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## The Cherokee Syllabary

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**ABSTRACT:** In order to recognize and correctly evaluate basic letter forms regarding their rarity, or general character, forensic document examiners are expected to have a ready reference file of the various systems of writing used in the United States during the last 100 years [1]. However, one system of writing appears to have been omitted from the reference/study materials. This paper provides information on that system of American writing known as the "Cherokee Alphabet," which is still in use today.

**KEYWORDS:** questioned documents, Cherokee, syllabary

### Historic Events

On the way to discovering the Mississippi in 1540, the Spanish expedition of DeSoto documented their march through Cherokee country [2]. The Cherokee, descendants from Iroquois linguistic stock, lived and thrived in the southeastern United States, which was comprised of Georgia, Tennessee, North and South Carolina.

In 1821, after twelve years of work, the Cherokee Sequoyah presented his "alphabet" to his people. This was an amazing accomplishment for a man who could not read or write prior to developing the alphabet. Sequoyah's "Talking Leaves" [3] invention was not a true alphabet. In actuality, it was a syllabary—phonetic symbols representing spoken syllables [4].

Sequoyah initially taught his daughter, Ah-yo-ka, to read and write his eighty-five character syllabary. He then began to teach other children in the tribe. The skepticism of the tribal chiefs toward the value of Sequoyah's work was soon overcome and the adult members of the tribe began to learn the syllabary [3].

Paper was scarce among the Cherokee, so bark was often used as a writing surface. Sequoyah's symbols were drawn with charcoal or paint made from berries. From one to another, the syllabary spread quickly to those who spoke the language, culminating in the Cherokee becoming the first Native American tribe in the United States to have a written language [3].

In 1824, portions of the New Testament from the Bible were translated into the Cherokee syllabary by missionaries. With the help of these same missionaries, the Cherokees established their own newspaper in New Echota, Georgia. At that time, New Echota was the eastern capital of the Cherokee nation [3].

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14 December 1987

VEOGA D@S@J@  
GWY@ D@C @SWF@  
W@  
@SWF@ 74465

Chief Wilma Mankiller  
Cherokee Nation of Oklahoma  
Tahlequah  
Oklahoma 74465

RG@VJ VEOG D@S@J@J  
Honorable Chief Mankiller;

A@TS @LVC@ SCV@E, TE@ D@-@ VEOG@ @SP@J@Y L@R@T@ GWY@  
D@C, @@L@P@P@ SC@WJL@J khSP@L D@ GWY@ D@C.

On this historic occasion, the installation of the first woman Chief of the Cherokee Nation, we are indeed proud to be here as the guests of the Cherokee Nation.

@V@ @TS @@L@P@P@E D@ EH@R Z@P@A@, @D J@WY J@@GVJ Z@ SCR@B.

With equal pride and sense of accomplishment, we hereby present you with this copy of the files which allow, for the first time, the use of the modern word processing computer, to write, print, and publish in the Cherokee language.

@D @@Y J@WY J@@GVJ D@GWY @@VJ SCR@T@, @SY @Y@T@J J@V@  
B@ @@VJ D@ hS@TR TGP@VJ @@Y GWY T@h@h@J T@T.

We present these files for the use of your people, in the hopes that your historic and wonderful language will continue to grow and prosper along with the Nation as a whole.

@LVP@ DL@T@J @R T@JL@J @Y@SP @L@OR GE@G@ @RT.

With best wishes for a long and fruitful administration, we remain,

@@L S@P@L@T@Y,  
Respectfully,

William Nelson Coxe, Jr.  
Mattie Ann Fincher Coxe

FIG. 2—Letter produced using Cherokee language word processing program (see text).

2) using the word processing system was presented to Chief Wilma Mankiller, Principal Chief of the Cherokee Nation. As part of the demonstration, "The Lord's Prayer" (Fig. 3) and a "Sample Cherokee Lesson" were printed (Fig. 4). As indicated by these examples, the characters form words separated by spaces, which are read left to right.

On May 25, 1993, the *Tulsa World* reported that a retiree, Harry Moneyhun, developed two computer programs to help preserve the Cherokee language [12]. Moneyhun's educational programs, which include more than 10,000 Cherokee words, "are being used in several area schools and by the Cherokee Nation." Moneyhun's programs differ from the previous programs insofar as the phonetic spelling (even one reasonably close) will produce the Cherokee characters. Eventually, Moneyhun would like to develop a third program that would type the spoken word.

