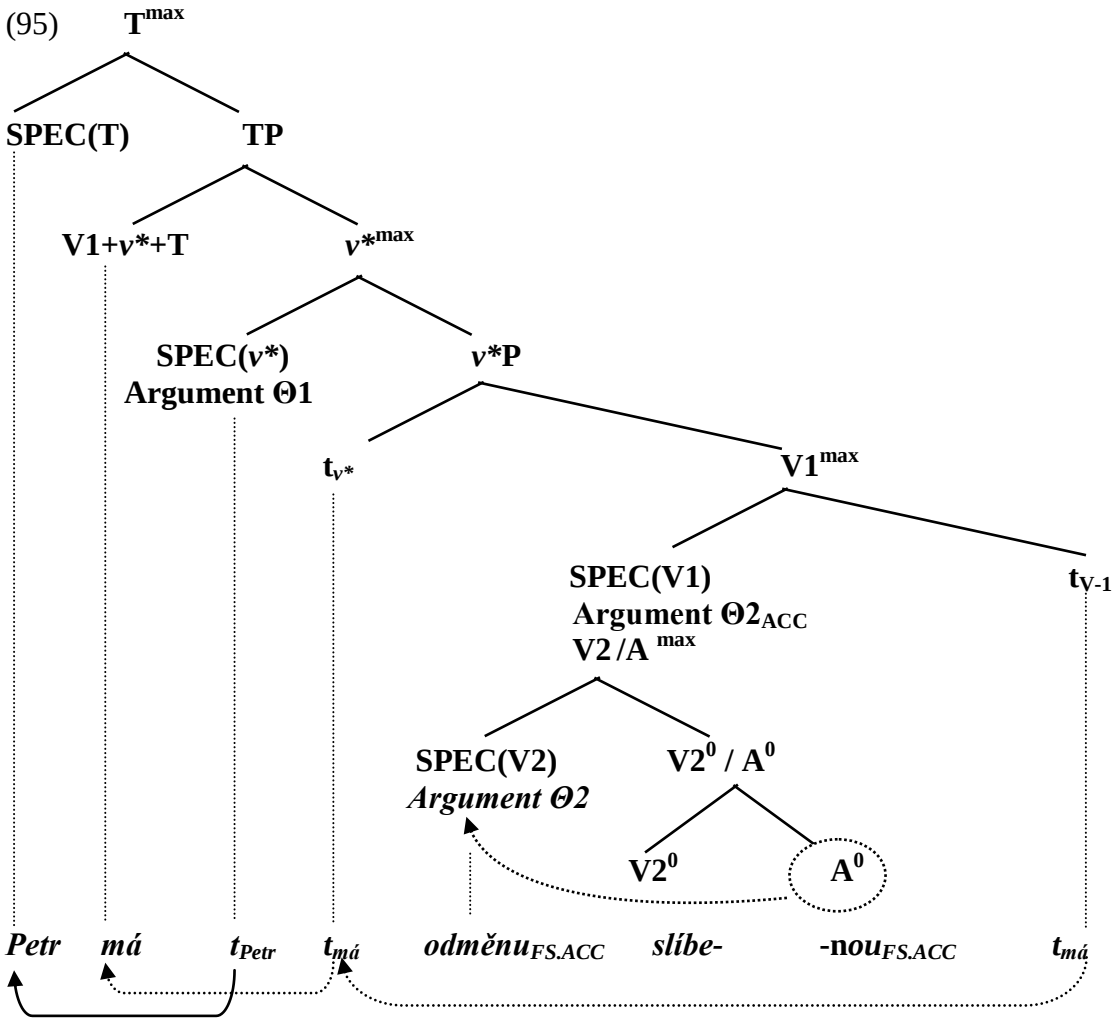
The following scheme (95) illustrates the derivation we propose for Czech Accusative passive participles. Notice, that it differs from the analysis proposed for the analytic

[81] *In (93) we are giving only the interpretation which takes the surface subject for an Argument of the past participle. In the Czech structure, however, the subject ‘Paul’ has no or an unclear theta role with respect to the verbal stem of the derived adjective. The sentence in (93) can be interpreted as: ‘Paul has a promised reward’ or ‘Paul has been promised a reward’.*
We assume similar Numeration sets for those structures which differ with respect to the choice of alternatives during the process of derivation, i.e. given the repertory of lexical and grammatical entries in a given language, the Merging of which can provide alternatives to Move/Attract Transformation. We are not going to further discuss these structures here, however.

passive in (72)/(73)/(88) above only by the kind of AUX used. The verb *mít* ('have') is a transitive verb [$_{v*}$V+*v**], i.e. according to (69) it has a more layered structure than the non-thematic unAccusative verb *být* ('be'). In (95) the verb *mít* ('have') is generated as a lexical V1 with Argument Θ2 in its SPEC(V1).

In (95) the Argument Θ2 of V1 in SPEC(V1) is the projection of the past participle. The past participle enters the derivation as a verbal head (V2) and therefore it projects its own Argument Θ2 in SPEC(V2).[82]

(95)



The verb *mít* ('have') incorporates into its *v** and after this *v**→V1 it can assign Accusative to its Argument Θ2 according to (70b). The Argument Θ2 is a

[82] *The participle in SPEC(V1) in (95) is derived in its own cycle as in (72) and (73), i,e, it is generated as a lexical verb and is 'transformed' by the insertion of an adjectival suffix. As an adjective, i.e. a [+N] category, the adjectival [+N] derivate it can check the subcategorisation frame of the transitive verb V1* mít.*('have') and be located in its SPEC(V1).*

constituent V2/A^{max} and its A head is co-indexed with its SPEC(V2). The Accusative case is thus transferred to both of components of the V2 /A^{max}.[83]

Moreover, after V1→*v** movement the verb *mít* (’have’) obtains a position for Argument Θ1 in SPEC(V1). According to (70a) this Argument Θ1 receives a structural Nominative after the head *v** adjoins to a finite T (Θ1→SPEC(T)).

Notice that the realisation of a V2-Argument Θ1 inside of the participial structure of the verb *slíbit* (‘promise‘) in (95) is problematic because the verbal head V2 never merges with a light verb *v**. According to (70), without the projection of *v** (and T) the participle cannot assign either Accusative or Nominative. The following example in (96) demonstrates that the only grammatical realisation of an Agent for the participle is as a PP adjunct realisation.

(96) *Petr má* ***od šéfa/?šéfem*** *slíbenou odměnu*
Peter has by boss / $boss_{INSTR}$ $promised_{ACC}$ $reward_{ACC}$
‘Peter was promised a reward by his boss.‘

We can observe that in (96) the Instrumental case is not very felicitous: it is significantly worse than in the standard Czech analytic passive structures. The distinction between (96) and the analytic passive structures is in the choice of the AUX verb *být* (‘be‘) vs. *mít* (‘have‘), and this correlation leads to the possibility that the Instrumental Case is related to the presence of (some item-specific property of) the verb *být* (‘be‘).

Consider the examples in (97) that suggest that Instrumental may be an oblique (PP) case assigned by some ‘more lexical’ verb *být* (‘be‘). As (97a) demonstrates, following the copula *být* (‘be‘), the nominal predicate can in Czech be either Nominative (agreeing with the structural subject) or Instrumental.

(97) (a) *Já* ***jsem*** *učitel / učitelem*
I_{NOM} be_{1S} $teacher_{NOM}$ / $teacher_{INSTR}$
‘I am a teacher.‘

(b) *Já* ***jsem*** *kárán *učitel / učitelem.*
I_{NOM} be_{1S} rebuked *$teacher_{NOM}$ / $teacher_{INSTR}$
‘I am rebuked by a teacher.‘

(b) *Já* ***jsem*** *učil * učitel / *učitelem / učitele*
I_{NOM} be_{1S} taught *$teacher_{NOM}$ / $teacher_{INSTR}$ / $teacher_{ACC}$
‘I was teaching a teacher.‘

The Instrumental in (97a) looks very similar to the Instrumental Agent with the analytic passive containing the ‘verbal’ AUX *být* (’be’) in (97b). Both the examples, on the other hand, contrast with the Czech past tense in (97c) where the grammaticalised AUX *být* (’be’) does not seem to influence at all the case assigning

[83] *We could assume that the [$_A$V+A] complex can be assigned case as a whole and that the features are transferred to the DP in its SPEC. We could alternatively assume that the SPEC(V/A) can receive case itself by some process similar to that in ECM structures.*

characteristics of the transitive verb *učit* ('teach'), namely it does not combine with Instrumental.[84]

For space reasons, however, we will omit here further discussion of the mechanism for assigning Instrumental Case.

7 DERIVATION OF PERFECTIVE PASSIVE PARTICIPLES

In (61) we defined the ordering of levels in the course of deriving the Czech analytic passive of imperfective verbs, assuming that imperfective passive participles are **post-syntactic** adjectival derivates as illustrated in (63c). The same concerns some Czech passive structures with perfective verbs. However, in this section we will demonstrate that passive structures with perfective verbs can moreover be formed with a **syntactic** adjectival derivate of the type (63b), which demonstrates a Merge of a V-stem and an A-suffix during rather than after syntactic processing. The proposed phasing of a derivation is suggested in the following (98), which starts in (a) in the same way as (61a) but starting from the (b) level, the processes are ordered in a distinct way.

(98) (a) Initial projection of the verbal head V which is taken from the Lexicon and listed in the initial Numeration. The verbal head realises its subcategorisation at the level of V, i.e. of its internal Argument Θ2.

(b) At the level of syntax

(i) Inserting of the derivational affix *-n-/-t...* with the categorial label A, composition of the $[_{A}V+A]$ derivate,

(ii) co-indexation, i.e. checking of the feature <+N> of the A with the Phi features of the nominal element in its SPEC, and

(iii) Merge and projection of the light verb *v** (plus subsequent Merge and projection of the functional head T).

(c) At the level of Phonetic Form the Phi features co-indexed in (b/ii) are realised as the long adjectival agreement morphology ***-ý/-á/-é***.

In the following section we will show the arguments supporting our claim that the long versus short type of agreement morphology in Czech is a sign of dissociated levels versus a single (associated) level of co-indexation and phonetic realisation in the agreement process.

