

# A Note about *Nothing*

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2003. In *Investigations into Formal Slavic Linguistics: Contributions of the Fourth European Conference on Formal Description of Slavic Languages (FDSL IV, Vol. 2*, edited by Peter Kosta, Joanna Błaszczak, Jens Frasek, Ljudmila Geist, and Marzena Żygis, 745–759. Postdam: The University of Potsdam.

## Introduction

In Veselovská (1995, Section 5.5) I discuss possible examples of N-to-D Movement in Czech. I demonstrate that there is no reason to assume any such movement with Czech nouns, either common or proper. The only plausible candidates are some few pronouns which I briefly exemplify in Section 1. In the following parts I discuss Czech indefinite, negative, free choice and interrogative pronouns and show that their [+/-HUMAN] forms exemplify two distinct structures represented by distinct morphological patterns.

As for my methodology, this paper argues in favour of a model of grammar which takes inflectional morphology for a signal of relevant syntactic relations. I demonstrate that applying the cyclic approach and several theoretical assumptions, the generative syntactic framework can explain even very complex morphological patterns which systematically correlate with distinct syntactic behaviour and interpretations.

## 1. *D category and N-to-D Movement in Czech*

Pronouns are since Postal (1969) analysed as representatives of the Determiner category in English. The following example (1) repeats Postal's argument about the obligatory sequence of marked co-occurrence of pronoun and noun.

- (1) *My, lingvisté* bychom nic podobného neměli tvrdit.  
we linguists Aux nothing similar shouldn't claim  
'We linguists should not claim anything like that'

Assuming that functional projections in Czech precede the lexical projection, i.e. D precedes N, (1) suggests that personal pronouns occupy the position of D.<sup>1</sup> A similar conclusion can be drawn from the example (2), which contrasts the obligatory order of a Czech emphatic pronoun *sám* 'self' with nouns and pronouns.

- |     |    |   |    |   |
|-----|----|---|----|---|
| (2) | a) | V Miláně přednášel <u>sám</u> <i>Chomsky</i> .<br>in Milano lectured himself Chomsky<br>'Chomsky himself gave a talk in Milan.' | b) | *... <u>Chomsky sám</u><br>*... Chomsky himself |
|     | c) | *V Miláně přednášel <u>sám</u> <i>on</i> .<br>* in Milano lectured himself he<br>'He himself gave a talk in Milan.'             | d) | ... <u>on sám</u> .<br>... he himself           |

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<sup>1</sup> I will use the label D for the high functional projection of the DP (=a nominal functional projection) with no a priori stipulation about its feature contents.

In the example (2) the pronoun has to precede the emphatic pronoun 'self' suggesting that it occupies a position above N, i.e. in the high functional projection of the DP. The following example (3) repeat similar contrast for a noun/pronoun and the quantifier *všichni* 'all'.

- (3) a) V Miláně přednášeli všichni účastníci.  
in Milano lectured all participants  
'All participants gave a talk in Milan.'
- b) \*... účastníci všichni  
\*... participants all
- c) \*V Miláně jsme přednášeli všichni my.  
\* in Milano Aux lectured all we  
'All of us gave a talk in Milan.'
- d) ... my všichni.  
... we all

The example (4) demonstrates that it is problematic to derive the position of a personal pronouns from the relative order of nouns/pronouns and adjectives, because personal pronouns are not felicitous either preceding or following adjectival pre-modifiers.

- (4) a) Přijel takový velký muž /\*on  
arrived such big man /\*he  
'Such a big man arrived.'
- b) \* ... on/muž takový velký  
\* ... he/ man such big

Some indefinite pronouns, however, can be used with modifiers without any pause, which might signal some kind of extraposition. Compare (5) with examples of *indefinite, negative and free choice pronouns*. Notice that adjectival modifiers are acceptable only following the pronoun.

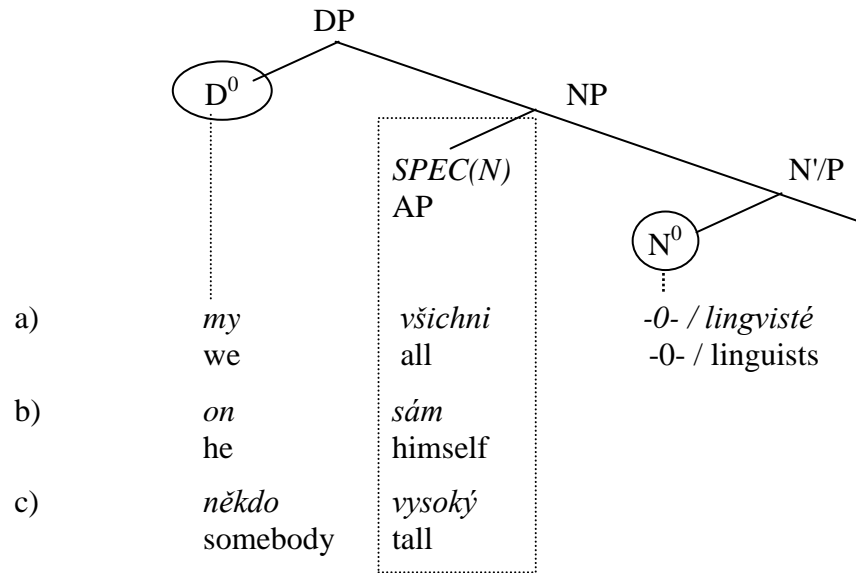
- (5) a) Stojí tam takový vysoký muž  
stands there such tall man  
'There is such a tall man standing overthere.'
- b) \*... muž takový vysoký  
\*... man such tall
- c) \* Stojí tam takový vysoký někdo  
\* stands there such tall somebody  
'There is somebody tall standing overthere.'
- d) ... někdo takový vysoký  
... somebody such tall

The pronoun *někdo* 'somebody' in (5) is derived from the interrogative/relative pronoun *kdo* 'who' demonstrated in (6a). (6b) gives more examples of the range of the Czech complex *indefinite, negative and free choice pronouns* comprising the [+HUMAN] element *kdo* 'who'.

