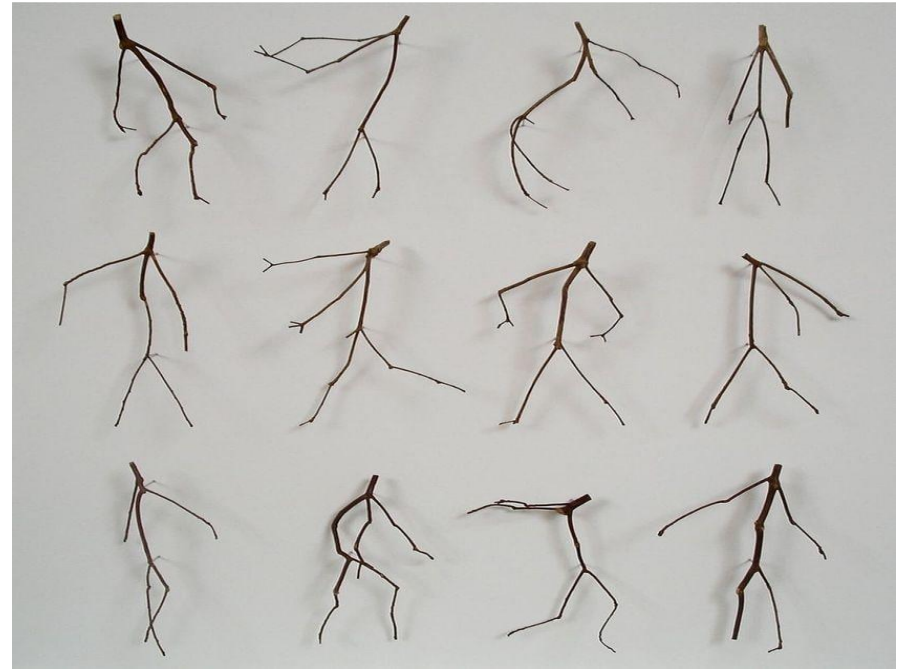


# Towards an account for mixed gender agreement in Ukrainian

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*Dancing Twigs, Kris*



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# Introduction

- This work presents a case study of mixed gender agreement in Ukrainian profession nouns, a drastically understudied topic in the Ukrainian research.
- It examines a number of approaches that seem not to fully account for the data.
- It suggests that the multiple-layer DP-hypothesis by Zamparelli (1995 and subsequent work) may be best suited to account for the data.

*Keywords:* mixed gender agreement, gender mismatches, hybrid agreement, Ukrainian

# 1. Data with mixed gender agreement

- Ukrainian nouns that belong to the first declension (or  $\emptyset$ -declension) and denote professions consistently show masculine gender agreement when referring to males. However, in reference to females, they can show different kinds of gender agreement: (i) masculine agreement (1a); (ii) feminine agreement (1b); and (iii) mixed agreement (1c).

- (1) a. Районн-ий            хірург            зроби-в            операцію.  
Raionn-yi            khirurh            zroby-v            operatsyiu.  
*district-masc*            *surgeon*            *make-past-masc*            *surgery*  
“The district surgeon conducted a surgery.”
- b. Районн-а            хірург            зроби-л-а            операцію.  
Raionn-a            khirurh            zroby-l-a            operatsyiu.  
*district-fem*            *surgeon*            *make-past-fem*            *surgery*  
“The district surgeon conducted a surgery.” (referring to a female).
- c. Районн-ий            хірург            зроби-л-а            операцію.  
Raionn-yi            khirurh            zroby-l-a            operatsyiu.  
*district-masc*            *surgeon*            *make-past-fem*            *surgery*  
“The district surgeon conducted a surgery.” (referring to a female).

- Gender agreement in Ukrainian occurs with predicative and attributive adjectives, demonstrative and relative pronouns, and verbs in the past tense.
- Ukrainian profession-denoting nouns (e.g., *likar* ‘doctor’, *professor* ‘professor’, *juryst* ‘lawyer’, *kerivnyk* ‘supervisor’, *khirurg* ‘surgeon’, *avtor* ‘author’, *ahent* ‘agent’) can take more than one type of gender agreement in colloquial speech when referring to female professionals.