7.1 The Distinctions between Syntactic and Post-syntactic Adjectival Derivates

In the previous sections we repeatedly suggested that with the Czech ***-n-/-t-*** participles the short (fused/simple) morphology is the standard for the post-syntactic derivates, which are able to simultaneously express the **imperfective** (verbal) aspectual morphemes. These structures were illustrated in (63c). In the post-syntactic derivate the insertion of the A suffix takes place at the level of PF which is the same level at

[84] *For many other distinctions between the 'more verbal' (passive) AUX and the 'more grammaticalised' (past) AUX see section 1.5.*

which the realisation of agreement inflection takes place. On the other hand, the long (complex) morphology signals the more 'adjectival' derivates (63a/b), in which the co-indexation takes place before PF and is therefore dissociated from the process of realising the inflectional morpheme. We propose that the following (99) may be the right generalisation.

(99) A fused morphology is a result of the features checked and realised at the same level of derivation.

As for passive participles formed with **perfective** verbs, traditional Czech grammars consider their morphology as being arbitrarily expressed by either of the two types of forms. If so, Emonds's rules about the levels of insertion of grammatical morphemes in (57) of Part 1 imply that the level of merge of the adjectival suffix with these verbs is possible at both the syntactic and post-syntactic levels. The two kinds of passive structures, however, should exhibit distinct characteristics with respect to their adjectival properties.

The syntactic [$_A$V+A] derivate is of category A before Spell Out and it is also interpreted as such at Logical form. We therefore assume that it should show substantially more adjectival characteristics than the post-syntactic [$_A$V+A] derivate which is adjectival only after Spell Out, at Phonetic Form. In the following sections we are going to provide Czech data supporting the distinction between the two forms.[85]

7.1.1 Long and Short participial Morphology

The table in (100) illustrates the paradigms of short/nominal (A) and long/pronominal (B) agreement morphology which can both appear with the Czech participles derived from verbs with the [+LS/A] feature.

(100)			**A: Short agreement**	**B: Long agreement**
(a)	MS	*Trezor byl* safe$_{MS}$ was$_{MS}$	*otevře-n-**Ø*** open-$_{ADJ+MS.short}$	*otevře-n-**ý** / votevře-n-**ej*** open-$_{ADJ+MS.long}$
(b)	FS	*Skříň byla* wardrobe$_{FS}$ was$_{FS}$	*otevře-n-**a*** open-$_{ADJ+FS.short}$	*otevře-n-**á*** open-$_{ADJ+FS.long}$
(c)	NS	*Okno bylo* window$_{NS}$ was$_{NS}$	*otevře-n-**o*** open-$_{ADJ+NS.short}$	*otevře-n-**é** / votevře-n-**ý*** open-$_{ADJ+NS.long}$

[85] *Most tests used in this section have already been used in earlier frameworks to distinguish between adjectival and verbal passives in English in the studies by Siegel (1973) and Wasow (1977) and more recently in Emonds (2000, Ch. 5). For Russian, in a fully compatible framework, similar data are presented in Schoorlemmer (1995). All the tests show contrasting characteristics of the two kinds of derivates on the levels of morphology, syntactic and interpretation, thus demonstrating the systematic connection between the linguistic levels independent of any derivation that might or might not relate them.*

(d)	M/FP	*Trezory/skříně byly* safes$_{MP}$/wardrobes$_{FP}$ were$_{M/FP}$	*otevře-n-**y*** open-$_{ADJ+M/FP.short}$	*otevře-n-**é** / votevře-n-**ý*** open-$_{ADJ+NS.long}$
(d)	NP	*Okna byla* windows$_{NP}$ were$_{NP}$	*otevře-n-**a*** open-$_{ADJ+NS.short}$	*otevře-n-**á*** open-$_{ADJ+NS.long}$

Many Czech speakers feel that the short (A) form is kind of archaic, while the long form is more common/colloquial. In some contexts, however, only some of them are grammatical: the stylistic-option approach is therefore not tenable.

The distinction between the two kinds of morphology nonetheless has a diachronic dimension.[86] The short morphology follows the original basic nominal paradigm, i.e. the endings are the same as the inflectional endings of the main Czech nominal patterns in corresponding Genders. The long morphology comes from the more complex Old Slavonic paradigm (originally compound, then pronominal or adjectival inflection). Synchronically, we believe that the statement in (99) implies that the level of grammaticalisation and consequently of the level of insertion are aspects of specific grammatical systems which are subject to diachronic change.

The synchronic distinction between long and short morphology is mentioned only vaguely in traditional descriptive Czech grammar. In **attributive** (modifying) positions the long/pronominal form is taken as standard (and the short for archaic), while in the **predicate** position the short/nominal form is preferred if the interpretation is [+ACTIVITY], while the short form is better for the interpretation [+STATIVE]. The distinction between the structures comprising the two morphologically distinct forms is, however, terminologically expressed. The combination of the verb *být* ('be') and the participle with the short agreement (100A) is called an **analytic passive** (i.e. AUX + past participle), while the combination of the verb *být* ('be') and the derivate with long agreement (100B) is called a **copula - (verbal) adjective** complex.

In a generative framework the Czech (A) form can be given the traditional label of **verbal passive**, while the Czech (B) form can be called **adjectival passive**.

7.1.2 Interpretive Differences

The semantic distinction between adjectival and verbal passives is discussed in detail for German in Rapp (1997) and for Russian in Schoorlemmer (1995), and their diagnostics and conclusions can successfully be applied to Czech. The following (101) contrasts (A) the post-syntactic derivate (signalled by short morphology) in (101A) with (B) the syntactic derivate (signalled by long morphology) in (101B/c) with respect to their ability to be modified by local / temporal / manner adverbials.

(101) (A) *Dárek byl zabalen v neděli / v autě / rychle*
present$_{MS}$ was packed-$_{ADJ+MS.short}$ on Sunday / in a car / quickly
'The present was packed on Sunday / in a car / quickly.'

(B) **Dárek byl zabalený v neděli / v autě / rychle*
* present$_{MS}$ was packed-$_{ADJ+MS.long}$ on Sunday / in a car / quickly

[86] *See Encyklopedický slovník češtiny (2002:23/440) or Mluvnice češtiny II (1986: 172).*

(c) *Dárek je zabalený v růžovém papíru / pěkně*
present$_{MS}$ is packed$_{-ADJ+MS.long}$ in pink paper / beautifully
'The present is packed in pink paper / beautifully.'

The grammatical (101A), which is a post-syntactic derivate (a verbal passive participle) interpreted at LF as the category V, can combine (i) with a **temporal frame** specifying the action of the moment of achieving the result, i.e. it is compatible with the temporal adverbial 'on Monday'. It can also combine with (ii) an **adverbial of place** ('in the car') and (iii) a **VP adverb of manner** ('quickly'). None of this is possible with the syntactic derivate (B) in (101B), which tolerates only characterising of an object after the result, as in (101c). This is because the syntactic derivate (101B/c) is interpreted at Logical Form as an Adjective, and this forces the interpretation of a [+STATE] characteristic that is prototypical for adjectives.

7.1.3 Instrumental Agents

As the following contrasting examples in (102A) show, only the post-syntactic derivate can express its Agent in the form of an Instrumental adjunct. We conclude that the verbal category V present at LF allows for an Agent interpretation if a nominal constituent is in an appropriate structural position. The same is not possible with syntactic derivates, as demonstrated in (102B), which behave with respect to this characteristics just like the lexical adjective in (102c). We conclude that the categorial head A does not tolerate an Argument/Agent interpretation at the level of Logical Form.[87]

(102) (A) *Okno bylo otevře-**n-o** **policií / nárazem větru***
window$_{NS}$ was opened$_{-ADJ+NS.short}$ police$_{INSTR}$ /stroke$_{INSTR}$ of wind
'The window was opened by the police/a gust of wind.'

(B) **Okno bylo otevře-**n-é** **policií / nárazem větru***
* window$_{NS}$ was opened$_{-ADJ+NS.long}$ police$_{INSTR}$ /stroke$_{INSTR}$ of wind

(c) **Okno bylo špinavé **Petrem / nárazem větru***
* window$_{NS}$ was dirty$_{NS.short}$ Peter$_{INSTR}$ /stroke$_{INSTR}$ of wind
'The window was dirty *by Peter/*a gust of wind.'

With lexical adjectives which enter the Numeration already having an A head, Arguments can be interpreted more freely. The following example of a plausibly lexical adjective derivate (103a) does not disallow an interpretation in which 'Peter' has also an Agent interpretation in a hypothetical active structure, which is not an easy option with verbal passives as in (103b)

---

[87] *This contrast is not very sharp in as much as some syntactic derivates (B) can combine with Agent interpreted Instrumentals as well:*
(i) Ten dopis je podepsaný Petrem.
the letter is signed$_{-ADJ+MS.long}$ Peter$_{INSTR}$
'The letter was signed by Peter.'

(103) (a) *Petr byl unave-**n-ý***
Peter was tired $_{\text{ADJ+MS.long}}$
'Peter was tired (because he made himself tired).'

(b) *Petr byl zabi-**t-Ø***
Peter was killed$_{\text{ADJ+MS.short}}$
'Peter was killed (??because he killed himself).'

7.1.4 Grading of an Adjective

As for the adjectival characteristics of the derivates (A) and (B), the following example (104a) shows that neither of them fully conforms to the categorial characteristics of Adjectives, namely neither of them is able to be graded. Grading remains a property of a lexical adjectives illustrated in the contrasting (104b). Notice that the hypothetical comparative/superlative form of (A) and (B) is not able to distinguish between the two forms because the long-short distinction is neutralised by the comparative/superlative morpheme: in (104a) the only distinction between the two participles is in lexical Aspect.

(104) (a) ??*Pokoj byl uklizen-**ější** / uklízen-**ější** než pracovna*
?? room was tidied$_{\text{COMP}}$ than study
'The room was more tidy than the study.'

(b) *Pokoj byl vět-**ší** / čist-**ší** než pracovna*
room was bigger/cleaner than study
'The room was bigger/cleaner than the study.'

