

# **THE COPULA IN MODERN STANDARD ARABIC**

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## **Predicational and equative uses**

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Like its counterparts in many languages, the Modern Standard Arabic (MSA) copula appears with a number of different complements and has both predicational and equative uses.

Predicational uses may involve PP, AP, and NP complements, and also verbal complements.

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(1) kaana                      ʔaT-Tifl-u                      fii    l-hadiiqat-i  
be.PAST.3SG.M    the-child.SG.M-NOM    in    the-garden-GEN  
‘The child was in the garden.’

Predicational uses may involve PP, AP, and NP complements, and also verbal complements.

(1) kaana                   ʔaT-Tifl-u                   fii   l-hadiiqat-i  
be.PAST.3SG.M the-child.SG.M-NOM in the-garden-GEN  
'The child was in the garden.'

(2) kaana                   xalid-un                   xaaʔif-an                   min   l-ʕanaakibi  
be.PAST.3SG.M Khalid-NOM afraid.SG.M-ACC from the-spiders  
'Khalid was afraid of spiders.'



Predicational uses may involve PP, AP, and NP complements, and also verbal complements.

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(2) kaana                    xalid-un                    xaaʔif-an                    min    l-ʕanaakibi  
be.PAST.3SG.M    Khalid-NOM    afraid.SG.M-ACC    from    the-spiders  
'Khalid was afraid of spiders.'

(3) kaana                    Zayd-un                    muʔallif-a                    riwaayaatin  
be.PAST.3SG.M    Zaid-NOM    author.SG.M-ACC    novels  
'Zaid was an author of novels'

(4) kaana                    Zayd-un     yaktubu                    t-taqriir-a  
be.PAST.3SG.M   Zayd-NOM   write.PRES.3SG.M   the-report-ACC  
'Zaid was writing the report.'

Equative uses have a distinctive syntax with an optional pronoun between the two noun phrases.

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(5) kaana                    Hišaam-un        Muhammad-an  
be.PAST.3SG.M Hisham-NOM    Muhammad-ACC  
'Hisham was Muhammad'

Equative uses have a distinctive syntax with an optional pronoun between the two noun phrases.

(5) kaana                    Hišaam-un        Muhammad-an  
be.PAST.3SG.M Hisham-NOM    Muhammad-ACC  
'Hisham was Muhammad'

(6) kaana                    Hišaam-un        Huwa    Muhammad-an  
be.PAST.3SG.M Hisham-NOM    he        Muhammad-ACC  
'Hisham was Muhammad'

This is not possible with predicative uses.

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(7) \*kaana                    Zayd-un    Huwa    muʔallif-a                    riwaayaatin  
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'Zaid was an author of novels'

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(7) \*kaana                    Zayd-un    Huwa    muʔallif-a                    riwaayaatin  
be.PAST.3SG.M    Zaid-NOM    he            author.SG.M-ACC    novels  
‘Zaid was an author of novels’

(8) \*kaana                    ʔaT-Tifl-u                    Huwa    fii    l-hadiiqat-i  
be.PAST.3SG.M    the-child.SG.M-NOM    he            in    the-garden-GEN  
‘The child was in the garden.’



This is not possible with predicative uses.

(7) \*kaana                    Zayd-un    Huwa    muʔallif-a                    riwaayaatin  
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(8) \*kaana                    ʔaT-Tifl-u                    Huwa    fii    l-hadiiqat-i  
be.PAST.3SG.M    the-child.SG.M-NOM    he            in    the-garden-GEN  
'The child was in the garden.'

(9) \*kaana                    xalid-un                    Huwa    xaaʔif-an                    min  
be.PAST.3SG.M    Khalid-NOM    he            afraid.SG.M-ACC    from  
l-ʕanaakibi  
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The pronoun in an equative sentence is always third person but agrees in number and gender with the subject.

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(10)kuntu           ʔanaa   Huwa   muʔallif-a   r-riwaayati  
be.PAST.1SG   I           he           author-ACC   the-novel  
'I was the author of the novel.'

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'I was the author of the novel.'

(11) kaanat           l-fataat-u       Hiya/\*Huwa   l-munassiqat-a  
be.PAST.3SGF   the-girl-NOM   she       he           the-coordinator-ACC  
'The girl was the coordinator.'