- (6) a) (\*Takový velký) *kdo* takový velký  
(\*such big) who such big  
'who big like that'
- b) Ně-kdo /ni-kdo /kdo-koli/ *kdo*-si /ledas-kdo/kde-kdo takový veliký  
somebody /nobody/anybody/whoever such big

The ordering of the adjectival modifiers with respect to the pronouns argues again for the position of the pronouns in the high functional projection of the DP, i.e. D. The following scheme (7) illustrates the position of Czech pronouns in D as suggested by the data in these examples.

(7)



## 2. Analysis of [+HUMAN] pronouns

### 2.1. Theoretical assumptions about heads

Discussing Czech quantifiers in Veselovská (2000), I propose that the following (8)-(10) are possible generalisations of morphological signals of the structural relations in Czech.

- (8) *NP-Agreement* is a morphological signal of a SPEC-head agreement, i.e. the complex of phi features of a D-Structure head  $X^0$  are reflected on the head  $Y^0$  of the constituent  $Y^{\max}$  in the SPEC position with respect to  $X^0$ ;
- (9) *V-Agreement* is an agreement between the pre-Spell Out head of the nominal complex in subject position and a verbal predicate,<sup>2</sup>
- (10) *Case* is assigned at a relevant level by a head element X to the head of the maximal  $D^{\max}/N^{\max}$  which is sister to X. (Case features become a part of the feature complex of the head D/N which is spread via NP Agreement.)

As for the [+HUMAN] pronouns comprising the element *kdo* 'who', the following examples (11) demonstrate several morphological signals as to the headedness of the pronoun. These characteristics are summarised in (12) in terms of (8)-(10).

- (11) a)      *Nikdo*              *takový*              *podobný*              *nepřišel*  
            *nobody*<sub>3SM-NOM</sub> *such*<sub>3SM-NOM</sub> *similar*<sub>3SM-NOM</sub> *not-came*<sub>3SM</sub>  
            'Nobody like that arrived.'

<sup>2</sup> Some forms of a Czech V-Agreement require more detailed definition, especially when the verbal predicate is analytic (comprises auxiliaries) or with coordinated subjects; see also Veselovská (2002).

- b) Mluvil jsem s někým takovým podobným.  
 I spoke Aux with somebody<sub>3SM-INSTR</sub> such<sub>3SM-INSTR</sub> similar<sub>3SM-INSTR</sub>  
 'I met somebody like that.'
- (12) a) The V-Agreement in (11a) reflects the phi features of the [+HUMAN] pronoun *nikdo* 'nobody'-3SM) suggesting thus that the pronoun is the head of the complex;
- b) the NP-Agreement of adjectives in both (11a/b) suggests that the [+HUMAN] pronoun *nikdo* 'nobody'-3SM) is the head which triggers the NP-Agreement;
- c) the Cases (NOM and INSTR) assigned to the complex structure appear on the [+HUMAN] pronouns *nikdo* 'nobody'-3SM-NOM/INSTR) suggesting they are heads of the complex.

## 2.2. N-to-D-to- $\Sigma$ Movement

My analysis of the Czech [+HUMAN] pronouns is based on a comparison with the agreement structures of Czech nouns. Compare the examples (13) with (11) above. They show that the *agreement patterns* of nouns and pronouns are in fact identical and following the criteria (8)-(10) and (12), both the noun in (13) and the pronoun in (11) are heads of their respective complexes.

- (13) a) Takový podobný člověk nepřišel  
 such<sub>3SM-NOM</sub> similar<sub>3SM-NOM</sub> man<sub>3SM-NOM</sub> not-came<sub>3SM</sub>  
 'A man like that did not arrive.'
- b) Mluvil jsem s takovým podobným člověkem.  
 I spoke Aux with such<sub>3SM-INSTR</sub> similar<sub>3SM-INSTR</sub> man<sub>3SM-INSTR</sub>  
 'I met somebody like that'

The only distinction between the nouns in (13b) and [+HUMAN] pronouns in (13a) concerns the linear order of the head element with respect to the agreeing adjectival premodifiers. While the noun seems to occupy the position of N in the scheme (7), the pronoun seems to be located in some higher functional head of the DP.

Because the pronouns in (6b) contain the feature [+HUMAN] and because I assume that this feature is inherently a *nominal* feature (i.e. a feature of the lexical category N), I propose that Czech [+HUMAN] pronouns are generated inside NP.<sup>3</sup> To reach the high functional head in the periphery of the complex nominal structure, these [+HUMAN] pronouns move through all potential nominal functional heads (all of them with default features only).<sup>4</sup> In other words, I propose that the Czech [+HUMAN] pronouns constitute an example of N-to-D Movement in Czech, which I illustrate in the following (14).

