Alternate Agreement in Arabic

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Definition of Agreement

- Agreement or concord is:
  - the feature compatibility between two words in a phrase or clause.

  - The systematic covariance between a semantic or formal property of one element and a formal property of another. Corbett (2001)

Definition of Agreement

- البنات ذهبن إلى الحديقة

  al-banātu   d̲ahabna   ʾilā al-ḥadīqati
  the-girl.pl.fem.3 go.past.pl.fem.3   to   the-garden
  'The girls went to the garden.'

- Controller: the element which determines the agreement - Subject

- Target: the element whose form is determined by agreement - Verb

- Domain: the syntactic environment in which agreement occurs - Sentence

Agreement in Arabic

- Arabic has rich agreement morphology
- Five morphosyntactic features involved in agreement:
  - Number: singular, dual and plural
  - Gender: feminine and masculine
  - Person: 1st, 2nd, and 3rd
  - Case: nominative, accusative and genitive
  - Definiteness: definite and indefinite

Agreement in Arabic

- Agreement relations show between various elements in the sentence

1. Noun – Demonstrative pronoun: number, gender

   هذا الرجل

   haḏā   ar-raǧulu

   this.sg.masc   the-man.sg.masc

   'this man'

2. Noun – Adjective: number, gender, case, definiteness

   رأيت الرجلين الكريمين

   raʾaitu ar-raǧulaini   al-karīmaini

   I-saw   the-man.dual.acc.def the-generous.dual.masc.acc.def

   'I saw the two generous men.'

Agreement in Arabic

3. Noun – Relative pronoun: number, gender, case

الطالبتان اللتان نجحتا

aṭ-ṭālibatāni   allatāni   naǧaḥatā

the-student.dual.fem.nom   who.dual.fem.nom   succeed.past.dual.fem.3

The two students who succeeded

4. Noun – Pronoun: person, number, gender

الطالبات ذاكرن دروسهن

aṭ-ṭālibātu   ḏākarna   durūsa-hunna

the-student.pl.fem.3.nom study.past.pl.fem.3 lessons-their.pl.fem.3

'The students studied their lessons.'

Agreement in Arabic

5. Subject – Predicate: number, gender

الرجل كريم

ar-raǧulu   karīmun

the-man.sg.masc generous.sg.masc

'The man is generous.'

- Morphosyntactic agreement is sometimes replaced by a semantic agreement. The subject is plural and the predicate is singular, but they are semantically compatible.

هؤلاء هم السبب في هزيمتنا

hāʾulāʾi humu as-sababu fī hazīmati-nā

These they   the-reason in defeat-our

'These people are the reason behind our defeat.'

Agreement in Arabic

- The feature of humanness plays an important rule in agreement in Arabic. With non-human plural nouns, verbs are invariably in the singular and feminine.

  القطط تشرب اللبن

  al-qiṭaṭu   tašrabu   al-labana

  the-cat.pl.fem.nom.3 drink.sg.fem.3 the-milk

  'The cats drink the milk.'

Uniform or Alternate Agreement

- Platzack (2003) classified languages into:
    - "uniform agreement" languages
    - "alternate agreement" languages
- Standard Arabic is a language with alternate agreement
    - SVO: rich or full agreement in person, gender and number
    - VSO: poor or partial agreement in only person and gender

Uniform or Alternate Agreement

- When subjects are in the pre-verbal position (SVO), verbs have full agreement in number, gender and person

البنات ذهبن إلى الحديقة

al-banātu   ḏahabna   ʾilā al-ḥadīqati

the-girl.pl.fem.3 go.past.pl.fem.3   to the-garden

'The girls went to the garden.'

