Why Revisit Published Data of an Endangered Language with Native Speakers? An Illustration from Cherokee

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In this paper we show that much can be gained when speakers of an endangered language team up with linguistic anthropologists to comment on the documentary record of an endangered language. The Cherokee speakers in this study examined published linguistic data of a relatively understudied grammatical construction, Cherokee prepronominals. They commented freely on the form, usage, context, meaning, dialect, and other related aspects of the construction. As a result of this examination, we make the data of Cherokee prepronominals applicable to a wider audience, including other Cherokee speakers, teachers, language learners, and general community members, as well as linguists and anthropologists.

1. INTRODUCTION. Revisiting published linguistic data of endangered languages allows for another, perhaps only, chance to elicit first-language intuitions and discussions of documented words and phrases. This is especially important, because endangered language forms that are published are likely to become the only permanent and professional documentation of those forms. For this reason, it is vital for endangered language data to be as relevant to as many different audiences as possible. When speakers consider a documented set of words and phrases from their language, they can make numerous lexical, grammatical, semantic, and pragmatic connections that go far beyond the data set at hand, thereby contributing significantly to the documentation of the language. It is the intent here to illustrate what can be gained by revisiting published endangered language data.

This study differs from the run-of-the-mill linguistic investigation. In a typical linguistic investigation, speakers and linguists team up to examine a particular grammatical or phonological issue. The contribution is primarily relevant to other linguists and always correctly constrained by the particular issue at hand. So, for example, a linguist interested

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1 We would like to thank Tracy Hirata-Edds for her insightful comments. We also thank Mary S. Linn and an anonymous reviewer for their suggestions.

2 Cherokee prepronominals are morphemes that appear at or near the beginning of words. They are called “prepronominals” because they appear before pronominals. Prepronominals express adverbial, inflectional, and other kinds of information.
in Cherokee prepronominals, prefixes that express adverbial, inflectional, and other kinds of information, will review the relevant literature and then work with a speaker to identify as many of these linguistic markers as possible. Such a study can shed more light on the distribution, form, meaning, and/or usage of the linguistic markers.

In contrast to the typical linguistic investigation, the point here is for speakers to examine and react to the words and phrases they encounter in the literature. This kind of investigation is not constrained to the distribution, form, meaning, and usage of a particular grammatical construction. Speakers are freed up to ask questions such as, “what might language learners, teachers, community members, linguists, anthropologists, etc. want to know about the words and phrases in this data set?” and “what interests me, as a speaker of the language, about the words and phrases in this data set?” A speaker-guided exploration of this kind not only makes the data set more relevant to more audiences but also enriches the documentation of the grammatical construction.

We formed a team consisting of three fluent speakers of Cherokee and two linguists. The Cherokee speakers are also teachers of the Cherokee language at a major university. The team analyzed each relevant linguistic example found in the only published source of Cherokee prepronominals, Reyburn 1953. The team corrected mistakes, expanded on dialect variation, commented on pronunciation and contexts for usage, adjusted written representations, explored how meaning arises out of the prepronominal construction, amended English glosses, made audio files of the data, identified archaic forms, formulated questions, and suggested areas for future documentation. Much of what we did can be developed into separate documentation, research, and/or education projects.

Our analysis of the data led us to recognize how productive an examination of documented forms can be. We present our contribution to the data in four sections of this paper: (4) Addressing Errors, (5) Amending and Supplementing the Data, (6) Reanalysis of Linguistic Claims and Representations, and (7) Suggestions for Further Documentation and Research.

2. BACKGROUND OF THE SPEAKERS. The data in Reyburn 1953 come primarily from two consultants, Jess Youngdeer and Annie Oocumma. The dialect of Cherokee comes from the Qualla reservation, specifically the Soco Valley area in North Carolina. We offer a twenty-first century perspective on Reyburn 1953 from three speakers of Oklahoma Cherokee. The three speakers are Durbin Feeling, Christine Armer, and Charles Foster. Durbin Feeling, from Mayes County, speaks a dialect of Oklahoma Cherokee that is heavily influenced by literacy. Christine Armer speaks a different variety of Oklahoma Cherokee, from Sequoyah County, where she grew up. Charles Foster describes his variety of Cherokee as a general northeastern Oklahoma Cherokee. Although the speakers come from different areas of Oklahoma, there are few instances of dialectal variation among the Oklahoma speakers relevant to this study. There is, however, dialect variation between the Oklahoma forms and the North Carolina forms. Examples are illustrated in section 5.3.

3 We chose Reyburn 1953 because it is the only publication of a grammatical construction of interest. We quickly found that one speaker was able to comment productively on examples in Reyburn 1953 when the speaker first looked at the data set.
3. INTRODUCTION TO CHEROKEE PREPRONOMINALS. In Cherokee, as in other Iroquoian languages, a set of prefixes appears to the leftmost side of the verb. These prefixes are called prepronominal prefixes because they occur before pronominal prefixes (Reyburn 1953; Pulte and Feeling 1975; King 1975; Cook 1979; Montgomery-Anderson 2008). Reyburn (1953) records 12 prepronominals, two of which, however, can be categorized under the iterative. We follow Cook (1979:81) and offer one entry for the iterative.

