Reduced pronouns in San Juan Atitán Mam [*]

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1 Introduction

- The literature on person inflection in Mayan languages focuses on Set A (ergative and possessive) and Set B (absolute) inflection.

(1) Q'anjob'al
  X-**in**   **ha**-mitx'-a'.
  ASP-B1SG A2SG-catch- TV
  'You caught me.'   (Mateo-Toledo, 2008, 49)

- In San Juan Atitán (SJA) Mam, there is a third paradigm of ϕ markers that are used:[1]

(2) Ma **chi**   b'et [qi].
  PROX B2/3PL walk 2PL
  'You all walked.'

- These ϕ markers *always* double Set A and Set B morphemes in subject and possessor contexts.

- In this research, I argue that these morphemes are not agreement (contra Scott 2020), but pronouns in subject/possessor position.

  – Evidence for this comes from VOS reflexives, which separate the subject from the verb

- A main characteristic of the subject/possessor pronouns: first person pronouns are *reduced*

(3) First person singular pronouns: full vs. reduced
  1SG   *qin=i* → *=i*

- I formalize the reduction of first person pronouns via:

  – Impoverishment

  – Bidirectional feature exchange

- This research presents novel data from SJA Mam showing that:

  – Pronominal categories in a Mayan language are consistently realized via agreement as well as in-situ pronouns.

    * Only for subjects/possessors (never objects)
    * Independent pronouns are not used; pronouns are reduced

  – Impoverishment rules that delete syntactic features can be sensitive to whether the feature has been agreed with.

Outline

2 Overview of SJA Mam grammar

- Mam is VSO, where the verb contains aspect, Set B (absolute), directionals, Set A (ergative), verb roots, and suffixes/enclitics.

(4) Ma tz'=ok   ky-ke'y-an   qa xjal   jun ja.
  PROX1 B2/3SG=DIR:in A2/3PL-see-DS PL person one house
  'The people saw a house.'

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[1]Abbreviations in this handout include: 1 = first person, 2/3 = second or third person, A = Set A, AP = antipassive, ASP = aspect B = Set B, CP = completive aspect, DAT = dative, DET = determiner, DIR = directional, DISAGR = disagreement enclitic, DS = directional suffix, EXCL = exclusive, F = female, FOC = focus, INCL = inclusive, IPFV = imperfective, M = male, MM = mismatch, PFV = perfective, PL = plural, PROX = proximate aspect, RN = relational noun, RR = reflexive and reciprocol, SG = singular, SG = status suffix, TR = transitive

- Structure:

  - I assume that the verb moves up to the edge of the verbal domain to a head I label ss for "status suffix" following Clemens & Coon (2018).

  - I adopt the rightward specifier view of the verb initial order in Mayan (Aissen, 1992), and VSO word order is derived via object shift (Little, 2020).

(5)
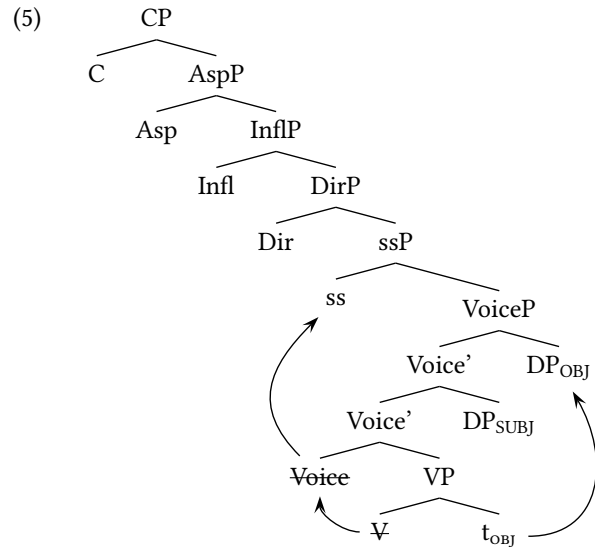
3   Position of subject/possessor pronouns

> ★ Subject/possessor pronouns are arguments, not agreement morphemes

3.1   Nominative alignment

- To illustrate the subject/possessor pronouns, I focus on the reduced pronoun *=i*.

- Reduced pronouns show a nominative distribution

(6)   Nominative alignment of reduced pronouns

a.   Ma   **chin** b'et   =i .
     PROX B1SG walk =DISAGR
     'I walked.'   *intransitive subject*

b.   Ma   ∅   kub'   **n**-tz'ib'-n   =i .
     PROX B2/3SG DIR:down A1SG-write-DS =DISAGR
     'I wrote it down.'   *transitive subject*

c.   Ma   tz'=ok   ky-ke'y-an   qa qin=i .
     PROX B2/3SG=DIR:in A2/3PL-see-DS PL 1SG=DISAGR
     'They saw me.'   *transitive object*

- In addition to realizing nominative verbal arguments, reduced pronouns are used for possessors:

(7)   n-wïx   =i
        A1SG-cat =DISAGR
        'my cat'

3.2   Pronouns versus agreement

- Two analyses of the post-verbal morpheme series:

  - (Reduced) pronouns (Scott, in prep)

  - Agreement morphemes (Scott, 2020)

- These two competing analyses arise given that the forms are phonologically reduced and sometimes dependent (like agreement affixes) and also express ϕ features (like pronouns).

