THE COPULA IN MODERN STANDARD ARABIC
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Predicational and equative uses
Predicational and equative uses

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 ?aT-Tiāl-u fii l-hādiīqat-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.

(1) kaana ?aT-Tifl-u fii l-hadiiqat-i
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‘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’
‘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 mu'allif-a riwaayaatin
be.PAST.3SG.M Zaid-NOM he author.SG.M-ACC novels
‘Zaid was an author of novels’
This is not possible with predicative uses.

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

(8) *kaana ?aT-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 mu’allif-a riwaayaatin be.PAST.3SG.M Zaid-NOM he author.SG.M-ACC novels ‘Zaid was an author of novels’

(8) *kaana ?aT-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 xaqif-an min be.PAST.3SG.M Khalid-NOM he afraid.SG.M-ACC from l-ʕanaakibi the-spiders ‘Khalid was afraid of spiders.’
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 ?anaa Huwa mu?allif-a r-riwaayati
    be.PAST.1SG I he author-ACC the-novel
    ‘I was the author of the novel.’
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.’
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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However, these two copulas have the same set of forms. This suggests that they are subtypes of a single type, as follows:
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(13) 

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copula
  /\                  /\  
predicational-copula equative-copula
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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 1-hadiiqat-i kaana ?aT-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 ?aT-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 ?aT-Tifl-u
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    ‘The child was in the garden.’

(15) xaa?if-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) mu?allif-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 ?aT-Tifl-u in the-garden-GEN be.PAST.3SG.M the-child.SG.M-NOM ‘The child was in the garden.’

(15) xaa?if-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) mu?allif-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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(18)