The pronoun in an equative sentence is always third person but agrees in number and gender with the subject.

(10) kuntu            ʔanaa    Huwa    muʔallif-a    r-riwaayati  
be.PAST.1SG    I            he            author-ACC    the-novel  
'I was the author of the novel.'

(11) kaanat            l-fataat-u        Hiya/\*Huwa    l-munassiqat-a  
be.PAST.3SGF    the-girl-NOM    she        he            the-coordinator-ACC  
'The girl was the coordinator.'

(12) kaana            Haʔulaaʔi    Hum/\*Huwa    ʔafDal-a    fariiq-in  
be.PAST.3SG.M    those            they        he            best-ACC    team-GEN  
'Those were the best team.'

This suggests that MSA has not a single copula with two different meanings but two different copulas with different semantic and syntactic properties.

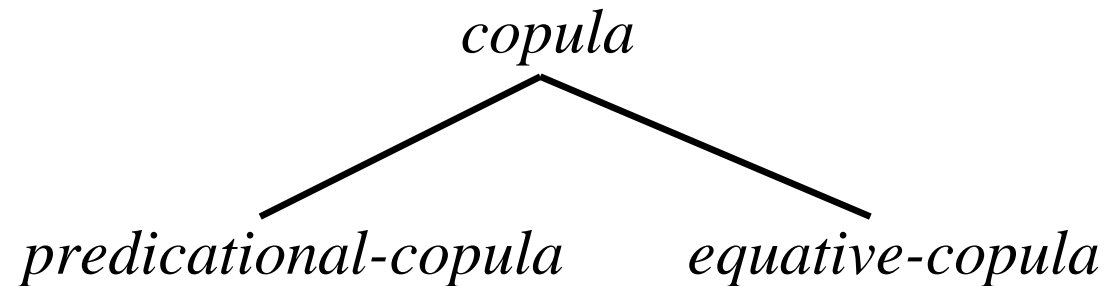
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(13)





# **Verbal and non-verbal predicational uses**

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There are also syntactic differences between predicational examples with a non-verbal complement and predicational examples with a verbal complement.

P, A, and N and their complements can be fronted.

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(14) fii l-hadiiqat-i kaana ʔaT-Tifl-u  
in the-garden-GEN be.PAST.3SG.M the-child.SG.M-NOM  
'The child was in the garden.'

P, A, and N and their complements can be fronted.

(14) fii l-hadiiqat-i kaana ʔaT-Tifl-u  
in the-garden-GEN be.PAST.3SG.M the-child.SG.M-NOM  
'The child was in the garden.'

(15) xaaʔif-an min l-ʕanaakibi kaana xalid-un  
afraid.SG.M-ACC from the-spiders be.PAST.3SG.M Khalid-NOM  
'Khalid was afraid of spiders.'

P, A, and N and their complements can be fronted.

(14) fii l-hadiiqat-i kaana ʔaT-Tifl-u  
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(15) xaaʔif-an min l-ʕanaakibi kaana xalid-un  
afraid.SG.M-ACC from the-spiders be.PAST.3SG.M Khalid-NOM  
'Khalid was afraid of spiders.'

(16) muʔallif-a riwaayaatin kaana Zayd-un  
author.SG.M-ACC novels be.PAST.3SG.M Zaid-NOM  
'Zaid was an author of novels'

P, A, and N and their complements can be fronted.

(14) fii l-hadiiqat-i kaana ʔaT-Tifl-u  
in the-garden-GEN be.PAST.3SG.M the-child.SG.M-NOM  
'The child was in the garden.'

(15) xaaʔif-an min l-ʕanaakibi kaana xalid-un  
afraid.SG.M-ACC from the-spiders be.PAST.3SG.M Khalid-NOM  
'Khalid was afraid of spiders.'

(16) muʔallif-a riwaayaatin kaana Zayd-un  
author.SG.M-ACC novels be.PAST.3SG.M Zaid-NOM  
'Zaid was an author of novels'

This suggests that the predicational copula can have a PP, AP, or NP as its complement.

V and its complement NP cannot be fronted.



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(17) \*yaktubu                    t-taqriir-a            kaana                    Zayd-un  
      write.PRES.3SG.M the-report-ACC be.PAST.3SG.M Zaid-NOM  
      ‘Zayd was writing the report.’