Reyburn (1953:178) identifies the following prepronominals.

<table>
<thead>
<tr>
<th>Prepronominals</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>a-</td>
<td>general tense marker (not addressed in this paper)</td>
</tr>
<tr>
<td>da-</td>
<td>future; FUT</td>
</tr>
<tr>
<td>da-</td>
<td>movement toward speaker; CISLOC</td>
</tr>
<tr>
<td>de-</td>
<td>plural; PL, DISTR</td>
</tr>
<tr>
<td>di-</td>
<td>distant position; DIST</td>
</tr>
<tr>
<td>di-</td>
<td>distant imperative; DIST/IMP</td>
</tr>
<tr>
<td>ho-</td>
<td>again, back; ITER</td>
</tr>
<tr>
<td>ni-</td>
<td>already; PART</td>
</tr>
<tr>
<td>wi-</td>
<td>movement away from speaker; TRANSLOC</td>
</tr>
<tr>
<td>yi-</td>
<td>negative, conditional; NEG, COND</td>
</tr>
<tr>
<td>zi-</td>
<td>as, past action; PAST, RELATIVIZER</td>
</tr>
</tbody>
</table>

According to Reyburn (1953:173), the Cherokee verb has four positions: Prepronominal prefix + pronominal prefix + stem + suffix. Finer-grained descriptions of the structure of the verb are found in Pulte and Feeling 1975:241, which offers the following:

\[ [+/-] \text{initial} + \text{Pronoun} + [+/-] \text{Reflexive} + \text{Verb Stem} + [+/-] \text{nonfinal} + \text{Final} \]

\[ \text{Prefix} \quad \text{Prefix(es)} \quad \text{Prefix} \quad \text{Suffix(es)} \quad \text{Suffix} \]

King (1975:35) identifies the theoretically possible verb structure of “up to three prepronominal prefixes, a pronominal prefix, a reflexive prefix, a stem including an incorporated noun root, a verb root, one or two derivational suffixes, each followed by an aspectual suffix and a modal suffix.” King (1975:37) later offers the following verb to show the complexity of Cherokee verbal morphology.

\begin{verbatim}
yiwikwata:skwalo:sta’nito’li
y(i)-w-akw-ata:-sk-kwalo:-st-a’n-ito’-l-i
\end{verbatim}

\begin{verbatim}
COND-TRANSLOC-LSG-REFL-head-bumping-CAUS-PFV-AMBULATIVE- PFV-modal
if-at a distant place-l-self-head-bump-cause to-past-go about doing something-Past-modal
‘if I go about bumping my head at a distant place’
\end{verbatim}

This paper focuses primarily on the prepronominal and its relationship to the verbal complex, although other parts of the verb become relevant to the discussion simply because they are part of the data set.
3.1 NOTES ON REPRESENTATIONS. All forms from the original article are labeled “WR” unless otherwise noted. The symbol $z$ in the original North Carolina examples corresponds to $j$ in the Oklahoma forms. Both letters represent an unaspirated [ts]. We represent the voiceless lateral [l] with hl. Tones are represented in the following way: $\tilde{a}$ mid tone, $\acute{a}$ low tone, $\grave{a}$ falling tone, $\grave{\grave{a}}$ high tone, $\grave{a}$ rising tone, and $\grave{\grave{\grave{a}}}$ extra high tone. Voiceless consonants such as t and k are aspirated and would be represented in IPA as [tʰ] and [kʰ], respectively.

4. ADDRESSING ERRORS. Mistakes happen. It is especially important to identify mistakes that appear in the data of endangered languages. If there is no review of the data and there are no further investigations supplementing the data, then the data from a previous publication become the only permanent record of those forms. This is a crucial consideration for endangered languages, because once a language is no longer spoken, there will be no opportunity to elicit first-language intuitions and discussions about the data. This is a strong argument for more review of published data of endangered languages while there are still competent speakers. Here our team offers two kinds of oversights we found in the data we reviewed.

4.1. OMITTED WORDS. Our examination found examples of mismatches between the Cherokee word and the English gloss. An example is offered in (1) below. There are two points to make here. First, the Cherokee word $s\dot{e}:lû$ ‘corn’ is left out of the Cherokee example, but ‘corn’ appears in the English gloss. The verb’s semantics express ‘take long objects out of container’, which can be used with the idea of taking ears of corn out of their husks. The verbal semantics can lead one to assume that ‘corn’ is not needed. The noun ‘corn’, however, must be present, at least in twenty-first century Oklahoma Cherokee, to specify what is being picked. Second-language learners will need to know this in order to use the verb correctly. We simply supply the noun $s\dot{e}:lû$ ‘corn’ in (2) to address this issue. To demonstrate that today, in Oklahoma, this verb does not express ‘corn’ as part of its semantics, we offer the noun $d\acute{i}g\acute{o}:hw\acute{e}:l\grave{o}:dî$ ‘pencils’ as an object of the verb in (3). See Blakenship 1996 and Scancarelli 1987 for more on classificatory verbs.

Prepronominal $d(e)$- ‘plural’

<table>
<thead>
<tr>
<th>(1) d-ag$\acute{\text{f}}$lahi (WR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>m.-1so.about.to.pick.corn</td>
</tr>
<tr>
<td>‘I am about to pick corn.’</td>
</tr>
</tbody>
</table>

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4 Mistakes that appear in this paper are solely the responsibility of the authors.

