In Choctaw, everyone’s a clitic

Matthew Tyler  
Yale University

1 Introduction

• A tough question:

  (1) When confronted with a piece of morphology that agrees in \( \phi \)-features with a NP, how do you decide if it is an agreement morpheme or a clitic?

• An even tougher question:

  (2) What even is the difference between an agreement morpheme and a clitic?

• Fortunately, people have answers to these questions!

  – An answer to question (2) will provide a theory of clitics and agreement, and it will predict that clitics and agreement morphemes should differ in certain ways.

  – Therefore this theory will provide us with a bunch of diagnostics for distinguishing clitics and agreement morphemes (i.e. some answers to question (1)).

  → But these diagnostics might take different shapes from language to language.

• In this talk: the verbal morphology of Choctaw – agreement morphemes, clitics, or a mixture?

• Broadly, the theory of clitic doubling assumed here:

  – Clitics are pronoun-like elements that incorporate into the verb in the syntax;

  – Agreement morphemes are ‘bare’ expressions of formal features, copied onto the verb postsyntactically.

• With this theory, we can devise two language-specific diagnostics for Choctaw:

  – The availability of ‘clitic climbing’;

  – The ability of the clitic to license the quantifier-like element oklah.

• The result of the diagnostics: (almost) all Choctaw argument-referencing morphology is clitic-like.

  → Hence: (almost) everyone’s a clitic.

Roadmap:

1. Introduction
2. Background
3. Clitic climbing
4. Licensing oklah
5. Conclusion

2 Background on Choctaw

• Choctaw is a Western Muskogean language spoken mainly in Mississippi and Oklahoma by 3000+ people.¹

• Uniformly head-final, fairly rigid SOV order, pervasive argument-drop.

  – Argument drop means that ‘clitic doubling’ ends up being a slight misnomer: most of the time we only see the clitic, and not the full argument.

¹I use the Modified traditional orthography from Broadwell (2006): doubled vowels and consonants are long, underlined vowels are nasalized, and the digraph \(<lh>\) represents [ɪ]. Unlike Broadwell, I do not mark pitch accent, and I am inconsistent in marking word-final glottal stops, marking them only where I clearly hear them.

All examples in this handout, unless indicated otherwise, are from fieldwork conducted on and around the Mississippi Choctaw reservation (Mississippi Band of Choctaw Indians, MBCI) in the summer of 2016.
2.1 Argument-referencing verbal morphology

- There are three classes of morpheme that cross-reference arguments: traditionally labelled Class I, Class II and Class III (Munro and Gordon 1982).
- Choctaw argument-referencing verbal morphology is, broadly, active-stative (Dahlstrom 1983; Mithun 1991). That is:
  - When the verb is ‘active’/agentive, intransitive subjects pattern like transitive subjects (doubled by Class I).
  - When the verb is ‘stative’/non-agentive, intransitive subjects pattern like transitive objects (doubled by Class II).
- **Class I** forms are largely reserved for agents (transitive and intransitive):

  (3) Ish= hih -ahiina -h -q?
  \[2SG.I= \text{dance} \quad \text{-MOD} \quad \text{-TNS} \quad \text{-Q}\]
  ‘Can you dance?’

- **Class II** forms cross-reference objects (4) and non-agentive subjects (5):

  (4) Is= sa= pisa -tok?
  \[2SG.I= \text{1SG.II= see} \quad \text{-PST}\]
  ‘Did you see me?’

  (5) Pi= noktalha -h.
  \[1PL.II= \text{jealous} \quad \text{-TNS}\]
  ‘We are jealous.’

- **Class III** forms cross-reference applicative arguments (6) and a lexically-determined class of non-agentive subjects (7):

  (6) Bill-at wak nipi chi= hoponi -h.
  \[\text{Bill-SUBJ cow meat 2SG.III= cook} \quad \text{-TNS}\]
  ‘Bill is cooking steak for you.’

  (7) A= takooßi -h.
  \[\text{1SG.III= lazy} \quad \text{-TNS}\]
  ‘I am lazy.’

- See Appendix A for full paradigms.
- Next up: some suggestive clues on the clitic vs. agreement split.