The ungrammaticality of (104a) becomes clearer when the characteristics of the post-syntactic derivate (A) is reinforced by another indication of its nature, i.e. by the presence of an Agent as in (105).[88]

(105) **Pokoj byl uklízenější Petrem než pracovna*
*room$_{\text{MS}}$ was tidied$_{\text{COMP}}$ Peter$_{\text{INSTR}}$ than study
'By Peter, the room was more tidied than the study.'

---

[88] *The arguments in this section are weakened by the fact that many speakers feel hardly any distinction between the short vs. long morphology. Moreover, even some post-syntactic derivates (A) can be graded and still keep their verbal interpretation.*

(i) Pokoj byl ukl-i-zen-**ější** / ukl-í-zen-**ější** než pracovna.
?? room was tidied$_{COMP.short}$tidied$_{COMP.long?}$ than study
'The room was more tidy than the study.' *(= more often / in a better way)*

The presence of Agent in the Instrumental in (ii) below is not expected because it clearly involves a post-syntactic derivate (A). The example was, however, found in a Czech corpus, showing the weakened sensitivity of some speakers to distinct adjectival agreement morphemes.

(i) Zprávy jsou sledovan-**ější diváky** v Praze než v menších městech.
News are watched$_{COMP}$ audience$_{INSTR}$ in Prague than in smaller towns
'The news is watched by the audience more in Prague than in smaller towns.'

The examples in (106a) illustrate a property related to grading, namely that post-syntactic derivates do not tolerate combination with the grading adverb *více* (‘more‘) and even the syntactic derivate (B) with a long agreement (106b) is much worse than a lexical adjective in (106c).

(106) (A) * *Pokoj byl mnohem více uklíze-**n**-**Ø** než pracovna*
* room_{MS} was much more $\text{tidied}_{\text{MS.short}}$ than study
’The room was much more tidied than the study.‘

(B) ? *Pokoj byl mnohem více uklíze-**n**-**ý** než pracovna*
? room_{MS} was much more $\text{tidied}_{\text{MS.long}}$ than study
’The room was much more tidied than the study.‘

(c) *Pokoj byl mnohem více čistý než pracovna.*
room_{MS} was much more clean than study
’The room was much more clean than the study.‘

7.1.5 Negative Preffix

The example (107) demonstrates that a post-syntactic derivate (A) cannot combine with the negative prefix ***ne-*** which signals clausal negation in Czech. As (107A) illustrates, the position of the prefix is grammatical only in the finite AUX part of the complex. The contrasting example (108) shows that with the syntactic derivate (B) (or a lexical adjective) the position of negative prefix is free.

(107) [A] (a) *Pokoj **ne**-byl (Petrem) uklize-**n**-**Ø***
room not-was ($\text{Peter}_{\text{INSTR}}$) $\text{cleaned}_{\text{ADJshort}}$
‘The room wasn’t cleaned (by Peter).‘

(b) **Pokoj byl (Petrem) **ne**-uklize-**n**-**Ø***
* room was ($\text{Peter}_{\text{INSTR}}$) $\text{not-cleaned}_{\text{ADJshort}}$

(108) [B] (a) *Pokoj **ne**-byl uklize-**n**-**ý** / čistý*
room not-was $\text{tidy}_{\text{ADJ.long}}$ / clean
‘The room wasn’t tidy / clean.‘

(b) *Pokoj byl **ne**-uklize-**n**-**ý** / **ne**-čistý*
room was $\text{not-tidy}_{\text{ADJ.long}}$ / not-clean
‘The room was untidy / unclean.‘

Assuming that the negative prefix is an indication of some maximal projection, the example (108) suggests that the copula heads a maximal projection (plausibly V^{max}), and that the passive participle does as well (plausibly A^{max}). The ungrammaticality of (107) on the other hand shows that the post-syntactic derivate $[_{A}V+A]$ is not analysed as a maximal projection at the level of syntax, but it forms only one component of an extended verbal complex *v**P.

7.1.6 Selecting verbs

Another traditional distinction between adjectives and verbal participles concerns the verb which selects them. Compared with the number of verbs selecting adjectives (and adjectival passive derivates), the number of verbs selecting a verbal passive participle is more restricted.

In Czech the contrast is not too significant because there is a relatively small number of verbs selecting adjectives. Still, the contrast in (109) is clear. It shows that both a lexical adjective and a syntactic derivate (B) in (109B) can be a complement of verbs like *být* 'be' or *zůstat* 'remain'. On the other hand, a post-syntactic derivate (A) with short agreement morphology in (109A) can be selected only by the verb *být* 'be'.

(109) (A) (a) *Petr je / *zůstal unave-**n-Ø** / pochvále-**n-Ø**.*
Peter is / *remained tired$_{ADJ.MS.short}$ / praised$_{ADJ.MS.short}$
'Peter is / *remained tired/praised.'

(b) *Komora je /*zůstala ukli(í)ze-**n-a**.* / otevře-***n-a***
Hall is /*remained cleaned$_{ADJ.FS.short}$ / opened$_{ADJ.FS.short}$
'The hall is / *remained cleaned/opened.'

(B) (a) *Petr je / zůstal unave-**n-ý** / chvále-**n-ý***
Peter is / remained tired$_{ADJ.MS.long}$ / praised$_{ADJ.MS.long}$
'Peter is/remained tired/praised.

(b) *Komora je / zůstal uklize-**n-á** / otevře-**n-á**.*
Hall is / remained cleaned$_{ADJ.FS.long}$ / opened$_{ADJ.FS.long}$
'The hall is / remained clean/open.

According to our analysis the ungrammaticality of (109A) is caused by a restricted subcategorial frame of the verb *zůstat*, which is not as general as the frame of the Czech *být* 'be' mentioned already in (42) of Part 1. We suggest that the verb *zůstat* does not select a [+V] complement, and that the post-syntactic derivate [$_A$V+A] in (109A) is a category V at the level of syntax, where the subcategorisation of the verb *zůstat* has to be checked. Contrary to the verbs selecting Aps, the verb *být* 'be' is an item from the Czech Syntacticon and it can therefore become a part of the derivation at any level. Assuming that the selection restrictions are to be satisfied by the operation Merge, the verb *být* 'be' can combine with a [$_A$V+A] derivate of any type.

The following example (110) also demonstrates that the post-syntactic derivate (A) cannot be used in a Czech equivalent of a raising structure, while a syntactic derivate (B), as well as a lexical adjective *čistá* 'clean', can be.[89]

(110) (A) **Pracovna se zdá být uklize-**n-a** matkou*
*study seems to-be cleaned$_{ADJ.FS.short}$ mother$_{INSTR}$
'The study seems to be cleaned by mother.'

[89] *We are not going to deal with raising here, partly because of the low productivity of this construction in Czech. The contrast in (110) is nonetheless clear.*

(B) *Pracovna se zdá být uklize-**n-á** / čist-**á***
study seems to-be cleaned$_{ADJ.FS.long}$ / clean $_{FS}$
'The study seems to be cleaned / clean.'

The above example demonstrates the more adjectival nature of a syntactic derivate [$_A$V+A] with long agreement morphology in (B), compared to the more verbal post-syntactic derivate [$_A$V+A] with the short agreement ending in (A).

7.1.7 Heterogeneous Agreement

In section 6.1 we proposed that the short agreement morpheme (A) represents a fusion of (i) a derivational adjectival morpheme and (ii) the agreement ending. As stated in (99), this fusion is a result of the fact that both components enter the derivation in the same level, here at the level of Phonological Form. As for long agreement (B), we proposed that it results from the disjoint insertion of the two morphemes in different levels, which prevents their fusion: the insertion of the adjectival suffix (and the co-indexation of the A category with the Phi features in its domain) already takes place at the level of syntax, and thus precedes the insertion of PF agreement morphology.

The phasing of the insertion process also allows us to account for a distinction between (A) and (B) derivates concerning Partitive Genitives in subjects realised as quantified nominal phrases. Notice the distinct feature contents of the components of the subject complex: *pět* ('five$_{NS.NOM}$') and *vojáků* ('soldiers$_{MP.GEN}$'), and compare them with the feature content of the verbal agreements reflected on the [$_A$V+A] derivates *zraněn-*('wounded').

(111) (A) *Pět vojáků bylo$_{3SN}$ zraně-**n-o***
five$_{3SN.NOM}$ soldiers$_{MP.GEN}$ was$_{3SN}$ wounded$_{ADJ.SN.NOM.short}$
'Five soldiers were wounded.'

(B) *Pět vojáků bylo zraně-**n-ých***
five$_{3SN.NOM}$ soldiers$_{MP.GEN}$ was$_{3SN}$ wounded$_{ADJ.MP.GEN.long}$
'Five soldiers were wounded.'

In both examples in (111) the AUX reflects the default 3SN features of the quantifier. But in the [$_A$V+A] derivates *zraněn-* ('wounded'), the examples diverge: in (111A) both the verbal participle with short morphology and the AUX show the same features, i.e. the agreement is 'homogenous'. On the other hand, in (111B) the agreement is 'hetergeneous', i.e. the two components of the analytic verbal form exhibit distinct features: the adjectival derivate (participle) shows MP.GEN, which are the features of the complement of Q, *vojáků* ('soldiers$_{MP.GEN}$') and the AUX reflects the default 3SN features.

The following example (111c) gives a structure for a lexical adjective (and copula) showing a pattern identical to (B). 90

---

[90] *For more discussion of Slavic quantifiers followed by a (Partitive) Genitive see Babby (1987) and Franks (1995,) and for Czech Karlík (2000) and Veselovská (2001b). The terminology concerning "homogenous/ heterogeneous" agreements is from Franks (1995).*

(111) (c) *Pět vojáků bylo šťastných /*šťastno*
five$_{3SN.NOM}$ soldiers$_{MP.GEN}$ was$_{3SN}$ happy$_{MP.GEN.long}$ /*happy $_{SN.NOM.short}$
'Five soldiers were happy.'

In (112) we schematically illustrate our analysis of the heterogeneous agreement pattern exemplified in (111).

