Predication, specification, and equation in Ch'ol*

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1   Introduction

- In this talk, we discuss three types of copular constructions:

    1. predicational (*Maria*$_{\text{REF}}$ *is a teacher*$_{\text{PRED}}$)

    2. specificational (*The teacher*$_{\text{NON-REF}}$ *is Maria*$_{\text{REF}}$)

    3. equative (*Clark Kent*$_{\text{REF}}$ *is Superman*$_{\text{REF}}$)

- One of the key questions that research on this topic addresses is if and how these clauses are related to one another, both derivationally and in their underlying structure.

➤ We argue that all three types of copular clauses in Ch'ol have different surface structures, previewed in (1):

(1)   Three surface structures in Ch'ol copular sentences:

	TOPIC	FOCUS	Predicate	DP
Predicational			NP$_{\text{PRED}}$=ABS	DP$_{\text{REF}}$
Specificational		DP$_{\text{REF}}$		DP$_{\text{NON-REF}}$
Equative	DP$_{\text{REF}}$			DP$_{\text{REF}}$

- Ch'ol also provides evidence for the different underlying structures of predicational and specificational sentences:

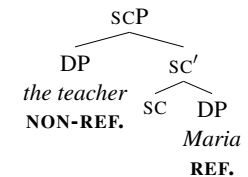(2)   Underlying differences among Ch'ol copular sentences:

	TOPIC	FOCUS	Predicate	Small Clause	
Pred.			NP$_{\text{PRED}}$	DP$_{\text{REF}}$	~~NP$_{\text{PRED}}$~~
Spec.		DP$_{\text{REF}}$		DP$_{\text{NON-REF}}$	~~DP$_{\text{REF}}$~~
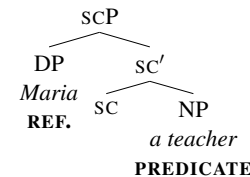
(3)   Predicational   (4)   Specificational

➤ Our key claims concern specificational sentences:

1. Specificational sentences *are not* inverted predicational sentences (contra, e.g., Heggie 1988; Moro 1997; Heycock 1994; Mikkelsen 2005; den Dikken 2006)

    - definite descriptions cannot be predicates in Ch'ol

    - absolutive agreement is obligatorily absent in specificational constructions, which is surprising if the referential expression is the underlying subject

2. Specificational sentences are also not a type of equative sentence (contra Heycock and Kroch 1999, 2002; Rothstein 2001)

Plan: ☐ Copulas ● ☐ Predication vs. Specification ● ☐ Equation ● ☐ Implications

2   Background on copular clauses

- Higgins' (1973) classification of nominal copular sentences is based on interpretational distinctions.

- Predicational clauses involve a referential subject and a predicate:

(5)   *Predicational:*
      <u>Hilary Mantel</u> is <u>a two-time winner of the Booker Prize</u>.
      REFERENTIAL   PREDICATE

- In a specificational construction like (6)...

(6)   *Specificational:*
      <u>The two-time winner of the Booker Prize</u> is <u>Hilary Mantel</u>.
      NON-REFERENTIAL   REFERENTIAL

  ○ The precopular constituent provides a *variable*: (there is an *x* such that *x* is two-time winner of the Booker Prize)

  ○ The postcopular constituent provides a *value for that variable*: (x = Hilary Mantel)

- Specificational sentences having been argued to be...