- **(Reduced) pronouns analysis**

  - Pronouns appear in subject position (and some undergo morphological reduction)

  - **Evidence**: these morphemes follow the same ordering distribution as lexical subjects

(8) Reduced pronouns as subjects

    a.   [Ma   chin b'et]$_V$ [=i   ]$_S$.
         [PROX B1SG walk] [=DISAGR]
         'I walked.'

    b.   [Ma   ∅   b'et]$_V$ [Rebecca]$_S$.
         [PROX B2/3SG walk] [Rebecca]
         'Rebecca walked.'

(9) Proposed structure of reduced pronoun subjects in (8-a)
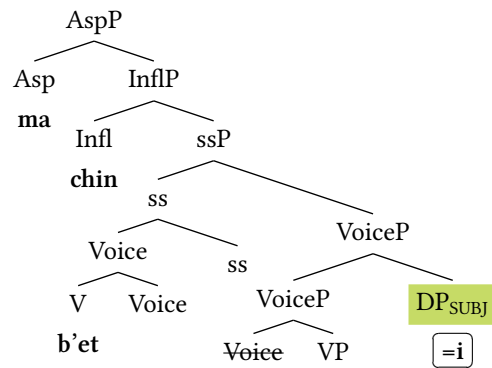
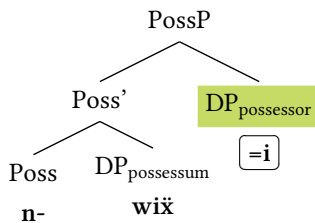(10) Reduced pronouns as possessors

    a.   n-wïx =i
         A1SG-cat =DISAGR
         'my cat'

    b.   t-wïx   Lucrecia.
         A2/3SG-cat Lucrecia
         'Lucrecia's cat'

(11) Proposed structure of reduced pronoun possessor in (10-a)

- **Agreement analysis** (Scott, 2020)

    – The morphemes are derived via an Agree probe on the ss head

    – **Evidence**: In Ixtahuacán Mam, these morphemes seem to be sensitive to the features of the subject and object (England, 1983, 58).

(12) Subject "agreement"

    Ma   chin b'et =i.
    PROX B1SG walk=DISAGR
    'I walked.'

(13) Proposed structure for agreement analysis of (12) (Scott, 2020, 132)
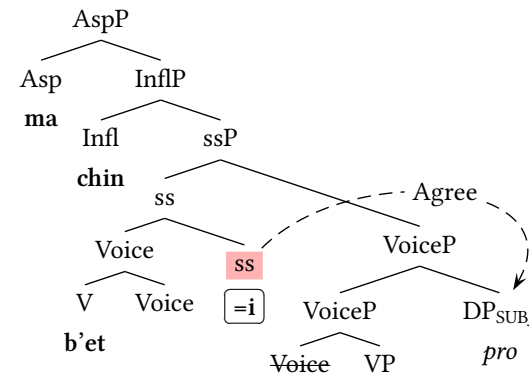
(14) Possessor "agreement"

    n-wïx =i
    A1SG-cat=DISAGR
    'my cat'

(15) Proposed structure for agreement analysis of (14) (Scott, 2020)

≫ We turn to evidence from reflexives that reduced pronouns behave like lexical subjects

3.3 Reflexives

- Characteristics of reflexive constructions:

  ▷ Can be formally transitive (Set A subject) or intransitive (Set B subject)

  ▷ Require the reflexive relational noun object *ib'* meaning 'self', whose possessor is co-indexed with the subject

  ▷ **Require VOS word order**

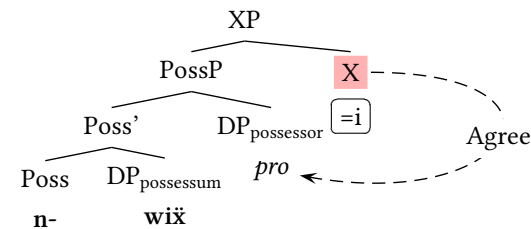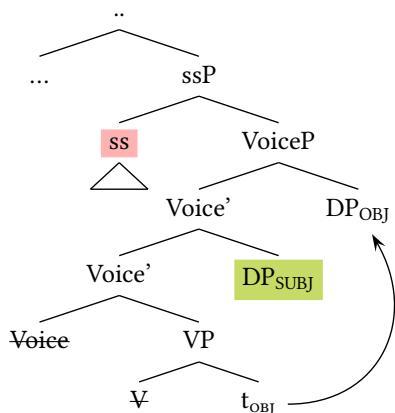- Lexical subject reflexives

  (16)   Transitive reflexive
         Ma   ∅   kub'   **t**-qes-an   t-ib'   **Henry**.
         PROX B2/3SG DIR:down A2/3SG-cut-DS   A2/3SG-RN:RR Henry
         'Henry cut himself.'