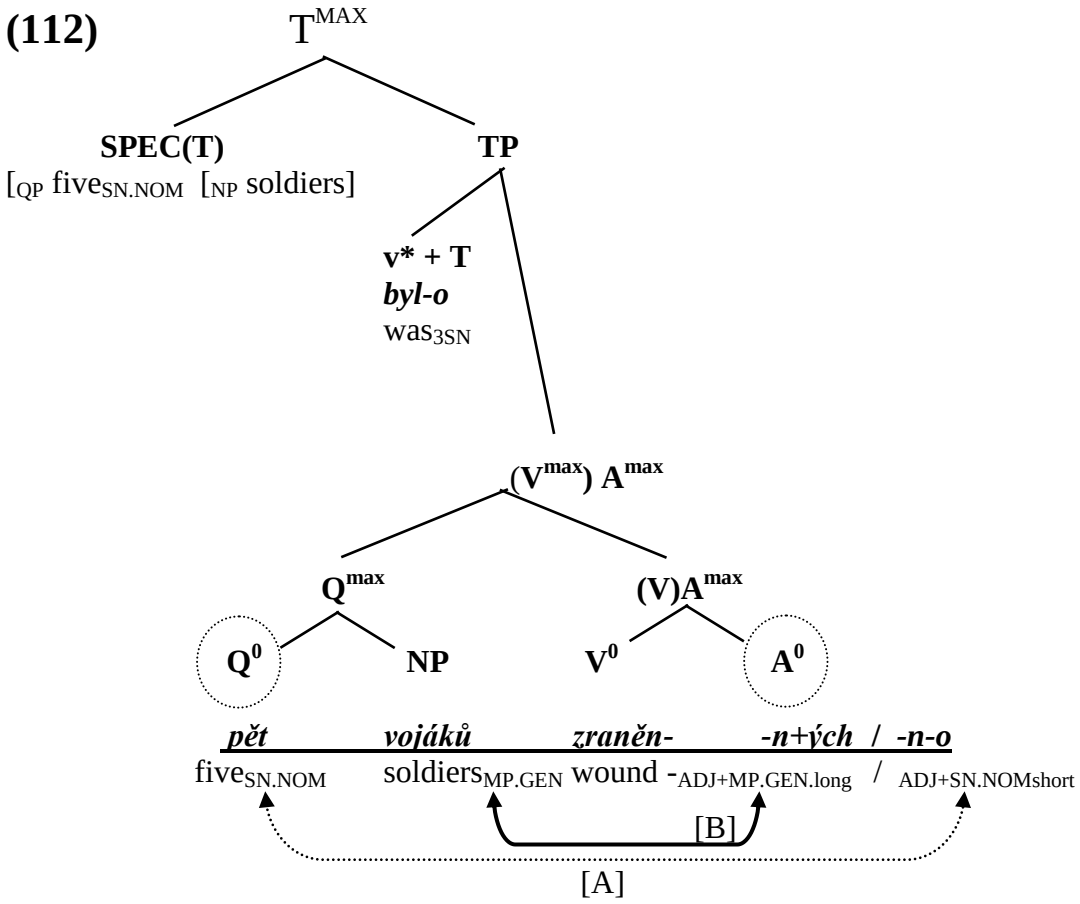
We assume that an agreement between the participle and the subject is created in the structural relation SPEC(V/A) and V/A in (112). However, at the initial derivational level of (112) in the V/A domain, at least two items involved are from the grammatical system of Czech (the Czech Syntacticon) and therefore do not have to enter the initial Numeration: these are the quantifier (Q) *pět* ('five') and the adjectival suffix (A) *–n-*. (Both items are circled at the bottom of the scheme). Because of their grammatical nature, these items can be missing in the initial levels of the derivation.

As for (111B), the heterogeneous agreement pattern suggests that the elements which enter agreement relations with the two components of the analytic verbal form are not identical. We propose that at the level where the verbal (participial) agreement is established, the grammatical element - Q *pět* ('five') - is not yet present in the structure, while the A suffix already is. 91 This adjectival suffix of the adjectival passive participle is therefore co-indexed with the Phi features of the head of the nominal complex in subject position, which, in the absence of the Q head, is the Nominal head *vojáků* ('soldiers$_{MP.GEN}$') in a structure [$_{QP}$ -- [$_{NP}$ soldiers$_{MP.GEN}$]. This agreement relation is marked by a bold arrow [B] at the bottom of (112).

Such co-indexation can at this level express only the features of Gender and Number, because structural Genitive is not yet assigned. GEN will become a part of the Phi feature complex only at PF, and at the PF level the co-indexation is realised by a non-fused, long agreement morphology, which is also exemplified in (111B).

[91] *Our analysis assumes the insertion of the adjectival suffix prior to the insertion of the Quantifier head, in accord with the general bottom up sequencing of Merge. It is therefore irrelevant whether the adjectival suffix is present in the Numeration or only in the syntactic derivation: in both cases it is present prior to the insertion of the Quantifier, and so the agreement is long/ adjectival, as seen in (111B/c)*

(112)



As for the structure (111A) with a post-syntactic adjectival derivate of (A) type (a verbal passive participle), the co-indexation of the adjectival suffix and the Phi features of the nominal complex is delayed until the stage of PF. It is on this level that the structure of the quantified complex is [$_{QP}$ five$_{SN.NOM}$ [$_{NP}$ soldiers$_{MP.GEN}$], with the head Q *pět* ('five') entering into agreement with the A suffix. The relation between SPEC(V/A) and (V/A). i.e. the co-indexation between the Q and the A suffix, is indicated with a broken arrow [A] in the bold text at the bottom of (112). Because the co-indexation and realisation of the agreement are both taking place at PF, the resulting morpheme in (111A) is short (fused), and the resulting agreement pattern shows the same agreement features (default, 3SN) on both components of the analytic verbal form.

In the domain of TP in the high periphery of the structure in (112), the italics show the final stage of derivation. The complex subject *pět vojáků* ('five soldiers') occupies the position of SPEC(T) and enters into a relation with the verb *být* ('be'). In this final stage of derivation the subject complex has the structure [$_{QP}$ five$_{SN.NOM}$ [$_{NP}$ soldiers$_{MP.GEN}$] , i.e. its head is the Q *pět* ('five$_{3SN}$'), and its default features therefore determine the agreement with the AUX.[92]

[92] *More detailed discussion of the disjoint agreements in Czech on AUX and the participle, in both passive and past analytic tenses, is provided in Veselovská (2003).*

The same analysis can be applied to passive participles used in combination with the AUX *mít* ('have') discussed in section 6.3 in (95). The following examples show that they reflect the same distinction in agreement (Accusative) morphology when the object is a nominal complex containing a quantifier assigning Partitive Genitive. As we predict, example (113A) demonstrates that the post-syntactic derivate (the participle with short agreement) can agree only with the $Q_{3SN.ACC}$, while the long morphology as well as a lexical adjective *špinavý* ('dirty'), in (113B) can agree only with the quantified NP in GEN.

(113). (A) *Pět* *dopisů* *mám* *napsá-**n-o*** */ * špinavo$_{3SN}$*
five$_{3SN.ACC}$ letters$_{MP.GEN}$ have$_{1S}$ written$_{3SN.ACC\text{-}.short}$ / * dirty$_{MP.ACC}$
'I have five letters written /*dirty.'

(B) *Pět* *dopisů* *mám* *napsa-**n-ých*** */ špinavých*
five$_{3SN.ACC}$ letters$_{MP.GEN}$ have$_{1S}$ written$_{MP.GEN\text{-}.long}$ / dirty$_{MP.GEN}$
'I have five letters written /dirty.'

7.2 Tense and Aspect

In (51) of Part 1 we illustrated how the feature of Tense in the Czech analytic passive is expressed on the passive Auxiliary, while Aspect features can be found in both the Auxiliary and the Passive Participle.

7.2.1 Aspect of the Participle

The preceding sections have provided a number of arguments in favour of our analysis of the distinction between the participles with long and short agreement morphology, showing that the former has many adjectival characteristics while the latter is more verbal. We have argued that this is a result of the presence vs. absence of the adjectival suffix at Spell Out (and consequently at Logical Form).

The presence of the adjectival suffix, which forms a right-hand head of the complex [$_{A}$V+A] at an interpretative interface, must therefore be reflected in the interpretation. In the acceptable examples in (111B) the interpretation is [+STATE], i.e. assuming that the soldiers were in a wounded state (by means of themselves or somebody/something else), and no Aspect feature plays any role. On the other hand in the grammatical (111A) the interpretation depends on the feature of [±LS/A] Aspect expressed by the verbal participle, as demonstrated in (114).

(114) *Pět* *vojáků* *bylo* *(z)raněno* */ (z)raň-**ová**-no.*
five$_{3SN.NOM}$ soldiers$_{MP.GEN}$ was$_{3SN}$ wounded$_{[-LS/A]}$ / $_{[+LS/A]}$
'Five soldiers were wounded / repeatedly wounded.'

The example (115A) further demonstrates that the presence of a feature Aspect correlates with the presence of the short morphology, the sure sign of a post-syntactic derivate (A). (115B) shows that with the long morphology, the (B) derivate is not felicitous in combination with an adverbial signalling progressive (repetitive) Aspect.

(115) (A) *Okno* *bylo* ***opakovaně*** *otevíráno.*
window$_{NS}$ was repeatedly opened$_{NS.short}$
'A window was being repeatedly opened.'

(B) *??Okno bylo* ***opakovaně*** *otevírané.*
?? window$_{NS}$ was repeatedly opened$_{NS.long}$

This distinction directly follows from our analysis, which assumes that in Czech Aspect is a semantic (lexical) property of a verbal stem. If so, than the visibility, i.e. interpretability of a feature of Aspect at Logical Form, is a property of the form which enters LF as a Verb, i.e. without the derivational head A.