  1. **inverted predicational sentences** with a subject of type $<e>$, and a predicate of type $<e,t>$ (Heggie 1988; Moro 1997; Heycock 1994; Mikkelsen 2005; den Dikken 2006);

  2. **inverted equative sentences** with both DPs of type $<e>$ (Heycock and Kroch 1999, 2002; Rothstein 2001);

  3. a **distinct sentence type**, with the non-referential DP being an individual concept $<s, <e,t>>$ (Romero 2005; Heycock 2012; Arregi, Francez, and Martinović 2021)

- We argue in favour of option #3 — the non-referential DP in a specificational sentence is an *individual concept*: a function from worlds to individuals

- An *individual concept* denotes a potentially different referent across possible worlds and/or times (e.g., "the president of the US")

- Arregi et al. (2021) focus on the semantic differences between predicational and specifical clauses, our arguments are syntactic. We show that, in Ch'ol:

  ➡ Specificational sentences are syntactically distinct from both predicational sentences and equatives

  ➡ The referential expression is *not* the underlying subject of the specificational sentence, as it fails to trigger agreement.

  ➡ There is no 'inversion' of the type argued for in English; the individual concept is the underlying subject of the small clause

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Plan: ☑ Copulas ● ☐ Predication vs. Specification ● ☐ Equation ● ☐ Implications

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3   Predication vs. Specification in Ch'ol

- Ch'ol is a Mayan language of the Greater Tseltalan branch spoken by around 250,000, primarily in the state of Chiapas in Mexico (Vázquez Álvarez 2011).

- Basic structure of the Ch'ol clause is previewed in (7):

(7)   TOPIC [$_{FocP}$ FOCUS [<u>Predicate</u> DP (DP)]]

- Basic discourse-neutral word order in Ch'ol is predicate-initial for both verbal and non-verbal predicates (NVPs) (Vázquez Álvarez 2011; Clemens and Coon 2018):

(8)   a.   **Tyi** i-mek'-**e**   ñeñe' ajMaria.
           PFV 3ERG-hug-TV baby Maria
           'Maria hugged the baby.'
      b.   <u>Chañ</u> ajMaria.
           tall   Maria
           'Maria is tall.'

○ Verbal predicates like (8-a) denote events and require one of a set of aspectual morphemes and a "status suffix"

○ Non-verbal predicates like (8-b) denote states and may *not* appear with aspectual morphology or status suffixes

- As the NVP in (8-b) shows, Ch'ol does not have a copula—regardless of temporal or person/number specification:

(9)   a.   Maystraj-oñ.
           teacher-1ABS
           'I am a teacher.'
      b.   Wajali   maystraj-oñ.
           back.then teacher-1ABS
           'Back then, I was a teacher.'
      c.   Maystraj ajMaria.
           teacher Maria
           'Maria is a teacher.'

- Ch'ol is head-marking pro-drop. Absolutive morphemes—like *-oñ* in (9)—co-index objects and intransitive subjects; free-standing pronouns typically only appear in preverbal topic or focus positions, or when pro-drop is not licensed

(10)   Ch'ol absolutive morphemes and full pronouns

	absolutive	full pronoun
1st person	*-(y)oñ*	*joñoñ*
2nd person	*-(y)ety*	*jatyety*
3rd person	Ø	Ø

- As in other Mayan languages, a *single focus position* is available at the left edge of the clause, for which focused constituents, wh-words, relativized elements, and certain focus-sensitive operators compete (Norman 1977; Aissen 1992):

(11)   a.   [_FOC_ Maxki] tyi i-mek'-e   ñeñe ___ ?
                    who   PFV 3ERG-hug-TV baby
           'Who hugged the baby?'   *wh-question*

b.   [_FOC_ AjMaria] tyi i-mek'-e   ñeñe ___.
            Maria   PFV 3ERG-hug-TV baby
     'MARIA hugged the baby.'   *focus*

3.1   Predicational sentences

- Predicational constructions are characterized by:

   1. obligatory absolutive agreement on the predicate
   2. ungrammaticality of DP predicates