  (17)   Intransitive reflexive
         N=∅=ew-an   t-ib'   **Henry**.
         IPFV=B2/3SG-hide-AP A1SG-RN:RR   Henry
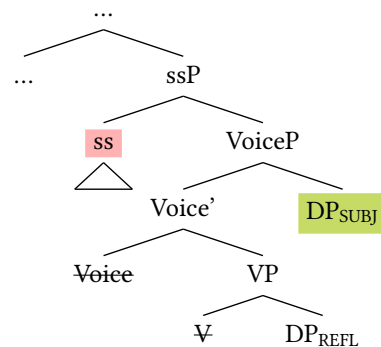   'Henry is hiding.'

- Structure of VOS reflexives in Mam (Little, 2020)
  - Object shift does not happen in reflexives

(18)   Baseline VSO: object shift   (19)   VOS reflexives: no object shift

- Diagnostic

  - <mark>Agreement:</mark> If the morphemes in question are agreement, they should stay on the verb (in ss) before the object

    * Reflexive order prediction: V =i O

  - <mark>Pronoun:</mark> If the morphemes are pronouns, they should appear in final position (as subjects), after the reflexive object

    * Reflexive order prediction: V O =i

- Pronominal reflexives

  (20)   Transitive reflexive V O =i
         a.   Ma   ∅   kub'   n-qes-an   w-ib'   =i .
              PROX B2/3SG DIR:down A1SG-cut-DS   A1SG-RN:RR   =DISAGR
              'I cut myself.'
         b. *Ma   ∅   kub'   n-qes-n   =i   w-ib'   (=i).
              PROX B2/3SG DIR:down A1SG-cut-DS =DISAGR A1SG-RN:RR   =DISAGR
              Intended: 'I cut myself.'

  (21)   Intransitive reflexive V O =i
         a.   N=chn=ew-an   w-ib'   =i .
              IPFV=B1SG-hide-AP   A1SG-RN:RR   =DISAGR
              'I am exercising.'
         b. *N=chn=ew-n   =i   w-ib'   (=i).   .
              IPFV=B1SG-hide-AP =DISAGR A1SG-RN:RR   =DISAGR
              Intended: 'I am exercising.'

- Key observation:

  - The reduced pronouns cannot appear adjacent to the verb in reflexives

- Note on possessors and the final pronoun:

  - Since we are examining the paradigm of subject/possessor pronouns
    * and in reflexive constructions, subjects and possessors are co-indexed,
    * we predict the structure in (22):

  (22)   ... [w-ib'   =i   ]$_o$ [=i   ]$_s$.
         ... [A1SG-RN:RR =DISAGR] [=DISAGR]
         'I ... myself.'

4

– I assume the underlying structure of (20-a) is (22), which is resolved in the phonology resulting in *wib'i*.

> ≫ Reflexive data supports an analyses of the subject/possessor pronoun series as arguments, not agreement
>
> ≫ Appendix B contains three further arguments from intransitive subject focus, possessive relational nouns, and second position clitic placement

3.4   Not agreement

- In this section we examined how reflexives provide a diagnostic for the nature of (reduced) subject/possessor pronoun morphemes.

- Conclusion: pronominal arguments are marked once via agreement

- Importantly, these morphemes are not a second series of Set B markers, like we see in **Tzotzil** (Aissen, 1987). Woolford (2011) shows that phonological factors influence their distribution.

(23)   L- **i**- s- pet   **-otik**.
       CP B1 A3 carry -1PLINC
       He carried us (inclusive).   Tzotzil (Aissen, 1987, 1)

- Similarly, these morphemes are not "omnivorous" agreement like that in Kaqchikel (Preminger, 2014) and Ch'ol (Coon, 2016) – where the extra agreement marker agrees with either the subject or the object.

(24)   Ch'ol (Coon, 2016, 528)
       a.   Tyi y-il-ä-y-ety-**ob**.
            ASP A3-see-TV-EP-B2-PL
            '**They** saw you.'
       b.   Tyi aw-il-ä-y-**ob**.
            ASP A2-see-TV-EP-PL
            'You saw **them**.'

