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**Abstract:** Although Catawba has been studied over 100 years, from early 1800s to the mid-1900s, all serious investigations about Catawba started in the early 1900s. Currently, the vast majority of extant field notes can be traced to the last three speakers of Catawba. However, there are primary sources from the early 1800s that have not been analyzed. These primary sources are word lists, and they harken to a time when Catawba was more widely spoken and less impacted by the deleterious effects of language dormancy. This paper presents an additional lexicon of Catawba from earlier primary sources.

Keywords: Catawba, Barton, Mills, Gallatin, Proto-Siouan

#### 1. Introduction

Blair Rudes

Catawba is a dormant language once spoken in southeastern United States, and is currently being revived Heinemann-Priest (2000). Catawba belongs to the Siouan-Catawban macro family. Of the Catawban languages, Catawba is the only one that has been extensively documented and studied.

Several scholars have compiled unpublished lexicons of the Catawba language. The table below summarizes the best-known lexicons.

Author	Year	Primary sources
Kathy Shea	1984	Siebert (1945a,b)
	Swadesh (1937)	
	Susman (1935), Speck (1934)	
		Michelson (1913)
		Gatschet (1900)
Paul Voorhis	1990s	Speck (1934)
	2003	Siebert (1945a,b)
Claudia Heinemann-Priest	1996	Lieber (1858)
		Dorsey (n.d.)
		Michelson (1913)
		Speck (1934)

Table 1: Summary of all known Catawba lexicons

Siebert (1945a; 1945b, unpublished notes) McDavid (1941)

2008

<sup>\*</sup>The authors would like to thank the late Dr. Bob Rankin, the late Dr. Blair Rudes, and Kathy Shea for pioneering Catawban studies. Without their dedicated efforts, the authors of this paper could not study Catawba with the attention it deserves.

Other lesser known lexicons were compiled by Alexander Pickens, Raven McDavid, and Wes Taukchiray. Some investigators, like Shea and Priest, included a diverse scope of primary referenced materials. In contrast others, like Voorhis and Rudes, constructed lexicons from a much more limited scope.

Unfortunately, there is still a large volume of original field notes that have not yet been analyzed. Amongst them are older sources dating prior to the 1860s. These older references have historically been ignored, and to the authors' knowledge, these older references have never been analyzed. The focus of Catawba studies of the early 19th century was solely based on wordlist construction; thus, no grammatical material was ever captured until Oscar Lieber's publication in 1858. The objective of this paper is to construct a lexicon of older, less studied materials. Since these materials were not recorded by creditable linguists, they are necessarily of poor quality. Despite the challenges associated with analyzing older references, these sources may hold a lot of value in capturing archaic terms. As Siouan linguistic studies become more developed, it is hoped that these references will answer more questions on Catawba's ties to the Siouan language family for future scholars.

The relevant references used in this paper are:

- Benjamin Smith Barton (1798) published a set of 30 words in his publication *New Views of the Origin of the Tribes and Nations of America*. In his publication, Barton surveyed several Native American languages and attempted to construct family trees. His entire list, with analysis, appears in this paper. The first edition of his publication did not include any Catawba entries. Prior to his publication of the second edition, Barton noted, "[w]hile this edition was in the press, the arrival of two Katahba-Indians in Philadelphia afforded me an opportunity of collecting a small specimen of their language." (Barton 1798:22, Appendix). Therefore, only the second edition of Barton's book is referenced here.
- John L. Miller, President of the Ebenezer Academy, recorded at least 147 words. The original vocabulary by Miller has not been located. Gallatin published some or all of Miller's wordlist in 1836.
- Robert Mills (1826) published his *Statistics of South Carolina*. His publication provides an overview of the geography, history, and politics of South and North Carolina. It also provides Catawba words for the natural number set one through ten and eight words and phrases in Catawba. Mills's entire wordlist with analysis appears in this paper.
- Albert Gallatin (1836) published Catawba words compiled by John Miller and Benjamin Barton. Gallatin's entire wordlist minus number words, with analysis appears in this paper. Where items on Gallatin's wordlist clearly came from Barton's publication, we reference Barton's 1798 publication. Otherwise, items from Gallatin's wordlist is assumed to come from Miller's wordlist.
- James Owen Dorsey (n.d.) compared nearly 41 terms in Catawba against related Siouan languages. Dorsey did not perform any original field work in Catawba Country. However, looking at his list of Catawba terms, it is very clear that Dorsey had access to additional wordlists outside of Barton and Miller. Since this set of slip files are undated, it is not clear to the authors what this/these additional source/s are. Regardless, the authors make references

to these slip files for terms not previously attested in Shea (1984), Voorhis (n.d., 1992), or Rudes (2008a,b). It is likely that Dorsey had access to Gatschet's field notes. If so, there are vocabulary found in the slip files that were not published in Gatschet's (1900) grammar. Most of Gatschet's unpublished field notes are currently unanalyzed.

A casual observer may also find three additional references from the 1800s that are rarely referenced in more current research on Catawba. They are described below and largely omitted from this paper.

- Fredrick A. Porcher's papers (n.d., circa 1850s) contain portions of a handwritten draft of Oscar Lieber's vocabulary (published 1858). Since Lieber's vocabulary is among the best-known primary references in Catawba, the notes located in the Porcher papers is not analyzed in this paper. Claudia Heinemann (1996) and Blair Rudes (2008a,b) analyze Lieber's work in detail elsewhere. A future scholar may be interested in comparing the handwritten draft to Lieber's printed publication.
- Chamberlain (1888) was among the first to make the connection between Catawba and Woccon with other Siouan languages. He proposed a set of cognates based on wordlists available during his time. Because of recent scholarship (Rankin et al. 2015), future scholars can determine how accurate his observations were with Proto-Siouan. Chamberlain's pamphlet is now available in the Siouan Archives for a future scholar's reading pleasure. However, for the current study at hand, the authors only make brief mention of Chamberlain's work where appropriate. Chamberlain did not perform any original field studies and relied solely on words compiled by Miller and Barton, which are analyzed in this present paper.
- Albert Gallatin (1848) published 60 words in his *Hale's Indians of the North-West American,* and *Vocabularies of North America*. The sources for this list were the original Miller and Barton lists. However, there is one critical difference in this book, when compared to Barton's and what we believe to be Miller's lists. Gallatin attests that *gitlung* meant 'hair.' This is an error on Gallatin's notes. He meant to place this term in the Cherokee wordlist. Because this book is a repeat of information already provided by Miller and Barton, this book has not been used for any further analysis in this paper.

## 2. Methods

Wordlists from Barton (1798), Mills (1826), and Miller (as referenced in Gallatin 1836) were perused. Terms were analyzed by morphemes if possible. These terms were compared against lexicons previously compiled by Voorhis (n.d.), Shea (1984), and Rudes (2008a,b). When a morpheme was found to be previously undescribed, it was populated in Table 1 of this paper. All terms from Barton, Mills, and Miller's wordlists are available in Appendix A.

This paper defines "previously undescribed" as:

- 1. Morpheme or gloss attested by Barton, Mills, Miller does not appear on lexicons compiled by Shea (1984), Voorhis (n.d.), Rudes (2008a,b), or
- 2. If morpheme does appear on these aforementioned lexicons, Barton, Mills, and Miller are the sole sources for these morphemes.

A brief note of phonology and morphemic analysis is covered in Appendix B of this paper, largely based on previous scholarship.

#### 3. Results and discussion

#### 3.1. Limitations to this analysis

Analyzing these older references is compounded with several limitations endemic to Catawban language studies today. Mills, Miller, and Barton clearly had a difficult time hearing nasal vowels.

```
(1) eesauh (Gallatin 1836), eswoa (Barton 1798)
iswą (Shea 1984:187)
'river'
```

However, the nasal quality for this word was clearly attested by Oscar Lieber as "i-swang" (1858:7). There are other cases where it is unclear if at one time a nasal vowel was optional or if the early investigators missed it. An example of this uncertainty is the morpheme for 'man'.

```
(2) yabrecha (Gallatin 1836)
yii baritca (Shea 1984:177, referencing Speck 1934)
'man' (??)
```

When Miller attested this term, he did not give the first vowel (here, *a*) without any indication of a nasal quality. The Catawba term for man has been attested with a nasal vowel *yęę*, *yę*, *yįį* (see Shea 1984:177). However, before we dismiss Miller for making an error, observe what Gatschet attested in 1900:

```
(3) ye'mi'-h-ra-re (Shea 1984:177, referencing Gatschet 1900) man superior-3s-PROX-IND 'chief, commander'
```

Gatschet, unlike Mills, Miller, and Barton, was trained in studying Native American languages. He did not record a nasal sound in the example above. In fact, Shea records several examples from Gatschet where the first vowel of this word was indeed oral, when later sources record an obligatory nasal vowel. By 1934, all attested words for 'man' in Frank Speck's notable publication *Catawba Texts* all record an obligatory nasal vowel (see Shea 1984:177 and Voorhis n.d.). It is, therefore, possible that the word for 'man' could have had an optional oral vowel sound in the early 1800s. Further evidence of this optional nasal sound is the fact that Miller had attested yakezuh, as opposed to *yaa kiča* for 'wife' and *yi kiča* for 'husband', for both husband and wife (see Appendix A, indices 47 and 48 of this paper)—thus, a difference between *yi* and *yaa* was not obvious to Miller.

The nature of vowels (short, long, or nasal) is conspicuously uncertain throughout the Catawba corpus. Gatschet, himself, indicated that the nasal was sometimes optional, but did not provide any further observation as to when the optional nasal sounds were allowed. Another example of this uncertainty is:

```
(4) įti (Shea 1984:188) 
iti (Gatschet 1900:528) 
'rock, stone'
```

The authors of this paper have an additional limitation. Most of the Catawba corpus has been unanalyzed and found in archives all over the United States. The authors here have made painstaking efforts to find and consolidate these unpublished references; but much of it is still untouched despite our efforts. It is quite likely that these items described in this paper as "archaic" may not actually be so. A great example of this is the entry for 'beaver'. Shea (1984) writes "[...] the vocabularies published by Gallatin are the only sources which cite a Catawba word for 'Beaver' chaupee, clearly a Siouan cognate." However, čapi was elicited by the late Chief Sam Blue tonsitoop or chop for 'beaver' (Pickens 1957). The authors of this paper are fully cognizant of the fact that they may be making the same error as well on other terms that have been attested on currently unanalyzed materials.

#### 3.2. Catawba numbering system

The Catawba numerical system has been described elsewhere (Heinemann 1996). Thus, we will not spend much time on number related words here. Mills attested numbers from 1 through 10. Miller attested numbers 1-12, 20, 30, and 100. These entries are largely consistent with other scholarship. However, there are three entries that are notable:

```
(5) ne-purre (Mills 1826)
nipare
'six' (error for 'two')
```

Mills clearly made an error here. The attested term is clearly for 'two' and not 'six'. The correct word for 'six' is *dipkuraa* (Rudes 2008b:22).

```
(6) lubbosa (Gallatin 1836)
nipisa (Mills 1826)
dawosa (Shea 1984:95)
'eight'
```

The number eight has been attested as *dawosa* (Shea 1984:95). As far as the authors are aware, *lubbosa* has not been attested elsewhere in the Catawba corpus and may indeed be an archaic term. The third entry of note is as follows:

```
(7) pat-chaw (Mills 1826)
paca
wąča (Shea 1984:166)
'nine'
```

The attested term for 'nine' is  $wq\check{c}a$ . Clearly either Mills did not hear the nasal quality of the verb or this term had an optional nasal vowel that later became obligatory.

## 3.3. Archaic phonemes

The wordlists compiled by Barton, Mills, and Miller have some typical phonemic alterations also observed in more recent Catawba corpus. Unexpected phonemes are discussed in this section.

The phoneme /l/, as attested in the entry *lubosa* 'eight' in example (6), is very elusive in Catawba. The authors are only aware of a few occurrences of this phoneme, including this one. /l/ was attested in *ilyii waasee*? 'eel' (Michelson 1913:sheet 27). This word *ilyii* is likely a borrowing from English. The phoneme /l/ also appears in some Catawba proper names, Yanabe Yalengway and Willmannantanghkee, from the 1750s (Bauer 2016:50). This phoneme was also attested by Oscar Lieber in *ih-wohl-deh* 'young'. Otherwise, this phoneme is absent in Catawba. This phoneme was also attested in Woccon in the following words: *welka* for 'duck' and *palawa* for 'a turd'.

Another exotic phoneme of interest is the entry for 'white'.

```
(8) saukchuh (Gallatin 1836)
takči (Shea 1984:248)
'white'
```

The initial /s/ may be been an error by Miller, who recorded this term. As far as the authors are aware, 'white' has not been attested as *sakči* elsewhere. However, if a future scholar determines that Miller was not mistaken and this term was optionally *sakči* in addition to *takči*, he or she may investigate if this term is indeed related to the Proto-Siouan \*asáa 'white'.

The opposite change is observed in the following example:

```
(9) pot-tateerawah (Gallatin 1836)
pase-taru-aa (Voorhis n.d.:77)
axe-large-NEG
'axe, hatchet'
```

In example (9), Miller heard a /t/ in the medial position of the first morpheme; however, in later sources, we see /s/.

The wordlists compiled by Barton, Mills, and Miller often do not have vowels phonemes that align with recent scholarship. However, there two observed noteworthy patterns that show some evidence of vowel shifts. There is a tendency when later attested Catawba requires /e/, /e/, or /ee/, Mills/Miller/Barton's wordlist shows /a/ or /aa/. Examples of this are as follows (bold lettering by authors):

```
(10) yayeh (Gallatin 1836)
ye-ye (Voorhis n.d.:108)
man-GEN
'Indian'
(11) wa (Gallatin 1836)
wee (Shea 1984:233)
'town'
(12) yahho (Gallatin 1836)
ye (Shea 1984:250)
'wind'
```

Alternatively, since Barton, Mills, and Miller were not trained linguists, it is possible that they heard phonemes /e/ or /ee/ and transcribed /a/ based on how an English speaker would say the name of the letter a. Similarly, they may have heard the phonemes /i/ or /ii/ and transcribed it as /e/ (Justin McBride, p.c., 2020). Before we can dismiss Miller from making an error, we should look to a related language, Woccon. Lawson (1709) attested yauh-he for 'Indian' and yuh-hor for 'wind'. Both words have a consistent vowel sound for the first vowel with Miller's wordlist. Thus, it may be possible that an archaic form of this term is \*yaaye, with an oral, long /aa/ for 'Indian' and \*yaa for 'wind'. We do not have a word in Woccon for town, city, or village.

Miller attested several color terms had once ended in a short /a/ or perhaps a /ə/ sound. Whereas, later attested Catawba requires a short /i/ sound.

```
(13) houkchuh (Gallatin 1836)
hawukči (Shea 1984:56)
'black'
```

Another example of this possible vowel shift is in example (7), where Miller either records a short /a/ or /ə/ at the end of the utterance, and later attested Catawba uses /i/.

## 3.4. Previously undescribed morphemes

An analysis of wordlists constructed by Mills, Miller, and Barton did not reveal significant information about Catawba not previously described by Rudes (2008a,b), Voorhis (n.d.), or Shea (1984). However, the list below was constructed from Appendix A per methods described in Section 2 of this paper.

Index	Morpheme or gloss	Comment	
15	nipisa	Attested for the number eight.	
26	pičine hare i-ksa na-mu-a?	Attested to mean 1000. Morphemes may mean 'I	
		want 100 arms'.	
27	ni(n)yaa	Attested for 'my daughter'.	
		Mills accurately attested the pre-nasal sound before	
		yaa 'woman'. Lieber also recorded this pre-nasal.	
		However, the pre-nasal phoneme was no longer	
		obligatory in later references (see Voorhis n.d.:13).	
28, 31,	-da	In older references, this morpheme was elicited for	
34, 44,		first person singular inalienable possession. More re-	
51, 52		cent references elicit -na.	
36	ehopwe	Archaic term for God. This word clearly has the po-	
		tential modal suffix -we. Other morphemes for this	
		entry are uncertain. It is likely that this word is re-	
		lated to the locative <i>haap</i> 'on.top'.	

Table 2: List of glosses and morphemes previously unattested

50, 54,	Indefinite possessor affix	The indefinite possessor is quite prolific in Speck's	
55A,	i-	texts; however, it has not been described in published	
64, 75,	ι-	literature yet. This possessor is the inalienable pos-	
212			
212		sessor for nouns that do not identify who that noun	
		belongs to. Also, this affix can be the subject to pre-	
		fixing verbs when the subject is not identified.	
52	yaa-naa	Attested to mean 'sister'.	
	woman-1s		
56	himuu	Attested to mean '[his] face'.	
72, 78	-piya	This suffix is only used for hands and toes. Because	
		this phoneme was never recorded by trained linguists,	
		the exact form of this phoneme is unknown (ex, is it	
		-píyaa, -piiyá, -píiyaa, etc.)	
74	i-ksa-pis	Attested to mean 'fingernail'. Individual morphemes	
	IDEF-arm-skin	have all been attested before. However, this is the	
		only time the authors are aware of this gloss being	
		attested.	
83	haa	Attested to mean 'heart'.	
02	di-haa	Theorem to mount from t	
	1s-heart		
87	wjsi wide'yu	This entry was attested for 'warrior'. I have analyzed	
07	wisi wide yu	the morphemes here to be 'meat Shawnee'. However,	
		_	
88		morphemes are uncertain.  Attested to mean 'friend'.	
	ya-atehune-ee		
90	Kaupeyaweeracha	Attested to mean 'kettle'. This entry's morphemes are	
	keepa yą wiirą-c-a?	uncertain. Best guess is provided.	
	hole water to.burn-CAUS-SUB		
107	heakuh	Attested to mean 'light'.	
	hiika		
113A	yapha sohę	Attested to mean 'autumn'. Each morpheme has been	
	leaf fall-CONT	previously attested. However, this gloss has not been	
	'leaf falling'	previously attested. Interestingly, its form matches	
		the Biloxi <i>snisníhi</i> which was attested to mean 'when	
		the leaves begin to fall' (Dorsey n.d.).	
113B	woye or waye	Attested to mean 'autumn'. Could be an error for	
		'winter'.	
128	háake	Attested to mean 'lake'.	
144	yay	Attested to mean 'oak'.	
167	si?kąči	Attested to mean 'red', attested previously as si?kq	
		and $sk\varrho$ . The second syllable $-\check{c}i$ , has not been attested	
		with this color word. Further analysis is required.	
169	yą wi-h-a?	Attested to mean 'blue'. Morphemes indicate 'water-	
	water resembles-STAT-SUB	like'. All of these morphemes have been previously	
		attested. However, this gloss has not been attested.	
		and and the state of the state	

180	e?-h-ču wį-h-ree to.dislike-3s-INTS to.resemble-3s-IND	Attested to mean 'ugly. Morphemes are uncertain.
188	wupchahaora	Attested to mean 'we'. Morphemes are uncertain.
190	kera-arrera	Attested to mean 'they'. Morphemes are uncertain.
214	nutátie	Attested to mean 'blanket'.

## 4. Conclusion

In a recent paper, de Reuse & Tefler undertook a similar survey to double check an old 1881 Nakoda wordlist, authored by Anna Barker, against current Nakoda speakers (2020). Their findings indicated current Nakoda speakers could re-elicit almost every word found in the wordlist by Anna Barker (Telfer 2020, p.c.). This paper's findings show that much has changed in Catawba between surveys from pre-civil war era and the 1940s, when Frank Speck and Frank Siebert were actively studying this language. This rapid change over time may be because Catawba was already in the process of language death in the early 1800s.

Previously, Rudes (2003) identified several phonological changes that were occurring in Catawba between the mid 1800s to the mid-1900s. Rudes noted denasalization of phonemes /n/ and /m/ to /b/ and /d/, when they occurred before oral vowels. Examples of this phenomenon is *nurupi* (Gallatin 1836) to *duruubi* (Shea 1984:139) for 'iron'; *nitemp* (Gallatin 1836) to *ditemp* (Shea 1984:45). Compare those words with *nu'?ma?* for 'bead', which did not denasalize (Rudes 2008b). Table 1 of this paper uncovers that certain terms like ehopwe for 'God', *hiika* for 'light' fell into disuse. Morphemes such as *-piya* for 'extremity' and *-da* for first person alienable possession also fell into disuse over time.

Another curious observation is that the independent personal pronoun marker -ta or -ta? was not elicited by Barton or Miller (see Indices 185 through 190). Lieber (1858) also did not elicit this pronoun marker. However, this marker is prolific in Siebert's and Speck's studies (Shea 1984:126).

The authors believe that examining other older, primary sources, other than the ones surveyed here, will uncover more archaic morphemes. An example of a previously documented morpheme is *aráta*, which is attested to mean 'leader' and a name or title of the famous Catawba, Chief Haigler (Rudes 2008a, referencing historical documents). This recorded term may be a cognate with proto-Siouan \*(wa-)Róota which means 'war' (Rankin et al. 2015).

This paper identifies the following:

- 1. Almost two dozen morphemes that were not previously identified by Shea, Voorhis, and Rudes. They are described in Table 1.
- 2. Phoneme /l/ may have been used in older Catawba. Do note that /l/ was not a Proto-Siouan phoneme.
- 3. Possible sound shift from /\*a/ or /\*aa/ to /e/, /ee/, /e/.
- 4. There is some evidence of English calques entering into Catawba. See Index 102 of Appendix A. The head-modifier configuration, which is typical in Catawba, would result in

- *nuți wičaawa* for 'moon'. This configuration was attested by Lieber (1858:7). However, Miller attested *wičaawa nuți*, a configuration more similar to English. Miller either made an error or English was entering into Catawba by this time.
- 5. *Yaa*, or 'woman', may have been homophonous with *yaa* for 'sister' (Appendix A, Index 52) and -*yaa* for 'daughter' (Appendix A, Index 27). Later attested Catawba shows a preference for *haču* and -*inuwaa*, respectively and the former terms appear to have fallen into disuse. However, the data in Appendix A clearly shows that the term for 'daughter' has always been inalienably possessed and 'sister' has always been alienably possessed, regardless of the later attested terms or, what appears to be, archaic terms.

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# Appendix A

Table 3: Catawba lexicon from earlier sources

Index	Catawba-morpheme-	Reference	Comments
	English		
1	пе-ро-уа	Mills (1826)	Entry is consistent with later
	dapani		attested Catawba. See Shea
	'one'		(1984:71).
2	dupunna	Gallatin (1836:358)	Entry is consistent with later
	dapani		attested Catawba. See Shea
	'one'		(1984:71).
3	nau-pa-re	Mills (1826)	Entry is consistent with later
	nąpre		attested Catawba. See Shea
	'two'		(1984:236).
4	naperra	Gallatin (1836:358)	Entry is consistent with later
	nąpre		attested Catawba. See Shea
	'two'	) (***) (100 (**)	(1984:236).
5	no-mon-da	Mills (1826)	Entry is consistent with later
	naamna?		attested Catawba. See Shea
	'three'	C-11-4: (102(-250)	(1984:229).
6	namunda naamna?	Gallatin (1836:358)	Entry is consistent with later attested Catawba. See Shea
	'three'		
7		Mills (1826)	(1984:229).  Entry is consistent with later
/	purree-purree parpare	Willis (1620)	attested Catawba. See Shea
	'four'		(1984:107).
8	purrepurra	Gallatin (1836:359)	Entry is consistent with later
	parpare	Gunum (1050.557)	attested Catawba. See Shea
	'four'		(1984:107).
9	puc-tree	Mills (1826)	Entry is consistent with later
	paktire		attested Catawba. See Shea
	'five'		(1984:103).
10	pukte-arra	Gallatin (1836:359)	Entry is consistent with later
	paktire		attested Catawba. See Shea
	'five'		(1984:103).
11	ne-purree	Mills (1826)	Mills may have made an error
	depkara		here for 'two'. See Indices 3
	'six'		and 4.
12	dip-kurra	Gallatin (1836:359)	Entry is consistent with later
	depkara		attested Catawba. See Shea
	'six'		(1984:201).

13	was-sin-nee wasignure 'seven'	Mills (1826)	Entry is consistent with later attested Catawba. See Shea (1984:195).
14	wassin-e-u wasignure 'seven'	Gallatin (1836:360)	Entry is consistent with later attested Catawba. See Shea (1984:195).
15	ne-pis-saw dawosa 'eight'	Mills (1826)	Mills clearly attested an ancient form of this number word. The Woccon is <i>nupsau</i> (Lawson 1709). This number word has been previously recorded as dawosa (Shea 1984:95). However, Oscar Lieber too recorded <i>na-po-sah</i> for 'eight' (Lieber 1858:9).
16	lubbosa dawosa 'eight'	Gallatin (1836:360)	Miller records a possible older form of this word, with the elusive phoneme /l/.
17	pat-chaw wąča 'nine	Mills (1826)	Mills may have recorded an archaic form of this word.
18	wunchah wąča 'nine'	Gallatin (1836:360)	Entry is consistent with later attested Catawba. See Shea (1984:166).
19	pitch-in-nee pičine 'ten'	Mills (1826)	Entry is consistent with later attested Catawba. See Shea (1984:223).
20	pechuna pičine 'ten'	Gallatin (1836:361)	Entry is consistent with later attested Catawba. See Shea (1984:223).
21	pechuna dupa hoksu pičine dapę haksa 'eleven'	Gallatin (1836:361)	Entry is consistent with later attested Catawba. See Shea (1984:168).
22	pechuna napurra hoksu pičine nąpre haksa 'twelve'	Gallatin (1836:361)	Entry is consistent with later attested Catawba. See Gatschet (1900:535).
23	pechuna napurra pičine napre 'twenty'	Gallatin (1836:362)	Entry is consistent with later attested Catawba. See Gatschet (1900:535).
24	pechuna namunda pičine naamna? 'thirty'	Gallatin (1836:362)	Entry is consistent with later attested Catawba. See Gatschet (1900).
25	pechu-hahruh pičine hare 'one hundred'	Gallatin (1836:362)	Entry is consistent with later attested Catawba. See Shea (1984:169).

26	pechuhruh eeksuh namohah pičine ha-re i-ksa na-mu-a? ten STAT-IND IDEF-arm 1s- want-suB 'one thousand'	Gallatin (1836:363)	This form for 'one thousand' has not been attested. Gatschet attested pičine hare pičine Gatschet (1900:535). Although morphemes are uncertain here, this utterance may mean 'I want 100 arms'.
27	non-yaw ni(n)yaa ni-(n)yaa my-woman 'daughter'	Mills (1826)	Later attested Catawba for 'my daughter' is:  ni'nuwaa my.daughter 'my daughter' Shea (1984:84)  Mills's entry is interesting for the following reasons:  1. Mills (1826) records a nasal quality to the word 'woman'. Lieber also recorded this nasality as n'-yah (1858:7). However, this nasal sound preceding the word for 'woman' was not elicited in more recent references, it was elicited, instead, as yaa or iyaa (Voorhis n.d.:13, 104).  2. The fact that -nuwaa was not elicited for 'daughter' indicates that 'woman' was used for this kinship term or Mills was mistaken.
28	cow-re-dha-har-ree kuri-na ha-ree son-my STAT-IND 'my son'	Mills (1826)	This entry shows that the first-person alienable possessive marker could have been <i>-dha</i> and later attested Catawba may have nasalized it to <i>-na</i> .
29	cow-sin-nee-wi-ra kuri-na wi-ree son-1s to.resemble-IND 'resembles my son' a fine boy	Mills (1826)	Entry is consistent with later Catawba. See Shea (1984:209).

30	ya-wee-can-nee yaa wikanee woman warm-INT 'is the woman warm?' a beautiful girl	Mills (1826)	Wikq can either be an archaic root for 'be.beautiful' or Mills made an error. It appears that his informant was asking 'is the woman warm?'
31	cow-re-dhagh kuri-na son-my 'a baby'	Mills (1826)	See index 28. Mills's informant was most likely saying 'my son'.
32	ne-mough-sa-ragh ne-mosa-ree I-love-IND 'I love you'	Mills (1826)	Entry is consistent with later attested Catawba. See Shea (1984:151).
33	yon-e-go-jau yaa ni-kičaa woman 1s.own 'my wife'	Mills (1826)	Interesting use of 1s. In later attested Catawba, 'I own' is <i>dikičaa</i> , and Lieber reports that 'my wife' is <i>yaa-de-ke-tcheh</i> , which is consistent with Rudes's lexicon. However, Mills records that the first person singular may once have been <i>ni</i> Sally Brown, much later attested that 'my wife' was <i>yaa kicaanaa</i> (Rudes 2008a).  Truman Michelson also attested that 'č/ is allophonic with /j/ (Michelson 1913).
34	borough-hend-ha bara-hę-daa brother-??-my 'my brother'	Mills (1826)	Mills records the archaic form of the first-person singular alienable possession marker, -da. It is not clear to the authors what the hę means.
35	cunree-har-ree-yaw-ee kurii-h-ree yaa-ee good-3s-IND woman-small 'the girl that I love'	Mills (1826)	See Shea (1984:85). widee e=deer calf.
36	ehopweh 'God'	Gallatin (1836:307)	This is an archaic word for god. God is <i>wariwe</i> in later attested Catawba, or 'man not dying'. Compare with Shea (1984:115).

37	yahwerejeh yi wirą-c-a? man to.die-CAUS-SUB 'wicked spirit'	Gallatin (1836:307)	Miller did not hear the nasal quality. However, the nasalization does appear in Lieber's (1858) publication. Michelson (1913:sheets 76/151) attests that the verb phrase's initial syllable was omitted, recorded as <i>yę rąčé</i> .
38	yabrecha ya breča man ?? 'man'	Gallatin (1836:308)	In more recent field notes, the word for man has been elicited as <i>yi</i> or <i>ye</i> . Either the recorder, when recording this entry, did not hear the nasal quality to man or the nasal quality was recently innovated in Catawba.  The elicited phrase for man here is consistent with Lawson's elicited phrase in Woccon <i>yauh</i> - Rudes (2000).  The morpheme <i>brecha</i> is unclear in meaning. It was
			later attested in Speck's notes (Voorhis n.d.:109).
39	eeyauh yaa 'woman'	Barton (1798:104)	Entry is consistent with later attested Catawba. See Shea (1984:252).
40	eechahuh yi ča h-a? man small 'boy'	Gallatin (1836:308)	Entry is consistent with later attested Catawba. Note Michelson attests <i>hica</i> for 'boy' (1913:sheet 64/151).
41	yahwachahuh yaa wa ča he woman-??-small-?? 'girl'	Gallatin (1836:309)	Entry is consistent with later attested Catawba. See Shea (1984:204) for 'small'.
42	yeenturawa yi taro-aa man large-NEG 'child, infant'	Gallatin (1836:309)	Entry is consistent with later attested Catawba. See Shea (1984:204) for 'small'.
43	yahmosa yi musa man to.love 'father'	Gallatin (1836:309)	Here, <i>musa</i> 'to love' is used to mean 'beloved man'. Note that Miller did not record the nasal quality. See Shea (1984:151).

44	nenedau nane-na father-1s 'my father' father	Barton (1798:102)	Entry is consistent with later attested Catawba. See Shea (1984:98). Note archaic possessive marker.
45	yaxu yaksu 'mother'	Gallatin (1836:310)	Entry is consistent with later attested Catawba. See Shea (1984:161).
46	checheendau činčin-na mother-1s 'my mother' mother	Barton (1798:102)	Entry is consistent with later attested Catawba. See Shea (1984:168). Note archaic possessive marker.
47	yakezuh yį kiča 'husband'	Gallatin (1836:310)	Note the replacement of $\check{c}$ with $z$ . Also note Miller could not differential between $yi$ (for 'husband') and $yaa$ (for 'wife'), indicating that *ya may have been the same gloss for 'husband' and 'wife'. Otherwise, entry is consistent with later attested Catawba. See Shea (1984:211). Compare with Index 48.
48	yakezuh yaa kiča 'wife'	Gallatin (1836:310)	Note the replacement of $\check{c}$ with $z$ . Also note Miller could not differential between $yi$ (for 'husband') and $yaa$ (for 'wife'), indicating that *ya may have been the same gloss for 'husband' and 'wife'. Otherwise, entry is consistent with later attested Catawba. See Shea (1984:211). Compare with Index 47.
49	koorewa kuriiwaa son+our 'son'	Gallatin (1836:311)	Entry is consistent with later attested Catawba. See Shea (1984:209).
50	enewah i-inuwaa IDEF.daughter 'daughter'	Gallatin (1836:311)	Entry is consistent with later attested Catawba. See Shea (1984:84).

51	murraundau mbara-na brother-my 'brother'	Barton (1798:103)	Note that Miller too records the archaic first person alienable possessive marker. See Shea (1984:62).
52	yadah yaa-naa woman-my 'sister'	Gallatin (1836:312)	'Sister', in later attested Catawba is <i>hacu</i> and is alienably possessed (see Shea 1984:200). However, Miller's informant may have said 'my woman' (see Shea 1984:252).
53	yayeh yiye man+GEN 'Indian'	Gallatin (1836:312)	Woccon: <i>yauh-he</i> (Lawson 1709). Note the absence of the nasal quality in 'man' (see Shea 1984:137). Lieber also did not attest a nasal quality in his publication. His finding is consistent with Gallatin (see entry for 'Indian' (Lieber 1858:7)).
54	iska -iską? 'head'	Gallatin (1836:312)	Entry is consistent with later attested Catawba. See Shea (1984:126).
55A	iskonsa i-ską-si IDEF-head-hair 'hair'	Gallatin (1836:313)	Compare this entry with index 54. Miller was able to hear and record the nasal quality in this entry, however, he missed it in the previous entry.
55B	gitlung 'hair'	Gallatin (1848:94)	This entry was an error in Gallatin's book. He meant to include this term in the Cherokee wordlist.
56	heemoh hi-nen 3s-face 'face'	Gallatin (1836:313)	This term is either an error on Miller's part or indeed an archaic term for 'face'. Compare with Shea (1984:96).
57	eetaup i-taap IDEF-forehead 'forehead'	Gallatin (1836:313)	Entry is consistent with later attested Catawba. See Shea (1984:106).
58	netaup ni-taap 1s-forehead 'my forehead' forehead	Barton (1798:109)	Entry is consistent with later attested Catawba. See Shea (1984:106).

59	doxu duksuu? 'ear'	Gallatin (1836:314)	Entry is consistent with later attested Catawba. See Shea (1984:93).
60	nocksoo nu-ksu 1s-ear 'my ear' ear	Barton (1798:109)	Entry is consistent with later attested Catawba. See Shea (1984:93).
61	heetooh hituu? 'his-eye' eye	Gallatin (1836:314)	Entry is consistent with later attested Catawba. See Shea (1984:96).
62	neetooh n-ituu? 1s-eye 'my eye' eye	Barton (1798:108)	Entry is consistent with later attested Catawba. See Shea (1984:96).
63	eepeesooh i-pįsuu? 'nose'	Barton (1798:107)	Note that Barton did not record the nasal quality. Otherwise, entry is consistent with later attested Catawba. See Shea (1984:166).  The Proto-Siouan-Catawban cognate is *pa. The proposed Woccon cognate is poppe which also lacks the nasal quality seen in Catawba (Rudes 2000).
64	esomo i-sumuu? IDEF-mouth	Gallatin (1836:315)	Entry is consistent with later attested Catawba. See Shea (1984:162).
65	heesoomoseh hi-sumuu?-se 3s-mouth-point 'tongue'	Gallatin (1836:315)	Entry is consistent with later attested Catawba. See Shea (1984:162).
66	neesoomoseh ni-sumuu?-se 1s-mouth-point 'tongue' my tongue	Barton (1798:111)	Entry is consistent with later attested Catawba. See Shea (1984:162).
67	heeaup hi-yaap 'his tooth' tooth	Gallatin (1836:315)	Entry is consistent with later attested Catawba. See Shea (1984:232).

68	neeaup ni-yaap 1s-tooth 'my tooth'	Barton (1798:110)	Entry is consistent with later attested Catawba. See Shea (1984:232).
69	tooth  esomoesa yi-sumuu?-see your-mouth-hair 'beard'	Gallatin (1836:316)	Entry is consistent with later attested Catawba. See Shea (1984).
70	edut -idat 'neck'	Gallatin (1836:316)	Entry is consistent with later attested Catawba. See Shea (1984:164).
71	eeksuh -iksa 'arm'	Gallatin (1836:316)	Entry is consistent with later attested Catawba. See Shea (1984:122).
72	ecksapeeah i-ksa-piya 'hand'	Gallatin (1836:317)	Miller reveals an archaic form for 'extremity'. See index 78. The same suffix <i>peeah</i> is used there too. This <i>peeah</i> suffix appears in Lieber's publication (see 'hand' in Lieber 1858:7).
73	eekseaah i-ksa icaa? 'fingers'	Gallatin (1836:317)	In this entry Miller reveals that the informant did not use the later attested Catawba suffix for 'extremity', <i>icaa</i> ? for this word. However, the <i>icaa</i> ? suffix appears in Index 80, 'toes'. Inference is <i>-iksa</i> can mean 'hand', 'arm', and 'fingers'.
74	eeksapis i-ksa pis hand-skin 'nails'	Gallatin (1836:317)	This entry is not found in the more well-known lexicons of Catawba. See Shea (1984:122).
75	eehageo i-haak-yuu IDEF-body-flesh 'body'	Gallatin (1836:318)	Entry is consistent with later attested Catawba. See Shea (1984:59).
76	eepah i-pą 'belly'	Gallatin (1836:318)	Entry is consistent with later attested Catawba. See Shea (1984:55).
77	No-Entry 'leg'	Gallatin (1836:318)	Catawba does not differentiate between 'leg' and 'foot'. Miller did not record an entry.

78	hepapeeah h-ipa-piya 3s-leg-extremity 'feet'	Gallatin (1836:319)	Entry is consistent with later attested Catawba. See Shea (1984:105).
79	nepapee'ah n-ipa-piya 1s-leg-extremity 'foot' my foot	Barton (1798:114)	Entry is consistent with later attested Catawba. See Shea (1984:105).
80	epuhyetah i-įpa-ičaa? IDEF-foot-extremity 'toes'	Gallatin (1836:319)	Entry is consistent with later attested Catawba. See Shea (1984:105).
81	heposaup hi-pasaap 3s-shin 'his shin' bone	Gallatin (1836:319)	Miller's informant likely said hį 'pasaap, or '(his) shin' (Rudes 2008b:98).
82	nosaup nu-saap 1s-bone 'my bone' bone	Barton (1798:89)	Entry is consistent with later attested Catawba. See Shea (1984:59).
83	deehauh di-haa 'heart'	Barton (1798:117)	Later attested Catawba has 'heart' as -imę. See Shea (1984:127). This entry may be an archaic word.
84	eet iit 'blood'	Barton (1798:116)	Entry is consistent with later attested Catawba. See Shea (1984:58).
85	wa wee 'town, village'	Gallatin (1836:320)	Entry is consistent with later attested Catawba. Note vowel shift from <i>wa</i> to <i>wee</i> . See Shea (1984:233).
86	yahmeraee yę miirá 'chief'	Gallatin (1836:321)	Entry is consistent with later attested Catawba. Note the absence of nasal quality. See Shea (1984:69).
87	weeseeweedheu wisi widé-yu Shawnee cow-flesh meat Shawnee 'warrior'	Gallatin (1836:321)	Morphemes are uncertain. The authors provided their best guess. See Young & Siebert (2003:272) for possible context with Shawnee.

			According to Speck, <i>wisi</i> is a "fierce monster in Catawba mythology" (Speck 1913:326). Although, Speck had later reanalyzed as 'many people' in his <i>Catawba Texts</i> (Speck 1934:91). It is possible that this term is a reference to this mythical monster.
88	ya-atehune-ee ye atehune?-a? man friend-sub 'friend'	Gallatin (1836:321)	Lieber attested the following for 'enemy':  ate-koo-ni-wah (1858:8) atekuni-w-aa-Ø friend-??-NEG-SUB  It is likely that the morpheme
89	anah	Douton (1709,01)	kuni 'good' is used in this entry's construction.
89	sook suk 'house, hut'	Barton (1798:91)	This entry is consistent with later attested Catawba. See Shea (1984:131).
90	kaupeyaweeracha keepa yą wiirą-c-a? hole water to.burn-CAUS-SUB 'kettle'	Gallatin (1836:322)	This term was not attested in latter references. Morphemes are uncertain.
91	wah wą 'arrow'	Gallatin (1836:322)	Entry is consistent with later attested Catawba. Miller missed the nasal quality. See Shea (1984:47).
92	eecheka ičika 'bow'	Gallatin (1836:323)	Entry is consistent with later attested Catawba. See Shea (1984:60).
93	pot-tateerawah pase-taru-aa axe-large-NEG small axe 'axe, hatchet'	Gallatin (1836:323)	Latter references attested <i>pvse?</i> for 'axe' (Voorhis n.d.:77). It is not clear if Miller misheard <i>potta</i> for <i>pase</i> or if the former is an archaic expression for 'axe'.
94	seepah sępa 'knife'	Gallatin (1836:323)	Miller missed the nasal quality of the first vowel. Otherwise entry is consistent with later attested Catawba. See Shea (1984:142).

95	dupomorya dapa amáa-ya? something watercraft 'canoe, boat'	Gallatin (1836:324)	Entry is consistent with later attested Catawba. See Rudes (2008b:18). Recorder misheard an <i>r</i> .
96	weeda witée 'Indian shoes'	Gallatin (1836:324)	Entry is consistent with later attested Catawba. See Shea (1984:197).
97	koostauh kustą 'bread'	Barton (1798:88)	Entry is consistent with later attested Catawba. Recorder missed the nasal quality. See Shea (1984:51).
98	wahmezu wamsu 'pipe, calumet'	Gallatin (1836:325)	Entry is consistent with later attested Catawba. Note that sometimes <i>s</i> can have an allophone <i>z</i> . See Shea (1984:180).
99	opah įpa 'tobacco'	Gallatin (1836:325)	Entry is consistent with later attested Catawba. See Shea (1984:231).
100	wahpeeh wáapit 'sky, heaven'	Gallatin (1836:325)	Entry is consistent with later attested Catawba. See Lieber (1858:7). Note recorder did not hear the final stop consonant.  Also, Rudes (2000:240) postulated that this word either Woccon or Catawba metathesized the middle two syllables. Observe the following:  PS: *wiira 'moon, sun, orb' (Rankin et al. 2015) W: *witapiree (Rudes 2000:234) C: waapit (Rudes 2000:234)  If these words are indeed cognates, the proto-Siouan long /ii/ was reduced to a short /i/ and
			Catawba might have metathesized the middle two syllables. This, the Comparative Siouan Dictionary, offers insight to Rudes's question as to which of the two Catawban languages metathesized these syllables.

101	nootéeh nųti 'sun'	Barton (1798:119)	Entry is consistent with later attested Catawba. See Shea (1984:217).
102	weechawa nooteeh wicaawa nuti night sun 'moon'	Gallatin (1836:326)	Entry is consistent with later attested Catawba. See Shea (1984:160). In Catawba, 'moon' and 'sun' have the same gloss.
			Please note that Catawba noun phrases are head-modifier configuration. This gloss appears to be an English calque for 'night sun'. Lieber (1858:7) attests the head-modifier configuration for this gloss.
103	nootéeh nųti 'moon'	Barton (1798:121)	Entry is consistent with later attested Catawba. See Shea (1984:160).
104	wahpeeknu wáápitnu 'star'	Gallatin (1836:326)	Entry is consistent with later attested Catawba. Note that recorder did not hear the final stop, compare with 'sky, heaven' in index 101. Also see Shea (1984:214).
105	yahbra 'day'	Gallatin (1836:327)	Entry is consistent with later attested Catawba. Neither Rudes (2008a,b) nor the authors know what the morpheme -bra is in this context. Swadesh attested that this word means 'daylight' (Shea 1984:84).
106	weechawa wíčaawa 'night'	Gallatin (1836:327)	Entry is consistent with later attested Catawba. Frank Speck had this word varying with <i>hiičááwa</i> . See Shea (1984:165).
107	heakuh ʻlight'	Gallatin (1836:327)	Later attested Catawba uses hayak. Either this entry is an error or this is indeed an archaic term. Hayak was also used for 'lightning' in this paper in Index 116.

108	weechaupku wičo-k-a? night-HAB-SUB 'darkness'	Gallatin (1836:328)	Entry is consistent with later attested Catawba. Note the coalescence from <i>wičawa</i> to <i>wičɔ</i> . This entry uses the habitative suffix and the particle suffix. See Shea (1984:165).
109	yahwup yawap 'morning'	Gallatin (1836:328)	Entry is consistent with later attested Catawba. Note that Shea (1984:161) attests to a coalesced word <i>yoob</i> .
110	weechawa rare night-PROX-IND 'evening'	Gallatin (1836:328)	Entry is consistent with later attested Catawba. See Shea (1984:165).
111	yahrunkquechuh yaarą kica summer own 'spring'	Gallatin (1836:329)	Rudes (2008b) documents 'spring' as <i>yáarirq?</i> . Alternatively, roots to this gloss might be:  yaarą ki-ca summer this-DIM
112	yahruh yaarą 'summer'	Gallatin (1836:329)	Entry is consistent with later attested Catawba. See Shea (1984:217).
113A	yup-hasohuh yapha sohę leaf fall+CONT 'autumn'	Gallatin (1836:329)	Wasii? was documented by Shea (1984:97). This gloss may be previously unattested.
113B	woye, waye 'autumn'	Dorsey (n.d.)	This gloss may be previously unattested. However, this gloss matches 'winter'. See Index 114.
114	weeyah wayą 'winter'	Gallatin (1836:330)	Archaic term for winter (Rudes 2008b). Proto-Siouan form is *wáarą 'winter'. Later attested Catawba term is <i>waya</i> , as recorded by Shea (1984:251).
115	yahho ye 'wind'	Gallatin (1836:330)	Later attested Catawba is yéhuu 'wind is blowing' (Rudes 2008b). The archaic root of the word is closer to Woccon, yuh-hor. Note that archaic Catawba and Woccon attest to yaa/yuu.

116	hiunk-hiunk-huh	Gallatin	Hayak by itself means 'to
	hayak~hayak-h-a?	(1836:330)Entry is	lighten'. However, when redu-
	light-redup-stat-sub 'light-	consistent with later	plicated, it means 'lightning'.
	ning'	attested Catawba.	It is interesting that Miller
		See Shea (1984:147)	heard a nasal quality.
117	tere-re-hera	Gallatin (1836:331)	Entry is consistent with later
	tiririhiree		attested Catawba. See Shea
	'thunder'		(1984:230).
118	ookso'reh'	Barton (1798:123)	Entry is consistent with later
	uksu?		attested Catawba. See Shea
	'rain'		(1984:184).
119	wauh	Barton (1798:124)	Entry is consistent with later
	waa		attested Catawba. See Shea
	'snow'		(1984:206).
120	wauh sah	Gallatin (1836:332)	Entry is consistent with later
	wasa		attested Catawba. See Shea
	'hail'		(1984:122).
121	epee	Barton (1798:132)	Recorder did not hear nasal
	įįpi		quality. Otherwise entry is
	'fire'		consistent with later attested
			Catawba. See Shea (1984:102).
122	eyau	Barton (1798:131)	Entry is consistent with later
	yą		attested Catawba. See Shea
	'water		(1984:244).
123	moha	Gallatin (1836:333)	Recorder did not hear nasal
	moha		quality. Otherwise entry is
	'ice'		consistent with later attested
124		(102(222)	Catawba. See Shea (1984:136).
124	munno	Gallatin (1836:333)	Entry is consistent with later attested Catawba. See Shea
	manuu 'aarth land'		(1984:120).
125	'earth, land'  iswasekera	Gallatin (1836:333)	
123		Ganatiii (1830.333)	Entry is consistent with later attested Catawba. See Rudes
	iswą sikirii river nasty		(2008b).
	'sea'		(2000).
126	eesauh	Gallatin (1836:334)	Entry is consistent with later at-
120	iswą	Sanathi (1030.334)	tested Catawba. Notice lack
	'river'		of nasalization. See Shea
			(1984:187).
127	eswoa, e-swo-a	Barton (1798:81)	Entry is consistent with later
	iswą		attested Catawba. See Shea
	'river'		(1984:187).
128	haukhe	Gallatin (1836:334)	Not previously attested.
	hááke		
	'lake'		

129	uhwah 'valley'	Gallatin (1836:334)	Chamberlain (1888) and Heinemann (1996) offer plausible origins of this word. See Shea (1984:239).
130	sookterrowa suk-taro-aa mountain-large-NEG 'hill'	Gallatin (1836:335)	Entry is consistent with later attested Catawba. See Shea (1984:161).
131	sook-taro suk-taro mountain-large 'hill'	Barton (1798:79)	Entry is consistent with later attested Catawba. The negative suffix is apparently not required to differentiate between 'mountain' and 'hill]. See Shea (1984:161).
132	sookterro suk-taro mountain-large 'mountain'	Gallatin (1836:335)	Entry is consistent with later attested Catawba. See Shea (1984:161).
133	suck, táro suk-taro mountain-large 'mountain'	Barton (1798:77)	Entry is consistent with later attested Catawba. See Shea (1984:161). What Barton might be suggesting is that word accents are morphemic.
134	sauwa saawę 'island'	Gallatin (1836:335)	Entry is consistent with later attested Catawba. See Shea (1984:140). Miller missed the nasal quality of the last vowel.
135	eedee įti 'stone, rock'	Gallatin (1836:336)	Entry is consistent with later attested Catawba. See Shea (1984:188).
136	noropeweyeh nuruubi wiya iron wire 'copper'	Gallatin (1836:336)	Word is not attested in Voorhis or Shea. See Rudes (2008b:83).
137	norope-ee duruubi-DIM 'iron'	Gallatin (1836:336)	Entry is consistent with later attested Catawba. Note that archaic Catawba once nasalized the initial /d/. See Shea (1984:139).
138	koos kus 'maize'	Gallatin (1836:337)	Entry is consistent with later attested Catawba. See Shea (1984:78).

139	yup yap 'tree'	Gallatin (1836:337)	Entry is consistent with later attested Catawba. See Shea (1984:253).
140	eeúp yap 'wood'	Barton (1798:133)	Entry is consistent with later attested Catawba. See Shea (1984:253).
141	eeapaúh ee-up-hah yap-ha 'leaf'	Barton (1798:76)	Entry is consistent with later attested Catawba. See Shea (1984:145).
142	yunnup-pees yana-pis 'bark'	Gallatin (1836:338)	Entry is consistent with later attested Catawba. See Shea (1984:253).
143	surrak serak 'grass'	Gallatin (1836:338)	Entry is consistent with later attested Catawba. See Shea (1984:118).
144	yay 'oak'	Gallatin (1836:339)	Not attested in other lexicons. Later attested Catawba is watkáheree is 'oak'. See Rudes (2008b).
145	eetawa ičuwe 'pine-tree'	Gallatin (1836:339)	Entry is consistent with later attested Catawba. Note Gallatin did not hear /č/.
146	weedee-yoyunde-e wiiduu yadee cow-meat 2s.eat-IMP 'flesh, meat'	Gallatin (1836:339)	Informant clearly indicated here '(you) eat the meat'. Furthermore, this entry clearly shows <i>wide</i> in its unsycopated form. See Shea (1984:154).
147	weedee-youh wide-yu 'cow-dead'	Barton (1798:116)	Entry is consistent with later attested Catawba. See Shea (1984:154).
148	chaupee čápi 'beaver'	Gallatin (1836:340)	Later attested Catawba form can be as follows:  tasi cap (Pickens 1957)  tasi yamuree (Rudes 2008b)
149	weedaboy-ah wita-bo-a? cow-shoot-sub 'deer'	Gallatin (1836:340)	Entry is consistent with later attested Catawba. See Shea (1984:85).
150	yunnaus 'bison, buffalo'	Gallatin (1836:340)	Speck has also attested <i>yedehás</i> (Speck 1934).
151	nomeh namę? 'bear'	Gallatin (1836:341)	Entry is consistent with later attested Catawba. See Shea (1984:54).

152	yauntsesoore-ee	Gallatin (1836:341)	Entry is consistent with later at-
	tąsi-surie		tested Catawba. Note that /t/
	dog-wild 'wolf'		was replaced by /y/ according to Miller. See Shea (1984:54).
153	tauntsee, taunsee	Barton (1798:83)	Entry is consistent with later
	tąsi		attested Catawba. See Shea
1.7.4	'dog'	G 11 (1.02 ( 2.12)	(1984:54).
154	dupoyamo-eeha	Gallatin (1836:342)	Entry is consistent with later
	dapa yámuye 'fox'		attested Catawba. See Speck (1934:story 19).
155	piup	Gallatin (1836:342)	Entry is consistent with later
133	payą	Ganatin (1630.342)	attested Catawba. See Shea
	'squirrel'		(1984:212). Note that Miller
	Squirer		heard a stop, /p/.
156	depauksa	Gallatin (1836:342)	Entry is consistent with later
	dapa-pą-sę		attested Catawba. See foot-
	something-belly-old		note on Speck (1934:9). Note
	'rabbit'		this form is like Oscar Lieber's
			(1858:14) form.
157	yah	Gallatin (1836:343)	Lieber (1858:7) also records
	yaa		daa for snake. See Shea
1.50	'snake'	C 11 (102(242)	(1984:205).
158	koching kučin	Gallatin (1836:343)	Entry is consistent with later attested Catawba. See Shea
	'bird'		(1984:55).
159	watka-eno	Gallatin (1836:343)	Entry is consistent with later
137	witką-hiinų	Gunum (1030.313)	attested Catawba. See Shea
	chicken-egg 'egg'		(1984:95). Miller missed the
	66 66		nasal quality of the second
			vowel.
160	ahhah	Gallatin (1836:344)	Entry is consistent with later
	ááhaa?		attested Catawba. See Shea
	'goose'		(1984:118).
161	kosaunsopee	Gallatin (1836:344)	Entry is consistent with later
	kasą́supi		attested Catawba. See Shea
160	'duck'	Colletin (102(-244)	(1984:92).
162	eetoosewee-yachuh	Gallatin (1836:344)	Analysis for this entry is not
	ituse-we yą-čaa dove-?? water-DIM		certain. Also, it is not clear if Miller misheard the suffix -we.
	dove-?? creek		Speck had previously attested:
	'pigeon'		itúse bee?
	1.20		dove immovable
			'passenger pigeon' (See Rudes
			2008b:49.)

163	eepahka ípakee 'partridge'	Gallatin (1836:345)	Later references attested the following: dapakee or dapakeek dapa ipakee something ??-partridge  See Rudes (2008b:18 and 47). It is not clear if the form is ipakee or pakee.
164	watkunterro witką taro chicken large 'turkey'	Gallatin (1836:345)	Entry is consistent with later attested Catawba. See Shea (1984:235).
165	yee yii 'fish'	Gallatin (1836:345)	Entry is consistent with later attested Catawba. See Shea (1984:66).
166	saukchuh sakči 'white'	Gallatin (1836:346)	Later attested Catawba is <i>takci</i> , however the archaic construction resembles proto-Siouan *asaa(-ha) (Rankin et al. 2015). If this is truly a cognate, the nasal quality was missed.
167	houkchuh hawukči 'black'	Gallatin (1836:346)	Entry shows coalescence of - <i>awu</i> - to a back rounded vowel. See Shea (1984:56).
168	sikechuh si?ką-či 'red'	Gallatin (1836:346)	Entry is consistent with later attested Catawba. 'Red' has been attested as si?kq Rudes (2008b:102) and skę Rudes (2008b:103). Miller may have recorded an archaic version of this word; that is, si?kq may be short for si?kqči.
169	yahwe-hah ya wi-h-a? water is.like-3s-sub 'blue'	Gallatin (1836:347)	'Blue' has been attested as wayákaa or wiyákaa Rudes (2008b:122).
170	sekaweehuh siką wi-h-ree red-is.like-3s-IND 'yellow'	Gallatin (1836:347)	Entry is consistent with later attested Catawba. This utterance was later attested by Gatschet (1900:534).
171	wi-unka wiyąk 'green'	Gallatin (1836:347)	Entry is consistent with later attested Catawba. See Rudes (2008b:122).

172	pauktehera paatkę-h-ree is.big-3s-IND 'great, big'	Gallatin (1836:348)	Entry is consistent with later attested Catawba Rudes (2008b:88). However, Miller must have misheard and switched the <i>k</i> and the <i>t</i> in his notes.
173	tee-huera tu-h-ree be.small-STAT-IND 'small, little'	Gallatin (1836:348)	Entry is consistent with later attested Catawba (Rudes 2008b:116).
174	yahneerochora yi miira?-ču-ree man be.strong-INTS-IND 'strong'	Gallatin (1836:348)	Entry is consistent with later attested Catawba. See Shea (1984:119).
175	sebaheh 'old'	Gallatin (1836:349)	Entry is consistent with later attested Catawba. See Shea (1984:170).
176	worera -wari?-ree 'young'	Gallatin (1836:349)	Entry is consistent with later attested Catawba, see Voorhis (n.d.:103). This verb requires a pronominal prefix and a suffix.
177	koonera kurį-ə-ree good-EP-IND 'good'	Gallatin (1836:349)	Entry is consistent with later attested Catawba. See Shea (1984:116).
178	imbahow-ara himbaháaree himba-(h)-aa-ree nice-EP-NE-IND.MODE 'bad'	Gallatin (1836:350)	Entry is consistent with later attested Catawba. See Voorhis (n.d.:41).
179	koonehara kurii-h-ree 'handsome'	Gallatin (1836:350)	Entry is consistent with later attested Catawba. See Shea (1984:116).
180	ehechowehara e?-h-ču wi-h-ree to.dislike-3s-INTS to.resemble-3s-IND 'ugly'	Gallatin (1836:350)	Morphemes are uncertain. Perhaps the informant said 'he resembles he doesn't like'.
181	yawahrahcha yį wari-če man dead-рконів 'alive, life'	Gallatin (1836:351)	Entry is consistent with later attested Catawba. See Shea (1984:85).

182	yawahrah hera yi wariheree man dead+3s+IND 'dead, death'	Gallatin (1836:351)	Entry is consistent with later attested Catawba. See Shea (1984:85).
183	chehuh cheara čį ha-čuu-ree cold STAT-INTS-IND 'cold'	Gallatin (1836:351)	Typically, describing words in Catawba inflect for person similar to verbs. However, this word, 'cold' does not appear to inflect for person. After a close observation of Shea (1984:80), it appears likely that the suffix - ha- that appears on her entries is that stative suffix. Furthermore, 'I am cold' and 'you are cold' are essentially the same entries; thus, it is likely that this adjective does not inflect for person.
184	weehuhohechora wiika ha-čuu-ree hot STAT-INTS-IND 'warm, hot'	Gallatin (1836:351)	Like the word 'cold', the word 'hot' does not appear to inflect for person either. See Shea (1984:131).
185	derah de 'I'	Barton (1798:97)	Entry is consistent with later attested Catawba. See Shea (1984:135).
186	yayah ye 'thou'	Gallatin (1836:352)	Entry is consistent with later attested Catawba. See Shea (1984:257).
187	ouwah owa 'he'	Gallatin (1836:353)	Entry is consistent with later attested Catawba. See Shea (1984:125).
188	wupchahaora do 'we'	Gallatin (1836:353)	This may be an archaism. Morphemes are uncertain. See Shea (1984:245).
189	yayah wi 'you'	Gallatin (1836:353)	This may have been an error recorded by Miller. The informant clearly attested 'you' (singular) and Miller recorded it as 'you' (plural). See Shea (1984:256).
190	kera-arrera owa 'they'	Gallatin (1836:354)	This may be an archaism. Morphemes are uncertain. See Shea (1984:125).

191	aya 'this'	Gallatin (1836:354)	Previously unattested
192	heya hííyaa 'that'	Gallatin (1836:354)	Entry is consistent with later attested Catawba. See marginalia of Notebook #3 (Siebert 1945a). <i>Hiiyaa</i> was attested to mean 'yonder, nearly out of sight'.
193	needem nitęęp 'all'	Gallatin (1836:355)	Entry is consistent with later attested Catawba. See Shea (1984:45). <i>Diteep</i> has also been attested.
194	yahkano yaką 'many, much'	Gallatin (1836:355)	Entry is consistent with later attested Catawba. See Shea (1984:160).
195	tou-a-ena tuwę 'who'	Gallatin (1836:355)	Entry is consistent with later attested Catawba. See Shea (1984:249).
196	No Entry 'near'	Gallatin (1836:356)	
197	yahpasa yaap-se day-point 'today'	Gallatin (1836:356)	Entry is consistent with later attested Catawba. See Shea (1984:238).
198	sodah sųdáa 'yesterday'	Gallatin (1836:356)	Entry is consistent with later attested Catawba. See Shea (1984:256). Recorder missed the nasal quality of the first verb.
199	yahwah yawą 'tomorrow'	Gallatin (1836:357)	Entry is consistent with later attested Catawba. See Shea (1984:232).
200	imbah 'yes'	Gallatin (1836:357)	Entry is consistent with later attested Catawba. See Shea (1984:256).
201	wahhow-ara wahaa-ree no-IND 'no'	Gallatin (1836:357)	Entry is consistent with later attested Catawba. See Shea (1984:173).
202	noyah duyą obj.+2s.eat 'to eat'	Gallatin (1836:363)	Entry is consistent with later attested Catawba. Often a proclitic <i>du</i> - is added to 'to eat'. See Lieber (1858:13). This proclitic appears to be unrelated to the 'hand action' instrumental affix.

203	korooksa kuruk-s-a? drink-1s-suB 'to drink'	Gallatin (1836:363)	Entry is consistent with later attested Catawba. See Shea (1984:98).
204	tereeksera ciriksiree to.run-1s-IND 'to run'	Gallatin (1836:364)	Entry is consistent with later attested Catawba. See Shea (1984:190). Interesting use of <i>t</i> vs. <i>c</i> .
205	barreeda baa-ree-da dance-IND-?? 'to dance'	Gallatin (1836:364)	Entry is consistent with later attested Catawba. See Shea (1984:90). It is not certain what the affix -da means in this index.
206	koreda kuuwa-ree-?? to.go-IND-?? 'to go'	Gallatin (1836:364)	Often the /uuwa/ sounds will coalescence into an /o/ sound, as seen in this index. This entry is consistent with later attested Catawba. See Shea (1984:119).
207	mana mų-a? sing-suB 'to sing'	Gallatin (1836:365)	Entry is consistent with later attested Catawba. See Shea. Pg. 207.
208	hemoda himų-de sleep-IMP 'to sleep'	Gallatin (1836:365)	Entry is consistent with later attested Catawba. See Shea (1984:209).
209	nedaukwunada nida-kay-de 1s.peak-3s=3s-IMP s/he says to him/her 'to speak'	Gallatin (1836:365)	Entry is consistent with later attested Catawba. See Shea (1984:221).
210	kawneda kaani-de see-IMP 'to see'	Gallatin (1836:366)	Entry is consistent with later attested Catawba. See Shea (1984:202).
211	nummosara ne-musa-ree 1s-love-IND 'to love'	Gallatin (1836:366)	Entry is consistent with later attested Catawba. See Shea (1984:151).
212	eekwah i-kwa-a? IDEF-kills-SUB 'to kill'	Gallatin (1836:366)	Entry attests that the indefinite possessor affix can also be the subject of prefixing verbs as well as inalienably possessed objects. Otherwise, entry is consistent with later attested Catawba. See Shea (1984:141).

213	eewahna	Gallatin (1836:367)	It is hard to know if Miller
	awą?-a?		heard a nasal n or a vocalic
	walk-sub		<i>n</i> . Swadesh attests to <i>awq</i> - and
	'to walk'		McDavid attests to awa?.
			awa?-h-ne 'is he walking?'
			is also possible. See Shea
			(1984:241).
214	nutátie	Dorsey (n.d.)	This term may be a related
	'blanket'		term for núunee? (See Rudes
			2008b:85).
215	datukó	Dorsey (n.d.)	This term may be related to 'in'.
	'inner bark'		See Lieber (1858:11) and see
			Shea (1984:138).

## Appendix B

References for phonology and abbreviations used in this paper:

- Morphemic analysis used in this paper generally follows the phonemes described by Rudes (2003).
- Short vowels are presented as follows: a, e, i, u
- Long vowels are presented as follows: aa, ee, ii, uu
- Nasal vowels are presented as follows: a, e, i, u
- The coalesced vowel is presented as: 5
- Siebert (1945a,b) attested that Catawba does not have the vowel /o/ and /oo/. Despite that, these vowels have been used. When a morpheme had previous been attested with /o/ and the authors are not certain what the correct vowel is, the phoneme /o/ is used due to historical reasons.
- Consonants generally follow what was described by Rudes (2003).

The abbreviations used in this paper generally follow Rudes's (2008a) verb morphology paper. The ones used in this paper are described below:

- STAT—Stative Suffix—attested as /-ha-/. It is used with nouns to create a verb phrase. See Index 28 of Appendix A. Mills's consultant was saying 'it is my son' by changing *kuri-na* or 'my son' to *kuri-na ha-ree* or something to the effect of 'it is my son'. We made the stative suffix bold for emphasis.
- IND—Indicative Modal Suffix—Suffix has a phonemic value of *-ree*. Shows statement of fact.
- IDEF—Indefinite possessor—this morpheme was first described by Voorhis's grammar sketch (n.d.). Attested as /i/ and appears as a proclitic to indicate that the possessor of an inalienably possessed noun is not identified.
- INT—Interrogative Modal Suffix—attested as *-ne*. This suffix is used to ask yes or no questions.
- CAUS—Causative suffix—has the phonemic representation as -č-. This suffix is used in verb phrases to show the verb was caused by something. Generally, the presence of this suffix increases verb valency.
- SUB—Subordinative Modal Suffix—has a phonemic representation of a? or  $\varnothing$ . This modal suffix marks a dependent clause.
- NEG—Negative suffix—This suffix has the phonemic representation of -aa-.

- GEN—Genuine suffix—This suffix has the phonemic representation of -ye. This suffix is affixed to nouns to show the noun is genuine, or true.
- HAB—Habitual suffix—This suffix has the phonemic representation of -k-. It is affixed to the verb phrase and means that the verb action is repeated habitually.
- PROX—Proximative Suffix—This suffix has the phonemic representation of *-ra*-. It is affixed to verb phrases and means 'almost' or 'nearly'.
- CONT—Continutive Modal Suffix—This suffix has the phonemic representation of -hę. It is affixed to the end of verb phrases to show that the verb 'would' happen.
- IMP—Imperative Modal Suffix—This suffix has the phonemic representation of *-dee*. It is affixed the verbs to show a command.
- INTS—Intensive Suffix—This suffix has the phonemic representation of -čuu-. It is affixed to the verb phrase. It shows intensification of the verb.
- PROHIB—Prohibitive Modal Suffix—This suffix has the phonemic representation of -če. It is affixed to the verb phrase. It shows prohibition of the verb.