7.2.2 Tense and Aspect of the AUX

For the interpretation of the feature of [+LS/A] Aspect on an adjectival derivate (passive participle) the feature content of the AUX is also relevant, especially the presence of a marked Tense. The example (116A) shows that an Agent, which implies the structure for a post-syntactic derivate (A), prefers combining with an auxiliary carrying marked features of tense/modality, i.e. *byl/bude* (‘was/will-be‘). When the verb is rather in the unmarked present tense, e.g. *je* (‘is‘), most speakers prefer the adjectival form as in (116B). This demonstrates that both the syntactic and lexical adjectival derivates preferably occur with no marked temporal feature.[93]

(116) (A) *Okno ??je/bylo/bude otevře-**n-o** policií*
window$_{NS}$??is/was/will-be opened$_{-ADJ+NS.short}$ police$_{INSTR}$
‘The window is/was/will be opened by the police.‘

(B) *Okno je/bylo/bude otevře-**n-é** / čisté*
window$_{NS}$ is/was/will-be opened$_{-ADJ+NS.long}$ / clean
‘The window is/was/will be open / clean.’

7.2.3 Temporal Frame of the Analytic Form

As discussed in (43) of Part 1, Czech Aspect [+LS/A] has a feature ‘limiting the State and/or Action’ i.e. restricting the verbal state/action at or by the moment of achieving the result. Verbs with this feature allow reference to the temporal frame in which the moment of achieving the result precedes or follows the moment of speech. It does not, however, allow a temporal frame in which the moment of achieving the result (which is fixed) is identical with the moment of speech (which is a variable depending on physical time).

The following (117a) demonstrates that in the Czech analytic passive, the **Past Tense** expressed on the finite AUX *být* (‘be‘)in combination with the [+LS/A] participle (i.e. verbal (A) participle with short agreement morphology) is interpreted as the moment of achieving the result *preceding* the moment of speech. The **Future Tense,** signalled by a future AUX, i.e. by *bud-u/-eš/-e* (‘be$_{1/2/3S.FUT}$’) as in (117b) expresses in combination with the [+LS/A] participle that the moment of achieving the result *follows* the act of speech (without inferring anything about the present state or action). In combination with the **Present Tense** of the AUX *být* (‘be‘) the [+LS/A]

[93] *This correlation between the Tense of AUX and the variants (A) and (B) is not explained here. We limit this discussion to descriptive facts and a suggestion that some further differences plausibly result from distinct levels of grammaticalisation of the verb* být *‘be’.*

Aspectual feature on the participle forces interpreting the moments of achieving the result and of speech as disjoint, as demonstrated in (117c).

(117) (a) *Hala* ***byla*** *uklize-**n**-**a*** *špatně*
hall$_{FS}$ be$_{FS.PAST}$ cleaned$_{ADJ+FS.short}$ badly
'The hall was cleaned badly.'

(b) *Hala* ***bude*** *uklize-**n**-**a*** *špatně*
hall$_{FS}$ be$_{3S.FUT}$ cleaned$_{ADJ+FS.short}$ badly
'The hall will be cleaned badly.'

(c) *Hala* ***je*** *uklize-**n**-**a*** *špatně.*
hall$_{FS}$ be$_{3S.PRES}$ cleaned$_{ADJ+FS.short}$ badly
'The hall has (already) been cleaned badly.' (not: is being cleaned)

These distinct references to the temporal frame by the finite AUX and the verbal past participle (a post-syntactic adjectival derivate) clearly indicate that the two elements each have their own independent syntactic identity. We conclude then that at the interpretative interface both items are separate objects, i.e. in the complex verbal structure (72) the head V is at LF separate from the head *v**.

7.2.4 Future Tense

Notice now the contrast between the examples in (118). Both structures contain a finite AUX in FUT, i.e *bud-u/-eš/-e* ('be$_{1/2/3S.FUT}$') which combines with an infinitive. The example (118a) is a Czech analytic Future Tense, demonstrating that the infinitive which follows a Future AUX can only be imperfect. On the other hand, the combination of an identical AUX with a passive participle in (118b) tolerates both perfective and imperfective participles.

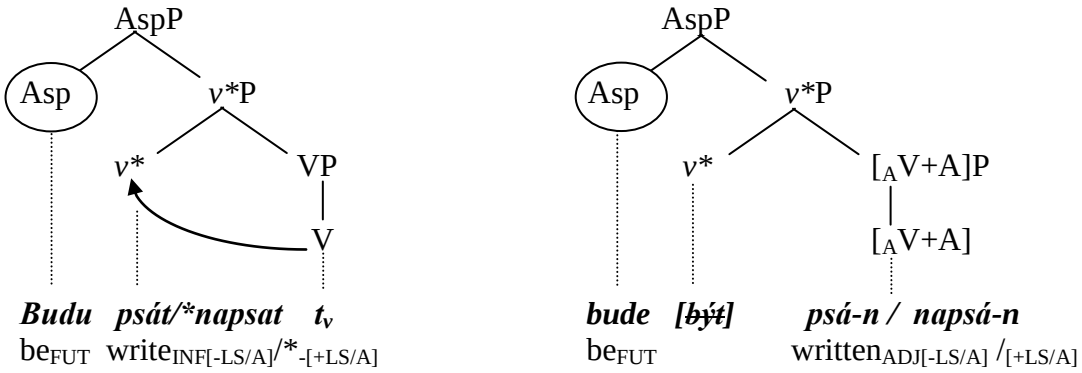
(118) (a) ***bude*** *psá-**t*** / **napsa-**t***
be$_{3S.FUT}$ write$_{INF[-LS/A]}$ / *write$_{INF[+LS/A]}$

(b) ***bude*** *psá-**n**-**Ø*** */ napsá-**n**-**Ø***
be$_{3S.FUT}$ written$_{ADJ.MS.short[-LS/A]}$ / write$_{ADJ-MS.short\ [+LS/A]}$

Our analysis offers a simple explanation for the contrast in (118). We propose that (118a) contains an infinitive of a transitive verb *psát* ('write') which has a structure [$_{v*}$V+*v**]. The future AUX *bud-u/-eš/-e* ('be$_{1/2/3S.FUT}$) is located in a functional projection c-commanding the *v**P as illustrated in (119a). The functional projection is labelled as Asp(ect), but filling it with the future AUX *bud-u/-eš/-e* ('be$_{1/2/3S.FUT}$') as in (119a) blocks the [+] value of the Aspect feature of the participle.[94]

[94] *For the restriction of the Aspect feature of the infinitive after the aspectual verbs and future AUX see (25) and (44) of Part 1. This restriction might alternatively be explained in terms of a more specific selection by the AUX* být, V [__-LS/A]. *For advantages and disadvantages of this analysis see e.g. Veselovská (1995) and Kosta (2001).*

(119) (a) AUX in a Czech Analytic Future (b) AUX in a Czech Analytic Passive



The scheme (119b) on the right illustrates our analysis of a future passive. It combines the structure of a future in (119a) with the structure of an analytic passive as in (72). It means that the passive AUX *bud-u/-eš/-e* ('be$_{1/2/3S.FUT}$') is generated in the head *v** c-commanding the passive participle as in (72) and at the same time is a Future tense in the structure (119a). (119b) proposes that the passive AUX in the Future contains a zero allomorph of the infinitive of the verb *být* ('be').

The presence of a zeroed infinitive of the verb *být* ('be') in the future passive is further confirmed by the paradigm (120) showing that this empty morpheme can independently carry a [-LS/A] Aspect feature. In the following table the left column gives a Past/Present/Future Czech verbal paradigm, and the right column shows the same for a passive AUX.[95]

In as much as the passive AUX is expected to exhibit characteristics identical to those of copula/existential verbs, the paradigm licenses the existence of a zero INF morpheme.

(120)

	pracovat ('to work')		***být*** (‚to be')
(a)	***prac-uji*** work$_{1SAGR}$ ('I work')	(a)'	***js-em*** be$_{AGR}$ ('I am')
(b)	***pracoval jsem*** work$_{PART/PAST}$ AUX-BE$_{PRES}$ 'I worked'	(b)'	***byl jsem*** be$_{PART/PAST}$ AUX-BE$_{PRES}$ 'I was'
(c)	***budu pracovat*** AUX-BE$_{FUT}$ work$_{INF[-LS/A]}$ 'I will work'	(c)'	***budu [~~být~~]*** AUX-BE$_{FUT}$+ Ø be$_{INF[-LS/A]}$ 'I will be'

[95] *As we illustrated above in section 1.5, the Czech passive AUX is identical with the Czech copula/ existential být ('be'). I. e. each of the forms of the verb* být *('be') in (120a'/b'/c') can combine with* unaven/smutný/doma *('tired/sad/at home') to form analytic passives, copulas with predicate adjectives or locational copulas.*

The presence of an empty morpheme for the infinitive of the passive AUX *být* (‘be’) in the Czech analytic future is also supported by the following .The table in (121) gives the paradigmatic variation for the passive AUX *být* (‘be’) in the context (121a). The form in (121b) demonstrates that the AUX is able to carry an independent feature of the iterative Aspect [+IT]. (121c) demonstrates an empty infinitive for *být* (‘be’) in the future, as proposed in (119) and (120). This is independently supported by (121d): the same infinitive, when it carries the feature of Aspect [+IT], must become overt.[96]

(121) (a) ***Hala je uklize-n-a***
hall is_{PRES} $clean_{ADJ.short}$
‘The hall is cleaned.

(a)	***je***	be_{PRES}	(‘is‘)
(b)	***bývá***	$be_{PRES[-PERF]\ [+IT]}$	(‘tends to be‘)
(c)	***bude [~~být~~]***	AUX-BE_{FUT}+ Ø $be_{INF[-LS/A]}$	(‘will be‘)
(d)	***bude bývat***	AUX-BE_{FUT}+ $be_{INF[+IT]}$	(‘will usually be‘)

7.3 Verbal Adjective Attributes

In this section we are going to briefly demonstrate the similarity of verbal adjective attributes with passive participles in similar positions, showing that they are both a kind of [$_{A}$V+A] hybrid as illustrated in (49) of Part 1.

The examples (122) illustrate that Czech verbal adjectives can be used in both pre- and post-modifier position, and that they can realise both internal and external Arguments of the related verb in forms comparable to those with the analytic passive.