- **Obligatory agreement**: Absolutive morphology appears obligatorily on the predicate to mark subjects in predicational copular constructions, regardless of whether an overt pronoun is also present; there is no 3rd person absolutive:
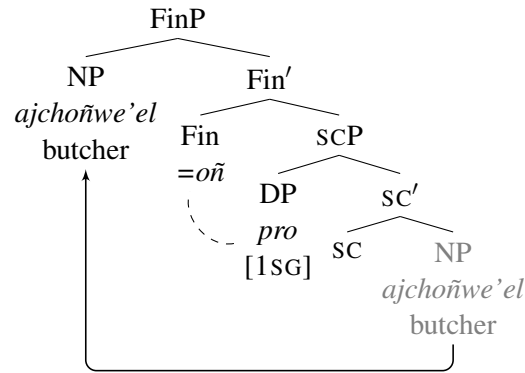
(12)   a.   Aj-choñ-we'el-*(**oñ**).
           AGT-sell-meat-1ABS
           'I am a butcher.'
      b.   [_FOC_ Jatyety] sajxk'aläl-*(**ety**).
                  2PRON   little.girl-2ABS
           'YOU'RE a little girl.'
      c.   Xwujty jiñi wiñik.
           healer DET man
           'The man is a healer.'   *(predicational)*

- **No DP predicates:** Nominal predicates may include phrasal material (e.g., adjectives) but *not* include D^0-level elements, a restriction also noted by Armstrong (2009) for Yucatec Maya:

(13)   a.   Chuty x'ixik-oñ.
           small woman-1ABS
           'I'm a small woman.'
      b.   ***Jiñi** maystraj-ety.
           DET teacher-2ABS
           intended: 'You are the teacher.'

- We propose that predicational sentences like (12-a) have the structure in (14):