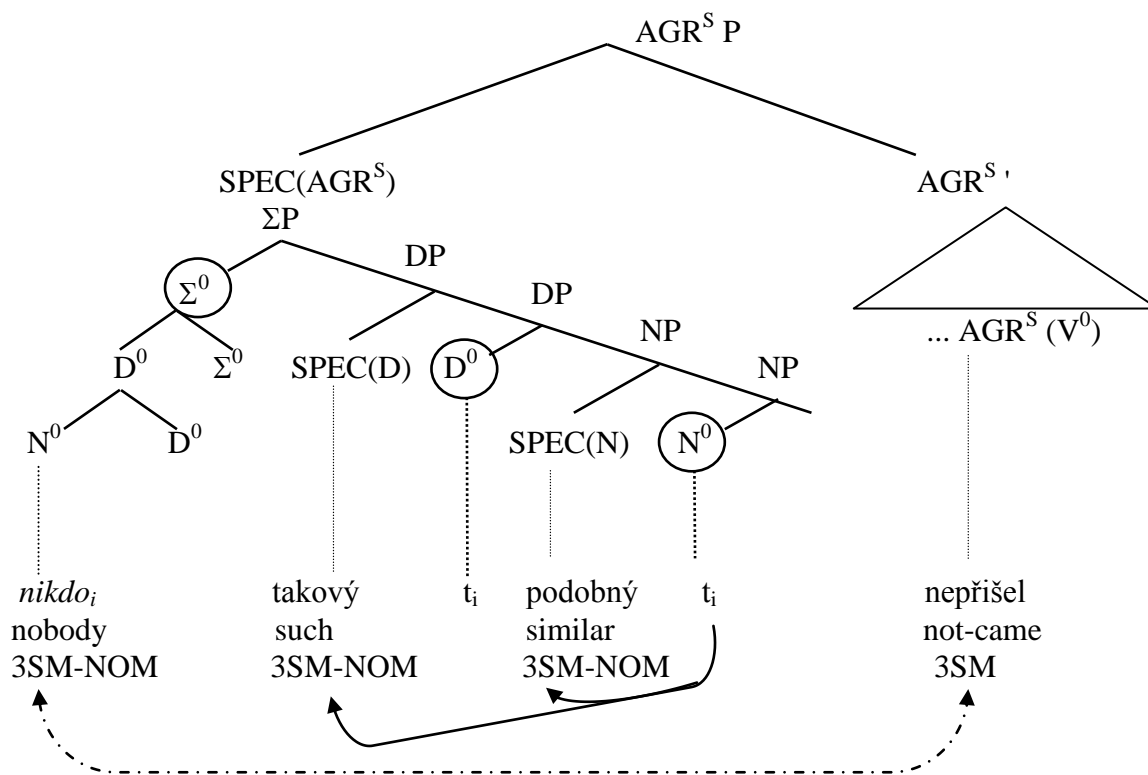
<sup>3</sup> In Veselovská (1999) I argue that Czech semantic GENDER, which occurs only with [+HUMAN], is a property of the lexical category N. ANIMACY is an epiphenomenal result of the location of the feature in the low lexical head. If so, [+HUMAN] elements must be generated in N<sup>0</sup>.

<sup>4</sup> The number, labels, feature content and ordering of all possible functional nominal heads is not a topic here.

- (14) a)  $[\Sigma^0 \text{Nikdo}_i \quad [\text{DP takový} \quad t_i \quad [\text{NP podobný} \quad t_i ]]] \text{ nepřišel}$   
 nobody<sub>3SM-NOM</sub> such<sub>3SM-NOM</sub>  $t_i$  similar<sub>3SM-NOM</sub>  $t_i$  not-came<sub>3SM</sub>  
 'Nobody like that arrived.'

In the schematic (14b) the landing site for the pronoun generated in  $N^0$  is the highest functional nominal head labelled as  $\Sigma P$ . Following Laka (1989, 1990)  $\Sigma$  is a polarity head with negative/positive features. Such a head seems appropriate for the pronouns mentioned here because all of them (indefinite, negative, free choice and interrogative pronouns) reflect a kind of polarity feature. Given that demonstratives follow the pronouns I assume that  $\Sigma$  precedes the DP. The arrows in (14b) visualise the assumed sharing of phi features signalled by morphology.

- (14) b) [+HUMAN] pronoun: N-to-D-to- $\Sigma$  Movement



The chain representing the [+HUMAN] pronoun is illustrated in (15).

- (15) chain: [*nikdo*/nobody,  $t_{D/N}$ ,  $t_N$ ]

According to (10), Case is assigned to the pronoun generated at  $N^0$ . At the level of structural Case assignment the pronoun is perhaps already moved to the top position  $\Sigma$ , and the head of the chain of *nikdo* 'nobody' is assigned NOM(/ACC) from an external source. As for the overt morphological agreement on AP premodifiers, because the pronoun is a D-Structure nominal head, its features will be relevant for NP-Agreement of adjectives as required by (8). The tail of the chain of *nikdo* 'nobody' will share features with its head and will agree with all SPECs. Because the movement takes place through all the potential nominal heads, all SPECs will agree

with the chain. And finally, as expected, if this constituent appears in a subject position, following (9), the predicate verb will agree with the head of the complex  $\Sigma P$ , i.e. *nikdo* 'nobody'.

