INTRODUCTION TO THE HISTORY OF HANDWRITING
GUIDELINE FOR SAFDE MAMBERS

Making a Long Story Short

The History of Handwriting

On an old piece of Egyptian papyrus, it was written that writing is more useful than a home and better than a monument in a temple. The ancient people of Egypt valued the invention of writing. Now some people don’t even know the origins of written language.

Note: Egyptians believed that writing was a gift from “Thoth” the God of the moon and of wisdom and learning. Thoth is depicted standing.
The study of the history of handwriting may not have a direct effect on the examination and comparison of handwriting. However, if a forensic document examiner was asked, “Who is Ludovico degli Arrighi aka Vicentino?” it is not likely that there would be an immediate and confident answer. Who is Vicentino? A secretary to the papal offices in Rome who contributed significantly to the development of our current handwriting styles.

During the SWAFDE 2001 Spring Seminar in Monterey, California all participants were asked to take part in a contest to write a synopsis on why it is necessary or unnecessary for a forensic document examiner to have knowledge of the history of handwriting. The winner of the contest was Floyd Whiting, and the following is his hastily composed but very thoughtful response:

“If a person purports to be an expert in a discipline, it is expected that he would have a comprehensive knowledge of the information pertinent to that discipline. Not only does such knowledge enhance the perception that the person truly understands his subject matter, but it also assists him in countering any attempt to discredit his professionalism. In the field of QD examinations we have to deal with defense attorneys who wish to undermine our presentations to the court. If we are able to show a deep understanding of the history of handwriting, it implies that we have spent considerable time dealing with our subject and thus most likely are highly skilled in other aspects, such as handwriting identification. If questions do arise during cross-examination, a rapid and accurate response quickly reveals the depth of our knowledge. Both the lawyer and the jury thus gain more respect for the analysis, and the attorney generally backs away from his confrontation. In addition, one gains greater self-confidence when he knows he has a solid grasp of his subject.”
WHAT IS ROCK ART?

With that said, we will now embark on the long road of the history of handwriting.

This guideline will only concentrate on the important stops along this long road, those that have influenced the development of the Roman (Latin) alphabet upon which the modern western European alphabets are founded.

Nearly 30,000 years B.C., stone-age humans decided to cover the walls of caves with hunting images. Was this the first attempt at writing?

The walls of the caves were covered with Pictographs and Petroglyphs

Definitions:

Pictograph: A painting on stone with natural pigments.

Petroglyph: A drawing on stone that is pecked, incised (carved), scratched or abraded.
CUNEIFORM

Definition: Latin: Cuneus (Wedge) and Forma (Shape).

Cuneiform is not a language or system of writing. It is a mode (method) of writing.

Cuneiform originate in Southern Mesopotamia in about 3300 B.C., and it was probably invented by the Sumerians. (Mesopotamia is in modern-day Iraq).

MESOPOTAMIA

Probably as many as thirteen different languages used cuneiform writing.

The earliest cuneiform inscriptions were composed of pictographs,

Later a fully developed Cuneiform system had more than 600 signs that could be used as symbols for words or as syllables.

Cuneiform was used for approximately 3,300 years. Our Roman (Latin) alphabet has been in use for approximately 2,500 years.

Cuneiform was mainly inscribed on soft clay with a wedge-shaped reed then baked in the hot desert sun or in ovens. However, it was also inscribed on stone, metals, wax, and other materials.

The last known cuneiform inscription was written in 75 AD.
CUNEIFORM TABLET FROM c. 2100 B.C.

HOW CUNEIFORM WAS WRITTEN WITH A REED STYЛUS
Massive Cuneiform inscriptions were cut into a cliff near the city of Behistun in Western Iran. Three scripts were used Persian, Elamite and Babylonian.

These inscriptions greatly assisted in the decipherment of Babylonian cuneiform. The Rock at Behistun has a similar value as the Rosetta Stone.

**THE ROCK AT BEHISTUN**

**DECIPHERMENT OF CUNEIFORM**
Hieroglyphs

- **Definition**: Greek: *Hieros (Sacred) and Glyphein (Carving)*

- Developed around 3,000 B.C.