**ᑎᑎᑎᑎ ᑎᑎᑎᑎᑎᑎ**

**THE LORD'S PRAYER**

**ᑎᑎᑎᑎ ᑎᑎᑎᑎ ᑎᑎ ᑎᑎᑎᑎᑎ ᑎᑎᑎᑎ**

Our Father which art in heaven, hallowed be

**ᑎᑎᑎᑎᑎᑎ. ᑎᑎᑎᑎ ᑎᑎ ᑎᑎᑎᑎᑎᑎᑎ.**

thy name. Thy Kingdom come.

**ᑎᑎ ᑎᑎᑎ ᑎᑎᑎᑎᑎᑎ ᑎᑎᑎᑎᑎᑎ ᑎᑎᑎᑎᑎ**

Thy will be done in earth, as it

**ᑎᑎᑎᑎ ᑎᑎᑎᑎᑎᑎᑎ. ᑎᑎᑎᑎᑎᑎ**

is in heaven. Give us

**ᑎᑎᑎᑎᑎᑎᑎ ᑎᑎᑎᑎ ᑎᑎ ᑎᑎ.**

this day our daily bread.

**ᑎᑎᑎᑎᑎᑎᑎᑎ ᑎᑎᑎᑎᑎᑎ ᑎᑎᑎᑎᑎ**

And forgive us our debts, as we forgive

**ᑎᑎᑎᑎᑎᑎᑎᑎ ᑎᑎᑎᑎ. ᑎᑎ ᑎᑎᑎ**

our debtors. And lead us

**ᑎᑎᑎᑎᑎᑎ ᑎᑎ ᑎᑎᑎᑎᑎᑎᑎᑎᑎᑎᑎᑎ**

not into temptation, but deliver

**ᑎᑎᑎᑎᑎᑎᑎᑎᑎᑎᑎᑎ ᑎᑎ ᑎᑎᑎ.**

us from evil:

**ᑎᑎᑎᑎᑎᑎ ᑎᑎᑎᑎ ᑎᑎ ᑎᑎ ᑎᑎᑎᑎᑎᑎ**

For thine is the kingdom, and the power,

**ᑎᑎ ᑎᑎ ᑎᑎᑎᑎᑎᑎ ᑎᑎ ᑎᑎᑎᑎᑎ.**

and the glory, for ever.

**ᑎᑎᑎ.**

Amen.

FIG. 3—The Lord's Prayer in the Cherokee language.

**SAMPLE CHEROKEE LESSON**

Sample phrases supplied by Mr. Durbin Feeling, Cherokee Language Specialist of the Department of Education of the Cherokee Nation of Oklahoma.

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GAṬWAB ṬṬṬE SAṬI AṬP, "ṬṬ SIAGI," DJ+.  
The shortest verse in the Bible says, "Jesus went."

RWJ 9JṬ ṬṬṬṬṬ PLIṬṬ.  
When he threw the ball down, it bounced.

Ṭ DWṬSPAY ṬṬṬ ṬṬṬṬṬ ṬṬṬṬṬ.  
The ball player is bouncing the ball hard.

Ṭ ṬṬṬṬ ṬṬṬṬṬ ṬṬṬṬṬṬṬ.  
The boys are playing ball.

ṬZṬYR DJṬṬṬṬ, ṬṬṬṬ.  
When he was accused of stealing, he denied it.

ṬṬṬṬ, ṬṬZ ṬṬṬṬṬ.  
I am denying him because I don't know him.

ṬṬṬ ṬṬṬṬ ṬṬṬ+ ṬṬ ṬṬṬṬ.  
His boat is ten feet long.

ṬṬṬ ṬṬṬṬ, ṬṬṬ ṬṬṬṬṬṬ ṬṬṬ Ṭ DWṬSPAY.  
That ballplayer is six feet, six inches tall.

ṬṬṬ ṬṬṬṬṬ ṬṬ ṬṬṬṬ ṬṬṬṬṬṬṬṬ.  
Twelve inches make one foot.

ṬṬṬṬ ṬṬṬṬṬ?  
Do you speak Cherokee?

ṬṬ ṬṬṬ ṬṬṬṬṬ ṬṬṬṬṬṬ ṬṬṬ ṬṬṬṬṬ?  
How many Cherokees work at the Cherokee Nation?