2.2 Class II and III markers as possessive determiners

- A widely-adopted syntactic analysis (Uriagereka 1995; Roberts 2010; Nevins 2011): argument-doubling clitics are **determiner heads**.
  - Determiner category captures the pronoun-like properties of clitics; head status captures how they incorporate.
- Clitics also spell out the \(\phi\)-features of the argument they double, so a clitic is this:

  (8) \[D^0[\phi]\]

- Where else might we see determiners spelling out \(\phi\)-features?

  \[\rightarrow \text{Possessive determiners!}\]

- Class II and III markers do indeed lead double lives as possessive determiners:

  (9) a. Class II forms mark **inalienable** possession.

      sa- shki ‘my mother’
      chi- shki ‘your mother’
      pi- shki ‘our mother’
      i- shki ‘his/her/their mother’

  b. Class III forms mark **alienable** possession.

      am- ofi ‘my dog’
      chim- ofi ‘your dog’
      pim- ofi ‘our dog’
      im- ofi ‘his/her/their dog’

- How seriously should we take this? It’s good circumstantial evidence for the clitichood of Class II/III markers (see also Kramer 2014 for this analysis applied to Amharic object-marker).
2.3 Class I and III markers as phonological clitics

- **Rhythmic lengthening** is a phonological process by which even-numbered non-final syllables in a string of light syllables are lengthened (Nicklas 1974; Ulrich 1986):

  (10) /salaha-tok/ → [sala:hatok]
  
  slow-PST
  ‘He was slow.’ (Broadwell 2006:21)

- Class I and III forms fall outside the domain for rhythmic lengthening.

  (11) a. /ish-achifa-tok/ → [ish-achi:fa-tok]
  
  2sg.i-wash-PST *[ish-a:chifa-tok]
  ‘You washed it.’
  (Broadwell 2006:22)

  b. /im-achiifa-tok/ → [im-achi:fa-tok]
  
  3.iii-wash-PST *[im-a:chifa-tok]
  ‘He washed it for her.’
  (Broadwell 2006:22)

- Does phonological clitic-hood have to match up with syntactic clitic-hood?

  → No. Or at least, not straightforwardly (Nespor and Vogel 2007; Selkirk 1996; Ito and Mester 2009).

- But again, it’s good circumstantial evidence for the clitic-hood of Class I/III forms

  - N.B. What about Class II forms? They do fall in the domain for rhythmic lengthening. See Appendix B for discussion.

- Next: a Choctaw-internal diagnostic for clitic-hood: **clitic climbing**.

3 Clitic climbing

3.1 The phenomenon

- In Italian, when a finite auxiliary takes a non-finite complement, an argument-doubling clitic may remain low, or ‘climb’ into the higher clause and attach to the main verb:

  (12) a. Volevo chiamar=la ieri.
  
  I.wanted to.call=her yesterday

  b. La= volevo chiamere ieri.
  
  ‘I wanted to call her yesterday.’ (Italian, Rooryck 1994:417)

- Characteristically, only one clitic may show up. This contrasts with multiple agreement patterns, where agreement necessarily shows up on both verbs:

  (13) Juma a-li-kuwa a-me-pika chakula.
  
  Juma S.AGR-PST-be S.AGR-PERF-cook food
  ‘Juma had cooked food.’
  (Swahili, Carstens 2011:3)

- Where do we find this pattern in Choctaw? One context is with **auxiliary-participle** constructions:

  (14) Bill-at aanowa-t tahli-h.
  
  Bill-SUBJ walk-PART finish-TNS
  ‘Bill finished walking.’

3.2 Clitic climbing with Class I

In an auxiliary-participle construction, we see the clitic-climbing like pattern:

(15) a. Bashli-t ish= tahli-tok.
  
  cut-PART 2SG.1= finish-PST

  b. Ish= bashli-t tahli-tok.
  
  2SG.1= cut-PART finish-PST
  ‘You finished cutting it.’
  (Broadwell and Martin 1993:6)

→ As in Romance, only one clitic is permitted.
3.3 Clitic climbing with Class II

Class II forms that reference objects participate in clitic climbing:

(16) a. Fammi-t sa= tahli-tok.
    whip-PART 1SG.II= finish-PST

b. Sa= fammi-t tahli-tok.
    1SG.II= whip-PART finish-PST

‘He/she finished whipping me.’ (Broadwell and Martin 1993:6)

→ Again, only one clitic may appear.

• But our work here isn’t done yet! Recall that Choctaw has an active-stative system. This means that Class II forms can reference objects and stative subjects.

• Broadwell and Martin (1993) argue for a split along these lines:
  – Class II markers that reference subjects are agreement morphemes.
  – Class II markers that reference objects are clitics.

• But the claim I’m making here is that all argument-referencing morphemes are clitics. Therefore, we need to show that subject-doubling and object-doubling Class II markers both participate in clitic climbing.
  – We saw in (16) that object Class II markers climb.
  – Next up: do subject Class II markers climb too?