5 We thank a reviewer for pointing out that Reyburn’s gloss may have been accurate, because in the mind of the speaker, the noun ‘corn’ was implied and therefore not overtly needed.
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(2) sēːlúː d-āːgūlːhīːːdi
Corn  Pl.-I.am.about.to.take.out.long.object.from.container
‘I am about to pick corn.’

(3) dīɡūːhwēːlōːdi d-āːgūlːhīːːdi
pencils  Pl.-I.am.about.to.take.out.long.object.from.container
‘I am about to take pencils out of a container.’

The second point has to do with the form of the prepronominal, d–. The plural and future prepronominals take the same form in this context. It is not clear how Reyburn (1953:178) analyzed this morpheme in this construction. We address this potential ambiguity by analyzing this morpheme as the plural. This means we need to account for the future sense, ‘about to’. We explain the future in the following way. The future sense, ‘about to’, comes from the suffix –ǐː:dî, a pre-incipient marker (Pulte and Feeling 1975:289). When the prepronominal d– is left off, the verb phrase still expresses the future sense ‘about to’ but the object changes from the plural to the singular. So, the verb, āːgūlːhīːːdi ‘I am about to take it (out of a container)’, has a singular object in contrast to examples (2)–(3).

4.2. MISTRANSLATIONS. Mistranslations can also appear. We offer (4) from the original article as an example, because it is mistranslated and because semantic information relevant to the Cherokee prepronominal was left out of the English gloss. First, the form dagwodhali is glossed as ‘I will trip him’ in the original. The corresponding Oklahoma form in (5) does not translate as ‘I will trip him.’ Instead it glosses as ‘s/he will trip me’. The Oklahoma form for ‘I will trip him/her’ is in (6). This seems to be a simple mistake that is easily addressed but potentially confusing to learners and researchers.

Prepronominal da– ‘future’
(4) dagwodhali (WR)
da-a-gwodhali
fut-3sg-trip
‘I will trip him.’

(5) dāːgwōːdēːhlî
da-a-gwōːdēːhlî
fut-3sg-trip
‘S/he will trip me (involving one of my legs).’

(6) dāːjīːydēːhlî
da-jīːyōːdēːhlî
fut-1sg-trip
‘I will trip him/her (involving one of his/her legs).’

6 The final tone on sēːlû falls when the word is in isolation but rises (sēːlû) in the environment given in example (2). A phonology of tone is beyond the scope of this paper.
We make one more comment on the translation in (4) concerning semantic contrasts that arise out of the prepronominal system that are not necessarily made in English. Such semantic contrasts can slip by speakers of English but pop out at speakers of Cherokee, only reinforcing the need to revisit published data. Relevant to the example at hand, the Oklahoma forms (5)–(6) express the tripping of one leg. The tripping of two legs requires the plural prepronominal realized as dō:– shown in examples (7) and (8). This seemingly small inconsistency in translation is particularly important because it shows how the presence or absence of a prepronominal can affect the linguistic interpretation and mental image of an event, a relevant point in a paper on prepronominals. This kind of subtlety may turn out to be difficult for English speakers acquiring Cherokee as a second language if it is not explicitly pointed out.

(7) dō:dō:gwō:dē:hli
    ‘S/he will trip me (involving both of my legs).’

(8) dō:dājī:yō:dē:hli
    ‘I will trip him/her (involving both of his/her legs)’

5. AMENDING AND SUPPLEMENTING THE DATA. Here we illustrate three ways to amend and supplement the data on prepronominals in Cherokee. First, we address the representation of phonological phenomena typically not appearing in the literature. Then we direct the reader’s attention to the audio files that accompany the paper. Finally, we offer examples of dialect differences that emerged as we considered the data set. By supplementing the forms to capture more phonological information and by including audio files and dialectal variations, the original data set becomes more relevant to learners, teachers, and members of various communities that claim the language as part of their heritage. Moreover, these amendments and supplements enrich the data in ways that contribute to comparative-historical work and dialectology.

5.1. WRITTEN REPRESENTATIONS. In the Cherokee literature, tone and vowel length are often not marked. This is unfortunate, because both are phonemic. Linguistic reasons for the importance of representing phonemic vowel length and tone are obvious and need little elaboration here. Bluntly put, phonological and morphological analyses cannot be adequate without reference to vowel length and tone. For language learners, the importance of documenting phonemic vowel length and tone in an endangered language cannot be overstated. Vowels, and therefore length and tone, are relevant to the pronunciation of every lexical and phrasal construction we are aware of.

Any example in Reyburn 1953 and many other studies can be used to show the scarcity of suprasegmental marking in Cherokee. We choose the example shown in (9) to illustrate not only the lack of suprasegmental marking but also to show the confusion that can arise because of it. Without tone marking, the Cherokee form is ambiguous. It is not clear what form was originally recorded: (10) or (11).