(122) (a) ***učitelem chvále-n-ý Pavel*** *stál u tabule*
$teacher_{INSTR}$ $praised_{ADJ.long.NOM}$ $Paul_{NOM}$ stood at blackboard
‘Paul praised by a teacher was standng at the blackboard.‘

(b) ***Pavel, chvále-n-ý učitelem*** *stál u tabule*
$Paul_{NOM}$ $praised_{ADJ.long.NOM}$ $teacher_{INSTR}$ stood at blackboard
‘Paul praised by a teacher was standing at the blackboard ‘

Though similar, the verbal adjective attributes and passive participles are not identical. Although short and long agreement morphemes can both occur in predicate position, (123) shows that in attribute position the agreement morphology must be long.

(123) (a) *učitelem chvále-**n-á** / *chvále-**n-a** dívka*
$teacher_{INSTR}$ $praised_{ADJ.long/*short}$ $girl_{NOM}$
‘a girl praised by a teacher‘

(b) *dívka chvále-**n-á** / *chvále-**n-a** učitelem*
$girl_{NOM}$ $praised_{ADJ.long/*short}$ $teacher_{INSTR}$

[96] *As in (50) of Part 1, passive participles cannot carry the [+IT] affix; it is possible only on the AUX as in (121b/d).*

Another distinction is illustrated in the following example. Contrary to the post-syntactic derivates (verbal participles) which occur only in structural cases, the Czech verbal adjective attributes have morphology for all genders, numbers and Cases including oblique, e.g. the prepositional Locative in (124).

(124) o *chlapci / dívkách chvále-**n-ém** / **-n-ých** učitelem*
about $boy_{MS.LOC}$ / $girls_{FP.LOC}$ $praised_{ADJ.long\text{-}MS/FP.LOC}$ $teacher_{INSTR}$
'about a boy / girls praised by a teacher.'

As we proposed in sections 4.4.3 and 7.1 and as suggested by (99), the long agreement morphology signifies that the adjectival suffix (with head A) in the hybrid category $[_AV+A]$ is co-indexed with the Phi features of a nominal complex in a checking domain prior to Phonological Form. The distinction between attribute agreement and the adjectival passive participle was illustrated in (63a/b/c). We proposed that the attribute agreement results from the unification of the $[_AV+A]$ complex inside the Lexicon, i.e. the initial Numeration contains the lexical derivate (63a). The structure proposed in (89a) in 6.1.1 also explains the ability of attributive derived adjectives to bear oblique case.

On the other hand, the feature [+V], which is a part of the categorial characteristics of even an adjective that enters the Numeration as a complex $[_AV+A]$, allows the interpretation (at Logical From) of related non-obligatory Arguments, as demonstrated in (122)/(123)/(124).

The examples in (125) show that in addition to interpretation, the binding relations of verbal adjective attributes are also parallel to those in passive structures, i.e. the reflexive anaphor in the Instrumental Agent takes the internal Argument for its antecedent in both passive (125a) and attributive (125b/c) structures.[97]

(125) (a) *Chlapec byl chválen svým učitelem*
boy_{NOMi} was $praised_{ADJ.short\text{-}NOM}$ $REFL_{i/*k}$ $teacher_{INSTR}$
'The boy_i was praised by $his_{i/*k}$ teacher.'

(b) *Jan viděl chlapce chváleného svým učitelem*
$John_i$ saw $[_{NP}$ boy_{ACCk} $praised_{ADJ.long\text{-}ACC}$ $REFL_{*i/k}$ $teacher_{INSTR}$
'$John_i$ saw a boy_k praised by $his_{*i/k}$ teacher.'

(c) *Eva_i mluvila o $[_{NP}$ $chlapci_j$ chváleném svým$_{*i/j}$ učitelem]*
Eva_j spoke about $[_{NP}$ boy_{LOCj} $praised_{ADJ.long\text{-}LOC}$ $REFL_{*i/j}$ $teacher_{INSTR}$
'Eve $_i$ spoke about a boy_j praised by $his_{*i/j}$ teacher.'

7.3.1 Floating Quantifiers

Another distinction between the lexical $[_AV+A]$ derivates and post-syntactic $[_AV+A]$ derivates (63c) is related to the distribution of floating quantifiers in the contrasting examples (126) and (127). The examples in (126) contain lexical adjectives (63a) with

[97] *We do not propose any precise structure for the binding of the anaphors. The examples are given here only to show the similarity between derived adjectives and passive participles.*

long agreement morphology, i.e. copula+adjective structures, and furthermore demonstrate that this structure can appear in Czech in a number of acceptable word orders. (In the examples the quantified nominal complex *pět štěňat,* i.e.[$_{QP}$ five [$_{NP}$ puppies]], is underlined.)

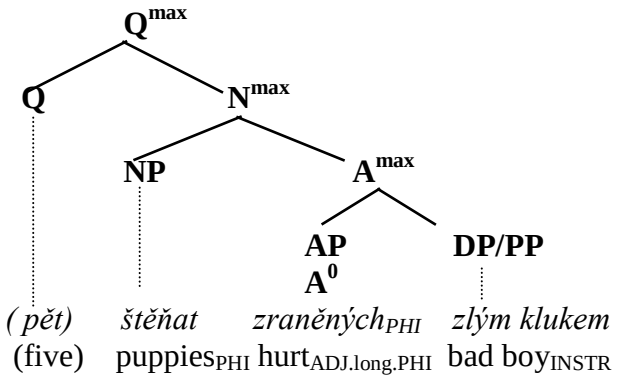
(126) (a) *Pět štěňat bylo zraně-**n-ých** zlým klukem.*
five puppies$_{GEN}$ was hurt$_{ADJ.long.GEN}$ bad boy$_{INSTR}$
'Five puppies were hurt by a bad boy.'
(b) *Pět bylo štěňat zraněných zlým klukem*
(c) *Zlým klukem zraněných štěňat bylo pět*
(d) *Štěňat zraněných zlým klukem bylo pět*

The contrasting examples (127) demonstrate that the post-syntactic [$_{A}$V+A] derivates (63c) in analytic passive structures do not allow the same variety of word orders.

(127) (a) *Pět štěňat bylo zraně-**n-o** zlým klukem.*
five puppies$_{GEN}$ was hurt$_{ADJ.short.NOM}$ bad boy$_{INSTR}$
'Five puppies were hurt by a bad boy.'
(b) **Pět bylo štěňat zraněno zlým klukem*
(c) **Zlým klukem zraněno štěňat bylo pět*
(d) **Štěňat zraněno zlým klukem bylo pět*

The distinction between (126) and (127)) are caused by the different derivational status of the underlined structures. We assume that the copula-adjective structure is base-generated with the lexical adjective in the position of a post-modifier of the noun, as in (128). The co-indexation of the A and N heads marked as $_{PHI}$ indicates the checking domain for adjectival agreement.[98]

(128)

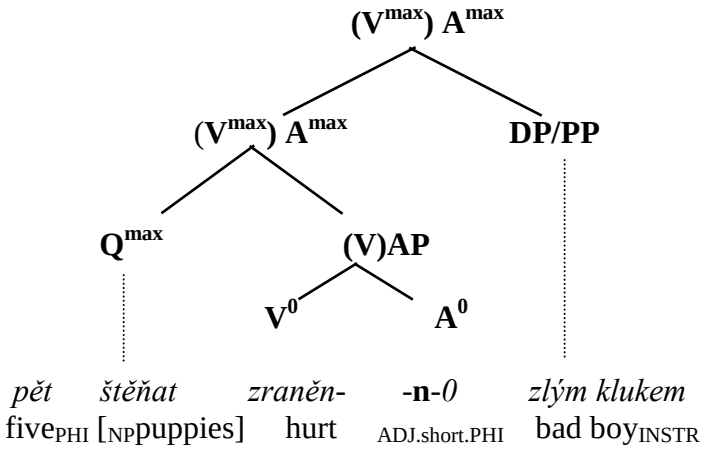


[98] *For more discussion on genitive agreement and the quantifier assigning genitive, see section 7.1.7. As for the position of the Instrumental Agent in (128) we propose it is a PP adjunct of the AP. Given that in the scheme (128) this adjunct is c-commanded by the NP* štěňat (*'puppies'), the binding relations in (125b/c) seem to be explained. We,however, do not further argue for the suggested structure (128) of Agent Interpreted Instrumentals.*

In (128) the NP constituent which receives Partitive Genitive from Q *pět (*'five') can clearly be separated from Q and moved to some higher positions. The remaining QP, on the other hand, is free to move as well, as documented in (126).[99]

The structure for the Czech analytic passive, i.e. for a structure with a post-syntactic [$_A$V+A], was given in (73) and the following (129) is its modification for (127). The co-indexation $_{PHI}$ marks the heads that enter into an agreement relation.

(129)



The structure which would remain after the extraction of the Q *pět* ('five') in (129) is not a constituent, which is why it cannot move. The only constituent which can check the EPP feature of finite T (or some pragmatic Topic/Focus feature in the high periphery of the clausal structure) is therefore the Q^{max}, which contains the N^{max} nominal complex *štěňat* ('puppies'). This complex must therefore remain undivided, as illustrated in (127).

8 SUMMARY

In this paper we have presented an analysis of the Czech analytic passive in the framework of Chomskyan generative grammar. In Section 1 we started with the introduction of the phenomena in Czech, mentioning some of the problems which the chosen framework has to face in its formal description. In Section 2 we introduced the recent generative Minimalist approach to the verbal projection and the sentence and stated some related principles which we applied to the Czech data.

Our analysis has been based on a detailed description of the properties of the components of the analytic passive in Czech. The characteristics of the passive auxiliary *být* ('be') we discussed in section 1.3.1.We compared the passive auxiliary with a similar auxiliary used to form an analytic past tense in Czech so as to argue that the two elements are in fact quite distinct. We demonstrated that according to many

[99] *We are not going to discuss here the landing side of the positions into which the components of a complex quantified DP are moved. The interpretation and the peripheral positions of most of the moved constituents suggest that the features triggering the movements of the AP and QP are the same features which trigger the pragmatically motivated word order sensitive to the Topic/Focus distinction in Czech.*

tests, the past auxiliary behaved like a grammatical non-verbal formative, while the passive auxiliary exhibits the properties of a full-fledged verb. Therefore we proposed distinct structural positions for these distinctly behaving auxiliaries in Section 3.