- Represent recognizable objects. Ideograms and phonograms.

- Ideograms represent a specific object or something closely related.

- Phonograms were used for their phonetic value.

- More than 750 individual signs were used for hieroglyphics.

A problem that both the Sumerians and the Egyptians experienced was the vast number of signs used for their methods of writing. It took ten years of training to become an Egyptian scribe, and the majority of the citizens could not read or write.

The Egyptians continued to use hieroglyphs for sacred writing, however, two writing styles followed the hieroglyphs; *Hieratic writing* and *Demotic writing*.

- **Definition**: Hieratic: *Developed about 2,755 B.C. This was the cursive form of writing, as script is to printed letters. It was much quicker to write since the picture quality of the language was reduced to a pattern of lines and squiggles.*

- **Definition**: Demotic: *This was a shorthand version of the hieratic script which was used during the late period. Demotic means “the peoples writing.”*

The need for “speed” and “legibility” is what probably influenced the creation of the alphabet.
**ROSETTA STONE**

Until the discovery of the Rosetta Stone, Egyptian hieroglyphs were a mystery, and could not be read. There were many who made contributions to the decipherment of the hieroglyphs, but it was Jean Francois Champollion (1790-1832) who in 1823 established the foundations on which present knowledge of the language of the ancient Egyptians is based, and he is rightly looked upon as the Father of the Decipherment of Hieroglyphs.

- Discovered in 1799 by Napoleon’s soldiers.
- Location: A small village in Egypt’s Western Delta called *Rashid*, better known to Europeans as *Rosetta*.
- Size and Material: 2’ 3” wide and 3’ 9” high. Made of compact black basalt.
- Text: A decree was drawn up in 196 B.C. that was written in three scripts: *Hieroglyphs, Demotic and Greek*.
- Currently on display in the British Museum.

**THE FIRST ALPHABET**

- Probably developed by the Phoenicians along the Eastern Mediterranean Coast between 1700 B.C. and 1500 B.C.
- Transition: *Ideographic writing to phonetic writing*.
- The Phoenician alphabet consisted of 22 letters.

**THE ROUTE TO THE ROMAN (LATIN) ALPHABET**

- The Phoenician alphabet was adopted by the Greeks around 900 B.C.
- The Etruscans established themselves in Italy in around 850 B.C. and adopted the Greek alphabet.
- The Greeks invented the modern alphabet with vowels around 800 B.C.
- When the Romans conquered the Etruscans around 509 B.C., they adopted their alphabet and added several consonants. All the Western European scripts come from the Classical Latin alphabet. *(There are conflicting theories about the source of the Roman alphabet. Some scholars believe that a small community of Greeks settled in the area that became Rome, and they brought the alphabet with them)*.
- The *Lapis niger*, from the Roman Forum, the oldest known Latin inscription. Written in *boustrophedon*, a manner of writing which remained in use until the 4th century B.C.
ROMAN CAPITALS

Definition: Boustrophedon: *Greek. Turning like an OX while plowing.* An ancient method of writing in which the lines are inscribed alternately from right to left and from left to right.

Around 350 B.C. left to right writing became standard within the Roman Empire.

Around 200 B.C. serifs first appeared, and there was a significant improvement in base-line alignment of letters.

The majuscule alphabet was the original model from which all Roman letterforms are derived.

Definition: Majuscule: *An uppercase letter.*

Definition: Minuscule: *A lowercase letter.* Developed from uncial between the seventh and ninth centuries and used in medieval manuscripts. (*A second century Roman cursive did use several minuscule letters.*)

The Roman majuscule alphabet continued to undergo numerous subtle changes in its structure between the 1st and 4th centuries A.D., however, *Square capitals* and *Rustic capitals* were the most common scripts used.

Uncial writing was used by the Romans and Greeks from the 4th through the 8th century. *Uncial: half inch,* is a style of writing characterized by somewhat rounded capital letters which provided the model from which most of the modern Latin Alphabet capital letters are derived.