To understand the difference between (9)–(10) and (11), a brief explanation of the relevant morphophonology is needed. Here we see a rule that changes the “distant position” morpheme di- to z before o, u, and e. The result is zo-. (The z is a palatal affricate and is
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5.2 ACOUSTIC REPRESENTATIONS. One of the most important reasons to revisit published data sets is to make audio files of widely available data that have been professionally analyzed, organized, and peer-reviewed. Ideally, speaker-linguist teams should make audio files of all widely available and peer-reviewed data. This would be a large project for some endangered languages, but invaluable to learners, teachers, and other community members. Audio files of endangered languages may be the only acoustic exposure learners, non-fluent teachers, and community members have to the actual pronunciation of the language. Audio files can be essential to learners and others who use archives as part of their language revitalization efforts. (See Hinton 2001 for more on archives and language revitalization.) We supply audio files for each Oklahoma form appearing in this paper to illustrate one way to document the pronunciation of prepronominals in the context of verbal constructions.

Of course, audio files are also crucial to linguists in various ways. Acoustic representations of forms provide the raw material for linguistic analysis. They also preserve acoustic characteristics of endangered language sounds, words, and phrases. Phoneticians and phonologists are especially interested in audio files because acoustic data are needed for investigations into phonological and morphosyntactic phenomena. Also, as can be seen by examples (9)–(11), acoustic data can clear up linguistic ambiguities. Furthermore, audio files allow researchers to compare written representations with their acoustic shape, verifying accuracy.

5.3 DIALECT VARIATION. Another way to make published data more accessible to a wider audience is to include dialect variation. Published data on specific constructions provide the opportunity to test systematically for dialect differences. We recommend that
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the examination include not only the targeted grammatical construction but also other parts of the construction as well. In this way, discoveries of new facts about the language emerge as investigations of the relevant grammatical construction continue. We find that testing for dialect variation is highly productive. Here we identify dialectal differences on the segmental, suprasegmental, allomorphic, morphosyntactic, semantic, and lexical levels. Differences among dialects of Cherokee (and other endangered languages) remain fertile ground for future documentation and research.

5.3.1 THE SEGMENTAL LEVEL. Differences on the segmental level can be quite important to learners of a specific dialect. A difference such as the distinction between [a] and [u], for example, may be an identity marker for a community. For this reason learners may prefer one sound over another. Such differences can also be interesting to linguists and anthropologists involved in understanding language change and identity. We recommend including this kind of example as part of the documentary record because it is not only useful to learners and researchers, but also because it is part of the history of the language and its future significance and utility cannot be anticipated.

When we look at older linguistic studies, it is not always clear what a symbol represents. We include two examples of differences on the segmental level, because one may simply be a matter of representation while the other shows a phonemic difference. First, the North Carolina form in (12) records a voiced palatal glide, –y–, where the corresponding palatal glide, represented as –hy–, is voiceless in Oklahoma (13). This may be a real difference or simply a matter of representation. In either case, we document this segment as it occurs in this word in Oklahoma Cherokee.

The other difference we include here is [ə] ~ [u], appearing in the verb for ‘swim’. This is an example of dialect variation among the three Oklahoma speakers as well as between Oklahoma and North Carolina Cherokee. This particular example shows that the North Carolina form is still present in at least one part of Oklahoma. We see the high back vowel [u] from Mayes County, OK, and further north and a mid central vowel [ə] in the Belfonte, OK, area. The mid central vowel is also recorded as the North Carolina form (12).

Prepronominal da- ‘movement toward speaker’

(12) dəyíni (WR)
    da-a-yíni
    cīsloc-3sg-swim
    ‘He is swimming this way.’

(13) də:hyú:t:ní
    də:hyə:t:ní
    (pronunciation around Belfont, OK)
    ‘S/he is swimming in this direction.’

5.3.2 SUPRASEGMENTAL LEVEL. Dialect differences can also be found at the suprasegmental level. In (14), the iterative h(a)- ‘back’ in the North Carolina Cherokee is realized simply as tone in Oklahoma (15) (Also see King 1975:67–68 and Cook 1979:80). The low tone correlates with the absence of the iterative ‘back’ reading. This is shown in (16) and (17).
To understand how this morpheme is realized in (17), a brief discussion is needed. The iterative in Cherokee can express “the idea of returning to some previous or known location” or “… repetition of [an] action or state” or “… transferring [something] back to a previous holder” (Cook 1979:81). The example in (17) expresses at least two of these meanings. Here we see the iterative expressed with a high tone, along with its segmental reflex, í-. For more details on the complex phonology of this morpheme see Cook (1979:77–82). Relevant here is the dialect difference involving tone. Clearly, the behavior of tone, especially in the prepronominal construction is fertile ground for more documentation and research. See Wright 1996 and Uchihara 2009 for more on tone in Cherokee.

A brief adjustment in the translation is also needed here. The word ‘animal’ in the original (14) is not overtly expressed in the Cherokee. Instead, the animate form of the verb is used. As a result we do not include the word ‘animal’ in our glosses. We use ANIM to indicate that the object of the verb is grammatically animate. The word ‘animal’ would be one example of a grammatically animate object.

**Prepronominal ha- ‘again’**

(14) h-osdighani (WR)  
ha-osd-ighani  
 ITER-1DUAL.EXCL-take.back  
‘Another and I are taking the animal back.’