(2)	a.	Нов-ий <i>new-masc</i> ‘New ( <b>masc</b> ) doctor (masc) came ( <b>masc</b> ) on time.’	<u>лікар/хірург/юрист</u> <i>doctor/surgeon/lawyer</i>	прийш-ов <i>come-past.masc</i>	вчасно. <i>on.time</i>
	b.	Нов-а <i>new-fem</i> ‘New ( <b>fem</b> ) doctor (masc) came ( <b>fem</b> ) on time.’	<u>лікар/хірург/юрист</u> <i>doctor/surgeon/lawyer</i>	прийш-л-а <i>come-past-fem</i>	вчасно. <i>on.time</i>
	c.	Нов-ий <i>new-masc</i> ‘New ( <b>masc</b> ) doctor (masc) came ( <b>fem</b> ) on time.’	<u>лікар/хірург/юрист</u> <i>doctor/surgeon/lawyer</i>	прийш-л-а <i>come-past-fem</i>	вчасно. <i>on.time</i>

- May 22, 2019, a new version of the Ukrainian orthographic rules (*pravopys*) was approved by the Ukrainian Cabinet of Ministers.
- *Pravopys* was developed by the UNCIO (Ukrainian National Committee on Issues of Orthography), founded in 1994 (three years after declaring Ukraine's independence from the Soviet Union on 24 August 1991).
- These new rules introduced feminine suffixes for almost all profession nouns in Ukrainian:
 

*Ukraïns'kyj pravopys*. 2019. Ministerstvo Osvity i Nauky Ukraïny. Available at: <https://mon.gov.ua/storage/app/media/zagalna%20serednya/%202019.pdf> (p.27 on feminine nouns).
- The resulting feminine forms are among the most keenly debated linguistic issues.
- A Ukrainian academic dictionary of feminine profession nouns does not yet exist in published form.
- It is not always clear how to apply these rules (i.e. which feminine suffix should be used with which profession noun).
 

**Керівник** “supervisor” – **Керівни-ця** or **керівнич-ка**? “female supervisor”

**Бухгалтер** “accountant” – **Бухгалтер-ка** or **Бухгалтер-ша** “female accountant”

**Хірург** “surgeon” – **Хірург-иня** does not exist? “female surgeon”

- (3)
- |    |  |   |                                   |                           |
|----|--|---|-----------------------------------|---------------------------|
| a. | Нов-ий<br><i>new-masc</i><br>‘New ( <b>masc</b> ) doctor (masc) came ( <b>masc</b> ) on time.’ | <u>лікар/хірург/юрист</u><br><i>doctor/surgeon/lawyer</i> | прийш-ов<br><i>come-past.masc</i> | вчасно.<br><i>on.time</i> |
| b. | Нов-а<br><i>new-fem</i><br>‘New ( <b>fem</b> ) doctor (masc) came ( <b>fem</b> ) on time.’     | <u>лікар/хірург/юрист</u><br><i>doctor/surgeon/lawyer</i> | прийш-л-а<br><i>come-past-fem</i> | вчасно.<br><i>on.time</i> |
| c. | Нов-ий<br><i>new-masc</i><br>‘New ( <b>masc</b> ) doctor (masc) came ( <b>fem</b> ) on time.’  | <u>лікар/хірург/юрист</u><br><i>doctor/surgeon/lawyer</i> | прийш-л-а<br><i>come-past-fem</i> | вчасно.<br><i>on.time</i> |





- Multiple adjectives (Ukrainian data):

(6) **AGREEMENT HIERARCHY (multiple adjectives)**

low attributive — high attributive — predicate — relative pronoun — personal pronoun

← *morphological agreement*

*semantic agreement* →

(“low adjective” is the term used by Pesetsky 2013)

- (7) a. У нас дуже хорош-а зубн-ий лікар (better: зубн-а лікар-ка).  
*with us very good-fem dental-masc doctor*  
 ‘We have a very good (**fem**) dental (**masc**) doctor (masc).’

- b. \*У нас дуже хорош-ий зубна-а лікар.  
*with us very good-masc dental-fem doctor*  
 ‘We have a very good (**masc**) dental (**fem**) doctor (masc).’