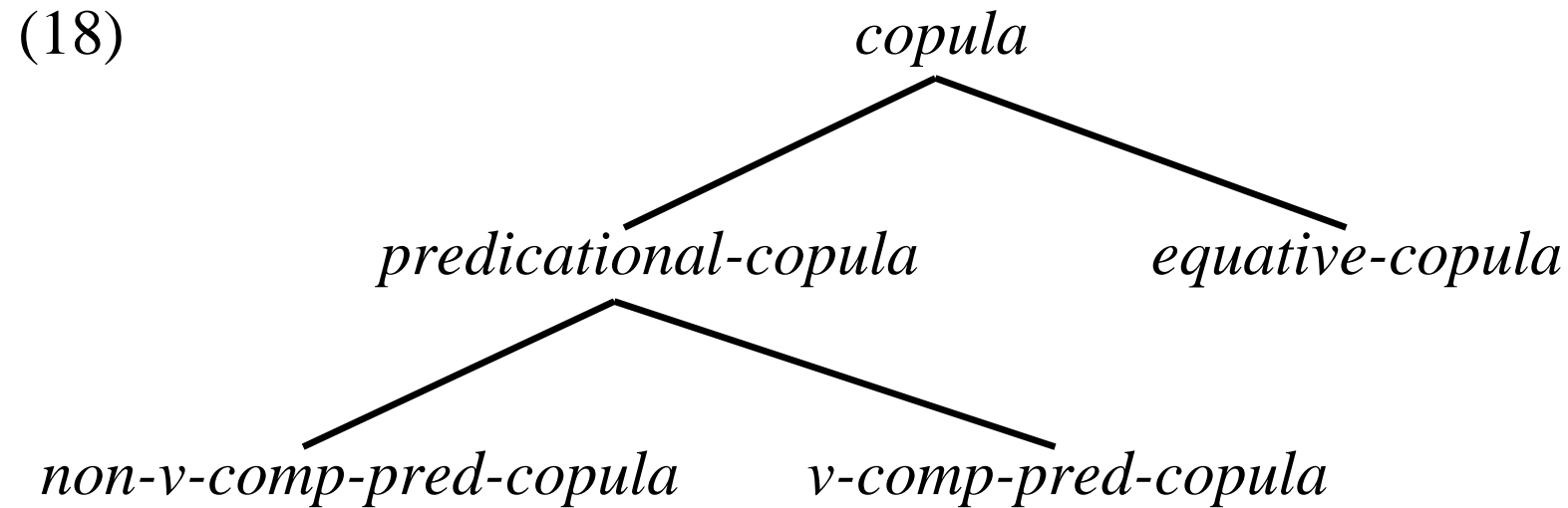
V and its complement NP cannot be fronted.

(17) \*yaktubu                    t-taqriir-a            kaana                    Zayd-un  
      write.PRES.3SG.M the-report-ACC be.PAST.3SG.M Zaid-NOM  
      ‘Zayd was writing the report.’

This suggests that the predicational copula can appear in an argument composition structure with a verb and the complements of the verb as its complements.

This suggests that the type *predicational-copula* has two subtypes, giving the following type hierarchy:

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# Verbless sentences

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- (19) \*yakuunu    ʔaT-Tifl-u                    fii    l-hadiiqat-i  
      be.PRES        the-child.SG.M-NOM    in    the-garden-GEN  
      ‘The child is in the garden.’

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      ‘The child is in the garden.’

(20) \*yakuunu    xalid-un        xaaʔif-an                    min    l-ʕanaakibi  
      be.PRES    Khalid-NOM    afraid.SG.M-ACC    from    the-spiders  
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      be.PRES    Khalid-NOM    afraid.SG.M-ACC    from    the-spiders  
      ‘Khalid is afraid of spiders.’

(21) \*yakuunu    Zayd-un        muʔallif-a                    riwaayaatin  
      be.PRES    Zaid-NOM    author.SG.M-ACC    novels  
      ‘Zaid is an author of novels’

(22) \*yakuunu Hišaam-un (Huwa) Muhammad-an  
be.PRES Hisham-NOM he Muhammad-ACC  
'Hisham is Muhammad'

It is only acceptable in a restricted set of contexts, e.g. after *qad* ‘may’.