The same analysis is possible for the [+Oblique] Case structures exemplified in (11b) and demonstrated in (16) below. At the D-Structure level INSTR is assigned by a preposition to the head *někdo* 'somebody', perhaps still at the  $N^0$  position. At the Spell Out level, *nikdo* 'nobody' moves to  $\Sigma$ . The whole chain of *někdo* 'somebody' has INSTR and the NP-Agreement can be formed with the tail of the chain.

- (16) Mluvil jsem [<sub>PP</sub> s [ <sub>$\Sigma P$</sub>  *někým<sub>i</sub>* [<sub>DP</sub> takovým  $t_i$  [<sub>NP</sub> podobným  $t_i$  ]]]]  
 I spoke Aux with somebody<sub>3SM-INSTR</sub> such<sub>3SM-INSTR</sub>  $t_i$  similar<sub>3SM-INSTR</sub>  $t_i$   
 'I spoke with somebody like that.'

### 3. Pronouns with [-HUMAN] feature

#### 3.1. Position

Looking for more examples of the same phenomena, it appears that the feature content of the pronominal element may play an important role in the derivation. In (17) pronouns similar to (6b) are given in their [-HUMAN] forms. They are derived by the same set of prefixes and affixes from an interrogative/relative pronoun *co* 'what'. The similarity in the order of the elements in (6) with (17), namely the fact that both + and – HUMAN pronouns precede the adjectives, suggest that also (17) may be a case of N-to-D Movement in Czech.

- (17) a) *Co /ně-co /ni-c /co-koli /co-si /ledas-co/kde-co* takového velkého  
 what/something /nothing/anything/whatever<sub>NOM</sub> such<sub>GEN</sub> big<sub>GEN</sub>  
 b) \* Takové(ho) velké(ho) *ně-co /ni-c /co-koli*  
 such big something/nothing/whatever

Notice, however, that *agreement pattern* of the grammatical (17a) is distinct from (6b). While the [+HUMAN] pronoun agrees with all the adjectives, i.e. both are in NOM, in (17a) the [-HUMAN] pronoun in NOM is followed by adjectives in GEN. (18) shows that the morphologically agreeing forms corresponding to (6b) (i.e. in NOM) are unacceptable.

- (18) \* Co /něco /nic /cokoli takový velký  
 \* what/something/nothing/whatever<sub>NOM</sub> such<sub>NOM</sub> big<sub>NOM</sub>

The structure of [-HUMAN] pronoun exemplified in (17a) resembles rather the agreement pattern typical of some Czech quantifiers, e.g. *mnoho* 'many/much', which are followed by a partitive genitive. Compare the examples in (19) below. Notice that not only the NP-Agreement of adjectives, but also the V-Agreement make the [-HUMAN] pronoun in (19b) comparable with the quantifier in (19a) but distinct from [+HUMAN] pronouns in (19c).

- (19) a) Mnoho takového velkého přišlo  
much/many<sub>NOM</sub> such<sub>GEN</sub> big<sub>GEN</sub> came-3SN  
 'much stuff big like that arrived'

- b) Co/Něco                      takového velkého přišlo  
what/something<sub>NOM</sub> such<sub>GEN</sub> big<sub>GEN</sub> came-3SN  
 'something big like that arrived'
- c) Kdo/Někdo                      takový velký přišel  
who/somebody<sub>NOM</sub> such<sub>NOM</sub> big<sub>NOM</sub> came-3SM  
 'somebody big like that arrived'

As I discuss in detail in Veselovská 1998 (and as discussed elsewhere as well), the GEN after certain quantifiers in Slavic languages appears only in structural Cases. In [+Oblique] Cases the morphology looks different and therefore Franks (1995) calls the morphological pattern of these quantifiers the *Heterogeneous Pattern*. Together with (19) above, the following example (20) demonstrates that [-HUMAN] pronouns derived from *co* 'what' have the Heterogeneous Pattern of the quantifiers, too. In contrast to (19a) and (19b), GEN does not appear in either (20a) or (20b). (20b) differs from the pattern with a quantifier in (20a) only by the absence of an overt nominal head. The nominal head is missing also in (19c) and (20c), which exemplify the [+HUMAN] pronoun.

- (20) a) s mnoha                      takovými podobnými ženštinami  
 with many<sub>SN-INSTR?</sub> such<sub>PF-INSTR</sub> similar<sub>PF-INSTR</sub> women<sub>PF-INSTR</sub>  
 'with many women like that'
- b) s ničím                      takovým podobným  
 with nothing<sub>3SN-INSTR</sub> such<sub>3SN-INSTR</sub> similar<sub>3SN-INSTR</sub>  
 'with nothing like that'
- c) s nikým                      takovým podobným  
 with nobody<sub>3SM-INSTR</sub> such<sub>3SM-INSTR</sub> similar<sub>3SM-INSTR</sub>  
 'with nobody like that'

The following analysis of [-HUMAN] pronouns is therefore based on my analysis of quantifiers proposed in Veselovská (2001). To capture the distinct agreement patterns of [+HUMAN] and [-HUMAN] pronouns in Czech I propose that the [+HUMAN] and [-HUMAN] pronouns are generated in distinct positions in a DP phrase marker and participate in the derivation in distinct ways.