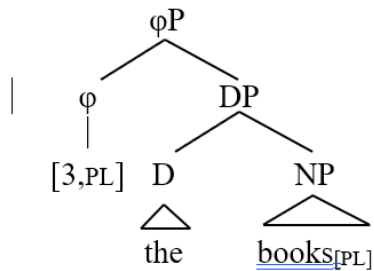
## 2. Previous analyses

In this section, I attempt to apply some previous analyses of gender to account for Russian hybrid nouns and show that these approaches are problematic when trying to account for mixed gender agreement.

### Sauerland (2004, 2009)

According to Sauerland (2004, 2009), interpretable features for person, number, and gender are purely presuppositional and can only occur in the projection  $\phi$ , which is generated above a DP (DP is the complement of  $\phi$ ), as in (7).

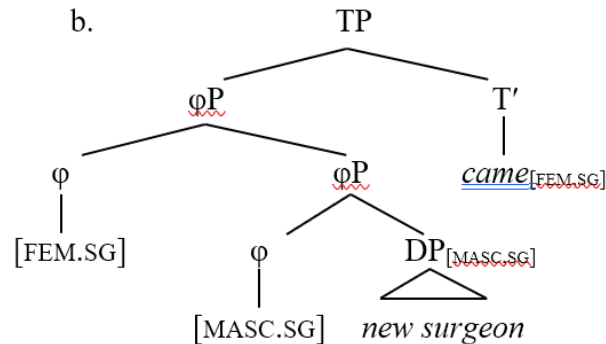
(7)



(Sauerland, 2004, p. 3)

- It allows for more than one  $\phi$ -head to be attached above a DP.
- This approach can be used to account for a variety of phenomena, such as agreement with coordinations, singular universal quantifiers, and mixed agreement of *committee*-nouns.
- In Ukrainian, it can account for mixed predicate agreement.

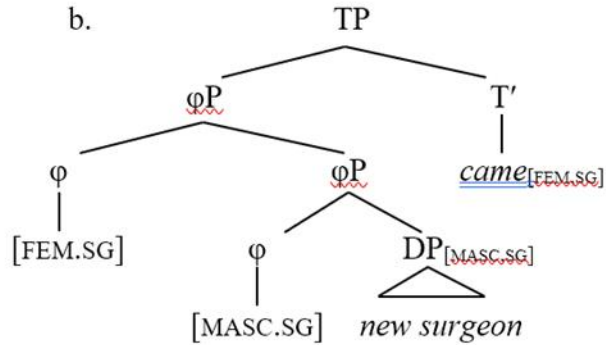
(9) a.      Нов-ий                      лікар/хірург/юрист      прийш-л-а                      вчасно.  
*new-masc*                      *doctor/surgeon/lawyer*      *come-past-fem*                      *on.time*  
 ‘New (**masc**) doctor (masc) came (**fem**) on time.’



(modified from Sauerland, 2004, p. 8)

- A problem with this approach arises when mixed DP-internal agreement is considered.

(10) a. У мене дуже цікав-а нов-ий бухгалтер.  
*with me very interesting-fem new-masc accountant*  
 ‘I have a very interesting (**fem**) new (**masc**) accountant (masc).’

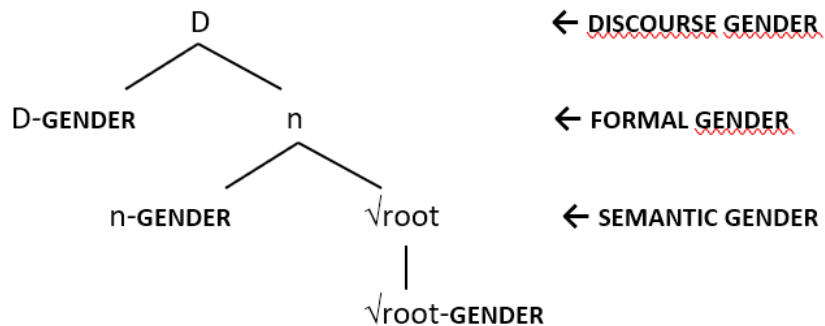


(modified from Sauerland, 2004, p. 8)

## Steriopolo and Wiltschko (2010); Steriopolo (2018)

- Steriopolo and Wiltschko (2010) propose the *Distributed Gender Hypothesis*.
- Gender is not a uniform morphosyntactic category; instead, it is syntactically heterogeneous and occupies different positions in a syntactic tree, as in (11).