(14)   Predicational structure

```
                    FinP
                   /    \
                 NP      Fin′
            ajchoñwe'el  /    \
              butcher  Fin     SCP
                       =oñ    /    \
                            DP      SC′
                           pro     /   \
                          [1SG]  SC     NP
                                    ajchoñwe'el
                                       butcher
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- ○ Predication involves an asymmetrical small clause (Bowers 1993; Baker 2003; den Dikken 2006; Armstrong 2009 for YM)
- ○ Absolutive morphemes are pronominal clitics generated via an Agree between a φ-probe on a functional head, here Fin^0, and the closest DP in its search domain
- ○ The predicate raises to a position above the subject, and the absolutive clitic adjoins to it

3.2   Specificational sentences

- Specificational constructions, in contrast, are characterized by:

  1. The *impossibility* of absolutive agreement
  2. The non-referential nominal *may* have D^0-material

- To elicit these, we set up contexts in which a *value* DP satisfies a non-referential description, in this case, a particular profession.

- Context: there's a small market that your friend's family runs. There's a tortilla-seller, a butcher, and a fish-monger. You know that your friend and her family members work in all the stalls, but you're not sure who does what. You ask...

(15)   a.   Maxki jiñ   aj-choñ-we'el=i?
              who   DET AGT-sell-meat=ENC
              'Who's the butcher?'
         b.   [FOC Joñoñ] aj-choñ-we'el.
              1PRON   AGT-sell-meat
              'The butcher is me.'   *(specificational)*

- ○ The referential DP *joñoñ* 'I' in (15-b) occupies FOCUS
- ○ The non-referential DP *ajchoñwe'el* 'the butcher'—claimed to be a predicate in *Predicate Inversion* approaches—is *not* in the predicate position

Focus

- Work since Higgins (1973) has noted that the referential DP in specificational sentences is focused; this has been taken to be one of the defining characteristics of specificational sentences.

(16)   Three surface structures in copular sentences:

	TOPIC	FOCUS	Predicate	DP
Predicational			NP_PRED=ABS	DP_REF
Specificational		DP_REF		DP_NON-REF

- Since no element occupies the FOCUS position in a *predicational* construction, we correctly predict that predicational subjects can move to this position, as in (12-b) above.

- However, *specificational* sentences should be incompatible with other elements in focus; constituents marked with the clitic =*jach* 'only' must occupy the focus position.

- As predicted, specificational constructions like the ones in (24-a) are incompatible with elements in FOCUS:

(17)   *Wa'li=jach   joñoñ jiñi aj-choñ-we'el.
         today=ONLY 1PRON DET AGT-sell-meat
         intended: 'Only today the butcher is me' (e.g., I'm filling in for my sister)

Agreement and non-referential DPs

- **No absolute**: While agreement is obligatory in predicational constructions, it is ungrammatical in specificational ones:

  (18) a. Aj-choñ-we'el-**oñ**.
             AGT-sell-meat-1ABS
             'I'm a butcher.'   *(predicational)*
        b. *Joñoñ aj-choñ-we'el-**oñ**.
             1PRON AGT-sell-meat-1ABS
             intended: 'The butcher is me.'   *(*specificational)*
             possible as: '*I* am a butcher.'   *(✓ predicational)*

- **Non-referential DPs:** While predicates in predicational constructions cannot have D^0 elements, the non-referential variable *can* appear with a determiner:

  (19) a. *[Jiñi aj-choñ-waj   ] [ajMaria].
                 DET AGT-sell-tortilla   Maria
             intended: 'Maria is the tortilla-seller.'   *(predicational)*
        b. [AjMaria] [**jiñi** aj-choñ-waj   ].