(15) ósdì:kāhné:gâ  
ósd-i:kāhné:gâ  
 ITER.1DUAL.EXCL-take,ANIM  
‘Another and I are taking it (ANIM) back (to some place).’

(16) ò:sdì:kāhné:gâ  
ò:sd-i:kāhné:gâ  
1DUAL.EXCL-take,ANIM  
‘Another and I are taking it (ANIM) (to some place).’

(17) í’ò:sdì:kāhné:gâ  
í’-ò:sd-i:kāhné:gâ  
 ITER-1DUAL.EXCL-take,ANIM  
‘Another and I are taking it (ANIM) back again.’

5.3.3 THE ALLOMORPHIC LEVEL. Two allomorphs of the prepronominal expressing the plural, do– and de– are in free variation in North Carolina. The rule in the original is stated as: “[m]orpheme de … has a freely varying alternant do when followed by d” (Reyburn 1953:179). Such free variation seems not to exist in Oklahoma. The North Carolina forms are given in (18). The Oklahoma forms follow in (19).
Prepronominal: de~do Alternation for the Plural

(18) dodagalīgəhi = dedagalīgəhi (WR)
    do-dagalīgəhi     de-dagalīgəhi
    PL-FUT.1SG.dive   PL-FUT.1SG.dive
    ‘I will dive’     ‘I will dive’

(19) ðő:dāgālīgə:hyiyi = *dē:dāgālīgə:hyiyi
    ‘I will dive.’        ‘I will dive.’
    (submerge under the water) (submerge under the water)

Here we need to comment on why the plural ðő:– is used (in both dialects) and also on the kind of diving that is expressed by the construction. The plural prepronominal ðő:– expresses multiple parts of the body that are involved in diving. This kind of diving is better understood as using one’s hands, feet, and limbs to submerge oneself while in the water. This form is not used to express diving from the bank of a river or from a diving board.

To express the situation where a person dives into the water from a bank of a river or a diving board, the morpheme –ē:dì:– ‘stiff’ or ‘upright’ is used in the verbal derivation. The mental picture one gets is a person standing stiff, resembling a post. Typically when diving from the bank of a river, the person faces away and therefore the TRANSLOC prepronominal wī– also appears. This kind of diving, then, is linguistically construed in Cherokee as an event that is expressed by the co-occurrence of two morphemes, wī– ‘movement away from speaker’ and –ē:dì:– ‘stiff/upright’. This is represented in (20).

(20) wīdāgādē:dì:nî
    ‘I will dive (stiffen my whole body like a post or board and go into the water end-to-end).’

Finally, the plural morpheme –dō:– cannot be used with the morpheme –ē:dì:– in examples such as (20). When these two morphemes co-occur, the plural –dō:– forces a plural reading, but the semantics of the morpheme –ē:dì:– require a singular interpretation. The conflict between the plural –dō:– and the singular semantics of –ē:dì:– results in a physically impossible two-body self that is stiff or post-like. The individual, then, becomes two (a clone?), and the two selves face away and dive in the water in the way one dives from a river bank or off of a board. Grammatically, the word is fine, but pragmatically, it describes an impossible situation. The word is given in (21).

(21) wīdō:dāgādē:dì:nî
    ‘My two selves will dive into the water, facing the other direction and in a stiffened position.’

5.3.4. THE MORPHOPHONOLOGICAL AND MORPHOSYNTACTIC LEVELS. The original North Carolina example, repeated in (22), allows us to demonstrate two additional
ways North Carolina and Oklahoma Cherokee differ. First, we show that the relevant morphophonological rule, as stated in the original, does not operate in Oklahoma Cherokee. Then we observe that the independent negative particle, *hlá*, is required in the Oklahoma construction (23) but apparently not in the North Carolina example (22). We note an exception found in the older religious literature (31).

In (22) we see an example of –da– ‘future’ becoming –di– when following yi–. The original rule as stated is, “[m]orpheme-final a and e are replaced by i when the morpheme is preceded by i” (Reyburn 1953:178). In the case of example (22), this rule can be represented as: \( yi + da \rightarrow yi + di \). The morphophonology here is quite rich, but in no case does the North Carolina rule operate in Oklahoma. We offer (24)–(30) to illustrate this. A full account of the morphophonology is beyond the scope of this paper. Here we simply note that the morphophonology is another area for more documentation and research. Because it is so complex and different from English, Cherokee morphophonology may turn out to be difficult for English speakers to acquire, especially if exposure to it is not abundant and sustained.

**Prepronominals** yi– ‘negative/conditional;’ da– ‘future’

(22) yi-digo’dani (WR)

\[ yi-da-g-o’dani \]
\[ NEG\text{-FUT-build.fire} \]

‘He will not build a fire.’

(23) Hlá yi-dágō:tánî

\[ Hlá yi-dā-g-ō:tánî \]
\[ NEG\text{.PART NEG\text{-FUT-3SG-FUT}-build.fire} \]

‘S/he will not build a fire.’

(24) Hlá yidāgō:ða:nî

‘I will not build a fire.’

(25) Hlá yidānó:tánî

‘They will not build a fire.’

(26) Hlá yi-tó:tánî

‘You will not build a fire.’

(27) Hlá yidāyó:sdō:tánî

‘We two will not build a fire.’