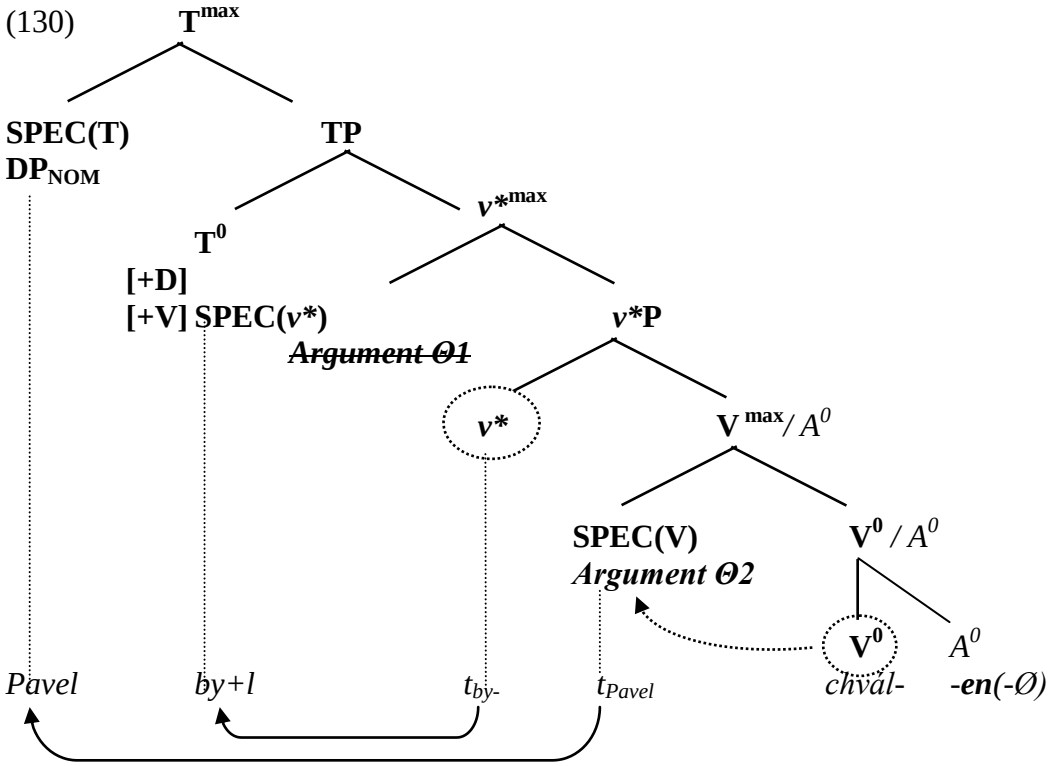
The second component of the analytic passive is the passive participle. In Section 4 we proposed that it is a complex (hybrid) form which consists of two categorially distinct parts, namely it is a [$_A$V+A] derivate. In section 4.4.2 we argued that the verbal stem V and adjectival suffix A can merge at three distinct levels of derivation. The verbal stem is uniformly present in the initial Numeration, but the adjectival suffix is a grammatical item and does not need to enter the initial Numeration: it can merge with the verbal stem later on, in syntax processing or at PF. We proposed that depending on the level of this unification of the complex, the resulting three kinds of [$_A$V+A] hybrids will exhibit a number of different predictable properties.

As for the passive participle, we proposed that it represents the latest, post-syntactic merge of the adjectival head with the verbal stem. The adjectival suffix merges with the verbal stem only at the auditory-perception interface, and that is why it shows verbal properties both during syntactic processing and at the level of Logical Form. In Section 5 we described its derivational process in several levels schematically summarised in the following scheme (130).

First the projection of the verbal head V Merges with its internal Argument Θ2 (Patient) creating SPEC(V). Second comes the projection of the head of the light verb *v** with a strong <+V> feature. The feature of *v** is checked by Merging the non-thematic AUX *být* ('be'), and this Merge prevents the attraction of V→ *v**. The resulting structure (a) does not allow generating (merge) of the external Argument Θ1 (Agent) in a SPEC(*v**) and (b) deprives V of its ability to assign structural Accusative. The AUX is however able to check the <+V> feature of the finite T and thus license the internal Argument Θ2 (Patient) by means of a structural Nominative.[100]

[100] *In (130) the adjectival suffix (the past participle adjectival morpheme '**-(e)n/-t)'** is marked in bold italics. We argue that the suffix is not present during the process of syntactic derivation but only at PF, where it has to acquire agreement morphology.*

(130)



Our analysis of the passive shows that the properties of passive structures, namely Burzio's Generalisation correlating the lack of Accusative with the lack of an Agent Argument Theta role, are in fact both results of the alternative ways a derivation can proceed. We argued that the strong <+V> feature of *v** can be checked by a V→*v** movement, which results in projecting an active structure and licensing both internal and external Arguments. But the same feature <+V> of *v** can alternatively be checked by merge of the non-thematic AUX *být* ('be'), which results in a passive structure with a restricted ability to license Arguments.

The following Sections 6 and 7 have demonstrated in more detail the distinction between the three kinds of [$_A$V+A] hybrids: (i) post-syntactic derivates (verbal passive participles), (ii) syntactic derivates (adjectival passives), and (iii) lexical derivates (deverbal adjectives). We demonstrated that these three forms are distinguishable by a wide number of properties which reflect a range of distinctions between the categories V and A.

We have illustrated that these distinctions among the three structures can be found in all linguistic levels: In interpretation of the complexes, the meanings range from adjectival [+STATE] to a possible verbal [+ACTIVITY] with independent temporal and Aspectual frames. At the level of morphology we have demonstrated that different types of agreement morpheme signal the derivational level of co-indexation, and so does the range of possible verbal agreement morphemes. On the syntactic level the distinctions are reflected by distinct distribution and extraction possibilities.

Not all characteristics of the Czech passive structures have been discussed and properly explained in this paper. We did not address at all e.g. certain restrictions on passivisation, distinctions between verbal Theta Roles and semantically related Arguments of lexical adjectives or Agent-interpreted Instrumentals. However, our paper has proposed a general and uniform approach to a circumscribed phenomenon

in a contemporary framework which has not been yet sufficiently applied to Czech data. We have demonstrated that regardless of the problems resulting from a relatively free constituent order in Czech, it is possible to apply general and presumably universal morpho-syntactic criteria to the analysis of Czech data and to achieve a reasonable level of descriptive and explanatory adequacy.

BIBLIOGRAPHY

AFARLI, TOR (1992) *The Syntax of Norwegian Passive Constructions*. John Benjamins Publishing Company, Amsterdam/Philadelphia.

BABBY, LEONARD (1987) 'Case, Pre-Quantifiers, and discontinuous agreement in Russian.' *Natural Language and Linguistic Theory 5:1987.* (91-138)

BAKER, MARK (1985) 'The Mirror Principle and Morphosyntactic Explanation'. *Linguistic Inquiry 16:1985*. (373-416)

--- (1988) *Incorporation. A theory of grammatical function changing*. Chicago, University of Chicago Press.

BAKER, MARK C. & KYLE JOHNSON & IAN ROBERTS (1989) 'Passive Arguments Raised.' *Linguistic Inquiry 20:1989.* (219-251)

BORER, HAGIT & WEXLER KENNETH (1992) 'Bi-Unique Relations and the Maturation of Grammatical Principles.' *Natural Language and Linguistic Theory 10:92*. (147-187).

BORER, HAGIT (1984) *Parametric Syntax: Case Studies in Semitic and Romance Languages.* Studies in Generative Grammar. Foris Publications, Dordrecht.

--- (1993) *Parallel Morphology*. Manuscript University of Massachusetts at Amherst.

--- (1997) *Parallel Morphology*. Seminar Atelier de Morphologie, Université de Nantes.

BOŠKOVIĆ, ŽELKO (2002) 'On Multiple Wh-Fronting." *Linguistic Inquiry 33*:351-384.

BRESNAN, JOAN W. (1977) 'Variables in the Theory of Transformations.' In Culicover, P.W., Wasow, T., and Akmajian, A.(eds.), *Formal Syntax*. Academic Press. (157-196) (plus comments by Partee)

--- (1982) Control and complementation. *Linguistic Inquiry* 13:1982. (97-202) (343-434)

BURZIO, LUIGI (1986) *Italian Syntax*. D.Reidel Publishing Company.

CHOMSKY, NOAM (1957) *Syntactic Structures*. The Hague: Mouton.

--- (1965) *Aspects of the Theory of Syntax.* Cambridge, Mass., MIT Press.

--- (1970) 'Remarks on nominalization.' In: Jacobs, R. – Rosenbaum, P. (eds.), *Readings in English transformational grammar*. Waltham/Mass., Ginn and Co. (184-221)

--- (1972) 'Deep Structure, Surface Structure, and Semantic Interpretation.' In *Studies on Semantics in Generative Grammar*. Mouton Publishers, The Hague 1972. (62-119)

--- (1981) *Lectures on Government and Binding*. Studies in Generative Grammar. Foris Publications, Dordrecht.

--- (1986). *Barriers*. Cambridge, Mass., MIT Press.

--- (1995) *The Minimalist Program*. Cambridge, Mass., MIT Press.

CHRAKOVSKIJ, VLADIMIR. S. (1974) (ed.): *Tipologija passivnych konstrukcij* (Diatezy i zalogi). Leningrad.

--- (1981) (ed.): Zalogovyje konstrukcii v raznostrukiurnych jazykach. Leningrad.

DANEŠ, FRANTIŠEK (1968) 'Sémantická struktura větného vzorce.' In: *Otázky slovanské syntaxe II*, Brno. (45-49)

DI SCIULLO, ANNE-MARIE – WILLIAMS, EDWIN (1987) *On the definition of word*. Cambridge,

Mass., MIT Press.

DRESSLER, WOLFGANG.: *Studien zur verbalen Pluralität. Iterativum, Distributivum, Durativum, Intensivum in der allgemeinen Grammatik, im Lateinischen und Hethitischen*. Wien, 1968.