             Maria   DET AGT-sell-tortilla
             'The tortilla-seller is Maria.'   *(specificational)*

    ○ (Determiners are not required for definite readings in Ch'ol, but when present, they force definite readings. See e.g., Little 2020.)

- As predicted, absolutive morphology is incompatible with a determiner on the non-referential DP:

  (20) *Joñoñ **jiñi** aj-choñ-we'el-**oñ**.
         1PRON DET AGT-sell-meat-1ABS
         intended: 'I am the butcher.' / 'The butcher is me.'

- We propose that specificational sentences have the structure in (21)

(21) Specificational structure
      a. Joñoñ aj-choñ-we'el.
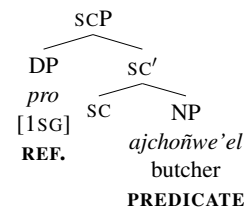   1PRON AGT-sell-meat
           'The butcher is me.'
      b.
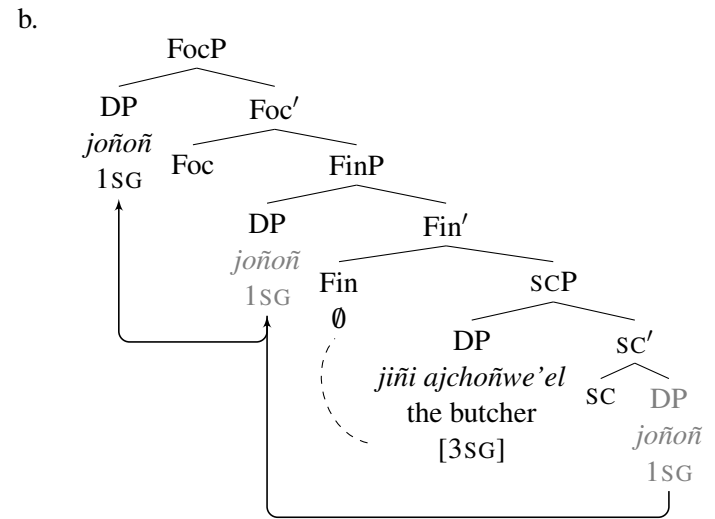
    ○ The subject of SCP is non-referential (i.e., the *variable*)
   ○ The referential DP raises to the clause-initial *focus position*

➨ **The absence of a 1st person absolutive morpheme is expected**—the non-referential NP in specificational clauses is always 3rd person, and **there is no overt 3rd person absolutive morphology**.

- The referential DP occupies different base positions in predicational and specificational constructions:
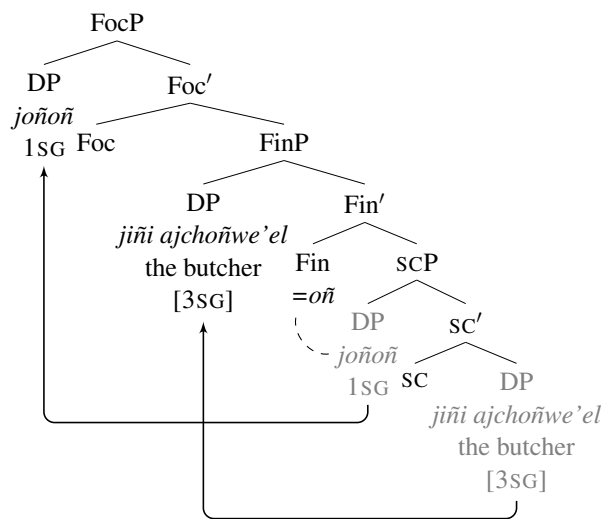
(22) Predicational   (23) Specificational

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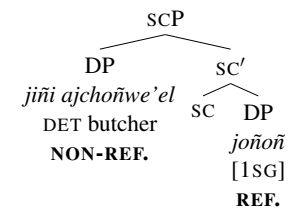
- If the subject of the specificational clause were the referential DP, absolutive marking should occur on its purported predicate:

(24)   a.   Joñoñ   jiñi   aj-choñ-we'el(***-oñ**).
              1PRON DET AGT-sell-meat-1ABS
              'The butcher is me.'
       b.   *

- Even if *jiñi aj-choñ-we'el* 'the butcher' does not raise to the predicate position, we would expect the agreement clitic to occur in the clause, as a result of the agreement of Fin with the 1st person subject *joñoñ*

Plan: ☑ Copulas • ☑ Predication vs. Specification • ☐ Equation • ☐ Implications

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4   Equatives

- In specificational sentences, the non-referential DP doesn't behave like a predicate.

- The next question to address is whether specificational sentences are a type of *equative* construction, as in Heycock 1994. Again, Ch'ol shows us that the answer is no.

- In Ch'ol equative copula constructions, two DPs are juxtaposed with one occupying the clause-external TOPIC position

(25)   Three surface structures in copular sentences:

	TOPIC	FOCUS	Predicate	DP
Predicational			NP$_{PRED}$=ABS	DP$_{REF}$
Specificational		DP$_{REF}$		DP$_{NON-REF}$
Equative	DP$_{REF}$			DP$_{REF}$

- <u>Context</u>: Brad Pitt is staying at a hotel in Palenque, but he wants to have a relaxing vacation, so he's grown out his beard, is wearing sunglasses, and not telling anyone who he is—he's going by the name "Juan". We've been staying there a few days, and you start to suspect who Juan is. You say to me...

(26)   Jiñi ajJuan, ajBrad Pitt=**me**.
       DET Juan   Brad   Pitt=AFF
       'Juan is actually Brad Pitt.'

   ⇨ The sentence in (26) involves an obligatory pause, and a 2P clitic which appears attached to the *second* of the two DPs, as expected if the first DP is in a <u>clause-external topic position</u>

- Vázquez Álvarez (2011) argues that Ch'ol topics are *external topics* in the sense of Aissen 1992: they are outside of focus, and separated from the clause by an intonational pause:

(27)   [A   li   ajOskar=i   ], [ixim=**äch**] tyi ikuchu tyälel.
        TOP DET Oskar=ENC   corn=AFFR PFV carry   DIR

       'As for Oskar, he brought CORN.'   (Vázquez Álvarez 2011)

   ○ 3rd-person topics always appear with one of a set of D^0 elements (*li*, *jiñ(i)*, *ili*, *ixä*), and may appear with a final enclitic =*i*

○ Topics may optionally be introduced with a topic marker, *a*