Uniform or Alternate Agreement

- If subjects are in the post-verbal position (VSO), verbs show partial agreement in gender and person only

ذهبت البنات إلى الحديقة

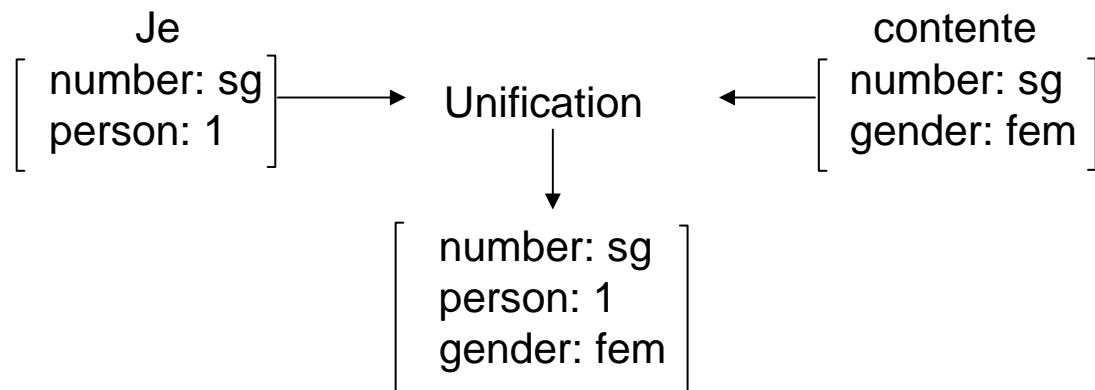ḏahabat   al-banātu   ʾilā al-ḥadīqati

go.past.sg.fem.3 the-girl.pl.fem.3 to the-garden

The girls went to the garden.

Uniform Agreement

- Unification works for uniform agreement languages, such as French, features are compatible

Je suis   contente

I   be.1.sg   pleased.sg.fem

'I am pleased' (woman taking)

Je
$$\begin{bmatrix} \text{number: sg} \\ \text{person: 1} \end{bmatrix} \longrightarrow \text{Unification} \longleftarrow \begin{bmatrix} \text{number: sg} \\ \text{gender: fem} \end{bmatrix}$$
                                 contente

$$\begin{bmatrix} \text{number: sg} \\ \text{person: 1} \\ \text{gender: fem} \end{bmatrix}$$

Alternate Agreement

- Unification does not work for alternate agreement languages, such as Arabic, because features are not always compatible.
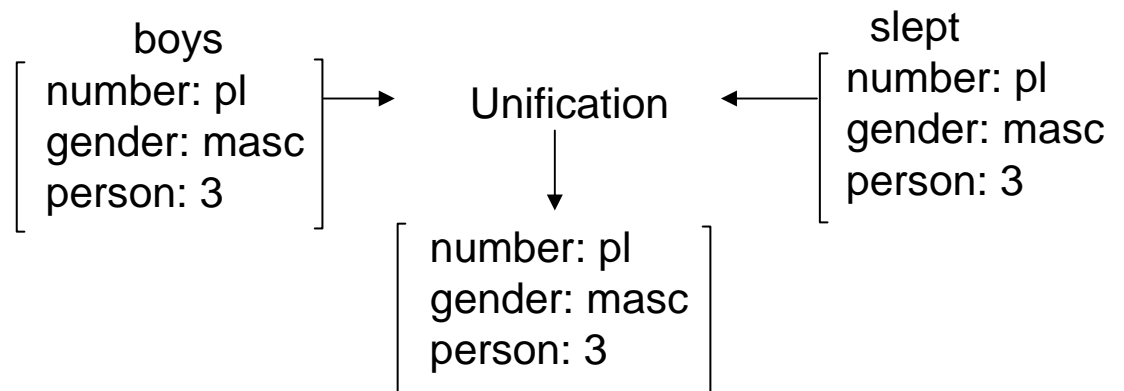- SVO: Compatible features, and unification succeeds.

الأولاد ناموا

al-'awlād　　　　　nāmū
The-boy.pl.masc.3 slept.pl.masc.3
'The boys slept.'

boys
$$\begin{bmatrix} \text{number: pl} \\ \text{gender: masc} \\ \text{person: 3} \end{bmatrix}$$ → Unification ←
slept
$$\begin{bmatrix} \text{number: pl} \\ \text{gender: masc} \\ \text{person: 3} \end{bmatrix}$$

↓

$$\begin{bmatrix} \text{number: pl} \\ \text{gender: masc} \\ \text{person: 3} \end{bmatrix}$$