6TH AND 7TH UNCIAL CENTURY
With the increased use of the pen and paper for writing and the increase in the amount of writing itself, in books and documents and proclamations, professional scribes made their appearance in the Roman Empire. There were, of course, many people who could not write at all, and others who wrote very badly. When a person had a message to be written, he called a scribe to do it for him. Only capital letters were used with no spacing between words. Occasionally a dot was placed between words for separation.

**ROMAN CAPITALS**

Many of the Roman and Greek scribes used a form of shorthand called *tachygraphy*.

*Wax Tablets* were used throughout the Roman Empire.

Definition: Paleography: The study of ancient inscriptions, which have very often been made on perishable materials such as papyrus, parchment, paper or wax.

Definition: Epigraphy: From Greek *epi* “on” and *graphein* “to write” is the branch of paleography which deals with inscriptions on hard surfaces such as stone, metal or bone.
WAX TABLETS “CODEX”

The Romans and Greeks used a method of keeping temporary records or just writing messages by writing on wax tablets with a stylus. The wax was usually poured into a wooden frame, and then the frames were connected together which formed a diptych, which evolved into a codex, then to our current book.

The stylus has a sharp point on one end for writing on wax, and a flat chisel form on the other end to smooth out (erase) the written material when it is not needed any longer.

Definition of Diptych: An ancient writing tablet having two leaves hinged together.

PERMANENT AND TEMPORARY METHODS OF RECORDING INFORMATION

PAPYRUS

Egyptians began making it about 2000 B.C.

It is a variety of reed that grows up to ten feet high on the banks of large rivers and lakes around the Mediterranean basin.

It was used because of its availability and durability.
A SIMPLE METHOD OF MAKING PAPYRUS

1. The stalk of the reed is thinly sliced and then laid out crisscross fashion on a flat stone.

2. The slices are then covered with a protective cloth and beaten with a wooden mallet for about an hour until the individual strips begin to bind together with the aid of the sap to form a continuous sheet.

3. The sheet is then polished using a smooth round stone and its uneven edges are cut off.

4. Individual sheets can be joined together to form a scroll.

5. Some scrolls reached a length of 30 meters.

Papyrus was almost universally used up until the 3rd century A.D., at which time it began to be replaced by parchment.

The Catholic Church used papyrus for the production of important documents until the 11th century.

Papyrus is still produced in small quantities and can be obtained through several specialized merchants.

PARCHMENT

Made from animal skins such as sheep and goat.

VELLUM: Is a refined form of parchment usually made from the skin of a stillborn calf or from the stomach of sheep, ram or goat.

First used widely around the 2nd century B.C., but probably used prior to papyrus.
While the process to produce papyrus is quite simple. The process to produce parchment/vellum is a long tedious process.

1. The skin is first trimmed and disinfected by leaving it to steep in limewater.
2. It is then tanned and scraped to remove hairs before being stretched on a rectangular frame.
3. The skin is then finished off and powdered with pounce, a powdered chalk which keeps the ink from being absorbed too quickly.

\[(pounce \ is \ still \ used \ by \ calligraphers \ today \ on \ very \ absorbent \ papers \ to \ keep \ the \ ink \ from \ bleeding \ into \ the \ paper \ fiber)\]

4. The skins are then finished by polishing with a pumice stone and cut to required size.

When the scribe made a mistake he had to scrape the ink off the parchment/vellum.

Parchment/vellum is still produced in very small quantities in the USA and Europe.

**PAPER**

Probably invented in China in the early years of the 2\textsuperscript{nd} century A.D.

Probably invented by a Chinese official of the court of the Han Dynasty by the name of Tsai Lun.

The first paper was made from vegetable matter such as bamboo, hemp and cotton.

The process was kept a secret until about 751 A.D. when the Arabs forced Chinese prisoners to turn over the formula.

Paper began to be produced in Europe around 1250 A.D.