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  copula
    +-- predicational-copula
    |        +-- non-v-comp-pred-copula
    |        +-- v-comp-pred-copula
        +-- equative-copula
```
Verbless sentences
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The present tense of the copula is ungrammatical in many contexts.
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(19) *yakuunu ?aT-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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(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.’

(20) *yakuunu xalid-un xaaʔif-an min l-ʕanaakibi
    be.PRES Khalid-NOM afraid.SG.M-ACC from the-spiders
    ‘Khalid is afraid of spiders.’
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The present tense of the copula is ungrammatical in many contexts.

(19) *yakuunu ?aT-Tifl-u fii l-hadiiqat-i
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(20) *yakuunu xalid-un xaa?if-an min l-ʕanaakibi
     be.PRES Khalid-NOM afraid.SG.M-ACC from the-spiders
     ‘Khalid is afraid of spiders.’

(21) *yakuunu Zayd-un mu?allif-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 ŋaT-Tifl-u fiī 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 ?aT-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 xaa?f-an min l-ʕanaakibi
     may be.PRES Khalid-NOM afraid.SG.M-ACC from the-spiders
     ‘Khalid may be afraid of spiders.’
It is only acceptable in a restricted set of contexts, e.g. after *qad* ‘may’.

(23) *qad yakuunu ?aT-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.’

(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
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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) ṭaT-Tifl-u  fii l-hadiiqat-i
the-child.SG.M-NOM in the garden-GEN
‘The child is in the garden.’
Where a present tense form of the copula might be expected, MSA normally has a verbless sentence, traditionally known as a nominal sentence.

(27) ɁaT-Tifl-u fii l-hadiiqat-i
the-child.sg.m-nom in the garden-gen
‘The child is in the garden.’

(28) xalid-un xaaʔif-un min l-ʕanaakibi
Khalid-nom afraid.sg.m-nom from the-spiders
‘Khalid is afraid of spiders.’
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(27) ?aT-Tifl-u fii l-hadiiqat-i
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‘The child is in the garden.’

(28) xalid-un xaa?if-un min l-ʕanaakibi
Khalid-NOM afraid.SG.M-NOM from the-spiders
‘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 1-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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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).
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).

(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).

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

   b. yaktubu t-taqriira Zayd-un
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This suggests that such verbs need not be the complement of the phonologically empty form of the copula.
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(35) a. yaktubu Zayd-un t-taqriira
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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)\) *predicational-copula* → \[
\begin{bmatrix}
\text{CONT [2]} \\
\text{ARG-ST <[1], [SUBJ <[1]>]} \\
\text{CONT [2]} \\
\end{bmatrix}
\oplus L
\]
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.

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

(38) \[v-comp-pred-copula \rightarrow \left[ \text{ARG-ST} < [], \left[ \begin{array}{c} \text{word} \\ \text{HEAD}\text{verb} \end{array} \right] \oplus [1] \right] \left[ \begin{array}{c} \text{COMPS}[1] \end{array} \right] \]
(39) equative-copula →

\[
\begin{align*}
\text{ARG - ST} < & \begin{cases}
\text{CONT} \begin{bmatrix}
\text{identity-rel} \\
\text{ARG [1]} \\
\text{ARG [2]}
\end{bmatrix} \\
\text{ARG - ST} < & \begin{cases}
\text{DEF + INDEX [1]} \begin{bmatrix}
\text{NUM [3]} \\
\text{GEN [4]}
\end{bmatrix}, \\
\text{PRO + CASE nom} \begin{bmatrix}
\text{PERS 3} \\
\text{INDEX \text{NUM [3]} \text{GEN [4]}}
\end{bmatrix} \\
\text{DEF + INDEX [2]} >
\end{cases}
\end{align*}
\]
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).
Present tense of the copula

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

\[
\begin{align*}
&\left[ \begin{array}{c}
\text{HEAD} \\
\text{POL} pos \\
\text{TENSE} pres \\
\end{array} \right] \\
\rightarrow & \left[ \begin{array}{c}
\text{copula} \\
\end{array} \right] \\
\end{align*}
\]
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).

\[
\begin{array}{c}
\text{HEAD} \\
\text{POL pos} \\
\text{TENSE pres}
\end{array}
\rightarrow [\text{NULL +}]
\]

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
Case

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

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

\[
(41) \left[ \begin{array}{l}
{\text{HEAD}} & \text{verb} \\
{\text{COMPS}} & < \ldots \left[ \begin{array}{l}
{\text{HEAD}} & \text{noun} \lor \text{adj} \\
{\text{CASE}} & [1] \\
{\ldots} & > \\
\end{array} \right] \ldots > \\
\end{array} \right] \rightarrow [1] = \text{acc}
\]
In the case of the phonologically empty form of the copula this will be overridden by the following constraint:
In the case of the phonologically empty form of the copula this will be overridden by the following constraint:

\[
\begin{array}{c}
\text{HEAD} \\
\text{NULL} + \\
\text{COMPS} < ... \\
\text{HEAD noun v adj} \\
\text{CASE [1]} \\
..., ...
\end{array}
\rightarrow [1] = nom
\]
In the case of the phonologically empty form of the copula this will be overridden by the following constraint:

\[
\begin{align*}
\text{HEAD} &\left[\begin{array}{c}
\text{copula} \\
\text{NULL} + \\
\end{array}\right] \\
\text{COMPS} &< \ldots \left[\begin{array}{c}
\text{HEAD} \text{ noun } \vee \text{ adj} \\
\text{CASE} [1] \\
\end{array}\right], \ldots > \\
\end{align*}
\]

\( \rightarrow [1] = \text{nom} \)

(41) will also be overridden by the constraint on the type \textit{equative-copula}, which requires the optional pronoun to be \([\text{CASE} \text{ nom}]\).
The following constraint will ensure the phonologically empty form of the copula never takes a verbal complement:
The following constraint will ensure the phonologically empty form of the copula never takes a verbal complement:

(43) \( v\text{-comp-pred-copula} \rightarrow [\text{NULL } -] \)
Conclusions
Conclusions

- The similarities and differences between the various uses of the MSA copula can be captured with an appropriate type hierarchy and associated constraints.
Conclusions

- 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
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