Alternate Agreement

- VSO: Non-compatible features and unification fails.
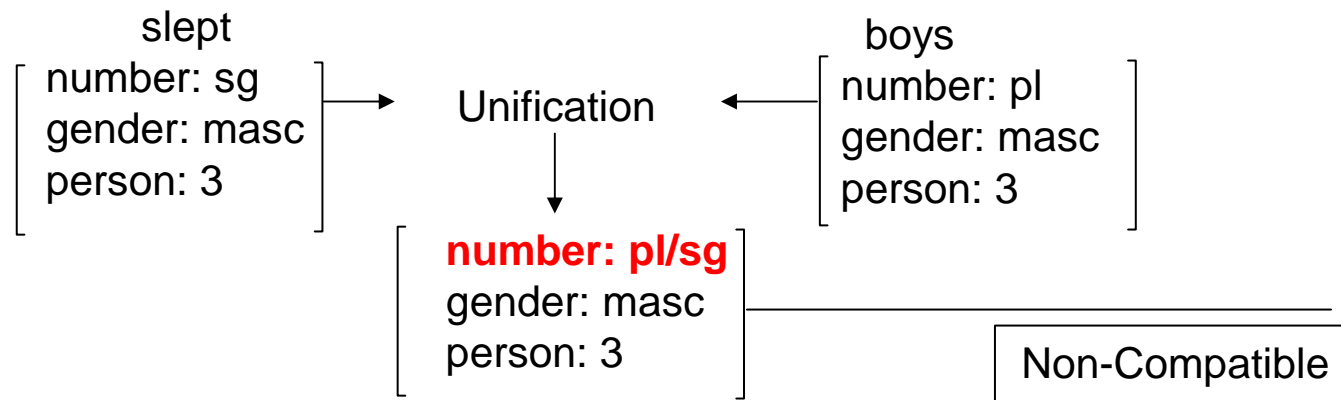
نام الأولاد

 nāma   al-'awlād

 slept.sg.masc.3 The-boy.pl.masc.3

'The boys slept.'

Alternate Agreement

- Constructional Approach: Agreement in Arabic is determined by word order and this is why we adopt a constructional approach to agreement.
  - First: The verb does not say anything about the subject. The agreement features of the verbs are temporarily stored in an independent structure called AGR.

slept.sg.masc.3 V   ($\uparrow$ PRED)='stept'
                             ($\uparrow$ AGR NUM)=sg
                             ($\uparrow$ AGR GEND)=masc
                             ($\uparrow$ AGR PERS)=3

slept.pl.masc.3 V   ($\uparrow$ PRED)='slept'
                             ($\uparrow$ AGR NUM)=pl
                             ($\uparrow$ AGR GEND)=masc
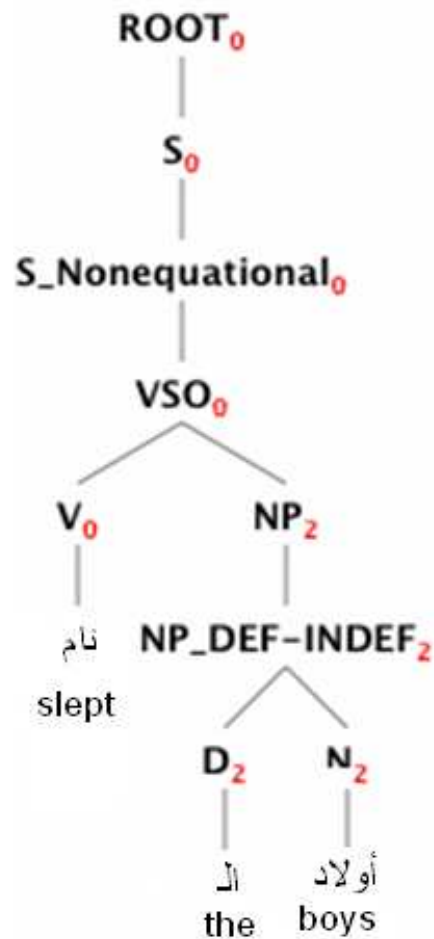   ($\uparrow$ AGR PERS)=3