▷ Pronominal arguments (subjects and possessors) are realized in two locations in the clause:

  ▷ Once via Set A/B agreement

  ▷ Once via a reduced pronoun in their base position

(25)   a.   Ma   [chin] b'et   [=i].
            PROX B1SG   walk =DISAGR
            'I walked.'   *intransitive subject*

       b.   Ma   ∅   kub'   [n-]tz'ib'-n   [=i].
            PROX B2/3SG DIR:down A1SG-write-DS =DISAGR
            'I wrote it down.'   *transitive subject*

       c.   [n]-ximtz   [=i]
            A1SG-thought =DISAGR
            'my thought'
                                                 possessor

- In the rest of this talk, we'll focus on answering the following questions:

  -↠ What features are realized in the agreement position?

  -↠ What features are realized in the argument position?

  -↠ What causes these arguments to be realized in both their argument and agreement positions?

  -↠ What is the nature of the first person pronoun reduction?

4   Featural analysis of SJA Mam pronouns and agreement

> ★ Set A and Set B agreement only realize [+/−author] and [+/−singular] features
>
> ★ The enclitic =*i* realizes the disagreement in values of [+/−author] and [+/−participant]

4.1 Theoretical assumptions: person features and morphological framework

- I adopt and straightforwardly implement Harbour's 2016 theory of person features

  - ⬦ two binary valued person features: [+/−author] and [+/−participant]
  - ⬦ languages with a four way person distinction, like Mam, have both

Table 1: Harbour's quadripartition

Category	Features
1 EXCL	+author −participant
1 INCL	+author +participant
2	−author +participant
3	−author −participant

  - ▷ Note that in this system, features are ordered functions acting on sets. Thus, 1PL.EXCL is [−participant] because it subtracts the "participant" set of author and addressee and its adds back in just the "author" set via [+author].
  - ▷ Thus, functionally, [+/−participant] behaves more like a typical [addressee] or [hearer] feature.

- Mam makes a simple singular/plural number distinction

  - I adopt the bivalent feature [+/−singular], simply adopting a more familiar label for Harbour's [+/−atomic] feature.

Table 2: SJA Mam ϕ features

SG (+singular)		PL (−singular)	
1SG	+author −participant	1PL.EXCL	+author −participant
		1PL.INCL	+author +participant
2SG	−author +participant	2PL	−author +participant
3SG	−author −participant	3PL	−author −participant

  - ▷ Note the empty cell under 1SG: this would be a first singular inclusive argument, which is logically impossible (with a strict interpretation of singular).
  - ▷ However, this cell may be used in Mam (Collins, 2005). See Scott (in prep) for more discussion.

- Looking at how these features are realized in the morphology is essential for understanding how full pronouns get reduced

- I adopt a Distributed Morphology (DM) framework (Halle & Marantz, 1993)

  - The features in Table 2 represent the full feature specification for pronoun categories in the syntax
  - In the morphological component of the grammar, individual vocabulary items are inserted

4.2 Agreement and the disagreement enclitic

4.2.1 Agreement: Set A and B

Table 3: SJA Mam Set A

	SG			PL
1SG	n-/w-		1PL.EXCL	q-
			1PL.INCL	q-
2SG	t-		2PL	ky-
3SG	t-		3PL	ky

Table 4: SJA Mam Set B

	SG			PL
1SG	chin		1PL.EXCL	qo
			1PL.INCL	qo
2SG	∅		2PL	chi
3SG	∅		3PL	chi

- Set A and B analysis:

  - First/non-first and singular/plural distinction
  - Only realize [+/−author] and [+/−singular]

- So... where is [+/−participant] ?

- ⤷ Next: features of the disagreement enclitic =i

4.3 Disagreement enclitic

Table 5: SJA Mam disagreement enclitic

	SG		PL
1SG	=i	1PL.EXCL	=i
		1PL.INCL	
2SG	=i	2PL	=i
3SG		3PL	

- This morpheme combines with Set A and Set B morphemes and distinguishes first person plural inclusive from exclusive:

(26) a. q-wiẍ
          A1PL-cat
          'our (incl) cat'

      b. q-wiẍ =i
          A1PL-cat =DISAGR
          'our (excl) cat'

- It distinguishes third from second person singular:

(27) a. t-wiẍ
          A2/3SG-cat
          'his/her cat'

      b. t-wix =i
          A2/3SG-cat =DISAGR
          'your cat'

- In (26), it realizes [−participant], but in (27), it realizes [+participant]

- Featural analysis

  - Enclitic cells: [author] and [participant] are +/− or −/+

  - Conversely, −/− or +/+ combinations do not align with the enclitic

Table 6: SJA Mam ϕ features

	SG (+singular)		PL (−singular)
1SG	+author −participant	1PL.EXCL	+author −participant
		1PL.INCL	+author +participant
2SG	−author +participant	2PL	−author +participant
3SG	−author −participant	3PL	−author −participant

- Based on this, Noyer (1992) and Harbour (2016) analyze the equivalent enclitic in Ixtahuacán Mam (England, 1983) as realizing the disagreeing values of the person features.