### 3.2. *The Quantifier Analysis of [-HUMAN] pronouns*

To start with, I assume the complete structure for the [-HUMAN] pronouns to be similar to (7). Or (14b) Moreover, following the criteria given in (8)/(9)/(10) the examples above showed several signals with respect to the headedness of the [-HUMAN] pronoun in the assumed  $\Sigma P$ . The signals are summarised in (21).

- (21) a) Following (9), the V-Agreement in (19b) suggests that the [-HUMAN] pronoun *is* the head of the complex  $\Sigma P$ ;

- b) Following (8), the NP-Agreement of adjectives provides contradictory signals. In a NOM/ACC context in (19b) it suggests that the [-HUMAN] pronoun *is not* the head relevant for the agreement on adjectival premodifiers, while in an [+Oblique] context in (20b) it suggests that the [-HUMAN] pronoun *is* the head relevant for the agreement on adjectival premodifiers;
- c) Similarly, following (10), in NOM/ACC contexts in (19b) the [-HUMAN] pronoun must be the Case assigning head, because a GEN case appears inside the structure which could be attributed to the presence of the pronoun only. In (20b), however, no such GEN is present to signal the headedness of the pronoun.

To explain the contradictory signals with respect to the headedness of the [-HUMAN] pronoun, we can notice that each of the structural descriptions in (8), (9) and (10) is stated with respect to the level of the derivational process. As for the V-Agreement, the relevant level for its assignment plausibly follows most transformations and takes place at a post-transformation (S-Structure) level of the derivation. For the NP-Agreement, which in (21b) shows contradictory signals, the relevant head for co-indexing is the *base generated* head (i.e. the D-structure head, the tail of a potential chain). And at last, Case can be assigned at both the D-Structure level and the S-Structure level as stated in e.g. Franks (1995) and repeated below in (22).

- (22) *Case Hierarchy*
- Lexical [+Oblique] Case is assigned at D-Structure
  - Structural Case is assigned at S-Structure

Because of the presence of GEN in (17a)/(19b), I propose that [-HUMAN] pronouns are [+N] heads able to assign *structural* GEN. Given that Case is a property of a DP, and that one DP chain cannot be assigned/carry two cases, I assume that [-HUMAN] pronouns are to be generated above the projection the head of which receives GEN and triggers the GEN agreement on the adjectives. In other words, the [-HUMAN] pronouns cannot be an example of N-to-D-to-Σ Movement demonstrated in (14b), because the resulting chain in (15) would contain two distinct Cases.

My proposed structure is exemplified by the example and the following scheme in (23). In (23), at the Spell Out level, the [-HUMAN] pronoun *nic* 'nothing' occupies the position Σ, i.e. it is the head of the complex ΣP, and therefore it is assigned NOM/ACC. As stated in (10), because Σ is an [+N] head, it assigns structural GEN to the following DP, namely to its head *pro<sub>N</sub>*. The phonetically empty head of N - *pro<sub>N</sub>* - is licensed (signalled) by an adjectival agreement.<sup>5</sup> Following (8), the adjectives located in SPEC positions with respect to the *pro<sub>N</sub>* (D-Structure head D/N<sup>0</sup>) agree with its default features – 3rd singular neuter - and the structural GEN assigned by Σ. The arrows at the bottom of the schematic (23b) visualise the assumed sharing of phi features signalled by morphology.

<sup>5</sup> The *pro<sub>N</sub>* in Czech represents an empty noun in contexts where English requires proform 'one'. Its phi features are realised by adjectival/pronominal morphology and may be reflected by a V-Agreement as well. See (i)/(ii).

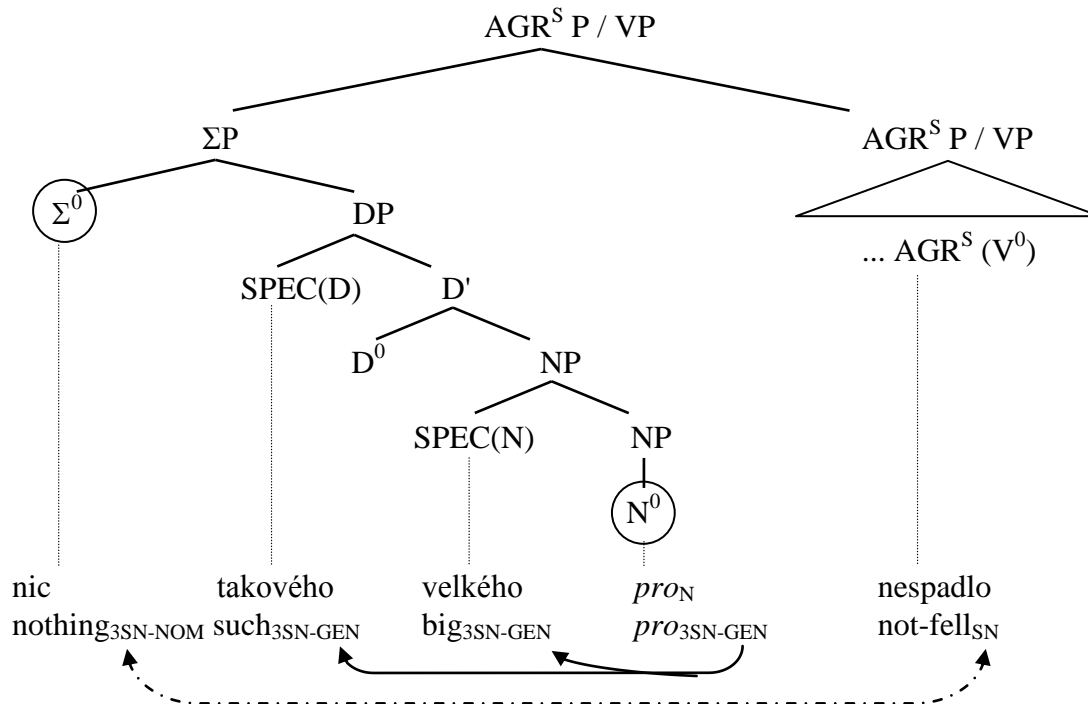
(i) Přišel jen ten velký.  
arrived<sub>3SM</sub> only the<sub>3SM.NOM</sub> big<sub>3SM.NOM</sub>  
'Only the big one arrived.'