Alternate Agreement

– Second: the relationship between the subject and the verb is resolved through functional equations on the phrase structure according to the position of the subject relative to the verb, i.e. whether it precedes or follows the subject.

$$SV \rightarrow NP \qquad\qquad V$$
$$\qquad\quad (\uparrow SUBJ)=\downarrow \qquad \uparrow=\downarrow$$
$$\qquad\qquad\qquad\qquad\qquad (\uparrow AGR\ GEND)=(\uparrow SUBJ\ GEND)$$
$$\qquad\qquad\qquad\qquad\qquad (\uparrow AGR\ NUM)=(\uparrow SUBJ\ NUM)$$
$$\qquad\qquad\qquad\qquad\qquad (\uparrow AGR\ PERS)=(\uparrow SUBJ\ PERS)$$

$$VS \rightarrow V \qquad\qquad\qquad\qquad\qquad\qquad NP$$
$$\qquad\quad \uparrow=\downarrow \qquad\qquad\qquad\qquad\qquad\qquad\quad (\uparrow SUBJ)=\downarrow$$
$$\qquad (\uparrow AGR\ NUM)=sg$$
$$\qquad (\uparrow AGR\ GEND)=(\uparrow SUBJ\ GEND)$$
$$\qquad (\uparrow AGR\ PERS)=(\uparrow SUBJ\ PERS)$$

Alternate Agreement

VSO word order agreement

Alternate Agreement

SVO word order agreement

Coordination

- Only constituent coordination is covered in our grammar until now.
- Constituents are treated as sets

$$S \qquad\qquad CONJ \qquad\qquad S$$
$$\uparrow \in \downarrow \qquad\qquad\qquad\qquad \uparrow \in \downarrow$$
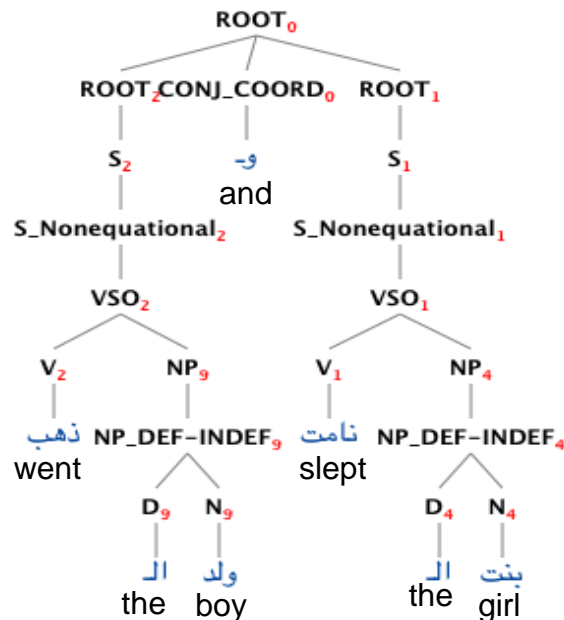
Coordination in Arabic

ذهب الولد ونامت البنت

d̲ahaba al-waladu wa-nāmati al-bintu
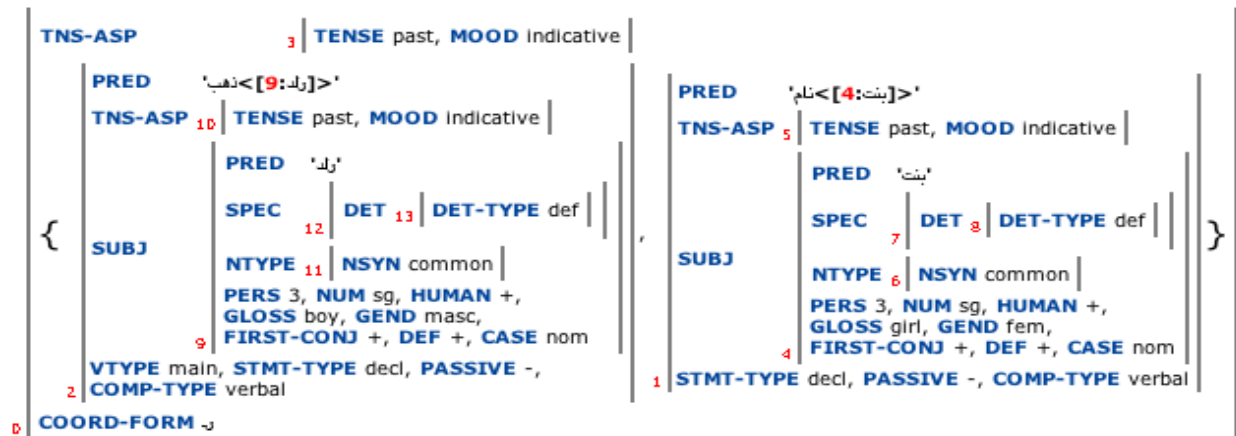
went   the-boy   and-slept the-girl