○ Clausal second-position (2P) clitics may attach to elements in FOCUS, but not TOPIC (Vázquez Álvarez 2011)

- Because neither predicational nor specificational constructions involve the topic position, 2P clitics are correctly predicted to attach to the first DP, in contrast with equatives, repeated in (28-c):

(28) a. Ñeñe'**=tyo** ajMaria(***=tyo**).
          baby=STILL Maria=STILL
          'Maria is still a baby.'   (*predicational*)
      b. Joñoñ**=äch** jiñi aj-choñ-waj(***=äch**).
          1PRON=AFF DET AGT-sell-tortilla=AFF
          'The tortilla seller is indeed me.'   (*specificational*)
      c. Jiñi ajJuan, ajBrad Pitt**=me**.
          DET Juan   Brad Pitt=AFF
          'Juan is actually Brad Pitt.'   (*equative*)

- **Second,** while foci may be embedded in finite embedded clauses, topics may not (Vázquez Álvarez 2011).

(29) Tyi k-ñächtyä [che' jiñ ajPeru' tyi i-tyumi   xchutyalob].
      PFV 1ERG-hear C   DET Pedro PFV 3ERG-advise boy
      'I heard that *Pedro* gave advice to the boy.'

(30) *Tyi k-ñächtyä [che' **a**   li   ajPeru', tyi ityumi xchutyalob].
      PFV 1ERG-hear C   TOP DET Pedro   PFV advise boy
      intended: 'I heard that, as for Pedro, he gave advice to the boy.'
      (Vázquez Álvarez 2011, 394)

- As predicted, predicational and specificational clauses may be embedded:

(31) Mi k-ña'tyañ [che' maystraj-ety].
      IPFV 1ERG-know COMP teacher-2ABS
      'I know that you're a teacher.'   (*predicational*)

(32) Tyi y-älä   [che' jiñi ajMaria aj-choñ-waj   ].
      PFV 3ERG-say COMP DET Maria   AGT-sell-tortilla
      'He said that the tortilla-seller is Maria.'   (*specificational*)

- Strikingly, equative clauses appear to resist embedding altogether, as in (33), expected given that topics cannot be embedded

(33) *AjMaria tyi y-älä   [(che') jiñi ajJuan, ajBrad Pitt].
      Maria   PFV 3ERG-say COMP DET Juan   Brad Pitt
      intended: 'Maria said that Juan is Brad Pitt.'   (*equative*)

Plan: ☑ Copulas ● ☑ Predication vs. Specification ● ☑ Equation ● ☐ Implications

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5 Conclusion

- We have argued that predicational, specificational, and equative sentences in Ch'ol all have a different surface syntax, repeated in (34):

(34)   Three surface structures in copular sentences:

	TOPIC	FOCUS	Predicate	DP
Predicational			Predicate=ABS	DP
Specificational		DP		DP
Equative	DP			DP

- We have also argued that predicational and specificational sentences are *not* derived from one and the same small clause

(35)   Underlying differences among Ch'ol copular sentences:

	TOPIC	FOCUS	Predicate	Small Clause
Pred.			NP_{PRED}	DP_{REF} ~~NP_{PRED}~~
Spec.		DP_{REF}		$DP_{NON\text{-}REF}$ ~~DP_{REF}~~

- Our arguments for the surface and underlying structure of the three types of copular clauses come from

    ○ agreement

    ○ the positioning of second position clitics

    ○ embeddability

- **Implications:**

    ○ While the discussion here has focused on copular constructions in Ch'ol, the results are consistent with work on other unrelated languages — e.g. Scottish Gaelic (Adger and Ramchand 2003) and Wolof (Martinović 2022) — which illustrate structural differences among different types of copular constructions

    ⇨ These differences are masked in languages like English, in which factors such as a dedicated subject position and an agreeing copular verb lead to similar surface configurations

- **Future work:**

    ○ What is the underlying structure of *equative* constructions in Ch'ol? Why do these make obligatory use of a clause-external topic position?

    ○ Is the topic structure needed to break the otherwise symmetrical relationship between the two referential expressions?

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