ṬṬṬ ṬṬṬ ṬṬṬ ṬṬṬ.  
She lives at a place called Rocky Mountain.

ṬṬṬ ṬṬṬṬ ṬṬṬ ṬṬṬṬ.  
Eagles live high atop the mountains.

FIG. 4—Sample Cherokee lesson (see text).

Depending on which source is used, the Cherokee Nation has anywhere from 60,000 [8] to more than 100,000 [5] members. Of the 60,000, Feeling reported, only about 30 percent can speak Cherokee. Of that 30 percent, only about 10 percent can read Cherokee and about 5 percent can write it [8].

In an effort to improve these percentages, the Cherokee Nation Education Department sponsored a three year curriculum plan to teach children how to read and write the Cherokee

language. The 1991 through 1994 stated goals of the Cherokee Language Curriculum Project are to:

1. Retain the language for future generations of Cherokee;
2. Maintain the status of the language as separate and distinct from other native languages;
3. Share the language with others who are not of Cherokee descent; and
4. Enhance the self-esteem and the image of the Cherokee child in his/her learning environment [9].

Currently, there are six elementary schools in three counties in northeastern Oklahoma pilot-testing the curriculum materials in grades kindergarten through third grade. The Cherokee curriculum staff is in the planning stages of drafting a curriculum guide for grades four through six, which will be ready by the 1994-1995 school year [9].

The method of teaching the Cherokee language begins with the *See-Say-Write Workbook* by Feeling.<sup>3</sup> The three major areas of learning to write are utilized in the workbook: Visual (See), Auditory (Say), and Kinesthetic (Write). The lessons are designed to be presented in eight sessions of ten lessons per session (except the eighth session, which is comprised of fourteen lessons). At the end of the eighth session, the students are expected to read and write the Cherokee language.

Students are issued the workbook during the first session. The workbook contains the "Cherokee Alphabet" writing system (Fig. 5). The entire lesson plan is based on repetition as the means of instilling the characters of the syllabary into the students' memories. The characters are in printed form and cursive writing (connecting letters) is not a factor. Each lesson is progressive and each new character introduced will be located in the upper left corner of the workbook page, much the same as writing workbooks used in many schools throughout the United States.

To allow for better recall, the teacher initially introduces a character in large print on a chalkboard then says the sound that the character represents. The students repeat that sound as they write the character. Eventually the characters will be used in sentences. All sentences are written in the Cherokee language, along with its literal meaning and its translation. The literal meaning and its translation is mainly for the student who does not speak the Cherokee language. Some characters do not sound like they are spelled. An example would be:

<i>K</i>	Character
<i>tso</i>	Transliteration
<i>jo</i>	Pronunciation

Leung, et al. [13] were able to differentiate writers of 21 handwritten symbols consisting of single strokes, geometric figures, printed English alphabet letters, and Chinese characters. Based on their results and other studies, identification of individual writers of the Cherokee syllabary is well within the realm of probability and a possible subject for future study.

### Discussion and Conclusions

Document examiners in Oklahoma<sup>4-6</sup> and the Federal Bureau of Investigation<sup>7-8</sup> were contacted. To date, they have not encountered any examinations of questioned documents

<sup>3</sup>D. Feeling, personal communication, October, 1993.

<sup>4</sup>A. H. Frank, personal communication, May, 1992.

<sup>5</sup>J. M. Hull, personal communication, May, 1992.

<sup>6</sup>J. S. Kelly, personal communication, May, 1992.

<sup>7</sup>E. D. Smith, personal communication, May, 1992.

<sup>8</sup>S. Grantham, personal communication, May, 1992.

**Cherokee Alphabet.**

D <sub>a</sub> S <sub>ga</sub> O <sub>ka</sub> T <sub>ha</sub> W <sub>la</sub> S <sub>ma</sub> O <sub>na</sub> t <sub>hna</sub> G <sub>nah</sub> T <sub>qua</sub> H <sub>sa</sub> o <sub>s</sub> L <sub>da</sub> W <sub>ta</sub> o <sub>dia</sub> L <sub>tla</sub> G <sub>t<sub>sa</sub></sub> G <sub>wa</sub> o <sub>ya</sub>	R <sub>e</sub> F <sub>ge</sub> P <sub>he</sub> o <sub>le</sub> A <sub>me</sub> A <sub>ne</sub> o <sub>que</sub> A <sub>se</sub> S <sub>de</sub> T <sub>te</sub> L <sub>t<sub>le</sub></sub> T <sub>t<sub>se</sub></sub> o <sub>we</sub> B <sub>ye</sub>	T <sub>i</sub> Y <sub>gi</sub> o <sub>hi</sub> P <sub>li</sub> H <sub>mi</sub> h <sub>ni</sub> P <sub>qui</sub> B <sub>si</sub> J <sub>di</sub> J <sub>ti</sub> C <sub>t<sub>li</sub></sub> h <sub>t<sub>si</sub></sub> o <sub>wi</sub> o <sub>yi</sub>	o <sub>o</sub> A <sub>go</sub> F <sub>ho</sub> G <sub>lo</sub> o <sub>mo</sub> Z <sub>no</sub> V <sub>quo</sub> F <sub>so</sub> V <sub>do</sub> T <sub>t<sub>lo</sub></sub> K <sub>t<sub>so</sub></sub> o <sub>wo</sub> h <sub>yo</sub>	O <sub>u</sub> J <sub>gu</sub> F <sub>hu</sub> M <sub>lu</sub> Y <sub>mu</sub> A <sub>nu</sub> o <sub>quu</sub> o <sub>su</sub> S <sub>du</sub> o <sub>tl<sub>u</sub></sub> J <sub>t<sub>su</sub></sub> o <sub>wu</sub> G <sub>yu</sub>	i <sub>v</sub> E <sub>gv</sub> o <sub>hv</sub> A <sub>lv</sub> o <sub>nv</sub> E <sub>quv</sub> R <sub>sv</sub> o <sub>dv</sub> P <sub>t<sub>lv</sub></sub> C <sub>t<sub>sv</sub></sub> G <sub>wv</sub> B <sub>yv</sub>
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**Sounds Represented by Vowels**

a, as <u>a</u> in <u>father</u> , or short as <u>a</u> in <u>rival</u>		o, as <u>o</u> in <u>note</u> , approaching <u>aw</u> in <u>law</u>
e, as <u>e</u> in <u>hate</u> , or short as <u>e</u> in <u>met</u>		u, as <u>oo</u> in <u>foo</u> , or short as <u>u</u> in <u>pull</u>
i, as <u>i</u> in <u>pike</u> , or short as <u>i</u> in <u>pit</u>		v, as <u>u</u> in <u>but</u> , nasalized

**Consonant Sounds**

g nearly as in English, but approaching to k. d nearly as in English but approaching to t. h k l m n q s t w y as in English. Syllables beginning with g except S (ga) have sometimes the power of k. A (go), S (du), o (dv) are sometimes sounded to, tu, tv and syllables written with tl except L (tla) sometimes vary to dl.

FIG. 5—Cherokee alphabet.

involving the Cherokee syllabary. There was, however, one landmark questioned document case relating to Cherokee writing—Hickory v. United States (1894. 14 S.Ct. 334, 151 U.S. 303, 38 L.ED. 170). Referencing this case, Charles C. Scott wrote in 1981:

“Unquestionably this is the leading case announcing the rule that volunteered writing done post litem motam for the purpose of creating specimens for comparison are inadmissible when offered on behalf of the party making them. Hickory was a Cherokee . . . who was charged with murder of a United States marshal. A letter in

the nature of a confession, written in the Cherokee alphabet, was put in evidence. Hickory denied the letter was in his handwriting and his counsel offered a paper, written by Hickory while at the counsel table, to compare with the confession letter" [10].

In *Hickory v. United States*, the Supreme Court held that the trial court properly excluded the volunteered specimen [10]. A review of the full decision by the court revealed two expert witnesses testified on behalf of the defense—one an "expert in Cherokee handwriting" [11]. Both experts (who were not identified as document examiners) claimed they compared the questioned writing with writing offered by the defendant and found that Hickory did not write the questioned document. There was no mention in the decision of a expert document examiner witness for the government.

With the development of the Cherokee Nation Language Curriculum, it would not be unlikely in the near future to see a document problem involving the Cherokee syllabary submitted for forensic document examination. When this occurs, the document examiner will hopefully recognize the symbols of Sequoyah's great achievement.

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