Around 1400 A.D. paper makers adopted the habit of putting watermarks in their paper in the form of letters, monograms and drawing of flowers or animals in order to indicate their origin.

Once the formula for papermaking became common knowledge the main difference between Chinese and Western methods of paper making was in the composition of the pulp. The Chinese used mulberry and bamboo rather than hemp and linen rags used in the West.
STYLI MADE OF LEAD, BRONZE AND COPPER

SOME OF THE FIRST WRITING INSTRUMENTS

- **Burin**: A steel cutting tool with a sharp beveled point, used in engraving or carving stone.

- **Stylus**: For writing on wax tablets, marking or engraving.

- **Reed Pen**: The reed pen was used throughout the ancient world, especially by river-based, agrarian cultures such as those that flourished on the fertile banks of the Nile, the Tigris and the Euphrates, and it continued to be used until replaced by the quill around the 5th century A.D.

(Note: The reed pen is still commonly used today by modern day calligraphers).

THE REED PEN

STYLI MADE OF LEAD, BRONZE AND COPPER
Quill Pen: Quill pens are commonly made from the penna, or large flight feathers of geese. (Swan, turkey, pelican, pheasant, eagle, peacock and crow feathers were also used).

Crow quills were used for fine detailed writing (micro-calligraphy); thus, the modern metal crow quill nib is also used for fine writing detail. Nobody knows when this type of pen was first used; though the British Museum possesses ancient Egyptian paintings showing scribes writing with quills.

The penknife is usually not mentioned, however, individuals who used a quill or reed pen had to have a penknife always handy for the initial cut of the instrument or to re-cut or sharpen the writing instrument. Along with the reed and the quill, the penknife is one of the scribes essential tools. The penknife also became a status symbol by being decorated with gold and jewels.

Primitive Pencil: A lump of lead or charcoal was used as a primitive pencil, but the bulkiness of the lump would make fine or detailed writing very difficult. Thus, the lead was shaped to a fine stylus form with a pointed tip. For pencils the Romans used lead and silverpoint styluses.

What has come to be known as a pencil was named because it resembled the brush known in Latin as a “penicillum.” This fine pointed instrument, which was formed by inserting a carefully shaped tuft of animal hairs into a hollow reed, much as a piece of lead is inserted into a mechanical pencil today. Peniculus is a diminutive form of the word “penis,” which is Latin for tail. The word was used for the very first fine brushes because they were actually formed from the tails of animals. Thus, a pencil is literally a “little tail,” which can be used for writing or drawing fine lines.
Writing Brushes: The first Chinese pointed brushes for writing appeared around 259 – 210 B.C. However, letters painted in black ink have been found on pottery dating back to 1500 B.C., which would indicate that brushes made from hair were probably in use at a much earlier date than traditionally attributed.

Metal Pens: Are not a recent invention for they were known to scribes from the earliest times. Actually, a copper-nibbed pen was discovered among the treasures of the Pharaoh Ramses II who reigned in the 13th century B.C.

The Romans also used such pens with great skill. A bronze pen in the shape of a goose quill was found in Pompeii. Metal pens were not widely used however until the 19th century; an Englishman by the name of John Mitchell patented the first steel-nibbed pen in 1822.

Eight years later the metal pen making industry was founded in Birmingham by Joseph Gillott. Currently Mitchell and Gillott metal nibs are still being used by calligraphers.

SAINT PATRICK AND THE HALF-UNCIALS

In 432 A.D. Saint Patrick laid his foundations so well in Ireland that in the following centuries his once pagan country became one of the seats of learning for Europe.

Perhaps the most important thing he taught the Irish was to write with Roman letters. By his time not only were Square capitals and Rustic capitals well developed, but the ever increasing amount of writing and the need for speed had started still another style of writing, the semi-uncials (half uncials). The semi-uncials like all other letters were given a certain national character by the people who used them. The Irish scribes made the most
of the semi-uncials and developed them into the most beautiful manuscript hand that has ever been seen. This Irish style of writing was so delicate and so highly finished that it became the most famous of all the semi-uncials.