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(23) *qad*    *yakuunu*    *ʔaT-Tifl-u*                    *fii l-hadiiqat-i*  
may    be.PRES    the-child.SG.M-NOM    in   the-garden-GEN  
‘The child may be in the garden.’

It is only acceptable in a restricted set of contexts, e.g. after *qad* ‘may’.

(23) *qad*    *yakuunu*    *ʔaT-Tifl-u*                      *fii l-hadiiqat-i*  
may    be.PRES    the-child.SG.M-NOM    in   the-garden-GEN  
‘The child may be in the garden.’

(24) *qad*    *yakuunu*    *xalid-un*            *xaaʔif-an*                      *min l-ʕanaakibi*  
may    be.PRES    Khalid-NOM    afraid.SG.M-ACC    from   the-spiders  
‘Khalid may be afraid of spiders.’

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(23) *qad*    *yakuunu*    *ʔaT-Tifl-u*                      *fii l-hadiiqat-i*  
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may    be.PRES    Khalid-NOM    afraid.SG.M-ACC    from   the-spiders  
‘Khalid may be afraid of spiders.’

(25) *qad*    *yakuunu*    *Zayd-un*            *muʔallif-a*                      *riwaayaatin*  
may    be.PRES    Zaid-NOM    author.SG.M-ACC    novels  
‘Zaid may be an author of novels’

(26) qad yakuunu Hišaam-un (Huwa) Muhammad-an  
may be.PRES Hisham-NOM he Muhammad-ACC  
'Hisham may be Muhammad'

Where a present tense form of the copula might be expected, MSA normally has a verbless sentence, traditionally known as a nominal sentence.



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(27) ?aT-Tifl-u                      fii l-hadiiqat-i  
the-child.SG.M-NOM in the garden-GEN  
'The child is in the garden.'

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'The child is in the garden.'

(28) xalid-un              xaa?if-un              min l-?anaakibi  
Khalid-NOM afraid.SG.M-NOM from the-spiders  
'Khalid is afraid of spiders.'

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'Khalid is afraid of spiders.'

(29) Zayd-un      mu?allif-u              riwaayaatin  
Zaid-NOM author.SG.M-NOM novels  
'Zaid is an author of novels,'

(30) Hišaam-un (Huwa) Muhammad-un  
Hisham-NOM he Muhammad-NOM  
'Hisham is Muhammad.'

Note that an adjectival or nominal predicate is nominative.

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Apart from this, these sentences look like copula sentences without a copula.

Like ordinary copula sentences they allow an existential interpretation with the expletive *hunaaka* ‘there’.

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(31) kaana                      Hunaaka    Taalib-un                      fii    l-hadiiqati  
be.PAST.3SG.M    there                      student.SG.M-NOM    in    the-garden  
‘There was a student in the garden.’



Like ordinary copula sentences they allow an existential interpretation with the expletive *hunaaka* ‘there’.

(31) kaana                    Hunaaka    Taalib-un                    fii    l-hadiiqati  
be.PAST.3SG.M    there                    student.SG.M-NOM    in    the-garden  
‘There was a student in the garden.’

(32) Hunaaka    Taalib-un                    fii    l-hadiiqati  
there                    student.SG.M-NOM    in    the-garden  
‘There is a student in the garden.’

The similarities between verbless sentences and sentences with an overt copula can be captured by assuming that the former contain a phonologically empty form of the copula with similar but not identical properties to overt forms.

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One difference is that the phonologically empty form of the copula takes a nominative complement.

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One difference is that the phonologically empty form of the copula takes a nominative complement.

A second difference concerns verbal complements.

One might suppose that the verb in the following is the complement of a phonologically empty form of the copula.

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(33) r-rajulu yaktubu t-taqriira  
the-man write the-report.SG.ACC  
'The man writes the report.'

One might suppose that the verb in the following is the complement of a phonologically empty form of the copula.

(33) r-rajulu yaktubu t-taqriira  
the-man write the-report.SG.ACC  
'The man writes the report.'

A verb that is the complement of an overt form of the copula cannot precede its subject and complement (in either order).

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A verb that is the complement of an overt form of the copula cannot precede its subject and complement (in either order).