- This is summarized and adapted to SJA Mam using the α notation:

(28) SJA Mam enclitic analysis based on Noyer (1992); Harbour (2016)
      a. =i ↔ [αauthor $\overline{\alpha}$participant]

- Despić & Murray (2018) show that languages outside of Mam, namely, Cheyenne and Serbian, also group disagreeing values of features as a natural class.

- D'Alessandro (2020) also shows that Ripano realizes the **mismatch** in subj/obj gender features with a verbal agreement morpheme:

(29) Babbu   dic-ə   l-e   vərità.
      dad.SG.M say-**3SG.MM** the-SG.F truth.SG.F
      'Dad tells the truth.'   (D'Alessandro, 2020, 242)

≫ What we can take away:

  - SJA Mam pronominal categories express

    * [author] [participant] and [singular]

  - BUT no single paradigm expresses all three…

    * Agreement: [author,singular]

    * DISAGR enclitic: [author,participant]

  - Thus it is the double marking of agreement and this DISAGR enclitic (reduced pronoun) that gives us the set of distinctions

⚲ Next: Comparing full and reduced pronouns:

  - which pronouns reduce?   (Answer: first person)
  - what features are deleted?   (Answer: [+/−singular])
  - when are pronouns reduced?   (Answer: when agreed-with)

5   Derivation of reduced pronouns

★ First person pronouns which have been agreed with trigger the deletion of [+/−singular] resulting in their reduction

5.1 Which pronouns reduce? Answer: first person

Table 7: SJA Mam pronoun paradigms

Subj/Poss				Independent		
	SG	PL			SG	PL
1 EXCL	=i	=i		1 EXCL	qini	qoy
1 INCL		∅		1 INCL		qo
2	=i	qi		2	=i	qi
3	∅	qa		3	∅	qa

5.2 What features are deleted? Answer [+/−singular]

- I assume that reduced pronouns are derived from full pronouns

- Full, independent first person pronouns

  – [Pronominal base] + subject/possessor reduced pronoun

Table 8: SJA Mam full pronouns

	SG		PL	
1SG	qin	=i		
1PL.EXCL			qo	=i
1PL.INCL			qo	

- Pronominal base morphemes (**absent in reduced environment**)

  (30)   a.   1SG   qin   ↔ [+author,+singular]
          b.   1PL   qo   ↔ [+author,−singular]

- Disagreement morpheme (**remains in reduced environment**)

  (31)   1EX   =i   ↔ [αauthor $\overline{\alpha}$participant]

- Accounting for the absence of the pronominal base morphemes

  ▷ **[+/−singular] features are deleted**

  ▷ morphemes in (30) blocked from insertion

▷ only disagreement morpheme features are present

▷ this applies in the context of [+author]

- Impoverishment

  (32)   **First person pronoun impoverishment rule (*version1*)**
  [+/−singular] → ∅ / [+author]

5.3 When are pronouns reduced? Answer: when agreed with

- We saw that the answer to this question is:

  – subject and possessor pronouns reduce

- But how can we formalize this?

- It turns out, subj/poss arguments are the only arguments that occur with Set A and Set B agreement

  – **Transitive objects** are not inflected via agreement (unlike other Mam varieties)

  – **Nonverbal predicate** subjects are not inflected via agreement

- Transitive objects (see Appendix A for an analysis)

  (33)   a.   N=**chin**   b'et   =i .
              IPFV=**B1SG** walk =DISAGR
              'I am walking.'

          b.   Ma   **tz'**=ok   ky-ke'y-an   qa qin=i .
              PROX1 **B2/3SG**=DIR:in A2/3PL-see-DS PL 1SG=DISAGR
              'They saw me.'

- Nonverbal predicate subjects

  – Agreement = reduction (34-a) // No agreement = no reduction (34-b)

  (34)   a.   Ma   **qo**   b'et   [=i   ]ₛ.
              PROX B1PL walk [=DISAGR]
              'We (exclusive) walked (today).'

b. B'et [qo'=y]$_S$.
walk [1PL=DISAGR]
'We (exclusive) walked (before today).'

- Generalization:
  - When the pronoun triggers agreement, it reduces

- Proposal:
  - The impoverishment rule only applies in the context of [+author]^F
  - F indicates that the [+author] feature has been agreed with by a Functional head

- Implementation: bidirectional feature sharing
  - Adopting insights from Pesetsky & Torrego (2007), Clem (2019), and 'goal flagging' by Deal (2022)

  (35)   Bidirectional feature copying
  a.   [$_{INFL}$ Infl   [[+AUTHOR]]]
                                ⌐ – – – Agree – – – ⌐

  b.   [$_{INFL}$ Infl [+AUTHOR]   [[+AUTHOR]^{Infl}]]

  - Now we can specify the impoverishment rule accordingly:

  (36)   **First person pronoun impoverishment rule (*final*)**
  [+/−singular] → ∅ / [+author]^F

6   Conclusion

- In SJA Mam, subjects and possessors are double marked: once via Set A or B, and once via a pronoun:

  (37)   Ma   chin b'et [=i   ]$_S$.
  PROX B1SG walk [=DISAGR]
  'I walked.'