(ii) Malou si neber.  
small<sub>3SF.ACC</sub> REFL not-take<sub>2S.IMP</sub>  
'Do not take the small one.'



- (23) a) [<sub>ΣP</sub> *Nic* [<sub>DP</sub> *takového* [<sub>NP</sub> *velkého* [<sub>N</sub> *pro<sub>N</sub>* ]]]] *nespadlo*  
 nothing<sub>3SN-NOM</sub> such<sub>GEN</sub> big<sub>GEN</sub> *pro<sub>GEN</sub>* not-fell<sub>3SN</sub>  
 'Nothing big like that fell down.'

b) S-Structure of the base generated  $\Sigma$  and *pro<sub>N</sub>*



If base generated above NP, [-HUMAN] pronouns do not pass any nominal functional heads and therefore they cannot reflect any purely nominal features. In Veselovská (1999) I argue that the purely N features are Gender (dependent on Animacy) and Countability and as predicted, the relevant pronouns are [-HUMAN] and their countability is at least questionable. The V-Agreement therefore supports my analysis. The subject-verb agreement is constructed at the end of the derivation and following (9) the predicate agrees with the head of the complex, i.e. with the features of  $\Sigma$  - *nic* 'nothing'-3SN.

To be able to use the same structure as in (23b) for the [-HUMAN] pronouns in [+Oblique] contexts as in (20b), I have to recall the concept of a post-cyclic head which I applied in Veselovská (2001) for the analysis of the Czech quantifiers with similar heterogeneous agreement patterns. I applied the theory of tripartite lexical insertion introduced in detail in Emonds (2000, Chapter 4). The author claims that only elements with purely semantic features are active in the cyclic derivation from the beginning. The grammaticalised elements containing only cognitive/syntactic features F can be activated later in the derivation, some as late as at PF (e.g. inflectional morphemes). I propose that some Czech Quantifiers as well as [-HUMAN] pronouns are grammaticalised elements which are interpretable at LF, i.e. they exemplify the elements which are inserted to the derivation after D-Structure but before Spell Out. Those elements I label *post-cyclic heads*.

Following to the above sketched theory, I propose here that it is the *absence* of the [-HUMAN] pronoun at the beginning of the derivation (at D-Structure) which causes the contradictory signals of its headedness mentioned in (21b/c). The example (24) repeats (20b) to show that in [+Oblique] Cases the [-HUMAN] pronoun does not reflect the same head properties as in NOM/ACC contexts. Crucially, it does not assign GEN.

- (24) [PP S [ΣP ničím [DP takovým [D [NP podobným *pro<sub>N</sub>* ]]]]]  
 with nothing<sub>3SN-INSTR</sub> such<sub>3SN-INSTR</sub> similar<sub>3SN-INSTR</sub> *pro<sub>N-3SN-INSTR</sub>*  
 'with nothing like that'

As proposed by Franks (1995) in (22), Lexical [+Oblique] Case is assigned at D-Structure.. At this level the head Σ is missing and the [+Oblique] case is therefore assigned to the head *pro<sub>N</sub>* in the position N<sup>0</sup>. Because the DP has a Case, there is no need for any GEN at S-Structure, when Σ is activated. NP-Agreement is formed with *pro<sub>N</sub>* in N<sup>0</sup> (default features: 3SN, and INSTR). The post-cyclic head, the [-HUMAN] pronoun *nic* 'nothing', is inserted late in a derivation and is not assigned any Case. Perhaps it does not need Case because the Case Filter applies for phrases probably. It is licensed by agreement: because *nic* 'nothing' does not (cannot) project, it is re-analysed as Σ<sup>max</sup> (= SPEC) and 'agrees' with *pro<sub>N</sub>* in N<sup>0</sup>.

#### 4. Empty Expletive Pronoun: an Alternative for [+HUMAN] pronouns

A Movement of N to D and Σ, assumed here for the [+HUMAN] pronouns in the structure (7 b), as well as the (late) insertion of the [-HUMAN] pronoun in the Σ position, indicate the presence of a feature in Σ which triggers head movement or the insertion of a grammatical element. Such a feature plausibly refers to the category [+N] or [+D] and the two methods of checking the feature (i) *Movement* or (ii) *Merge* are predictable within the minimalist framework in Chomsky (1995). The following alternative analysis proposes that this strong syntactic feature can also be checked by merge of a grammatical element with some Czech [+HUMAN] pronouns.