BOOK OF KELLS

The Book of Kells, which is called by most experts the handsomest manuscript ever written, was written during the seventh century in a monastery at Kells in County Meath, Ireland. It is available for public viewing at Trinity College, Dublin.

THE SIGNIFICANT CHANGE IN HANDWRITING
“CAROLINGIAN MINISCULE”

CHARLEMGANE (Charles the Great) 742 – 814

! The Dark Ages did not permit the development of the arts of civilization.

! Charlemagne was intent on restoring learning, and he set up schools in various parts of his empire and encouraged artists and men of learning.

! In 781 Charlemagne invited to his court a famous English scholar from York named Alcuin.

! In 796 Alcuin, encouraged by Charlemagne, started a school at the Abbey of Saint Martin’s at Tours, which became the most renowned school in Europe.

! Alcuin set out to teach his scribes to write as fine and readable a hand as possible. He taught them a modified form of the semiuncials (half uncials) that were used by the Irish monks. Based on this form, a new style of writing which Alcuin developed at Tours “Carolignian Miniscule” was to spread throughout Europe and become the original small lowercase letters as we know them today. The “Carolignian Miniscule” letters were not only different in size than the capital Majuscule letter, but also different in form.

! Alcuin established the usage of capitals at the head of paragraphs and sentences.

! Alcuin was the first to systematize the punctuation of manuscripts and the division into sentences and paragraphs.

! Scriptoriums were created in monasteries where calligraphy could be mass-produced in somewhat comfortable conditions.
The "Carolingian Script" of the tenth and eleventh centuries later served as one of the models for modern type.

Note: Charlemagne, who the "Carolingian Script" was named after, could read and speak Latin and Greek in addition to his own language, but he could not write.

CAROLINGIAN MINUSCULE

THE GRADUAL CHANGE

It was natural, however, that the widespread use of the "Carolingian Script" in many parts of the empire and by many scribes with different training would cause changes in the character of the script, some slight, some very great. By the end of the Middle Ages a whole new group of national hands developed just as they developed at the end of the Roman period. Only two of these national styles Gothic & Italic need concern the forensic document examiner.

GOTHIC

During the Late Middle Ages the Monks were the few privileged who could read and write. The script they primarily used was Gothic. The development of Gothic scripts from the Carolingian writing was a natural process. Carolingian writing was replaced in succession by the late Carolingian style, primitive Gothic and, finally fully-fledged Gothic.
Gothic became a distinct style in the twelfth century.

In the thirteenth and fourteenth centuries it swept over nearly all of Northern Europe and drove out almost all other styles of writing.

The first printers modeled their types upon the Gothic style.

There are numerous styles of Gothic script, and the following are the principal types used:

1070 – early 13th century  Primitive Gothic
13th – 15th century  Textura
16th century  Fraktur
14th – 15th century  Rotunda
14th century  Gothic cursive
15th century  Bastarda
16th century  Civilite

FRAKTUR SCRIPT
ITALIC, a slanted letter, became very popular throughout Europe after the introduction of printing, principally because it was made into a type by the Venetian printer, Aldus.

Our everyday writing styles, regardless of what type of writing instrument used, remain the direct descendants of chancery script. Italic is a style of writing or printed type that is patterned on a Renaissance Chancery script with letters slanting to the right.

Chancery cursive was used in the Chancery office of the Catholic Church, and it was written more rapidly than the Gothic hand used for formal documents. Italian writing books of the first half of the 16th century, notably those of Arrighi, Tagliente, and Palatino, supply us with printed examples of the Chancery letter. Of these the 1522 Operina of Arrighi aka Vicentino is considered by many today to be the finest and first formalized of all writing books as well as the first to be printed.
16th & 17th CENTURY FLEMISH WRITING MASTERS

One of the writing styles that was commonly used by the Flemish Writing Masters was *Ronde* which can be rapidly executed because its letters can be joined together continuously without pen lifts. This style of writing set the pattern for English Round Hand and Spencerian.

In addition, it created a style of flourishing that was adopted by America’s Master Penmen of the Golden Age of Ornamental Penmanship, 1850 – 1925.