(34) a. \*kaana yaktubu Zayd-un t-taqriira  
be.PAST.3SG.M write.PRES.3SG.M Zaid-NOM the-report.SG.ACC  
b. \*kaana yaktubu t-taqriira Zayd-un  
be.PAST.3SG.M write.PRES.3SG.M the-report.SG.ACC Zaid-NOM



A verb that is the only visible verb in the sentence can precede its subject and complement (in either order).

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- (35) a. *yaktubu*                      *Zayd-un*    *t-taqriira*  
      write.PRES.3SG.M    *Zaid-NOM*    *the-report.SG.ACC*
- b. *yaktubu*                      *t-taqriira*                      *Zayd-un*  
      write.PRES.3SG.M    *the-report.SG.ACC*    *Zaid-NOM*

A verb that is the only visible verb in the sentence can precede its subject and complement (in either order).

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          write.PRES.3SG.M    *Zaid-NOM*    *the-report.SG.ACC*
- b. *yaktubu*                      *t-taqriira*                      *Zayd-un*  
          write.PRES.3SG.M    *the-report.SG.ACC*    *Zaid-NOM*

This suggests that such verbs need not be the complement of the phonologically empty form of the copula.

A verb that is the only visible verb in the sentence can precede its subject and complement (in either order).

- (35) a. *yaktubu*                      *Zayd-un*    *t-taqriira*  
          write.PRES.3SG.M    *Zaid-NOM*    *the-report.SG.ACC*
- b. *yaktubu*                      *t-taqriira*                      *Zayd-un*  
          write.PRES.3SG.M    *the-report.SG.ACC*    *Zaid-NOM*

This suggests that such verbs need not be the complement of the phonologically empty form of the copula.

To avoid two analyses for examples like (33), we assume that the phonologically empty form of the copula never takes a verbal complement.

# **An HPSG analysis**

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Constraints on *copula* will ensure that the various forms of the copula have the right form, ensuring that the same forms appear with the various subtypes.

# Basic constraints

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A constraint on *predicational-copula* will ensure that predicational copulas share a SUBJ value and a CONT value with their first complement (which is the only complement in the case of the non-verbal-complement-predicational-copula).



## Basic constraints

A constraint on *predicational-copula* will ensure that predicational copulas share a SUBJ value and a CONT value with their first complement (which is the only complement in the case of the non-verbal-complement-predicational-copula).

$$(36) \text{ *predicational-copula* } \rightarrow \left[ \begin{array}{l} \text{CONT [2]} \\ \text{ARG - ST } < [1], \left[ \begin{array}{l} \text{SUBJ } < [1] > \\ \text{CONT [2]} \end{array} \right] > \oplus \text{L} \end{array} \right]$$

Constraints on *non-v-comp-pred-copula*, *v-comp-pred-copula*, and *equative-copula* will ensure that they have the right ARG-ST values.

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The constraint on *equative-copula* will also ensure that the optional pronoun agrees in number and gender with the subject and that this form of the copula has an identity interpretation.

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The constraint on *equative-copula* will also ensure that the optional pronoun agrees in number and gender with the subject and that this form of the copula has an identity interpretation.

(37) *non-v-comp-pred-copula*  $\rightarrow$   $\left[ \text{ARG - ST} < \square, \left[ \begin{array}{l} \textit{phrase} \\ \text{HEAD} \neg \textit{verb} \end{array} \right] > \right]$

Constraints on *non-v-comp-pred-copula*, *v-comp-pred-copula*, and *equative-copula* will ensure that they have the right ARG-ST values.

The constraint on *equative-copula* will also ensure that the optional pronoun agrees in number and gender with the subject and that this form of the copula has an identity interpretation.

$$(37) \text{ non-}v\text{-comp-pred-copula} \rightarrow \left[ \text{ARG-ST} < [], \left[ \begin{array}{l} \textit{phrase} \\ \text{HEAD } \neg \textit{verb} \end{array} \right] > \right]$$

$$(38) \text{ v-comp-pred-copula} \rightarrow \left[ \text{ARG-ST} < [], \left[ \begin{array}{l} \textit{word} \\ \text{HEAD } \textit{verb} \\ \text{COMPS}[1] \end{array} \right] > \oplus [1] \right]$$

