## On Person, animacy, and copular agreement in Czech

We present new data from agreement in Czech copular clauses in Czech which provide evidence for Person feature being dependent on animacy. Furthermore, we argue that if a Probe targets more than one Goal, a multiple Agree structure in the sense of Hiraiwa (2001) is created.

The puzzle: In Czech copular clauses, the copula ('be') is morphologically marked for person and number, and in the past tense also for gender. In  $NP_1$ - $NP_2$  copular clauses, the values of the  $\varphi$ -features are determined by  $NP_1$  even if both  $NP_3$  are in Nominative and irrespective of their word order, (1). (Because of space limitation we leave out details of the syntactic structure of  $NP_1$ - $NP_2$  copular clauses, and syntactic tests that determine which NP is  $NP_1$ .) Note that since the copula strictly agrees with  $NP_1$ , the  $\varphi$ -features of  $NP_1$  and  $NP_2$  do not need to be identical.

- (1) a. (Tenhle) mladík byl /\*byla babiččina zdravotní sestra. (this) young man. M was.3sg. M /\*was.3sg.F grandma's nurse.F 'This young man was grandma's nurse.'
  - b. Babiččina zdravotní sestra byl /\*byla (tenhle) mladík. grandma's nurse.F was.3SG. M /\*was.3SG.F (this) young man. M 'As for my grandma's nurse, it was this young man.'

The agreement pattern plays out differently if  $NP_1$  is realized by  $\phi$ -feature-invariant pronoun TO (roughly 'it'). Even though the pronoun itself is morphologically 3SG.N, it may refer to a linguistic antecedent in any gender and number. Thus, all the NPs in (2-a) are good antecedents for TO in (2-b). Crucially, in copular clauses with TO, the copular agreement is with  $NP_2$ , (2-b).

- (2) a. Anna napsala knížku /leporelo /román. Anna wrote book. F /pop-up book. N /novel. M 'Anna has written a book/a pop-up book/a novel.'
  - b. \*Byla /\*bylo /byl to propadák. was.3sG.F /was.3sG.N /was.3sG.M TO .3sG.N. flop.M 'It [=the book/the pop-up book/the novel] was a total flop.'

There is another difference in the TO-NP<sub>2</sub> pattern: in contrast to (1), if TO has an animate antecedent and NP<sub>2</sub> denotes an animate-like attributive property, NP<sub>2</sub> must agree in 'animate' gender (F, M) with the antecedent of TO (neuter NP<sub>2</sub> is marginally acceptable), (3)–(4). More precisely, the gender on NP<sub>2</sub> forces TO to pick an antecedent of the same gender (# indicates semantic infelicity).

(3) Jana často povídala o své babičce.

Jana often talked about self grandmother. F

'Jana often talks about her grandmother.'

- a. Byla to hodná paní. was.3sg. F To.3sg.N kind lady. F
  - 'She (=  $\overline{\text{Jana}}$ 's grandmother) was a  $\overline{\text{kind}}$  lady.'
- b. #Byl /\*byla to starý dobrák. was.3sG.M /was.3sG.F TO.3sG.N old good-man.M
- intended: 'She (= Jana's grandmother) was a generally kind person.' c. ?Bylo to zlatíčko.
- c. ?Bylo to zlatíčko.

  was.3sg.N To.3sg.N little gold.N

  'She (= Jana's grandmother) was a darling.'
- (4) V nemocničním pokoji mojí babičky byl nějaký mladý muž. in hospital room of-my grandmother's was.3sg.m some young man. M

'There was a young man in my grandmother's hospital room.'

a. #Byla /\*byl to zdravotní sestra. was.3sg.F /was.3sg.M TO.3sg.N health sister.F intended: 'He was a nurse.'

Crucially, if we replace the past tense copula with its present tense counterpart, which is unmarked for gender, as in (5), the problem with the gender clash goes away. Similarly, if the antecedent is animate but  $NP_2$  is inanimate, the gender values may be distinct as well, (6); thus they pattern as  $NP_1$ - $NP_2$  in (1). (The context for (5)-(6) is the same as for (3).)

- (5) Je to hodná paní /starý dobrák /zlatíčko.
  is. 3sg To.3sg.N kind lady.F /old good man.M /little gold.N.
  'She (= Jana's grandmother) is a kind lady/good old man/darling.'
- (6) a. Je /Byla to křehká květinka. is.3sG /was.3sG.F TO.3sG.N fragile flower. F 'She (= Jana's grandmother) is/was a delicate woman.'
  - b. Je /Byl to metráček. is.3sg /was.3sg.M TO.3sg.N metric-ton. M 'She (= Jana's grandmother) is/was fat.'
  - c. Je /Bylo to střevo.
    is.3SG /was.3SG.N TO.3SG.N intestine. N
    'She (= Jana's grandmother) is /was a silly woman.'

**The proposal:** We assume Agree analysis of agreement (Chomsky 2000, inter alia). We follow Béjar and Rezac 2003, Rezac 2004 in that Person and φ-features may probe separately. However, we depart from them in that we argue that the separate matching links form a multiple Agree configuration in the sense of Hiraiwa (2001). Furthermore, we argue that NPs in 3rd person lack a Person feature, unless they are animate. In other words, we argue that animacy is formally represented as valued Person feature, and that if Person feature is valued, gender feature is dependent on Person. Furthermore, we assume that the invariable pronoun το is φ-feature deficient. However, since it is deictic, it carries an unvalued Person feature which may be in principle - as for other pronouns (Heim 2008, Sudo 2012) - valued either from the structure or from the context. Finally, we assume that the past tense copula carries unvalued φ-features but no Person feature, while the present tense copula lacks unvalued φ-features. The Czech patterns are then derived as follows: (i) NP<sub>1</sub>-NP<sub>2</sub> [=(1)]: The copula head (Pred) Agrees with NP<sub>1</sub>, its closest probe, in  $\varphi$ -features. Since all features of the probe are valued by NP<sub>1</sub>, they become deactivated. (ii) TO-inanNP<sub>2</sub> [=(6)]: The copular probe first probes TO. Even though TO cannot value any of the φ-features of the probe, it is still visible for Agree as it carries an active Person feature. However, since το cannot value the φ-features of the probe, another Agree link is established. This time with NP<sub>2</sub> which can value and deactivate the φ-features of the probe. Even though TO is part of the multiple Agree configuration, its Person feature cannot be valued as the inanimate NP lacks Person feature. (iii) TO-animNP<sub>2</sub> [=(3)–(4)]: As in (ii), after the probe reaches NP<sub>2</sub> its φfeatures get valued by NP<sub>2</sub>. However, since TO is part of the same multiple Agree link, its Person feature – and in turn its gender feature – gets valued by the animacy-based Person feature on NP<sub>2</sub>. If the gender/Person feature matches that of its antecedent, the structure is felicitous. If it does not, the gender clash yields presupposition failure (Heim 2008). (iv) No interaction with Person and gender arises with the present tense copula because it does not carry any unvalued gender or Person feature [=(5)].