- For first person pronouns, the subject/possessor pronouns appear in a reduced form.

- This can be seen by comparing full, independent pronouns, such as the object pronoun in (38) to the reduced pronoun in (37).

  (38)   Ma   tz'=ok   ky-ke'y-an   qa qin=i .
  PROX B2/3SG=DIR:in A2/3PL-see-DS PL 1SG=DISAGR
  'They saw me.'

- The reduction pattern correlates with whether the pronoun triggered agreement, summarized in the impoverishment rule in (39).

  (39)   **First person pronoun impoverishment rule (*final*)**
  [+/−singular] → ∅ / [+author]^F

- This data show that subject and possessor pronouns in Mam are not only realized with agreement, but with in-situ pronouns.

- And, that accounting for their reduction requires morphological rules that reference whether a feature has been copied via Agree.

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A   Transitive object analysis

- Intransitive subjects are expressed with Set B as expected (40-a).

- Transitive objects, however, trigger the default Set B marker *tz'=* and full pronouns surface in object position (40-b).

(40)   a.   N=**chin**   b'et=i.
       IPFV=**B1SG** walk=DISAGR
       'I am walking.'

       b.   Ma   **tz'**=ok   ky-ke'y-an   qa **qin=i**.
       PROX1 **B2/3SG**=DIR:in A2/3PL-see-DS PL **1SG**=DISAGR
       'They saw me.'

- In Scott (in prep) I analyze this pattern with a disjunctive satisfaction condition on Infl, illustrated in (41).

  – Infl stops probing when it reaches ϕ (intransitive subjects)
    or
  – when it reaches transitive VoiceP, causing it to not reach the object.
  – This results in no ϕ features on Infl, and the default morpheme is inserted.

- Data point to low- or no- licensing analysis of objects

(41)   SJA default object agreement
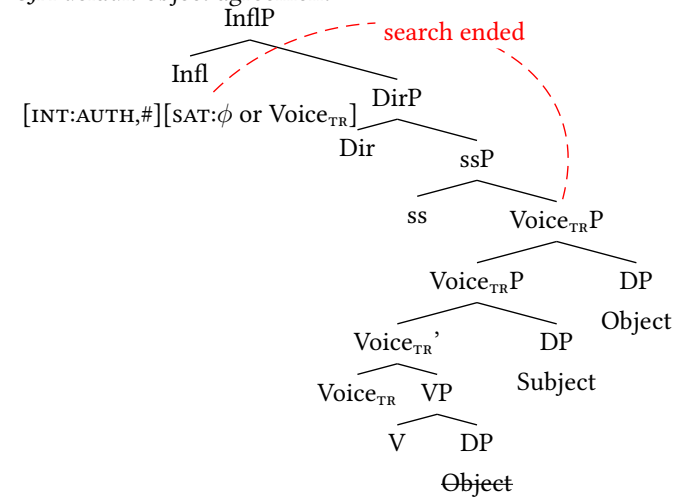
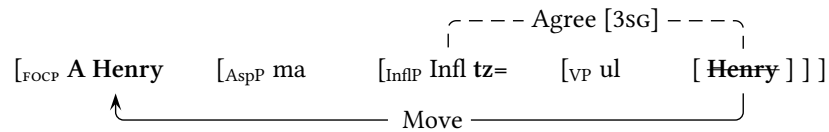## B   Diagnostics for subject/possessor pronouns

B.1   Intransitive focused subjects

- Characteristics of intransitive subject focus constructions:

  ▷ Involve movement of subjects to left periphery with the determiner *a*
  ▷ Retain Set B verbal agreement
  ▷ **Leave nothing in base position**

- Lexical intransitive subject focus

(42) a. Ma   tz=ul   **Henry**.
          PROX B2/3SG=arrive.here Henry.
          Henry arrived here.

      b. **A Henry** ma   tz=ul.
          DET Henry PROX B2/3SG=arrive.here
          Henry$_F$ arrived here.