3.3.1 Subject-referencing Class II forms

• Subject-referencing Class II marker participate in clitic climbing in auxiliary-participle constructions, for some speakers:

(17) a. %Niya-t sa= taha-h.
    fat-PART 1SG.II= finish-TNS

b. Sa= niya-t taha-h.
    1SG.II= fat-PART finish-TNS

‘I am completely fat.’ (Broadwell and Martin 1993:7)

• Hard to know what to make of this... however:

• There’s a configuration that gives rise to a clitic-climbing-esque optionality for all speakers: (hyper?)raising to object constructions (see also: Halpert and Zeller (to appear) on Zulu, Deal (2016) on Nez Perce, Zyman (2017) on Janitzio P’urhepecha). E.g.:

(18) a. John-at [ik- sa= chonna-'] ahni-h.
    John-SUBJ [IRR- 1SG.II= skinny-JUSS] think-TNS.

b. John-at [ik- chonna-'] si= ahni-h.
    John-SUBJ [IRR- skinny-JUSS] 1SG.II= think-TNS.

‘John wants me to be skinny.’

• Raising to object constructions have a very restricted distribution.3
  – The embedded verb must be jussive (ik-VERB-');
  – The matrix verb must be ahni ‘think’.

• What we do know is that they give us another situation in which a clitic may show up on a lower verb or a higher verb (but not both) – for our purposes, we have a further instance of clitic climbing.

• There’s a lot more to say about raising to object in Choctaw...
  – See Appendix C for some preliminary evidence that raising-to-object constructions do not involve prolepsis or quotation+prolepsis.

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2 Another clear indicator that a verb is jussive is a pitch accent on the final syllable, not represented here. In addition, (Broadwell 2006:148) and (Byington 1870:351) record the jussive verb with a final h, rather than a glottal stop. The speakers I consulted for the most part used a final glottal stop, so all examples I record here are shown with final glottal stops.

3 More extensive fieldwork is required to validate the strength of these two claims. There may be verbs that embed jussives other than ahni, but I haven’t been able to identify them yet.
• In summary, we’ve seen that:
  – Class I markers clitic-climb in auxiliary-participle constructions.
  – Class II markers (cross-referencing objects) climb in auxiliary-participle constructions.
  – Class II markers (cross-referencing subjects) climb in raising-to-object constructions.
• Next up: Class III forms – do they climb too?

3.4 Clitic climbing with Class III
• Class III markers in auxiliary-participle constructions: clitic-climbing is impossible (no good explanation of this).\(^4\)

(19) a. \([A=\text{nokshoopa-t}] \text{taha -h.} \)  
   \text{[\text{ISG.III}=\text{scared-PART}] finish -TNS}  
   ‘He/she is totally scared of me.’

b. *\([\text{Nokshoopa-t}] \text{a= tahe -h.} \)  
   \text{[\text{scared-PART}] ISG.III= finish -TNS}  
   intended: ‘He/she is totally scared of me.’

• Class III markers in raising-to-object constructions: clitic climbing OK.

(20) a. Mary-at \([\text{holisso alhiiha ik-} \text{ hapi= kaniiya-}] \text{ ahni-h.} \)  
   \text{Mary-SUBJ [letter PL IRR- PL.III= lose-JUSS] think-TNS}  
   ‘Mary wants us to lose those letters.’

b. Mary-at \([\text{holisso alhiiha ik-} \text{ kaniiya-}] \text{ hapim= ahni-h.} \)  
   \text{Mary-SUBJ [letter PL IRR- lose-JUSS] PL.III= think-TNS}  
   ‘Mary wants us to lose those letters.’

\(^4\)The sentences in (19) show an object-referencing Class III marker attempting to climb. I do not currently have data on whether subject-referencing Class III forms may participate in clitic climbing in auxiliary-participle constructions. However, given that in the Class II paradigm, speakers find object-clitic climbing much more natural than subject-clitic climbing, it would be surprising if their preferences reversed in the Class III paradigm, and so I feel reasonably safe in predicting that speakers would also reject clitic-climbing of a subject-referencing Class III form in an auxiliary-participle construction. However, more research is needed.

3.5 Clitic climbing: summary
There are three circumstances in which a ‘clitic-climbing-like’ alternation could potentially be found:
• Auxiliary-participle constructions; subject-referencing markers.
• Auxiliary-participle constructions; object-referencing markers.
• Raising-to-object (subject-referencing markers only).

The following cross-tabulation shows where clitic climbing is found:

(21) \begin{tabular}{l||c|c|c}
<table>
<thead>
<tr>
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<th>Class I(^5)</th>
<th>Class II</th>
<th>Class III</th>
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<tbody>
<tr>
<td>Aux-part; subj.</td>
<td>OK</td>
<td>%</td>
<td>no data</td>
</tr>
<tr>
<td>Aux-part; obj.</td>
<td>N/A</td>
<td>OK</td>
<td>*</td>
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<td>Emb. Juss.</td>
<td>N/A</td>
<td>OK</td>
<td>OK</td>
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</table>
\end{tabular}

Therefore, all three argument-referencing morpheme classes do, under some circumstances, show behavior that resembles clitic climbing.