The data supporting the alternative analysis are given below in (25b). Notice that if the modifying adjectives are missing/impossible (i.e. there is no signal of the overt syntactic movement of the [+HUMAN] pronoun to any high functional head), Czech grammar allows alternative V-Agreement, some of which are usually presented as a kind of 'disagreement'. In contrast to (25a), in (25b) the predicate does *not* agree with the [+HUMAN] 3SM features of *někdo* 'somebody'. The Aux clitic in (25b) shows agreement with 'we-1P' and the past participle verb is masculine (=unmarked) plural.<sup>6</sup>

- (25) a) Někdo takový velký přišel  
somebody-3SM<sub>NOM</sub> such<sub>NOM</sub> big<sub>NOM</sub> came-3SM  
 'Somebody big like that arrived.'
- b) Někdo (\*takový velký) jsme přišli  
somebody-3SM<sub>NOM</sub> (\*such<sub>NOM</sub> big<sub>NOM</sub>) Aux-be-1PM came-PM  
 'Some of us arrived.'

<sup>6</sup> Some more aspects of the subject predicate agreement *ad sensum* in Czech I discuss in Veselovská (2002). For more detailed data on the Czech variety of V agreement see Kučerová (2000).

In Veselovská (1999) I argued that NP-Agreement of adjectives depends on *syntactic* co-indexing of the extended nominal projection. I proposed that the ungrammaticality of premodifying adjectives signals that the co-indexing of N and D does not take place in syntax but is delayed to LF. If that is right, the absence of adjectives in (25b) signals the lack of syntactic co-indexing of the feature set of N and D, namely the fact that N and the highest functional projection are *not the same*. In (26) I give a structure with the [+HUMAN] pronoun generated in N and the strong [+N/D] feature of  $\Sigma$  checked not by a movement as in (23b), but by insertion of an *empty expletive pronoun* in the position of  $\Sigma$ . The heads N and  $\Sigma$  in (26) are thus occupied by two distinct elements and their syntactic co-indexation does not take place.<sup>7</sup>

AGR<sup>S</sup> P / VP

ΣP

Σ<sup>0</sup>

DP

\*SPEC(D)

DP

D<sup>0</sup>

NP

\*SPEC(N)

NP

N<sup>0</sup>

AGR<sup>S</sup> P / VP

... AGR<sup>S</sup> (V<sup>0</sup>)

*pro*<sub>Σ/D</sub>  
*pro-1P*

\*takový  
\*such

\*podobný  
\*similar

nikdo  
nobody-3SM-NOM

jsme  
Aux/be-1P

nepřišli  
not-come-P

<sup>7</sup> I propose that the co-indexing in syntax requires full identity of the phi features, while co-indexing at LF requires LF non-distinctness only. This non-distinctness may then tolerate the combination of unmarked and marked features. Also, (26) shows the *pro* generated in  $\Sigma$ . Its pronominal nature, however, suggests that it belongs rather to the position of D as marked by a dotted line. I leave D empty in (26) but use the label  $pro_{\Sigma/D}$  from now on.

In (25b) and (26) the V-Agreement is triggered by a phonetically unrealised personal pronoun (*pro*<sub>Σ/D</sub>) compatible with the features of the [+HUMAN] pronoun. At LF the *pro-IP* and the pronoun *nikdo* 'nobody' (i.e. Σ and N) will be co-indexed which results in the interpretation 'none of us.'

The existence of a pronominal subject *pro* licensed by a rich verbal morphology in Czech is unchallenged, since Czech is a full pro drop language. Also, recall that in (1)/(2) and (4) I demonstrated that Czech personal pronouns are located in the high functional head within the complex DP.

The following data suggest that the restriction on the co-occurrence of empty personal pronouns (*pro*) in D/Σ with a [+HUMAN] pronoun in N can be used as a criterion for deciding the base position of the personal pronouns. Notice that the 'disagreement' (traditional agreement *ad sensum*) is possible with the Czech non-gender marked pronouns only, e.g. *we-IP* in (25b) or *you-2P* in (27a) but not with the gender marked pronouns like *they-3PM* exemplified in (27b).

(27) a)	Vy/Kdo/Někdo	-jste	přišli	/	-přijdete pozdě...
	you/who/somebody	Aux-be <sub>2P</sub>	came <sub>PM</sub>	/	came <sub>2P</sub> late
	'you/some of you	-arrived		/	-will arrive late'
b)	Oni/*Kdo/*Někdo	-	přišli	/	-přijdou pozdě...
	they/*who/*somebody		came <sub>PM</sub>	/	-came <sub>3P</sub> late
	'they/*some of them		-arrived	/	-will arrive late'

The ungrammaticality of (27b) is expected because, as I proposed above, semantic Gender/Animacy is a property of N, and therefore the gender marked pronouns are generated in N and cannot co-occur with another N, e.g. with the [+HUMAN] pronoun *někdo* 'somebody'.<sup>8</sup>

## 5. Summary

In this paper I discussed the existing variety of morphological agreement patterns appearing with Czech [+/-HUMAN] indefinite, negative, free choice and interrogative pronouns. To derive the underlying structures of the complex nominal projections, I applied relatively simple rules relating morphology to syntax as given in (8)/(9)/(10). I proposed that the distinct morphological patterns of the Czech pronouns are a result of a *cyclic derivation* applying to lexical elements as well as to syntactic processes.