(28) dāgō:ða:nî

‘I will build a fire.’

In examples (29) and (30), tone differences and the negative particle *hlá* serve to dis-ambiguate the conditional yi– (29) from the negative yi– (30).
(29)  yīdāgō:tānî
    yi-dā-g-ō:tānî
    COND-FUT-3SG-build.fire
    ‘If s/he will build fire’

(30)  Hlá yīdāgō:tānî
    Hlá    yi-dā-g-ō:tānî
    NEg.PART   NEg-FUT-3SG-build.fire
    ‘s/he will not build a fire.’

In older or poetic forms, however, the negative particle can be left out. An example is found in hymns in the Cherokee hymnbook. Example (31) comes from hymn number 119.

(31)  tālē:nê    yə̂gá:jìyō’ǔ:hí
    second  I will not die again
    “I cannot die a second time”

5.3.5 SEMANTIC LEVEL. An analysis of the original data allows us to see variation between the two dialects of Cherokee in the verbal semantics. Consider the forms in (32) (North Carolina) and (33) (Oklahoma). In Oklahoma, the form expresses an origin from which a group might come. The North Carolina translation does not express an origin but rather a goal or destination to which a group goes.

Prepronominals yi– ‘conditional;’  di– ‘distant position’
(32)  yizunilósə    (WR)
    yi-di-un-ilósə
    COND-DIST-3PL-come
    ‘if they come to that place’

(33)  yįjū:nélò:sá
    ‘if they came from that direction’

Other examples of semantic differences may be real or simply ambiguous glosses such as (34) from North Carolina and its corresponding Oklahoma form in (35). In (34), the translation of the verb is ‘living’. In contrast, the Oklahoma Cherokee version in (35) expresses ‘is originally from’, which may or may not be the place where one is living. The Oklahoma speakers are very clear on the distinction.

Prepronominal di– ‘distant position’
(34)  zudehnáí    (WR)
    di-u-dehnáí
    DIST-3SG-was.living
    ‘the place where he was living.’
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5.3.6. Lexical Level. Here we see another difference in dialects between North Carolina and Oklahoma. The verb translated as ‘teach’ in the original (36) is glossed as ‘preach’ in Oklahoma (37). The Oklahoma form for ‘teach’ is given in (38).

Prepronominal: ʰə– ‘again’
(36) hiidal’zidôhəsga (WR)
    ʰə-id-al’zidôhəsga
    ITER-1PL..INCL-teach
    ‘You, others, and I are teaching again.’

(37) í:dâhljîdô:həsgâ
    ‘You, others, and I are preaching again’

(38) dó:dâdë:hyô:həsgâ
    ‘You, others, and I are teaching again.’

5.3.7. Identification of Archaisms. An examination of the data can also reveal archaic forms, which may or may not be archaic in one dialect or another. Such forms are interesting to linguists and anthropologists working on historical-comparative problems. These forms can be highly important to language learners interested in learning the language as speakers currently use it. Although the form in (40) is now considered archaic in Oklahoma, the speakers recognize it and include it as a form corresponding to the one in the original data. We offer (41) as the modern Oklahoma way to express the action, ‘took a breath’.

(39) agwâdlô’ogi (WR)
    ‘I took a breath.’

(40) á:gwâdô:lː’i
    ‘I took a breath.’

(41) á:kîwô:ldô:sː’i
    ‘I took a breath.’

6. Reanalysis of Linguistic Claims and Representations. Linguistic claims of phonological and grammatical behavior become “the final say” when (a) there are no other data to support, reject, or modify original accounts and (b) there is only one publication on the relevant phenomenon. An examination of the data that leads to claims about the grammar in these cases is essential. Here we offer an example to show how more data contributes to our understanding of the morphophonological behavior of prepronominals in Cherokee.
6.1. MULTIPLE PREPRONOMINALS. One morphophonological rule posited in Reyburn 1953 is “morpheme-initial [a] and [i] are lost after morpheme-final [i] and [e] respectively (178).” An instantiation of this rule is clearly seen in (42) below, where the initial a– in anedoha ‘they are walking about’ is deleted when the “distant position” prepronominal di– is added to the construction. In (43) and (44) we document the presence of this rule in twenty-first century Cherokee spoken in Oklahoma. In addition we note the change in tonal pattern across the verb depending on whether the “distant position” morpheme is present (43) or absent (44). (See also Montgomery-Anderson 2008:327.)

Prepronominal di- “distant position”

(42) di-nedoha (WR)
    di-an-edoha
    DIST-3PL-walk.about
    ‘They are walking about yonder.’

(43) dī:né:dò:hâ
    ‘They are walking about over there.’

(44) à:ně:dô:hâ
    ‘They are walking about.’

As given above, however, the rule does not account for multiple prepronominals, at least in Oklahoma Cherokee. When the iterative prepronominal –í– follows dī–, the rule does not apply. The morpheme initial /a-/ in anedoha ‘they are walking about’ remains and a glottal stop is inserted between the prepronominal construction and the following pro–nominal, resulting in a vowel cluster. Bender and Harris (1946:20) report rare occurrences of a two-vowel cluster but when appearing, “[a] glottal stop is often pronounced between the two vowels of a cluster…” We believe Bender and Harris’s glottal stop insertion rule applies to these data after the two prepronominals merge: dī:i– → dī–. The result is given in (45). Similar behavior of tone and the iterative and distributive prepronominals is discussed in Cook (1979:68-70).