'The boy went and the girl slept.'

Alternate Agreement in Coordination

- **First Conjunct Agreement**

    VSO: The verb agrees only with the first conjunct of a coordinate subject.

- **Whole Set Agreement**

    SVO: The verb agrees with the whole set, after resolving the agreement features.

Handling First Conjunct Agreement

- The first conjunct agreement is handled in our grammar through the phrase structure rules. The NP in VSO is given a check feature of FIRST-CONJ. Then the coordination template checks for this feature. If it is found the whole conjunction is given the same features as the first conjunct.

$$S \rightarrow V \qquad NP$$
$$\uparrow=\downarrow \qquad (\uparrow SUBJ)=\downarrow$$
$$(\downarrow FIRST\text{-}CONJ)=+$$

$$S \rightarrow NP \qquad V$$
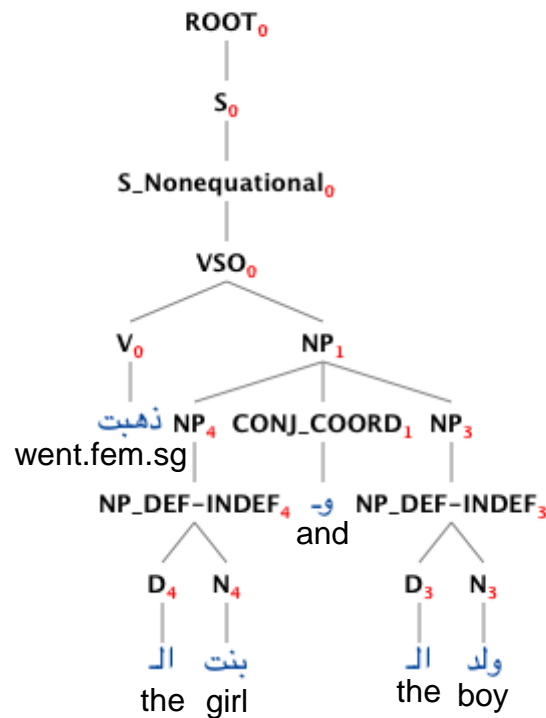$$(\uparrow SUBJ)=\downarrow \qquad \uparrow=\downarrow$$