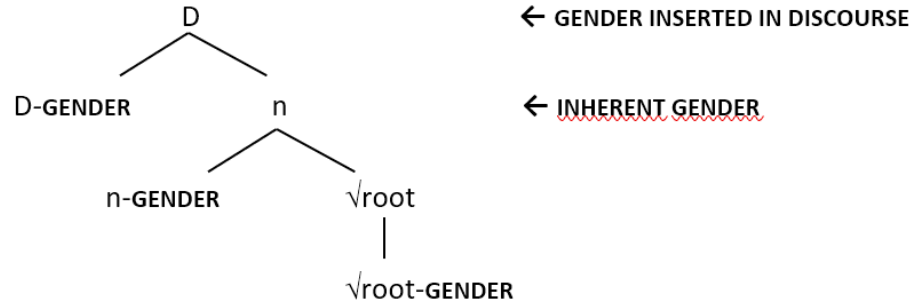
(11)



(Steriopolo and Wiltschko, 2010, p. 157)

- Steriopolo (2018) proposes that there are two different kinds of gender that differ structurally:
  - (i) inherent features located on  $n$  (following Kramer, 2015),
  - (ii) contextual features inserted in discourse dependent on the gender of a discourse referent.

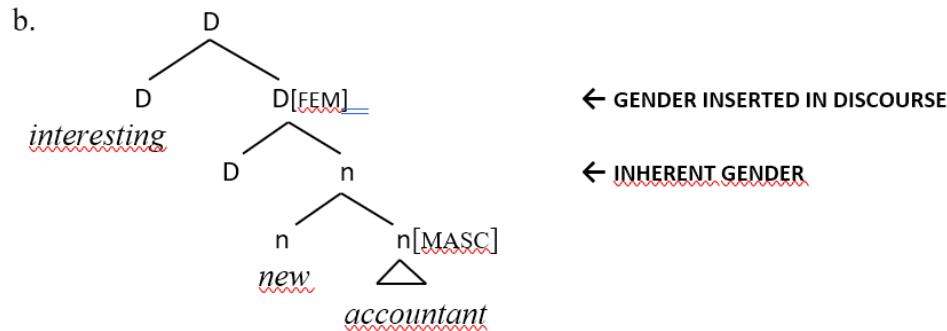
(12)



(modified from Steriopolo, 2018)

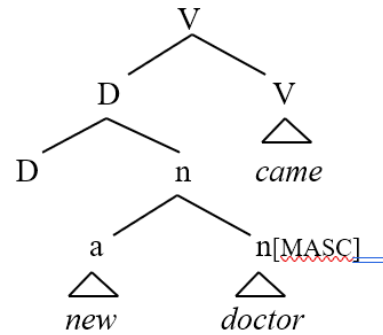
- To account for multiple adjectives with mixed gender agreement, Steriopolo (2018) proposes:
  - a lower adjective modifies an *n* with an inherent gender feature,
  - a higher adjective modifies a *D* with an inserted contextual feature.
- A cyclicity analysis of agreement is assumed, as in Chomsky (2001).

(13) a. У мене дуже цікав-а нов-ий бухгалтер.  
*with me very interesting-fem new-masc accountant*  
 ‘I have a very interesting (**fem**) new (**masc**) accountant (masc).’



(15) a. Нов-ий лікар/хирург/юрист прийш-ов вчасно.  
*new-masc doctor/surgeon/lawyer come-past.masc on.time*  
 ‘New (**masc**) doctor (masc) came (**masc**) on time.’

b.