(45) dī’āně:dô:hâ
    dī::i(‘)ān-ě:dô:hâ
    DIST-ITER-3PL-walk.about
    ‘They are walking about yonder (over there) again.’

6.2. RE-ANALYSIS OF MORPHEMES. An examination of the data in previous publications can lead to a reanalysis of a morpheme. Here we report on a reanalysis of a verbal root from the data set we examined. The North Carolina form in (46) provides an example of how the prepronominal interacts with verbal semantics to create a meaning in a compositional way. In (46) the verb root is –ā’ī–, glossed as ‘come’. This root, however, may be better translated as ‘move (in a direction)’. We offer a different Cherokee verb for ‘come’ in (47) because the speakers consider it as a more accurate translation of the English verb ‘come’
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in the context of the example. We offer (48) because it corresponds with the Cherokee form given in the original.

The ‘come’ reading in (46) arises out of the combination of the prepronominal da- ‘movement toward speaker’ + the root –á’ī– ‘move (in a direction)’. When da- does not appear, the verb root can be used, for example, to express generic movement of animals. For inanimate nouns the same verb root can be used to describe the action of ‘hands on a clock’, ‘cars’, or ‘the sun’. Clearly, the English gloss ‘come’ does not seem to fit these contexts. We offer (49)–(51) to illustrate the verb with animate nouns and (52)–(54) to show the verb with inanimate nouns.


(46)  da-náisəgi (WR)
   da-an-áisəgi
cisloc-3pl-come
   ‘They came this way.’

(47)  dāyū:ní:lō:sə:'i
   ‘They came this way.’

(48)  dō:ná’ī:sə:'i
   ‘They were moving (coming) in this direction.’

Animate Examples

(49)  Ná sū:nā’d:hlgi ājâ’di û:wē:yō:'i  a:ná:'i:sə:'i
   Ná sū:nā’d:hlgi ājâ’di û:wē:yō:'i  a:ná:'i:sə:'i
   det group fish in.a.stream 3.pl.moving.in.direction.
   ‘The group (school) of fish was moving (swimming) in a stream.’

(50)  Ná sā:sâ gālə:hi ā:ná:'i:sə:'i
   Ná sā:sâ gālə:hi ā:ná:'i:sə:'i
   det geese across.sky 3.pl.moving.in.direction.pst.progressive
   ‘The geese were moving (flying) across the sky.’

(51)  Ná sā:sâ ē:lădī ā:ná:'i:sə:'i
   Ná sā:sâ ē:lădī ā:ná:'i:sə:'i
   det geese along.ground 3.pl.moving.in.direction.pst.progressive
   ‘The geese were moving (walking) along the ground.’

Inanimate Examples

(52)  Ná wā:jī dē:go:hyá’dō:'i dā:'i:sə:'i
   Ná wā:jī dē:go:hyá’dō:'i dā:'i:sə:'i
   det clock/watch arms 3.pl.inan.moving.pst.progressive
   ‘The hands on the clock/watch were moving.’
(53) Nà dàgwālé:lû dá:'t:sô:'î
Nà dàgwālé:lû dá:'t:sô:'î
DET car 3.PL.INAN.MOVING.PST.PROGRESSIVE
‘The cars were moving (not necessarily in direction of speaker).’

(54) Ná:n̤dô gāl:ló:hî á:'t:sô:'î
Ná n̤dô gāl:ló:hî á:'t:sô:'î
DET sun/moon in.sky 3.PL.INAN.MOVING.PST.PROGRESSIVE
‘The sun (or moon) is moving in the sky.’

6.3. MORPHOSEMANTICS. In (4)–(8) and (18)–(21), we include examples of morphosemantic analysis of prepronominal constructions appearing in the original data set. Here we offer another example to show how the lack of a prepronominal can affect the interpretation of an event as much as the presence of one. This point may seem obvious but has subtle consequences as shown below. Consider the example in (55). Because of the lack of a PL/DIRSTR marker, the Oklahoma form implies ‘non-plural’ or ‘non-distributive’, which can be interpreted in this context as ‘one container (the same container)’ or ‘one source’. This meaning is not clear from the English gloss in (55). To express ‘different containers’, the PL/DIRSTR prepronominal, dō:- is used, as shown in (57).

Prepronominal da– ‘future’
(55) dayosdadídhahi (WR)
da-osd-adídhahi
FUT-1DUAL.EXCL-drink
‘Another and I will drink.’

(56) dāyō:sd Lýtāhî
S/he and I will drink (from the same container/source).’

(57) dō:dāyō:sd Lýtāhî
dō:-dā-y-ó:sd-åd tāhî
PL/DIRSTR-FUT-Y-1DUAL.EXCL-drink
‘S/he and I will drink (from separate containers).’