3.6 A note on the 1SG Class I form \(-li\)
There was a caveat earlier: \textit{almost} everyone’s a clitic.
• The 1SG class I form \(-li\) does not participate in clitic climbing. In an auxiliary-participle construction, it can only appear in the higher clause:

(22) a. Bashli-t tahli \text{-li} \text{-tok.}  
   cut-PART finish -ISG.1 -PST

b. *Bashli \text{-li} \text{-t} tahli-tok.  
   cut \text{-ISG.1 -PART} finish-pst  
   ‘I finished cutting it.’

\(^5\)Class I 1SG form \(-li\) does \textit{not} participate in clitic climbing-like behavior, as shown in Section 3.6.
Furthermore, the 1SG form is the only argument-referencing form to show up on the right of the stem, rather than the left:

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<tr>
<td>'I danced.'</td>
<td>'You danced.'</td>
<td>'We danced.'</td>
<td>'Y'all danced.'</td>
<td>'He/she/they danced.'</td>
<td></td>
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</tbody>
</table>

→ I concur with Broadwell and Martin (1993): -li is an agreement form, while the other Class I forms are clitics.6

- Next up: another Choctaw-internal diagnostic for clitichood.

4 Licensing oklah

Description of oklah in Broadwell (2006): it’s a ‘preverb’ which marks the plurality of an animate subject.

(24)  

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<td>habli *(-li)-tok.</td>
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<td>we.FOC-SUBJ</td>
<td>I.FOC-SUBJ</td>
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<td>(1PL.I) kick-PST</td>
<td>kick *(-1SG.I)-PST</td>
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<tr>
<td>go-PST</td>
<td>'YOU kicked.'</td>
<td>'WE kicked.'</td>
<td>'I kicked.'</td>
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In this section, I show:

(a) that oklah actually has a slightly more extensive distribution;
(b) that its distribution supports the claim that Class I-III forms are clitics.

So, what’s the claim about the distribution of oklah?

(25)  

Oklah must be c-commanded by an argument (a full NP or a clitic) that is in an A-position.7

→ Subject and clitic positions c-command oklah:

→ Object position does not c-command oklah:

(26)  

TP

\[\text{Subject} \quad \text{vP} \quad \text{T} \]

\[\text{VP} \quad (\text{Clitic}+)v+V \]

\[\text{oklah} \quad \text{Object} \quad \text{V} \]

- This means: oklah can be licensed by objects, so long as they are clitic-doubled.

- Evidence for this is coming up...

- Note: the explanation crucially relies on argument-doubling clitics being present in the syntax. It wouldn't work if the clitics were actually agreement morphemes, spelled-out postsyntactically.

7Broadwell and Martin show that in the presence of an overt pronoun, the Class I forms ish-, ii- and hash- may be omitted. By contrast the 1SG form -li may not be omitted in the presence of an overt pronoun:

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<td>(ish-) habli-tok.</td>
<td>(ii-) habli-tok.</td>
<td>habli *(-li)-tok.</td>
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<tr>
<td>you.FOC-SUBJ</td>
<td>we.FOC-SUBJ</td>
<td>I.FOC-SUBJ</td>
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</tr>
<tr>
<td>(2SG.I) kick-PST</td>
<td>(1PL.I) kick-PST</td>
<td>kick *(-1SG.I)-PST</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>'YOU kicked.'</td>
<td>'WE kicked.'</td>
<td>'I kicked.'</td>
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</tbody>
</table>

I was unable to replicate this with the speakers I consulted. However, for those speakers who do have this contrast, it supports the claim that all Class I forms other than the 1SG -li are clitics.

b. Oklhiili-kməq okl- ii= taloww- aachij-h.
dark-COMP.SDS PL- 1PL.I= sing -FUT-TNS
'When it gets dark, we’ll sing.' (Broadwell 2006:239)
4.1 Licensing oklah with objects

Oklah can associate with objects if they are cross-referenced by a Class II or III marker.

- Class II:

(27) a. Oklah ak- hachi= piso -tok.
   \text{PL} \quad 1SG.NEG \quad 2\text{PL.II}= \text{see.NEG- PST}
   \text{Bill didn’t see y’all.’}

   \text{PL} \quad 2\text{PL.II}= \text{see} \quad -1SG.1 -\text{NEG} -\text{PST}
   \text{‘I didn’t see y’all.’}

- Class III:

(28) a. Bill-at oklah hapj= nokshoopa -h.
   \text{Bill-SBJ} \quad \text{PL} \quad 1\text{PL.III}= \text{scared} -\text{TNS}
   \text{‘Bill is scared of us.’}

b. Alla oklah hachim= apišachi -li -tok.
   \text{PL} \quad 2\text{PL.III}= \text{look.after} -1SG.1 -\text{PST}
   \text{‘I looked after y’all’s kid.’} \quad \text{(Possessor-raising construction)}

This is what we predicted:

- *Oklah* needs to be licensed by a plural animate argument in a c-commanding position
- Object clitics function as arguments, they incorporate into the verb, and the verb c-commands *oklah.*

4.2 Licensing oklah in the auxiliary-participle construction

Usually, oklah happily associates with subjects (clitic-doubled and not). But what happens in clitic climbing environments, where the subject clitic can attach to one of two verbs?