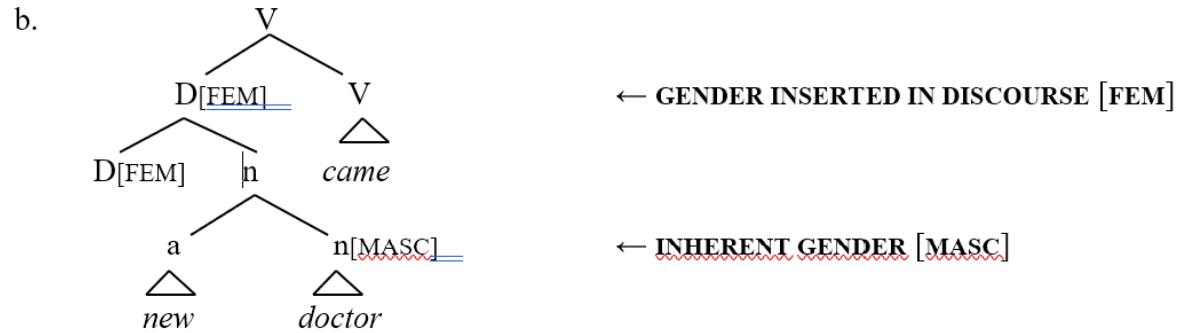


← NO GENDER INSERTED IN DISCOURSE

← INHERENT GENDER [MASC]

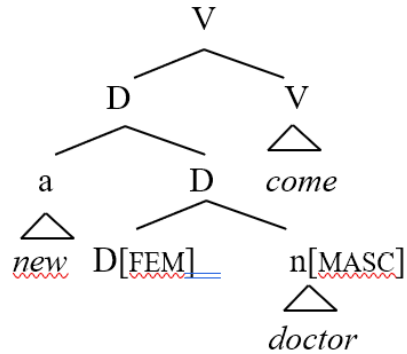


(16) a. Нов-ий                      лікар/хірург/юрист                      прийш-л-а                      вчасно.  
*new-masc*                      *doctor/surgeon/lawyer*                      *come-past-fem*                      *on.time*  
 ‘New (**masc**) doctor (masc) came (**fem**) on time.’



(17) a. Нов-а                                    лікар/хірург/юрист                    прийш-л-а                                    вчасно.  
*new-fem*                                    *doctor/surgeon/lawyer*                    *come-past-fem*                                    *on.time*  
 ‘New (**fem**) doctor (masc) came (**fem**) on time.’

b.

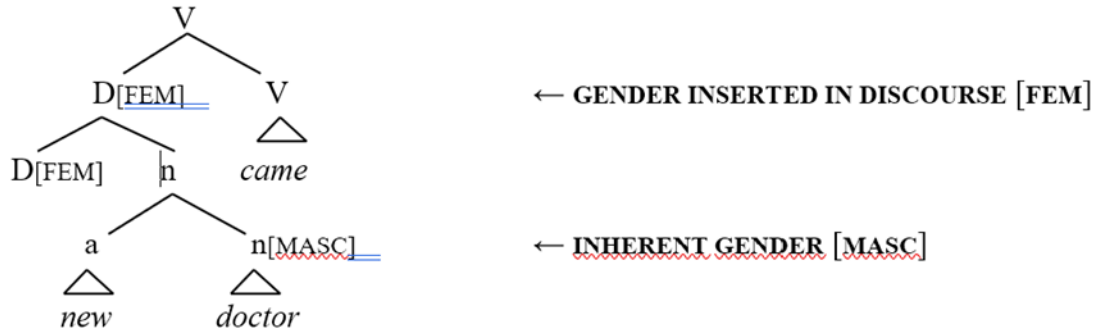


← GENDER INSERTED IN DISCOURSE [FEM]

← INHERENT GENDER [MASC]

- (18) a. \* Нов-**a**                    лікар/хірург/юрист                    прийш-**оВ**                    вчасно.  
*new-fem*                    *doctor/surgeon/lawyer*                    *come-past.masc*                    *on.time*  
 ‘New (**fem**) doctor (masc) came (**masc**) on time.’

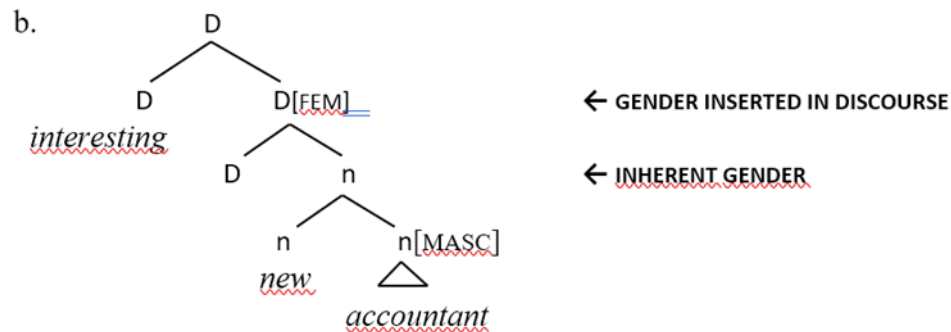
b.