In English, the phrase ‘another and I will drink’ or ‘s/he and I will drink’ implies ‘from different containers’, or it at least remains ambiguous as to whether one or more containers are relevant. In contrast, the prepronominal system, which includes a PL/DIRSTR distinction, requires Cherokee speakers to specify whether the drinking will involve one or more containers. In this way, the prepronominal construction has consequences on the linguistic interpretation and mental image of the event. Clearly, the morphosemantics of the prepronominal construction needs more documentation and research. Moreover, the subtleties of this part of Cherokee grammar may turn out to be difficult to master for English speakers learning Cherokee as a second language.
7. SUGGESTIONS FOR FURTHER DOCUMENTATION AND RESEARCH. By examining a data set with competent speakers, new areas for documentation and research automatically and naturally emerge. Throughout this paper we have noted various areas for more documentation and research, especially among dialects of Cherokee, the behavior of tone, and morphosemantics. Here we note two more areas: the number and shape of Cherokee prepronominals and semantic extension.

7.1. THE NUMBER AND SHAPE OF CHEROKEE PREPRONOMINALS. The focus of this paper is the data set used in the only publication primarily devoted to Cherokee prepronominals. Discussion of this data set leads to questions about other data sets. As we broaden our scope to other studies whose primary focus is not prepronominals, we find some relevant data (King 1975; Cook 1979; Montgomery-Anderson 2008; Pulte and Feeling 1975). When data from these sources are pooled, as seen in the chart below, two immediate questions arise. (1) Exactly how many prepronominals are there? and (2) How should they be represented? Previous work suggests that there may be as few as eight (Cook 1979) or even as many as thirteen (Montgomery-Anderson 2008). Clearly, more work is needed to arrive at an agreed upon number and representation of prepronominals in Cherokee.

It is not yet clear how Cherokee prepronominals should be represented. For example, tone is typically not represented in King (1975) but is regularly represented in Pulte and Feeling (1975). Moreover, allomorphs of the prepronominals are discussed in different individual studies and underlying forms are given. The posited surface and underlying forms, however, are typically not informed by data from other sources because, in part, of the severe lack of literature on Cherokee prepronominals. Until there is more literature on the subject, no agreed upon representation of these forms can emerge. We offer the following chart only to summarize what is known about the number and shape of Cherokee prepronominals.
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<tr>
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<td>ts(i)-</td>
<td>empirical</td>
<td>j-</td>
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<td>positive</td>
<td>ji-</td>
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<td>animate plural</td>
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7.2. SEMANTIC EXTENSION. An examination of data may result in a number of unexpected discoveries. Here we note two such discoveries, specifically of semantic extension. After reviewing the construction in (58), which includes the verb for ‘doctor someone’, we noticed that the meaning of this verb can extend to ‘soldering’ or ‘welding’. At this point it appears that this verb includes a semantic component associated with the meaning ‘mending’ that will allow for its use in additional expressions such as ‘putting a broken handle back on a (coffee) cup’. The limits of semantic extension of Cherokee verbs, such as this one, need documentation and much more research. See Blankenship 1996 for semantic range and classificatory verbs in Cherokee.

Prepronominal da– ‘future’

(58) dayozínawani (WR)
da-(y)ozínawani
FUT-1PL.EXCL.doctor.with.medicine
‘Others and I will doctor him.’

(59) dayōjįː̃ːwąːːnĩ
‘Others and I will mend (doctor) him or her.’

When discussing the verb for ‘limp’, (60), we noticed that the same word is used for ‘bounce’ (62). The semantic connection between ‘limp’ and ‘bounce’ is decipherable and begins to show associations expressed by verbs of movement. We are unaware of research that investigates the semantic and pragmatic range of motion/movement verbs in Cherokee. This kind of semantic analysis in Cherokee needs further research.

Prepronominal da– ‘future’

(60) dədadesi (WR)
da-a-dasesi
FUT-3SG-limp
‘He will limp.’

(61) dɔːːdâːdɛːsĩ
‘S/he will limp.’

(62) Sgwąːhléːsdî dɔːːdâːdɛːsĩ
Ball will bounce
‘The ball will bounce.’

8. CONCLUSION. In this paper we argue for more re-analyses of published data on endangered languages. A re-analysis of published data allows for more speakers of endangered languages to consider a data set and ask questions such as, ‘What would second language learners, (non-fluent) teachers, general community members, linguists, and anthropologists want to know about the forms in this data set?’ and ‘What interests me about the words and phrases in this data set?’ We offer a detailed illustration of what can be gained from eliciting first language intuitions and discussions of documented forms.
We note that by definition, there are few speakers of endangered languages and therefore few opportunities to recheck endangered language forms against first-language intuitions. Once a data set is published and widely available, it may be the only documentation of that particular linguistic construction. For this reason we suggest that any oversights that appear in data be addressed.

Reasons for revisiting data, however, go far beyond the issue of addressing oversights. A review of published data opens up an opportunity to make them more relevant to a wider audience by supplementing written forms, making audio files, and including dialect variations of professionally organized data. This kind of supplementation makes the data more applicable to language learners, teachers, and members of different communities that claim the language as part of their heritage. Linguists and anthropologists also benefit from enriched data sets with different representations of the same and similar forms. Finally, we point out areas for more documentation and research. We note the need for more work on dialects, tone, morphosemantics, the number and form of Cherokee prepronominals, and lexical semantics.
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