- Answer: we find that the position of the clitic affects *oklah*-licensing possibilities.

\[
\begin{array}{c}
\text{TP} \\
\text{vP} \\
\text{VP} \quad (\text{Clitic+})v+V \\
\end{array}
\]

\[
\begin{array}{c}
\text{oklah} \\
\text{V} \\
\text{VP} \quad (\text{Clitic+})v+V \\
\end{array}
\]

- Some predictions based on c-command relations:
  - The high clitic position should license *oklah* in either position;
  - The low clitic position should license *oklah* only in the embedded clause.\(^8\)

Appendix D discusses variation in the order of *oklah* and the object, and Broadwell’s (2006) generalization about the placement of *oklah.*
Let’s test this prediction with Class II markers in auxiliary-participle constructions:

(30) Class II marker on auxiliary: 9
   a. [Oklah noklhakcha-t] hap̂i taha-h.  
      [PL shocked-PART] 1PL.II= finish-TNS
   b. [Noklhakcha-t] oklah hap̂i taha-h.  
      [shocked-PART] PL 1PL.II= finish-TNS
   ‘We are completely shocked.’

(31) Class II marker on participle:
   a. [Oklah hap̂i noklhakcha-t] taha-h.  
      [PL 1PL.II= shocked-PART] finish-TNS
   b. * [Hapi noklhakcha-t] oklah taha-h.  
      [1PL.II= shocked-PART] PL finish-TNS
   ‘We are completely shocked.’

The prediction is borne out!

– Clitic in high position licenses oklah before either verb;
– Clitic in low position licenses oklah only before lower verb.

The same pattern holds with object-referencing Class II/III forms (only Class III forms shown here):

(32) a. [Bill-at oklah hap̂i nokshooha-t] taha-h.  
      [Bill-SUBJ PL 1PL.III= scared-PART] finish-TNS
   b. * [Bill-at hap̂i nokshooha-t] oklah taha-h.  
      [Bill-SUBJ 1PL.III= scared-PART] PL finish-TNS
   ‘Bill is completely afraid of us.’

...And with Class I forms:

(33) Class I marker on auxiliary:
   a. [Alla-maho im= angpoli-t] oklah ii= tahli-kmat...  
      [child-that.OBJ 3.II= talk-PART] PL 1PL.I= finish-when.SS
   b. [Alla-maho oklah im= angpoli-t] ii= tahli-kmat...  
      [child-that.OBJ PL 3.II= talk-PART] 1PL.I= inish-when.SS
   ‘When we’ve finished talking to that kid...’

(34) Class I marker on participle:
   a. [Alla-maho oklah il= im= angpoli-t] tahli-kmat...  
      [child-that.OBJ PL 1PL.I= 3.II= talk-PART] finish-when.SS
   b. *[Alla-maho il= im= angpoli-t] oklah tahli-kmat...  
      [child-that.OBJ 1PL.I= 3.II= talk-PART] PL finish-when.SS
   ‘When we’ve finished talking to that kid...’

In summary: in auxiliary-participle constructions, oklah must be c-commanded by a clitic. 10

– N.B. All of these examples have covert matrix subjects – overt matrix subjects license oklah in all positions but data needs checking.

10Where the subject is 3rd-person, and so is not clitic-doubled, oklah can go before either the auxiliary or the participle:

(ii) a. [Alla-t oklah washooha-t] tahli-kmat...  
      [child-SUBJ PL play-PART] finish-when.SS
   b. [Alla-t washooha-t oklah tahli-kmat...  
      child-SUBJ play-PART] PL finish-when.SS
   ‘When the children finished playing...’
4.3 Licensing oklah in the raising-to-object construction

- Just as with auxiliary-participle constructions, raising-to-object constructions have two potential positions for clitics, and two potential positions for oklah.
- First, note that a plural embedded subject does not license oklah in the main clause, only in the embedded clause:

  (35) [Alla alhiia-yat oklah ik- balili-'] ahni -li -h.
  [child PL-SUBJ PL IRR- run-JUSS] think -1SG.I -TNS

  (36) * [Alla alhiia-yat ik- balili-'] oklah ahni -li -h.
  [child PL-SUBJ IRR- run-JUSS] PL think -1SG.I -TNS

  ‘I want the kids to run.’