EMONDS, JOSEPH E**.** (2000) *Lexicon & Grammar: the English Syntacticon.* Mouton de Gruyter, Berlin.

Encyklopedický slovník češtiny. Praha, Nakladaství Lidové noviny 2002.

FIENGO, ROBERT (1974) *Semantic Conditions on Surface Structure*. Unpublished doctoral dissertation MIT, Cambridge, Mass.

FILLMORE, CHARLES (1968) 'Toward a Modern Theory of Case.' In Reibel, D. and Schane, S. (ed.), *Modern Studies in English*. Prentice-Hall, inc., Englewood Cliffs, New Jersey 1969. (361-375)

FRANKS, STEVEN & KING TRACY HOLLOWAY (2000) *A Handbook of Slavic Clitics.* Oxford University Press.

FRANKS, STEVEN (1995) *Parameters of Slavic Morphosyntax.* Oxford University Press, New York Oxford.

FREIDIN, ROBERT (1975) ´The Analysis of Passives.´ *Language* 51:1975. (385-405)

GREPL, M.IROSLAV – KARLÍK, PETR (1983) *Gramatické prostředky hierarchizace sémantické struktury věty*. Brno, UJEP.

--- (1998) *Skladba češtiny*. Olomouc, Votobia.

GREPL, MIROSLAV. (1973) 'Deagentnost a pasivum v slovanských jazycích.' In: *Čs. přednášky pro VII. mezinárodní sjezd slavistů ve Varšavě*, Praha, Academia. (141-149).

GRIMSHAW, JANE (1990) *Argument structure*. Cambridge, Mass., MIT Press.

HAEGEMANN, LILIANE & GUÉRON, JACQUELINE (1999) *English Gramma: A Generative Perspective.* Blackwell, CUP Cambridge.

HALLE, MORRIS A MARANTZ, ALEX (1993) 'Distributed Morphology and the Pieces of Inflection.' In Hale, K. and Keyser, S.J. (eds.) *The View from Building 20*. Cambridge, Mass., MIT Press. (111-176)

HAVRÁNEK, BOHUMIL (1928) *Genera verbi ve slovanských jazycích*. Praha, Královská česká společnost nauk.

HÖHLE, T. (1978) *Lexikalistische Syntax: Die Aktiv-Passiv-Relation und andere Infinitivkonstruktionen im Deutschen.* Tübingen, Max Niemeyer Verlag.

JAEGGLI, OSWALDO (1986) Passive. *Linguistic Inquiry 17:1986.* (587-622)

KARLÍK, PETR (2003) 'Reflexivum v češtině.' In *Sborník filozofické fakulty Masarykovy Univerzyity*, Masarykova univerzita, Brno.

--- (2000) 'Hypotéza modifikované valenční teorie.' *Slovo a slovesnost, 61:*170-189.

KAYNE, RICHARD S. (1989) 'Facets of Romance Past Participle Agreement, in P. Beninca, ed., Dialect Variation and the Theory of Grammar, Foris, Dordrecht. (85-103).

--- (1994) *The Antisymmetry of Syntax*. Linguistic Inquiry Monograph 25. Cambridge, Mass., MIT Press.

KEENAN, EDWARD (1985) 'Passive in the World's Languages.' In *Language Typology and Syntactic Description I*, 243-281. (Ed.) Shopen, T. Cambridge, Cambridge University Press. (243-281).

KOMÁREK, MIROSLAV (1978) *Příspěvky k české morfologii*. Praha, SPN.

KOOPMAN, HILDA & SPORTICHE, DOMINIQUE (1988) *Subjects*. Ms. UCLA.

--- (1991) 'The Position of Subjects'. In *Lingua 85:1991*. (211-258)

KOOPMAN, HILDA (1993) *Licensing Heads.* Ms. UCLA.

KOPEČNÝ, FRANTIŠEK (1962) *Základy české skladby*. Praha, SPN.

KOSTA, PETR (2001).: Negace a větná struktura v češtině. In: Hladká, Z. – Karlík, P. (eds.), *Čeština-univerzália specifika*, 3, Brno: Masarykova univerzita. (117-138).

LAKOFF, GEORGE & ROSS, JOHN (1976) 'Is Deep Structure Necessary?' In Syntax and Semantics 7, 159-164. (Ed) J. McCawley. New York, Academic Press.

LARSON, RICHARD (1988) 'On the Double Object Construction.' *Linguistic Inquiry 19:1988*. (335-391)

--- (1990) Double Objects Revisited (Reply to Jackendoff) *Linguistic Inquiry* 21:1990. (589-632)

LEFEBVRE, CLAIRE (1988) 'Past Participle Agreement in French: Agreement = Case.' In *Advances in Romance Linguistics: Publications in Language Sciences 28*, 233-251. (Ed.) Biurdsong, D. & Montreuil,

LEVIN, BETH & RAPPAPORT, MALKA (1986) 'The Formation of Adjectival Passives.' In *Linguistic Inquiry* 17:1986. (623-661)

LIEBER, ROCHELLE (1980) *On the Organization of the Lexicon,* Unpublished doctoral dissertation MIT, Cambridge, Mass.

MATEOS, ARANCHA (2000) Unpublished MA Dissretation, University of Durham.

Mluvnice češtiny II. Praha, Academia 1986.

OUHALLA, JAMAL **(**1991) *Functional Categories and Parametric Variation*. Routledge, London.

POLDAUF, IVAN (1940) 'Podstata anglického pasíva a anglické vazby zájmové účasti.' In *Časopis pro moderní filologii 26.* (358-363)

--- (1969) 'The so-called medio-passive in English.' In *Acta Universitatis Carolinae. Philologica 3, Prague Studies in English 13.* (15-34)

POLLOCK, JEAN-YVES (1989) Verb Movement, Universal Grammar, and the Structure of IP. *Linguistic Inquiry 20:1989*. (365-424)

POSTAL, PAUL (1986) *Studies of Passive Clauses.* Albany: State University of New York Press.

Příruční mluvnice češtiny. Praha, Nakladatelství Lidové noviny 1995.

RAPP, IRENE (1997) *Partizipien und semantische Struktur. Zu passivischen Konstruktionen mit dem 3*. Status. Tübingen, Stauffenburg Verlag.

ROBERTS, IAN (1985) 'Agreement parameters and the development of English modal auxiliaries.' *Natural Language and Linguistic Theory 3:1985*. (21-58)

--- (1991) *Verbs and Diachronic Syntax*. Dordrecht: Kluwer.

RŮŽIČKA, RUDOLF (1963) *Das Syntaktische System der altslawischen Partizipien und sein Verhältnis zum Griechischen..*

SCHOORLEMMER, MAAIKE (1995) Participial Passive and Aspect in Russian. Utrecht: Onderzoeksinstituut voor Taal en Spraak.

SGALL, PETR (1972) 'Topic, focus and the ordering of elements of semantic representation.' *Philologica Pragesis, 15:*1-14.

SIEGEL, DOROTHY (1973) 'Nonsources of Unpassives.' In *Syntax and Semantics 2*. (Ed.) Kimball, J. New York: Academic Press.

SPEAS, MARGARET (1990) *Phrase Structure in Natural Language.* Kluwer, Dordrecht.

ŠTÍCHA, FRANTIŠEK (1984) *Utváření a hierarchizace struktury větného znaku*. Praha, UK .

TESNIÈRE, LUCIEN (1959) *Éléments de syntaxe structurale*. Paris.

TOMAN, JINDŘICH (1980) 'Weak and Strong: Notes on *be* in Czech.' In Brettschneider, G. and Lehmann, Ch. (eds.) *Wege zur Universalien Forschung, Sprachwwissenschaftliche Beitrage zum 60 Geburstag von Hansjacob Seiler*. Gynter Narr Verlag Tubingen.

--- (2000) 'Prosodické spekulace o klitikách v nekanonickch pozicích.' In Hladká, Zdeňka a Karlík, Petr (ed.) *Čeština – univerzália a specifika 2*. Brno.

TRAVIS, LISA (1984) *Parameters and Effects of Word Order Variation*. Unpublished doctoral dissertation MIT, Cambridge, Mass.

VESELOVSKÁ, LUDMILA (1995) *Phrasal Movement and X-Morphology: Word Order Parallels in Czech and English Nominal and Verbal Projections.* PhD diss. Palacký University, Olomouc.

--- (2001a) 'K analýze českých deverbálních substantiv,' In Hladká & Karlík (eds) *Čeština-univerzália specifika 3*, Masarykova univerzita, Brno. (11-28)

--- (2001b) 'Agreement Patterns of Czech Group Nouns and Quantifiers.' In Corver, N. and Rijemsdijk, H, van (eds.), *Semi-Lexical Categories.* Studies in Generative Grammar. Mouton de Gruyter, Berlin. (273-320)

--- (2001c) 'Od bariér k minimalismu: Některé aspekty poslední vývojové změny chomskyánského modelu jazyka.' *Slovo a slovesnost 62:*274-292.

--- (2001d) 'Syntaktické primitivy.' In *Acta Universitatis Palackianae Olomucensis, Facultas Philosophica, Philologica 70:- Anglica II*. Universita Palackého, Olomouc. (65-90)

--- (2002) 'Struktura subjekt-predikátové shody,' In Hladká & Karlík (eds) *Čeština-univerzália specifika 4*, Masarykova univerzita, Brno. (199-212)

--- (2003) 'Analytické préteritum a opisné pasivum v češtině:: dvojí způsob saturace silného rysu <+V> hlavy *v**,' In *Sborník filozofické fakulty Masarykovy Univerzyity*, Masarykova univerzita, Brno. (159-176)

VOS, RIET & VESELOVSKÁ, LUDMILA (1999) 'Clitic Questionnaire.' In Henk van Rijemsdijk (ed.) *Clitics in the Languages of Europe.* Mouton de Gruyter , The Hague. (891-1010)

WASOW, THOMAS (1977) 'Transformations and the Lexicon.' In Culicover, P.W., Wasow, T., and Akmajian, A.(eds.), *Formal Syntax*. Academic Press. (327-360)