Handling First Conjunct Agreement

ذهبت البنت والولد

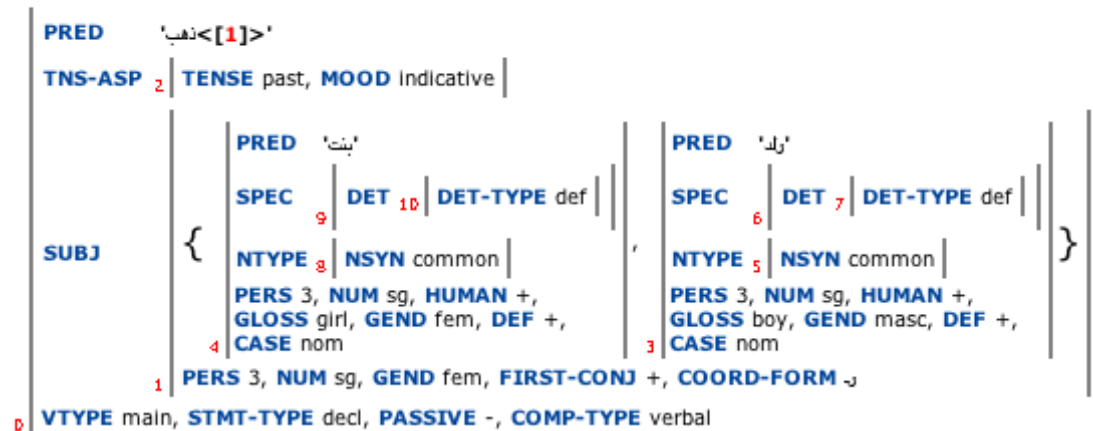ḏahabat   al-bintu wa-al-waladu

went.fem.sg the-girl and-the-boy

'The girl and the boy went.'

Handling Whole Set Agreement

- If the agreement follows the "whole set" agreement condition, the resolution of the features in conjoined subjects follows these rules:
  - Gender: The whole NP is masculine unless all conjuncts are feminine nouns, in which case it is feminine.

  - Person: Priority order.
    - 1st if any NP is in the 1st person
    - 2nd if any NP is in the 2nd person
    - Otherwise the person is 3rd

  - Number: The whole NP is plural unless there are only two conjuncts and both are singular, in which case the whole NP is dual.
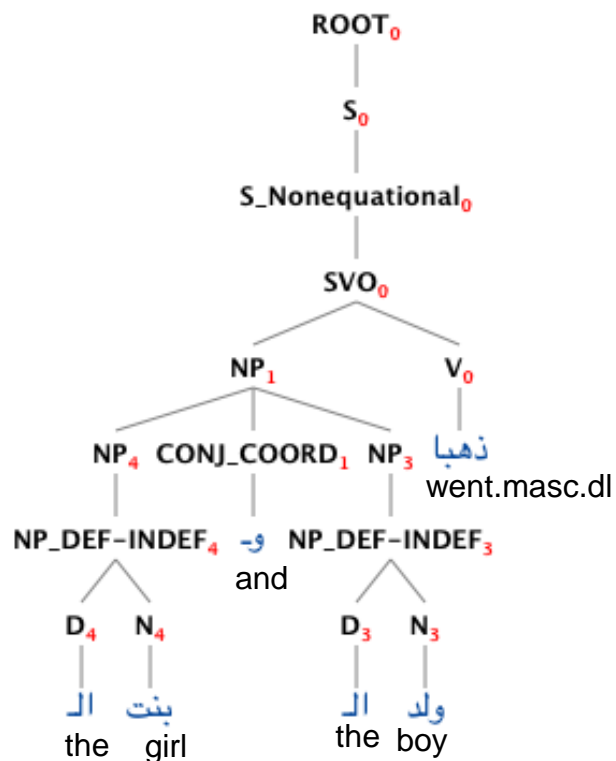
Handling Whole Set Agreement

البنت والولد ذهبا

al-bintu wa-al-waladu ḏahabā

the-girl and-the-boy went.dual.masc

'The girl and the boy went.'

C-structure

ROOT₀

S₀

S_Nonequational₀

SVO₀

NP₁ V₀

NP₄ CONJ_COORD₁ NP₃ ذهبا
went.masc.dl

NP_DEF–INDEF₄ -و NP_DEF–INDEF₃
and

D₄ N₄ D₃ N₃

الـ بنت ولد الـ
the girl the boy

F-structure

| PRED | 'ذهب<[1]>' |

| TNS-ASP ₂ | TENSE past, MOOD indicative |

SUBJ
{
PRED	'بنت'
SPEC ₉	DET ₁₀	DET-TYPE def
NTYPE ₈	NSYN common
PERS 3, NUM sg, HUMAN +,
GLOSS girl, GEND fem, DEF +,
₄ CASE nom
,
PRED	'ولد'
SPEC ₆	DET ₇	DET-TYPE def
NTYPE ₅	NSYN common
PERS 3, NUM sg, HUMAN +,
GLOSS boy, GEND masc, DEF +,
₃ CASE nom
}

₁ PERS 3, NUM dual, GEND masc, COORD-FORM -و

₀ VTYPE main, STMT-TYPE decl, PASSIVE -, COMP-TYPE nominal