(39) *equative-copula* →

$$\left[ \begin{array}{l} \text{CONT} \left[ \begin{array}{l} \textit{identity-rel} \\ \text{ARG [1]} \\ \text{ARG [2]} \end{array} \right] \\ \\ \text{ARG-ST} < \left[ \begin{array}{l} \text{DEF +} \\ \text{INDEX [1]} \left[ \begin{array}{l} \text{NUM [3]} \\ \text{GEN [4]} \end{array} \right] \end{array} \right] , \left( \left[ \begin{array}{l} \text{PRO +} \\ \text{CASE } \textit{nom} \\ \\ \text{INDEX} \left[ \begin{array}{l} \text{PERS 3} \\ \text{NUM [3]} \\ \text{GEN [4]} \end{array} \right] \end{array} \right] \right) , \left[ \begin{array}{l} \text{DEF +} \\ \text{INDEX [2]} \end{array} \right] > \end{array} \right]$$

## **Present tense of the copula**

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We assume that the phonologically empty form of the copula is [NULL +] and that this is required by the following constraint (where *copula* is a subtype of *verb*).



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$$(40) \left[ \text{HEAD} \begin{array}{l} \text{copula} \\ \text{POL } pos \\ \text{TENSE } pres \end{array} \right] \rightarrow [\text{NULL } +]$$

## Present tense of the copula

We assume that the phonologically empty form of the copula is [NULL +] and that this is required by the following constraint (where *copula* is a subtype of *verb*).

$$(40) \left[ \text{HEAD} \begin{bmatrix} \textit{copula} \\ \text{POL } \textit{pos} \\ \text{TENSE } \textit{pres} \end{bmatrix} \right] \rightarrow [\text{NULL } +]$$

We assume following e.g. Bonami, Borsley and Tallerman (2016) that constraints can be overridden by more specific constraints and that this is overridden by more specific constraints in the contexts in which the overt present tense form *yakunnu* appears.

Case

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The following constraint will ensure that nominal and adjectival complements of a verb are generally accusative:

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$$(41) \left[ \begin{array}{l} \text{HEAD } \textit{verb} \\ \text{COMPS } \langle \dots \left[ \begin{array}{l} \text{HEAD } \textit{noun} \vee \textit{adj} \\ \text{CASE } [1] \end{array} \right] \dots \rangle \end{array} \right] \rightarrow [1] = \textit{acc}$$

In the case of the phonologically empty form of the copula this will be overridden by the following constraint:

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$$(42) \left[ \begin{array}{l} \text{HEAD} \left[ \begin{array}{l} \textit{copula} \\ \text{NULL} + \end{array} \right] \\ \text{COMPS} \langle \dots \left[ \begin{array}{l} \text{HEAD noun } \vee \text{ adj} \\ \text{CASE [1]} \end{array} \right], \dots \rangle \end{array} \right] \rightarrow [1] = \textit{nom}$$

In the case of the phonologically empty form of the copula this will be overridden by the following constraint:

$$(42) \left[ \begin{array}{l} \text{HEAD} \left[ \begin{array}{l} \textit{copula} \\ \text{NULL} + \end{array} \right] \\ \text{COMPS} \langle \dots \left[ \begin{array}{l} \text{HEAD} \text{ noun} \vee \text{adj} \\ \text{CASE} [1] \end{array} \right], \dots \rangle \end{array} \right] \rightarrow [1] = \textit{nom}$$

(41) will also be overridden by the constraint on the type *equative-copula*, which requires the optional pronoun to be [CASE *nom*].



The following constraint will ensure the phonologically empty form of the copula never takes a verbal complement:

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(43) *v-comp-pred-copula* → [NULL –]

# Conclusions

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- The similarities and differences between the various uses of the MSA copula can be captured with an appropriate type hierarchy and associated constraints.
- The similarities and differences between verbless sentences and sentences with an overt copula can be captured by assuming that the former contain a phonologically empty form of the copula with similar but not identical properties to overt forms.

## **REFERENCE**

## REFERENCE

Bonami, O., R. D. Borsley, and M. O. Tallerman (2016), On pseudo-non-finite clauses in Welsh, *Proceedings of the Joint 2016 Conference on Head-driven Phrase Structure Grammar and Lexical Functional Grammar*, 104-124.