I used the cyclic approach for defining relevant levels to establish the NP-Agreement and V-Agreement, as well as Case assignment. Moreover, I argued that some idiosyncratic properties of both [+HUMAN] and [-HUMAN] indefinite, negative, free choice and interrogative pronouns can be explained assuming that they are grammatical post-cyclic elements not present/active in their position at the beginning of the derivational cycle (at the deep level of derivation).

As for the Czech [+HUMAN] indefinite, negative, free choice and interrogative pronouns I proposed two alternative derivations. In section 2.2 I proposed that the position of the pronoun preceding its adjectives signals an overt successive cyclic head Movement N-to-D-to-Σ which is

<sup>8</sup> Alternatively, assuming that *we-IP* is not a real plural of a countable *I-IS*, one might also think that it is the feature of countability/number which forces the base generation of a pronoun in N<sup>0</sup>.

triggered by a strong feature in the polarity projection  $\Sigma$ . This Movement results in the overt linear order and morphological pattern exemplified in (11), illustrated in (14b)/(16) and repeated schematically in (28).

- (28) a)  $[\Sigma_P \text{Nikdo}_i \quad [\text{DP takový} \quad t_i \quad [\text{NP podobný} \quad t_i ]]] \text{ nepřišel}$   
 nobody<sub>3SM-NOM</sub> such<sub>3SM-NOM</sub>  $t_i$  similar<sub>3SM-NOM</sub>  $t_i$  not-came<sub>3SM</sub>  
 'Nobody like that arrived.'
- b)  $\text{Mluvil jsem} [\text{PP s} \quad [\Sigma_P \text{někým}_i \quad [\text{DP takovým} \quad t_i \quad [\text{NP podobným} \quad t_i ]]]]$   
 I spoke Aux with somebody<sub>3SM-INSTR</sub> such<sub>3SM-INSTR</sub>  $t_i$  similar<sub>3SM-INSTR</sub>  $t_i$   
 'I spoke with somebody like that.'

In Section 4 I proposed that the strong feature in  $\Sigma$  can be alternatively checked without an overt movement by a Merge of phonetically empty *pro* licensed by V-agreement. Structures with the [+HUMAN] pronoun in N and empty *pro* at  $\Sigma$  are signalled by a distinct agreement morphology {agreement *ad sensum*) and restrictions on modifiers. This analysis is exemplified in (25b)/(27a), demonstrated in (26) and repeated briefly below as (29).

- (29)  $[\Sigma_P \text{pro}_{\Sigma D} (*\text{takový velký}) \quad [\text{NP někdo} \quad (*\text{takový velký}) \text{ jsme} \quad \text{přišli}]$   
 $\text{pro}_{1P} \quad (*\text{such big}) \quad \text{somebody}_{\text{NOM}} \quad (*\text{such big}) \quad \text{Aux-be}_{1PM} \text{ came}_{PM}$   
 'Some of us arrived.'

In Section 3 I discussed the Czech [-HUMAN] indefinite, negative, free choice and interrogative pronouns. I argued that they do not constitute another example of N-to-D-to-  $\Sigma$  Movement, but are base generated in the nominal functional projection, presumably  $\Sigma$ . The lexical head N is occupied by an empty pronoun *pro<sub>N</sub>* which is assigned GEN and triggers the adjectival NP-Agreement. The feature content of the [-HUMAN] pronouns explains why these pronouns show the same morphological agreement patterns as some Czech quantifiers, namely they both are post-cyclic heads. This similarity was illustrated in (19)/(20) analysed for the [-HUMAN] pronouns in (23)/(24) and the analysis is repeated in brief in (30). Notice that in (30b) the post-cyclic head does not prevent the *pro<sub>N</sub>* from receiving the D-Structure instrumental which is reflected in adjectival morphology.

- (30) a)  $[\Sigma_P \text{Něco} \quad [\text{DP takového} \quad [\text{NP podobného} \quad [\text{N } \text{pro}_{\text{N}} ]]]] \text{ spadlo}$   
 something<sub>3SN-NOM</sub> such<sub>GEN</sub> similar<sub>GEN</sub> *pro<sub>GEN</sub>* fell<sub>3SN</sub>  
 'Something like that fell down.'
- b)  $[\text{PP s} \quad [\Sigma_P \text{něčím} \quad [\text{DP takovým} \quad [\text{NP podobným} \quad \text{pro}_{\text{N}} ]]]]]]$   
 with something<sub>3SN-INSTR</sub> such<sub>3SN-INSTR</sub> similar<sub>3SN-INSTR</sub> *pro<sub>INSTR</sub>*  
 'with something like that'

The presence of structural GEN case in structures with [-HUMAN] pronoun in (30a) signals the presence of empty *pro<sub>N</sub>* in the position of N. Moreover, my analysis in (29) independently argues for the existence of *pro<sub>ΣD</sub>* in the position of D/ $\Sigma$ . We might speculate that the existence of both of these *pro* elements and their simultaneous co-occurrence is the condition for the *pro drop* languages like Czech.

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