The finest Flemish penman, Jan Van den Velde who was born in Antwerp in 1569 published nine books on the subject of calligraphy.

COPPERPLATE

A cursive style of Cancellaresca became the basis for a manual printed by C.A. Hercolani in 1574. His use of copper plates for printing, instead of wood blocks, allowed more delicate lines for the ascenders and descenders of the letterforms. Between 1680 and 1700, Colonel John Ayers of London worked on a merging of the Cancellaresca hand and the Secretarie hand. He introduced a cursive slant to the right and gave delicate loops to the ascenders and descenders. This style became known as copperplate, which is basically an English Round Hand style.

ENGLISH ROUND HAND
The early American handwriting manuals were derived from their English models, and in Boston in 1791 John Jenkins published one of the first widely accepted American copybooks for an original handwriting teaching system, which was based on a contemporary English Round Hand. However, the earliest copybook published in America was printed in Philadelphia in 1748. It was called the *American Instructor or Young Man's Best Companion*, which was also based on a contemporary English Round Hand.

In North America there were a number of writing schools and penmanship books by 1830, but no single method had established itself as the accepted American standard for learning penmanship until the Spencerian script.

Platt Rogers Spencer (1800 – 1864) developed the Spencerian System of Penmanship. His system of handwriting became very popular by 1830, and by the early 1860’s, Spencer had written several books on penmanship, and his system of handwriting became the standard used throughout the United States. This was the major system taught in the United States until 1890.
The Spencerian system proved to be very difficult for the general population to learn, and at times very difficult to read. Therefore, A.N. Palmer developed a simplified system based upon Spencerian that improved speed and legibility.

The Palmer Business Hand was adopted by New York City in 1905 and soon spread across the country.

Since the Palmer Business Hand was developed there have been approximately 76 new handwriting systems developed throughout North America, however, many of them have not significantly departed from the basic teaching methods of Palmer. Today, it is quite unlikely that the handwriting of an individual can be positively associated with a particular system.

**PROMISSARY NOTE WRITTEN IN SPENCERIAN**

**SPENCERIAN Oblique Pen Holder and No.1 Pen**

For careful writers and expert penmen
One Holder and Five No. 1 College Spencerian Pens, sent by
mail on receipt of 10 cents.
Spencerian Pen Co., 349 Broadway, New York

**OBLIQUE PEN HOLDER**

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**PALMER METHOD SPEED “R”**

**VERTICAL WRITING**
The golden Age of Ornamental Penmanship in the United States is an era that lasted from approximately 1850 to 1925. There were a number of professions that made great use of penmanship. As in all fields of endeavor, different styles of handwriting were developed to perform a variety of functions.

Business colleges featured handwriting courses that covered a variety of handwriting styles that were taught by Professors of Penmanship.

These Professors of Penmanship preferred to be referred to as Master Penmen rather than Calligraphers.

Many of the master penmen (chirographers) and professors of penmanship made a natural transition into the field of handwriting identification because Bank Investigators, Attorneys and Police Officers usually had nowhere else to go, other than to the handwriting department of business colleges, when they had a disputed handwriting problem.
The American Society of Questioned Document Examiners (ASQDE) was formally established September 2, 1942; however, by invitation-only, meetings and training sessions between Albert S. Osborn and other Professors of Handwriting/Master Penmen were held as early as 1913.

Some of the charter members of the ASQDE were master penman and professors of handwriting, but at least two of the charter members Scott F. Leslie and Herbert J. Walter are in the Master Penman’s Hall of Fame. Another notable document examiner by the name of Daniel T. Ames is also in the Master Penman’s Hall of Fame.

The following are the first elected officers and charter members of the ASQDE:

**Officers**

Albert S. Osborn  President
Clark Sellers  Vice President
Elbridge Stein  Secretary
John Tyrrell  Treasurer

**Members**


WRITING HAS PROGRESSED INTO AN ART FORM

If you forget everything that you just read, here is a simple time line to remember: