

A Study of Hmong Handwriting

Janis S. Tweedy

Forensic Document Examiner, Total Security Concepts, Inc., 750 South Plaza Drive, Suite 210, Mendota Heights, MN 55120

The handwriting of Hmong people who learned to write in Southeast Asia was collected and studied to see if there were any class characteristics or unusual habits present in the writing that could identify it as having been produced by a Hmong writer. Of interest is the fact that the Hmong people had no written language before 1953 when one was developed for them that uses the Roman alphabet. No identifiable class characteristics or habits were identified. However, a large percentage of the writers used more hand printing or penlifts than normally encountered by the author.

Introduction

The Hmong (pronounced "Mong") people have made their homes in the northern portions of Laos, Thailand and Vietnam and southern China in Southeast Asia. After the Vietnam War, many were directed into refugee camps and from there have been immigrating into the United States. The state of Minnesota has become a primary destination for the immigrants. The Hmong population in Minnesota has grown from none to over 27,000 in 18 years.

With the large population in Minnesota, it was just a matter of time before document cases involving Hmong handwriting would be encountered. In 1990, a note involved in a rape case was submitted to determine whether it had been written by either of two Hmong people involved in the case. In order to make a proper examination, it was necessary to get more information about Hmong writing. The investigation revealed some interesting facts.

While several attempts had been made in the past to develop a Hmong written language, the Hmong did not have a written language until 1953 when one was developed specifically for them by a trio of people. The system was called the Romanized Popular Alphabet (RPA) and was developed between 1951 and 1953 by three missionaries. Americans G. Lindwood Barney and William A. Smalley were Protestant missionaries who were also interested in studying the Hmong language. Yves Bertrais, a Frenchman, was a Catholic missionary who has become a major scholar in Hmong studies.

The Romanized Popular Alphabet uses all of the letters of the Roman alphabet. A copy of a book called *First steps in Hmong* by Yves Bertrais that has been used in the teaching of Hmong language and writing was obtained and studied. It displays a cursively-written alphabet with some very fancy embellishments on the capital letters. However, there are no step-by-step instructions on how to produce the letters. A comparison was made between the script in the Bertrais book and scripts shown in the *Foreign Systems of Handwriting* book produced by the Post Office Department in 1953. Many similarities were noted between the Hmong book script and four of the scripts displayed in the Post Office book. Two scripts were of French origin (Systems 37 and 43). See Fig. 1.

William A. Smalley, one of the developers of the RPA, was contacted and it was discussed with him how the letter forms of the RPA were taught to the Hmong. He was familiar with the Bertrais book *First steps in Hmong* and indicated that the letter forms in that book were very close to the forms which were and are currently taught to users of the RPA. He said there was a definite French influence in the writing due to Bertrais' choice of writing system. He said that ideally the RPA was taught much like he was taught in the United States using books with the letters to be copied and practice sheets which consist of two solid lines separated in the middle by a dashed line. He also said that the vast majority of the schools were lucky to even have a blackboard where the teacher/missionary would write and then the students would copy it on slates or paper. He felt that very few students ever became

accomplished enough to have their handwriting closely resemble the model writing. Hmong students are taught to hand print before they learn

to handwrite, however, I was unable to get any information on the hand printing system(s).

Just after the development of the RPA, another

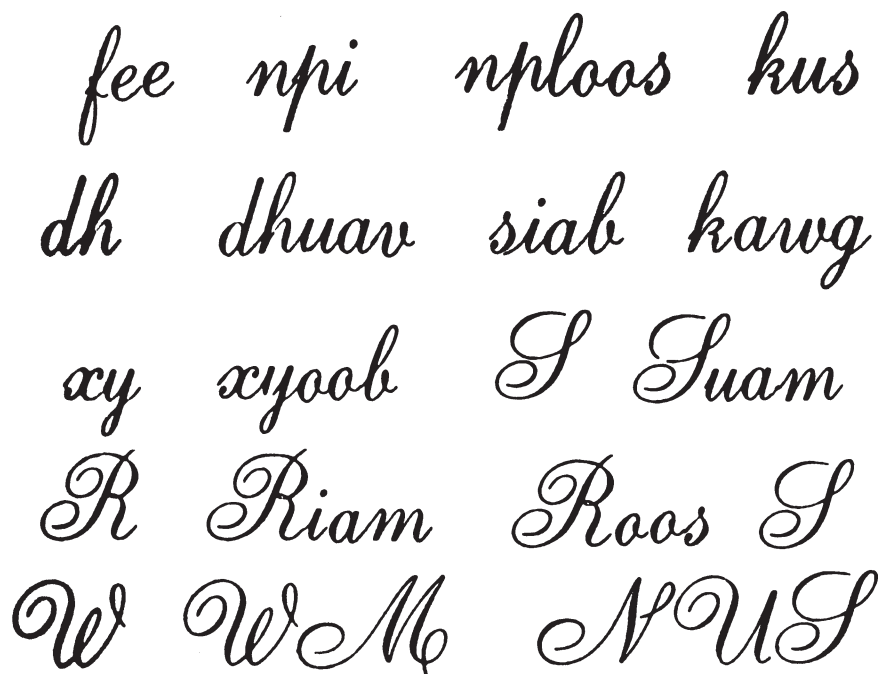


Figure 1. Sample letter forms from Bertrais' book

Hmong writing system was developed which was called Pahawh Hmong. In contrast to the RPA, the Pahawh Hmong uses symbols created specifically for that system instead of Roman letter

forms. Figure 2 shows how a sentence is written in Pahawh Hmong (top), the Romanized Popular Alphabet (middle) and English (bottom).

Yaj Soob Lwj twb pib kev cob qhia tib neeg nyeem tus Phaj hauj
Hmoob thaum 1959.
'Shong Lue Yang began teaching people to read the Pahawh
Hmong in 1959'.

Figure 2.

Several other scripts were developed since the late 1950's but they are in little use today.

There has been much discussion among the Hmong over which system they should use. Traditional Hmong feel that the Pahawh Hmong system is uniquely Hmong and should be used, however, they have experienced much difficulty trying to gain acceptance for it due to the problems caused by the symbols not being compatible with communication systems. The RPA, due to the use of the Roman alphabet, has experienced no such problems and is the most widely used system.

Methods and Materials

A short form was developed to collect Hmong writing samples. The form requested Hmong writing that was the text of the note in question and then material in English that used many of the same letter forms. The form also requested the age, sex and occupation of the writer as well

as information regarding where the individual learned to write. Names were optional.

It was extremely difficult to obtain a large number of samples for examination, as the Hmong were very reluctant to provide samples. Through the help of a Hmong Intern at the Minnesota Bureau of Criminal Apprehension, 107 samples were obtained. The samples were from 68 males and 37 females (two samples did not give the sex of the writer). The writers were divided into two groups based on whether they learned to write "before" (85 writers) or "after" (22 writers) they came to the United States. For a distribution of the ages of the "before" group participants, see Figure 3. It should be noted that some of the writers in the "after" sample probably did learn to write before coming to the United States but had misinterpreted the question to mean when they learned to write English. Therefore, the "after" group may not be an accurate representation and the rest of this work will refer to the results of the "before" group unless specifically indicated.

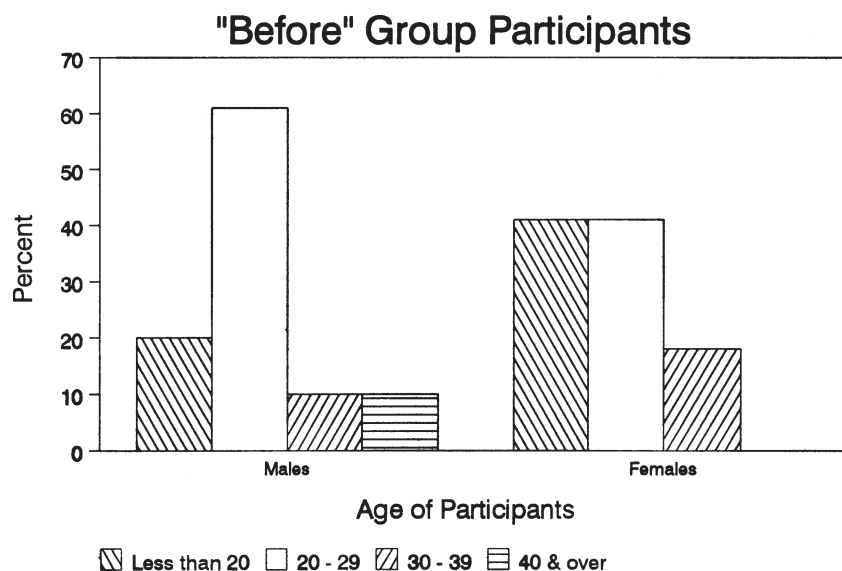


Figure 3.

The writing was studied to see if any differences or unusual features were noted between the Hmong writing and the writing normally encountered by the author.

The questioned note (Figure 4) was written on the reverse side of a bank deposit ticket and while not displaying a high degree of skill on the writer's part, characteristics were present that appeared to be useful for an identification examination: the lower case "s" that appears to have a large loop

or retrace at the top that curves sharply to the left and the lower case "x" that is formed by two oppositely-facing "c" forms. It needed to be determined whether the unusual characteristics were, in fact, unusual and of value for identification purposes.

These forms were also chosen because in Bertrais' book, the "s" and "x" forms do show similarities to the forms on the questioned note. (See Figures 5A and 5B.)

CHECKS	LIST SINGLY	DOLLARS	CENTS
1	Dim neej no		
2	zoo li no xub		
3	ced cia kev ua		
4	ib siab rau gal		
5	mog		
6	kev zoo siab		
7	tiaj muaj kaj es		
8	thiab li tiaj		
9	xub es siab kaj		
10	yeav hais li		
11	ced rau kev es		

Figure 4. The questioned material



Figure 5A.
Letters "s" and "x" from the questioned text



Figure 5B.
Letters "s" and "x" from Bertrais' book

Results

A review of the submitted Hmong writing showed "s" forms that had a large retrace or loop at the top in 22% of the writing. However, none of the 85 "before" writers actually made the sharp left curve that appeared in the questioned writing. In the 22 "after" writers, only one writer had a form that was somewhat similar to the questioned form.

Looking at the "x" forms, approximately 5% (5) of all the submitted writers exhibited a letter form with the general formation of the questioned form. None of the writers produced an "x" that was very similar in appearance to the questioned form.

Comparisons were also made on the "c" letter forms that showed the "c" form from the questioned note (having a large, horizontally-oriented initial loop) occurred in less than 12% of the Hmong writing samples.

Comparisons were also made in the slant and proportion areas with nothing remarkable noted.

It was noticed that a large percentage of the Hmong writers used the hand printed form of the letter "b" in their handwriting (83%). Some writers used the hand printed form exclusively while others mixed it with the handwritten form. Samples from the Minnesota Forensic Science Laboratory reference files were studied. Of 65 samples that were studied, only 29% of the writers demonstrated the hand printed "b" form in their handwriting.

While trying to determine what might cause the high percentage of hand printed "b" forms in the Hmong handwriting, it was noted that more hand printed forms and actual hand printing occurred in the Hmong handwriting samples. Examination of the Hmong writing samples revealed that 29% consisted of hand printed material or handwritten letter forms with many pen lifts (no more than 2 letters connected at a time). The writers

had been specifically told to *handwrite*, not *hand print*, yet hand printing was very prevalent in their writing. Perhaps it has something to do with the amount and type of training they have received in handwriting. A Minneapolis School System teacher who teaches English as a Second Language to the Hmong says that she has a lot of difficulty getting her students to connect their letters. They will use a handwritten form but disconnect it from the preceding and following letters. She says it is a problem when teaching the Hmong to write English.

Some handwriting in Hmong and some in English has been selected to show a representative sample of the material received. Figures 6 and 7 consist of a line or two of handwriting from writers who learned to write before coming to the United States. The order of writers (top to bottom) is the same for both Figures, i.e., the same writer produced the writing at the top of both exhibits, a different writer produced the second from the top entries on both exhibits, etc.

Discussion

As a result of the study, no identifications of any unique or class characteristics that can identify or be associated with Hmong handwriting were made. Most of the handwriting looks very similar to the type normally encountered in daily examinations by the author. However, it was noticed that many hand printed and disconnected forms appeared in the Hmong handwriting.

In undertaking an examination of an unfamiliar script, the author found it helpful to study the background of the writing and obtain samples from its users in order to determine whether the normal handwriting examination procedures can be used. From this investigation of Hmong handwriting, it appears that Hmong writing can be examined using normal examination methods.

Sim neej no zoo li no xwb ces cia kuv ua
ib siab rov gab mog.

Sim neej no zoo li no xwb ces cia
kuv ua ib siab rov gab mog.

Sim neej no zoo li no xwb ces cia kuv
ua ib siab rov gab mog.

Sim neej no zoo li no xwb ces cia kuv
ua ib siab rov gab mog.

Sim neej no zoo li no xwb ces kuv ua ib siab
rov gab mog.

Sim neej no zoo li no xwb ces cia
kuv ua ib siab rov gab mog.

Sim neej no zoo li no xwb ces cia kuv ua ib siab rov
gab mog. Kuv zoo siab tiab mlaaj koj' es thiaj

Sim neej no zoo li no xwb ces cia
kuv ua ib siab rov gab mog.

Figure 6. Examples of Hmong writing

Let us go to the St. Paul zoo with the kids.
We will see foxes, camels, snakes, jack rabbits,

Let us go to St. Paul zoo with the kids

Let us go to the St. Paul zoo with the kids,
we will see foxes, camels, snakes,

Let us go to the St. Paul zoo with
the kids.

Let us go to St. Paul zoo with the kids.

Let us go to the St. Paul zoo with
the kids.

let us go to the St. Paul zoo with the kids.
we will see foxes, camels, snakes, jack rabbits,

let us go the St. Paul zoo with the kids

Figure 7. Examples of Hmong writing English

Acknowledgements

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