- Proposed structure:

(43) Focused lexical subject movement in (42-b)

[$_{FOCP}$ **A Henry**   [$_{AspP}$ ma   [$_{InflP}$ Infl **tz=**   [$_{VP}$ ul   [~~Henry~~]]]

Agree [3SG] · · · Move

- Diagnostic

  - <mark>Agreement:</mark> If the morphemes in question are agreement, they should stay on the verb (in ss)

    * We may also predict the *full* pronouns in initial position (which includes the reduced pronoun) since it is focused
    * Word order prediction: pro=i V =i

  - <mark>Pronoun:</mark> If the morphemes are pronouns, they should appear in initial position and not post-verbally

    * Word order prediction: pro=i V

- Pronominal intransitive subject focus
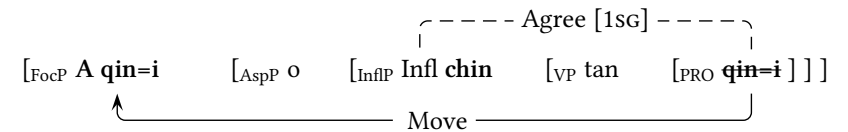
(44) 1SGfocus movement
      a. O   chin ta-n   =i .
          PFV B1SG sleep-AP =DISAGR
          I slept.

      b. A   qin=i   o   chin ta-n   (*=i).
          DET 1SG=DISAGR PFV B1SG sleep-AP (*=DISAGR)
          I$_F$ slept.

- Key observation:

- The reduced pronouns cannot appear adjacent to the verb (in in-situ subject position)

- Proposed structure:

(45) Focused pronoun movement in (44-b)

[$_{FocP}$ **A qin=i**   [$_{AspP}$ o   [$_{InflP}$ Infl **chin**   [$_{VP}$ tan   [$_{PRO}$ ~~qin=i~~]]]

Agree [1SG] · · · Move

> ≫ Intransitive subject focus data are directly predicted under the argument analysis of reduced pronouns

- Accounting for the data under an agreement analysis:

  - Anti-agreement: the probe responsible for =i agreement undergoes impoverishment in the presence of Ā features (inspired by Baier 2018).

  - While this is possible, it is unmotivated and extra machinery that the argument analysis does not need.

B.2 Possessive relational noun

- Characteristics of possessive relational noun constructions:

  ▷ Indicate possession not only through possessor agreement, but the possessive relational noun, *e* (possibly with possessor focus, exact interpretation unclear).

  ▷ Contain two instances of possessive (Set A) agreement

(46) Possessive relational noun (null possessor)
      a. t-wiẍ
          A2/3SG-cat
          'her cat'

      b. **t**-e   **t**-wiẍ
          A2/3SG-RN:POSS A2/3SG-cat
          'her cat'

▷ **Contain only once instance of the possessor immediately after the relational noun**.

(47)　Possessive relational noun (lexical possessor)

   a.　t-ximtz　　　　[Gloria]
     A2/3SG-thought Gloria
     'Gloria's thought'

   b.　t-e　　　　[Gloria] t-ximtz
     A2/3SG-RN:POSS Gloria　A2/3SG-thought
     'Gloria's thought'

- Diagnostic

　– Agreement:　If the morphemes in question are agreement, they should appear on both formally possesed nouns.

　　　* Word order prediction: RN =i N =i

　– Pronoun:　If the morphemes are pronouns, they should appear once following the relational noun.

　　　* Word order prediction: RN =i N

- Pronominal possessor with possessive relational noun

(48)　1SGpossessor

   a.　n-ximtz　　　　[=i]
     A1SG-thought =DISAGR
     'my thought'

   b.　w-i　　　　[=y]　　n-ximtz
     A1SG-RN:POSS =DISAGR A1SG-thought
     'my thought'

- Key observation:

　– The reduced pronouns does not appear adjacent to the noun, matching the pattern with lexical subjects

B.3　Evidence from polar questions

- The relational noun *e* also has a dative use– it introduces indirect arguments (49).

- When the RN phrase is focused, it appears in initial position (50).

(49)　N=∅-xi　　　　n-q'ama-'n=i　　　jun tijil **t-e**　　　**Elissa**.
    IPFV=B2/3SG=DIR:go A1SG-tell-DS=DISAGR one what A2/3SG-RN:DAT Elissa
    'I was telling Elissa something. '

(50)　**T-e**　　　**Elissa** n=∅-xi　　　　n-q'ama-'n=i　　　jun tijil.
    A2/3SG-RN:DAT Elissa IPFV=B2/3SG=DIR:go A1SG-tell-DS=DISAGR one what
    'I was telling [Elissa]_FOC something. '

- If made into a polar question, the second position clitic *=m* appears between the relational noun and the subject.

(51)　**T-e=m**　　　[Elissa] n=∅-xi　　　　n-q'ama-'n=i　　　jun tijil?
    A2/3SG-RN:DAT Elissa　IPFV=B2/3SG=DIR:go A1SG-tell-DS=DISAGR one what
    'Was I telling [Elissa]_FOC something?'

- Diagnostic: if the morphemes in question are pronouns , we predict the enclitic *=m* to similarly intervene between the realtional noun and the pronoun:

　– Word order prediction: RN=m =i

- This is attested: the polar question clitic *=m* appears between the relational noun and the reduced pronoun:

(52)　**T-e=m**　　　[=ni]　n=∅-xi　　　　n-q'ama-'n=i　　　jun tijil?
    A2/3SG-RN:DAT DISAGR IPFV=B2/3SG=DIR:go A1SG-tell-DS=DISAGR one what
    'Was I telling [you]_FOC something?'

C　SJA Mam agreement and pronoun VIs

C.1　Set A

Table 9: SJA Mam Set A

	SG		PL
1SG	n-	1PL.EXCL	q-
		1PL.INCL	q-
2SG	t-	2PL	ky-
3SG	t-	3PL	ky

- Set A morphemes analysis:

  – First/non-first and singular/plural distinction

  – Specified to transitive subjects and possessors through context *v/n*, representing Voice and Poss

C.2   Set B

Table 10: SJA Mam Set B

	SG		PL
1SG	chin	1PL.EXCL	qo
		1PL.INCL	qo
2SG	∅	2PL	chi
3SG	∅	3PL	chi

- Set B morphemes analysis:

  – First/non-first distinction

  – Singular/plural distinction

  – Specified to intransitive subjects through context *Infl.*

Table 11: Set B vocabulary items

	Set B (Infl)		VI analysis	Context
1sg	chin	↔	[+auth,+SG]	*Infl*
2/3sg	∅/tz'=	↔		*Infl*
1pl	qo	↔	[−auth,−SG]	
2/3pl	chi	↔	[−auth,−SG]	*Infl*

- Special notes:

  – 2/3sg form is the default form used for 2/3sg or for lack of agreement (see Scott in prep)

  – 1PL form is not limited to *Infl* contexts

C.3   Plural subject/possessor pronouns

- Turning to the rest of the subject/possessor paradigm, we focus on *qi* (2pl) and *qa* (3pl).

Table 12: SJA Mam subject/possessor pronouns

	SG		PL
1SG	=i	1EXCL	=i
		1INCL	
2SG	=i	2PL	q=i
3SG		3PL	qa

- Starting with *qa*

(53)   General plural marker
        qa ↔ [−singular]

(54)   a.   xjal
             person
             'person'

        b.   **qa** xjal
             PL person
             'people'

- Looking at *q=i*

(55)   Second person plural pronoun (bi-morphemic)
        a.   =i ↔ [αauthor, $\overline{\alpha}$participant]
        b.   q ↔ [−singular] / [−author, +participant]

- Multiple insertion must be free (fission won't work)

(56)   1PL *qo'=y*
        a.   qo ↔ [+author,−singular]
        b.   =i ↔ [αauthor,$\overline{\alpha}$participant]

  – Both morphemes realize [+author] and a fission rule separating the features of the pronoun would not predict the insertion of both morphemes in (56).

13

C.4   Pronominal bases

- Some independent pronouns in Mam are multimorphemic

Table 13: SJA Mam full pronouns

	SG			PL	
1SG	qin	=i	1PL.EXCL	qo	=y
			1PL.INCL	qo	

- – Pronominal base morpheme analysis
  - * Notice that *qo* is the same as the Set B 1PL form
    - · Analysis: *qo* lacks context
  - * However, *qin* is not the same as the Set B 1SG form *chin*
    - · Analysis: *qin* lacks context but *chin* is the *Infl*-context allomorph

Table 14: SJA Mam Pronominal base vocabulary items

	Set B (Infl)		VI analysis	Context
1SG	qin	↔	[+auth,+SG]	
1PL	qo	↔	[+auth,−SG]	

- – On multiple insertion:
  - * I assume that any number of morphemes eligible for insertion can be inserted for a pronoun
  - * This does not lead to chaos:
    - · Set A and B markers are never chosen in pronominal because their contexts are not met.
    - · For example, *qin* and *chin* realize the same features, but *chin* is restricted to Infl contexts.

D   Further evidence for bidirectional feature sharing

- – Second person plural
  - * Optionally reduced to the disagreement enclitic *=i*
  - * Only in Set A contexts

(57)   Optional reduction of 2PL *qi*

a.   ky-ja   q=i
       A2/3PL-house 2PL=DISAGR
       'y'all's house'

b.   ky-ja =y
       A2/3PL-house=DISAGR
       'y'all's house'

(58)   Set B: prohibited 2PL reduction

a.   Ma   chi   b'ix-an   q=i.
       PROX B2/3PL dance-DS A2PL=DISAGR
       'Y'all danced.'

b.   #Ma   chi   b'ix-n =i.
       PROX B2/3PL dance-DS=DISAGR
       #'Y'all danced.'
       Interpreted as: 'I danced.'

(59)   Ma   chi(n) b'ix-n =i.
       PROX B1SG   dance-DS=DISAGR
       'I danced.'

- – 2PL arguments agreed with *by Voice or Poss* optionally undergo impoverishment:

(60)   Second person reduced pronoun impoverishment rule (*optional*)
        [+/−singular] → ∅ / [+participant]$^{\text{v/n}}$

- – According to the rule in (60), not just any functional category, F, triggers impoverishment– only specific categories.