- It correctly predicts gender agreement with the demonstrative pronoun “this” (assuming that demonstrative pronouns are *D*-heads, as in Abney 1987, Postal 1969)

(19) a. Ц-я            цікав-а                            нов-ий            бухгалтер.  
*this-fem*    *interesting-fem*                            *new-masc*    *accountant*  
 ‘This (**fem**) interesting (**fem**) new (**masc**) accountant (masc).’

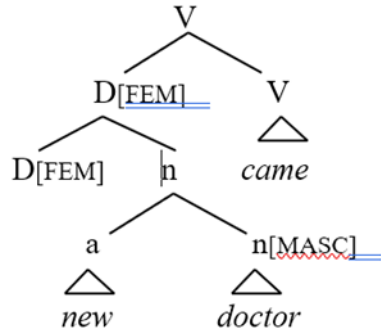
b. \*Ц-ей            цікав-а                            нов-ий            бухгалтер.  
*this-masc*    *interesting-fem*                            *new-masc*    *accountant*  
 ‘This (**masc**) interesting (**fem**) new (**masc**) accountant (masc).’



(20)

a. Ц-ей                    зубн-ий                    лікар                    вміло                    постави-л-а                    ПЛОМБУ.  
*this-masc                    dental-masc                    doctor                    skillfully                    put-past-fem                    filling*  
‘This (**masc**) dental (**masc**) doctor skillfully did (**fem**) a filling.’

b.



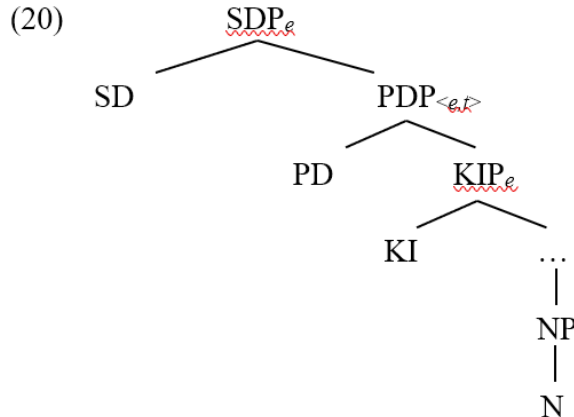
← GENDER INSERTED IN DISCOURSE [FEM]

← INHERENT GENDER [MASC]

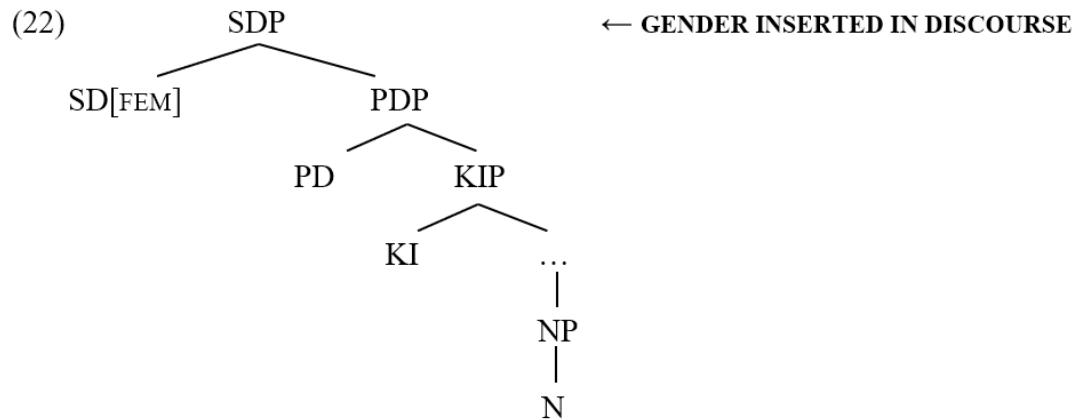
# Towards a possible solution?

## The three-layer DP-hypothesis (Zamparelli, 1995)

- Zamparelli (1995) argues that the DP is a layered structure, in which the three topmost layers correspond to (i) *referential*, (ii) *predicative*, and (iii) *kind* interpretation.
- The two topmost projections of the structure constitute the determiner (articles, demonstratives, quantifiers) system:
  - (i) *Strong Determiner Phrase* (SDP), (ii) *Predicative Determiner Phrase* (PDP)
  - (iii) *Kind Determiner Phrase* (KIP) is a projection containing the NP proper (the noun and some attributives).



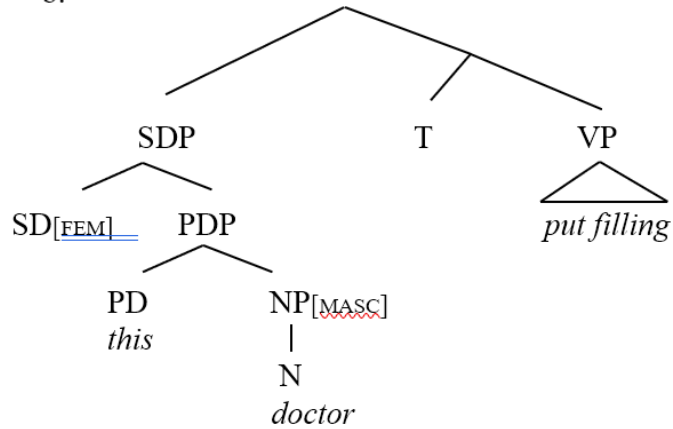
- Only elements in the head of SD can receive a referential interpretation (Zamparelli 1995: 262).
- The contextual (discourse) gender feature [FEM] can be inserted into SD (Steriopolo 2019).



- (21) a.      Ц-я                      лікар                      вміло                      постави-л-а                      пломбу.  
*this-fem*                      *doctor*                      *skillfully*                      *put-past-fem*                      *filling*  
 ‘This (**fem**) doctor skillfully did (**fem**) a filling.’
- b.              Ц-ей                      лікар                      вміло                      постави-л-а                      пломбу.  
*this-masc*                      *doctor*                      *skillfully*                      *put-past-fem*                      *filling*  
 ‘This (**masc**) doctor skillfully did (**fem**) a filling.’

(23) a. Ц-ей                      лікар                      вміло                      постави-л-а                      пломбу.  
*this-masc*                      *doctor*                      *skillfully*                      *put-past-fem*                      *filling*  
 ‘This (**masc**) doctor skillfully did (**fem**) a filling.’

b.





(24) a.

Ц-я

*this-fem*

лікар

*doctor*

вміло

*skillfully*

постави-л-а

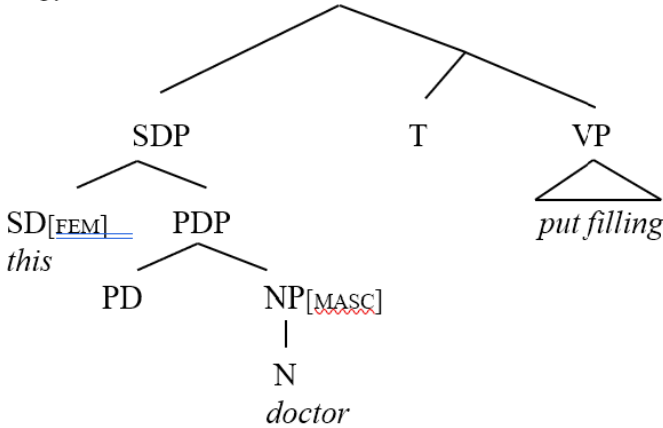
*put-past-fem*

пломбу.

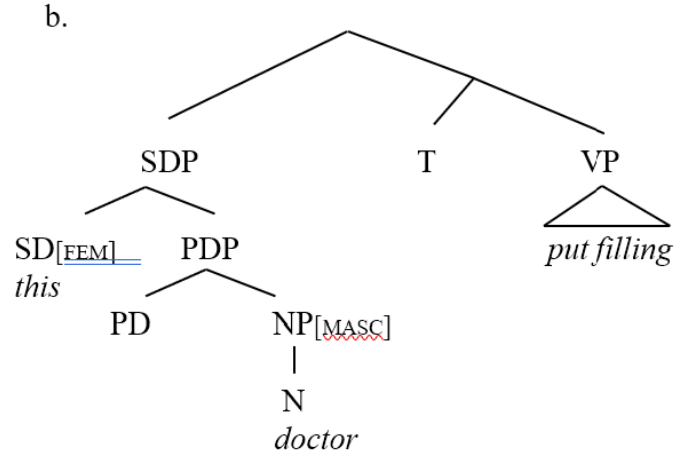
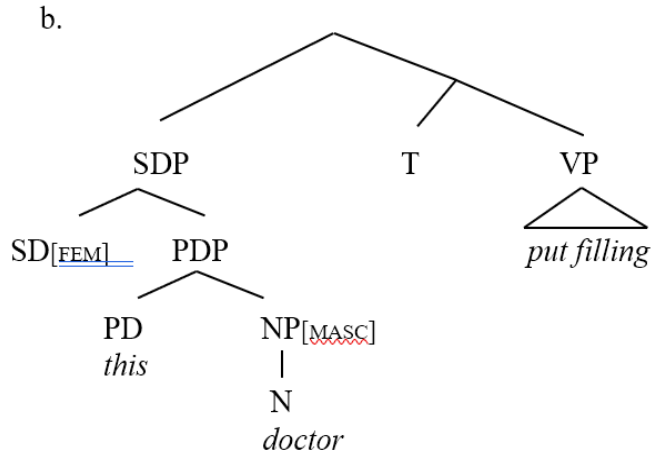
*filling*

‘This (**fem**) doctor skillfully did (**fem**) a filling.’

b.



- This could only work under the assumption that the demonstrative *this* can occupy different positions: PD and SD.



(25) a. Ц-ей                    лікар                    вміло                    постави-л-а                    пломбу.  
*this-masc*                    *doctor*                    *skillfully*                    *put-past-fem*                    *filling*  
 ‘This (**masc**) doctor skillfully did (**fem**) a filling.’

b. Ц-я                    лікар                    вміло                    постави-л-а                    пломбу.  
*this-fem*                    *doctor*                    *skillfully*                    *put-past-fem*                    *filling*  
 ‘This (**fem**) doctor skillfully did (**fem**) a filling.’



- (27) a. Мам-а – досвідчен-ий керівник.  
*mom-fem* *experienced-masc* *supervisor*  
 ‘Mom (**fem**) is an experienced (**masc**) supervisor.’
- b. ?Мам-а – досвідчен-а керівник. (better: керівни-ця /керівнич-ка)  
*mom-fem* *experienced-fem* *supervisor* (preferred: *supervisor-fem*)  
 ‘Mom (**fem**) is an experienced (**masc**) supervisor. (preferred: supervisor (**fem**)).’
- (28) a. Петров-а – нов-ий юрист.  
*Petrov-fem* *new-masc* *lawyer*  
 ‘Petrova (**fem**) is a new (**masc**) lawyer.’
- b. ?Петров-а – нов-а юрист. (better: юрист-ка)  
*Petrov-fem* *new-fem* *lawyer* (preferred: *lawyer-fem*)  
 ‘Petrova (**fem**) is a new (**masc**) lawyer. (preferred: supervisor (**fem**)).’

# Conclusions

- I have discussed some approaches to account for Ukrainian profession nouns with mixed gender agreement.
- I have shown that they are problematic when attempting to account for all elicited data.
- I have suggested that the multiple-layer DP-hypothesis by Zamparelli (1995 and subsequent work) may be best suited to account for the data.
- However, there is a problem when it comes to gender agreement in the predicate position, as in (29).

(29)        ?Петров-а            –            нов-а                            юрист.  
              *Petrov-fem*                                        *new-fem*                                        *lawyer*  
              ‘Petrova (**fem**) is a new ( **masc**) lawyer. (preferred: supervisor (**fem**)).’

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# **Thank you for your attention!**

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