- But a clitic in the main clause (i.e. the high clitic position) does license oklah in both the main clause and the lower clause:\(^{11}\)

  (37) a. Mary-at [oklah ik-nayoppa-'] hapi- ahni -h.
  Mary-SUBJ [PL IRR-happy-JUSS] 1PL.II- think TNS
  ‘Mary wants us to be happy’

  b. [Ik- balili-'] oklah hachi- ahni -li -h.
  [IRR- run-JUSS] PL 2PL.II- think 1SG.I -TNS
  ‘I want y’all to run’

In summary, the raising-to-object construction license oklah in a higher clause, where it would not ordinarily be licensed. This can be captured by the generalization stated above:

  (38) Oklah must be c-commanded by an argument (a full NP or a clitic) that is in an A-position.

  → In this account, clitics behave like full NP arguments – supporting the view that they are syntactically argument-like.

  → This wouldn’t work if they were syntactically ‘inert’ agreement morphemes.\(^{12}\)

4.4 Licensing oklah: summary

- Oklah needs to be c-commanded by a plural argument (a full NP or a clitic) in an A-position.
- We looked at two kinds of configurations in which this holds:

  (39)  
  \[ \begin{array}{c}
  \text{TP} \\
  \text{Subject} \\
  \text{vP} \\
  \text{T} \\
  \end{array} \]

  \[ \begin{array}{c}
  \text{VP} \\
  \text{(Clitic+)+}v+V \\
  \end{array} \]

  \[ \begin{array}{c}
  \text{oklah} \\
  \text{Object} \\
  \text{V} \\
  \end{array} \]

- In (39), oklah can be licensed by the subject or a clitic-doubled object.

\(^{11}\)I predict that a clitic in the lower clause in a raising-to-object construction would license oklah only in the lower clause and not in the higher, but I don’t currently have data on this.

\(^{12}\)N.B. In Section 3.6, we saw that -li exhibits non-clitic-like behavior in that it does not participate in clitic climbing and occurs in a strange position. It is impossible to test whether it shows the same exceptionality with respect to oklah-licensing because it is in singular, and so will not license oklah under any circumstances.
In (40), the low oklah can be licensed by a clitic in either position; the high oklah can be licensed by a clitic in the high position.

I have been assuming that in the absence of an overt subject, Spec-TP in (40) is unfilled.

- Open question: what happens in (40) if Spec-TP is filled?
  → Answer: I’m not sure right now, I hope to find out soon!

5 Conclusions

5.1 Summary of evidence

- Firstly, we saw circumstantial evidence:
  - Class II+III markers lead double lives as possessive determiners;
  - Class I+III markers are phonological clitics.

- Secondly, Class I-III markers each participate in some form of clitic climbing.
  - Class I+II markers in auxiliary-participle constructions;
  - Class II+III markers in raising-to-object constructions.

- Thirdly, Class I-III markers that participate in clitic-climbing can license oklah from their new position.

- Therefore, for all Class I-III markers, there is some evidence to support their clitic status.
  - ...with the exception of the 1sg Class I form -li.

5.2 Wider conclusions

- The answer to the question ‘how do you tell a clitic from an agreement form?’ isn’t always obvious.

- If we start out with a general theory of clitics vs agreement forms, we can use it to create language-specific diagnostics.

- The data and analysis of Choctaw counts as qualified support for the determiner theory of clitics.
  - ‘Qualified’ because it may be possible to account for the data under other theories, but that requires more research.

Acknowledgments

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### Appendix A: Paradigms

<table>
<thead>
<tr>
<th></th>
<th>Class I</th>
<th>Class II</th>
<th>Class III</th>
<th>‘Neg’</th>
</tr>
</thead>
<tbody>
<tr>
<td>1SG</td>
<td>-li</td>
<td>sa-/si-</td>
<td>(s)am-</td>
<td>ak-</td>
</tr>
<tr>
<td>2SG</td>
<td>ish-</td>
<td>chi-</td>
<td>chim-</td>
<td>chik-</td>
</tr>
<tr>
<td>1PL+</td>
<td>ii-/il-</td>
<td>pi-</td>
<td>pim-</td>
<td>kii-/kil-</td>
</tr>
<tr>
<td>2PL</td>
<td>hash-</td>
<td>hachi-</td>
<td>hachim-</td>
<td>hachik-</td>
</tr>
</tbody>
</table>

The ‘Neg’ series is used in forming negative verbs, but is also used in forming jussives. In those instances in this handout where it used to form jussives, it is labelled irr, for ‘irrealis’.

Note that the Class I and II series lack 3rd-person forms. It is also possible to argue that Class III lacks 3rd-person forms too – see Section 6.4. The lack of 3rd-person forms makes it hard to do many of the tests for clitichood that are standard in the generative literature, e.g. ability to affect binding relations (Suñer 1988; Anagnostopoulou 2003).

### Appendix B: Phonological evidence for clitichood

Recall that Class I and III markers fall outside the domain for rhythmic lengthening:

\[
\begin{align*}
\text{(42)} & \quad \text{a. } /\text{ish-achifa-tok/} \rightarrow [\text{ish-achi:fa-tok]} \\
& \quad 2\text{SG.I-wash-PST} \quad *[\text{ish-a:chifa-tok}] \\
& \quad \text{‘You washed it.’} \quad \text{(Broadwell 2006:22)}
\end{align*}
\]

\[
\begin{align*}
\text{b. } /\text{im-achiifa-tok/} \rightarrow [\text{im-achi:fa-tok]} \\
& \quad 3.\text{III-wash-PST} \quad *[\text{im-a:chifa-tok}] \\
& \quad \text{‘He washed it for her.’} \quad \text{(Broadwell 2006:22)}
\end{align*}
\]

BUT, Class II forms fall inside the domain for rhythmic lengthening:

\[
\begin{align*}
\text{(43)} & \quad \text{a. } /\text{sa-salaha-tok/} \rightarrow [\text{sa-sa:laha(a)-tok]} \\
& \quad 1\text{SG.II-slow-PST} \quad \text{‘I am slow.’} \quad \text{(Broadwell 2006:22)}
\end{align*}
\]

Does this mean that Class II forms are agreement morphemes?

- Not necessarily. Clitics can display varying degrees of phonological integration with their hosts (Nespor and Vogel 2007; Selkirk 1996; Ito and Mester 2009).

- To the extent that there is a relation between syntactic and phonological clitichood, it is likely to be a one-way implicational: phonological clitichood → syntactic clitichood.

- An explanation is still required about why Class II markers pattern differently, though, but it need not (and should not) appeal to their being agreement forms, rather than clitics.

### Appendix C: Raising-to-object constructions

Raising-to-object doesn’t involve quotation:

- **Interpretation of indexicals.** If embedded jussives were ‘quoted thought’, we would expect an 1SG expression inside it to be interpreted as the subject of the matrix clause. However, indexicals are interpreted as they would be in a matrix clause:

\[
\begin{align*}
\text{(44) } & \quad \text{John-at } [\text{ik- sam= aala-}] \text{ chi= ahni-h.} \\
& \quad \text{John-SUBJ } [\text{IRR- 1sg.dat= come-JUSS}] \text{ 2sg.II= think-TNS} \\
& \quad \text{‘John wants you to come to me.’} \\
& \quad \text{Not: ‘John wants you to come to John.’}
\end{align*}
\]

- **Wh-movement** possible:
(45) Nata-ho John-at [t₁ ik- ikbi-'] hapí= ahni-h.  
‘What does John want us to build?’

Raising-to-object doesn’t involve prolepsis:

• The clitic attached to ahni is unlikely to be assigned a theta-role by it,  
as it cannot appear in the absence of a jussive clause:

(46) * Chi- ahni-li -h.  
2SG.H- think -1SG.I-TNS  
intended: ‘I think of you.’

The argument against raising-to-object being an instance of long-distance  
agreement (LDA) relies on the Class II-III markers being clitics, rather than  
agreement forms. For that, see the rest of the article.

Expressing the embedded subject overtly

(Preliminary findings, need to be checked with more speakers)

• If the embedded subject is overt and clitic-doubled, whether it carries  
subject-marking or object-marking is dependent on the position of the  
clitic.

  – If there is no raised clitic, the embedded subject may be subject- 
  marked or object-marked:

(47) Mary-at chisnak-{'oosh/o} ik-chi-takoobi-’ ahni-h.  
Mary-SUBJ you.FOC-{'SUBJ/OBJ} IRR-2SG.H-lazy-JUSS think-TNS  
‘Mary wants YOU to be lazy.’

  – If there is a raised clitic, an overt embedded subject may only be  
    object-marked:

(48) Mary-at chisnak-{'*oosh/o} ik-i-takoobi-’  
Mary-SUBJ you.FOC-{'*SUBJ/OBJ} IRR-APPL-lazy-JUSS  
chii-ahni-h.  
2SG.H-think-TNS  
‘Mary wants YOU to be lazy.’

Appendix D: vP-internal word order variation

I assume that every clause with oklah has an underlying syntax like the following, where oklah adjoins to the edge of the VP.

(49)  
\[ \text{TP} \rightarrow \text{Subject} \rightarrow \text{vP} \rightarrow \text{T} \rightarrow \text{VP} \rightarrow (\text{Clitic}+)v+V \rightarrow \text{oklah} \rightarrow \text{Object} \rightarrow \text{V} \]

The object may remain in situ, deriving a word order in which oklah surfaces to the left of the object, as in the following:

(50) Hattak-at oklahi tachi’ apa-tok.  
man-SUBJ PL corn eat-PST  
‘The men ate all the corn.’ (Broadwell 2006:239)

However, the object may instead move to the edge of vP (either a scrambling  
or object shift operation) and surface to the left of oklah, as in the following tree:

(51)  
\[ \text{TP} \rightarrow \text{Subject} \rightarrow \text{vP} \rightarrow \text{T} \rightarrow \text{VP} \rightarrow (\text{Clitic}+)v+V \rightarrow \text{oklah} \rightarrow \text{Object} \rightarrow \text{V} \]
We should not be worried by the fact that the object is now in a structural position higher than *oklah* (raising the question: why wouldn’t a raised plural object license *oklah* from its raised, structurally high position?). If we take this kind of movement to be A’-movement, we would not expect *oklah* to be licensed. This is because *oklah* cannot usually be licensed from an A’-position, as shown by the following example, featuring topicalization of the object:

(52) Alla-ya Bill-at t₁ (*oklah) pisa-tok.
child-OBJ Bill-SUBJ (*PL) see-PST
‘The kids, Bill saw them.’

Appendix E: Other evidence for cliticoid

Invariance

Nevins (2011) suggests that tense-invariance is a characteristic property of clitics.

- Class II-III markers are all invariant across tense, mood and aspect marking.
- Class I markers are replaced by an entirely separate set of markers in the negative. Else, they are invariant.

PCC effects

Nevins (2011) argues that only clitics participate in Person Case Constraint (PCC) effects, while agreement forms do not.

- PCC effects are restrictions on potential combinations of clitics which cross-reference internal arguments. E.g. French:

(53) a. On me le montrera.
one me.DAT it.ACC show.FUT
‘They will show it to me’

b. *On me lui montrera.
one me.ACC him.DAT show.FUT
intended: ‘They will show me to him.’ (Adger and Harbour 2007)

- Both object-referencing Class II markers and subject-referencing Class II markers are afflicted by PCC effects.

  - PCC effects with **subject-referencing** Class II markers:

    (54) a. chi- sa- nokshoopa -h ‘I am scared of you.’
    b. i- sa- nokshoopa -h ‘I am scared of him/her.’
    c. * a- chi- nokshoopa -h ‘You are scared of me.’
    c. * i- chi- nokshoopa -h ‘You are scared of him/her’

  - PCC effects with **object-referencing** Class II markers:

    (55) a. Bill-at chi- sa- pila -tok ‘Bill sent me to you.’
    b. Bill-at i- sa- pila -tok ‘Bill sent me to him/her.’
    c. * Bill-at a- chi- pila -tok ‘Bill sent you to me.’
    c. * Bill-at i- chi- pila -tok ‘Bill sent you to him/her’

→ By Nevins’s diagnostic, Class II/III markers are clitics.

→ Also, if there was a clitic/agreement split along subject/object lines, then we would not expect to see any PCC effects with the subject-referencing Class II markers (in (54)).

- N.B. The precise flavor of PCC effects that we see is not important here (though interesting!).

‘Default clitics’: a counterargument?

- Preminger (2009) argues that we should expect to find a default form in the place of agreement, in the event that an agreeing head finds nothing to agree with.
- By contrast, there should be no such thing as a ‘default clitic’, as clitics are by definition associated with actual arguments.
- However, Choctaw does appear to have default clitics – in the Class III, possessive and negative series:

(56) ‘Default’ Class III marker:
Mary-at chishnak-ə ik- ı- takoobi-’ chi- amlı-h.
Mary-SUBJ you,FOC-OBJ IRR-3.III- lazy-JUSS 2SG.II- think-TNS
‘Mary wants YOU to be lazy.’
‘Default’ Possessive marker:
I-shki alhiiha-t i-ki alhiiha-yag naa ikkaana-k-at
3.11-mother PL-SUBJ 3.11I-father PL-OBJ INDEF know-COMP-SS
ookla i-shahli-h.
PL APPL-exceed-TNS
‘Mothers know more than fathers.’
(Lit. ‘Mothers surpass fathers in knowing things.’)

‘Default’ Negative marker:
I-k {sa- / chi- / pi-} kapasso-h.
3.NEG- {1SG.11- / 2SG.11- / 1PL.11-} cold.NEG-TNS
‘I/you/we aren’t cold.’

- Possible solution: these are default forms of clitic hosts, not the clitics themselves.