

CHAPTER 3

EVOLUTION OF HANDWRITING

3.1 THEORY - THE EVOLUTION OF HANDWRITING

Handwriting is one of the phenomena of human kind - the one that makes us different from animals, as they do not have such a gift of communication. Handwriting in the psychological sphere is described as an expressive method of communication: “A general label for a variety of diagnostic and therapeutic techniques, all of which require that the individual freely act out (or ‘express’), some particular role, part or fantasy. [...] Expressive methods are generally regarded as forms of projective techniques” (Reber, 1995, pg 271). Nevo more simply defines handwriting as “...an expressive movement which is projected on paper via the medium of the script...” (Nevo; 1989, 1331).

As with most communication tools, handwriting is a tool that can be analysed. This science of analysing is called graphology – the study of a person’s handwriting. This study gives the analyst an insight into the person’s personality. It describes a person’s attitude, his or her beliefs, background and future aspirations – in fact, graphology can describe the entire personality of a person (Saudek, 1978). Nevo elaborates on his stance on graphology by documenting handwriting as being “influenced by inner conflicts, psychological traits, developmental and situational factors” (Nevo; 1989, pg 1331).

Graphology did not originate as a science, but rather as a hobby of a few erudite, and those preoccupied with the idea of what exactly handwriting can or could reveal (Grandin, 1994) – “interest in handwriting, intelligence and personality has existed for years” (Rosenthal & Lines; 1978, pg 45). In the last four decades however, most of the empirical research has been done, so as to solidify this projective technique as a science in its own right (Lemke & Kirchner, 1971).

It has gained numerous promoters, as can be found in a number of European countries including Italy and Germany, where graphology is now offered on a tertiary level, up to and including doctoral level.

3.2 History of Handwriting

“Spoken words are the symbols of mental experience,
and written words are the symbols of spoken words.

Just as all men have not the same speech sounds,
so all men have not the same writing.”

(Roman; 1952, pg 3)

3.2.1 Handwriting – A System of Signs

Handwriting can be defined in several different ways, but in many instances it is simply seen as a mechanism used to document speech (Gelb, 1969). This is a very limited definition of handwriting, because not only does it record speech, it also conveys thoughts and feelings, pictures and ideas, concepts and emotions – as examples. Handwriting as such is a much more advanced method of communication – most humans are completely unaware of how advanced this science has actually proven itself to be (Greene & Lewis, 1990).

People differ from the animal by means of the ability to express their thoughts and feelings. This ability of expressing the self is done by means of verbal communication (talking), non-verbal communication (humming, gesticulating) and also by ‘artificial’ means, such as by writing, painting or performing or creating other pieces of art – making a clay pot, sculptures, etc. These artificial means of expression require the author to use certain external tools with which he/she will reveal his or her inner emotions, feelings, thoughts, etc. These tools include pens, paintbrushes, or even clay (Oliuier-Hirasawa, 2001).

The outcome of this expressive movement or method originates within the person's core, i.e. within the personality. The person attempts to express inner feelings, emotions, desires, needs, etc. With the use of a paintbrush, the person's subjective reference framework is used as a means of expression, i.e. the origin of the information is utilised as a means of expression. A person cannot express himself/herself objectively – he will use what he/she knows, what he/she likes and prefers as a basis of expressing himself/herself – “expecting simple, linear relations between individual isolated graphometric indicators (“signs”) and personality/behaviour variables is unrealistic because graphology does not operate in a linear pattern” (Nevo; 1989, pg 1331).

Handwriting, one of the most commonly used expressive methods, is a profound expression of the psychological make-up of the person. It is profound or fathomless in the sense that the extent of expression is mostly hidden to the author. He or she is not aware of how much information is being declared via certain strokes of the pen, the dots on the 'i's, the slant of the writing, the size and speed of the writing (Jacoby, 1939). An example of how this expressive movement can be beneficial to people, other than psychologists, counsellors and therapists, is described below, as used by a piano teacher:

“I got a sample of the student's handwriting [...]

The writing showed indications of excellent thinking processes, good memory, patience to learn hard material, intuitive insight, and emotional expressiveness. But she had a high self-opinion, which meant she might be hard to work with. She also showed defiance, which meant she thought that rules didn't apply to her. Still, she had the potential to be a great performer. I knew, however, that I would have to use psychology to convert her negative traits to a positive use”

(Owen; 1998, pg 934).

However, in order to communicate these aspects of personality, there is a need for a conventional system of signs or symbols, understood by those receiving the communication, or even artificial tools. This means that things such as paintings or earthenware creations are not necessarily interpreted to mean the same thing. In other words, not everyone receiving this type of communication will automatically be able to assume what the author was endeavouring to impart to his/her audience. The person receiving the 'creative' message from the author of the piece of art will interpret it in a very subjective and personal manner – as it was created in a very subjective and personal manner. Every person will interpret the message as they see it through their own eyes. Consequently, every individual has a different point of view when it comes to creativity – versions of interpretation will differ greatly (Gelb, 1969). To illustrate these differences, let us consider a painting by Picasso. Not every person that admires one of his paintings will be able to appreciate the beauty and intensity of emotions asserted by Picasso through his paintings. Not every person will like the abstractions portrayed by Picasso. Thus, you will have certain types of people that favour these types of paintings, whereas others are unmoved by their expression.

However, in contrast to paintings and sculptures, the written word is an established system of signs and symbols that allows every other perceiver to understand and interpret what the message content is conveying, as well as being able to identify the essential personality traits found underlying these signs and symbols (Owen, 1998). It is thus that we human beings use the alphabet, which is a system of signs and symbols, representing certain letters. The alphabet allows us to understand and interpret the message content. This alphabet was also designed for consistency, so that most people can read and understand what the written message is imparting.

The history of the development of the alphabet as we know it, as delineated below, has been a very important development, as it allows for many

indispensable methods of communicating with others in this day and age, i.e. by means of letters, books, poems, e-mail, etc.

3.2.2 Handwriting – The Development

3.2.2.1 Forerunners of Writing – Primitive Cave Drawings

Handwriting originated approximately 25,000 years ago. The first attempts at non-verbal communication by the Stone Age cave dwellers were through pictures drawn in caves. The Stone Age cave dweller was unable to write and may have used these pictures as a means to remember something he or she had to do or perhaps even to leave messages (see Appendix B) for other cave dwellers. To create these pictures they used sticks, sharp stones or even their fingers. The 'paint' or 'ink' that was used included charcoal (black), chalk (white), clay (ochre), blood and berries (red), fire ash (grey), mud (earthen-coloured) and even vegetable dyes (Oliuier-Hirasawa, 2001). These first markings in the primitive dwellings of man were called petrograms. Any pictures that were carved or incised were known as petroglyphs (Oliuier-Hirasawa, 2001). They usually depicted man and beast in relation to one another.

Examples of these cave dweller messages or pictures can be found in the caves of the famous Koi-San people, known as the Bushmen Paintings of South Africa. One of the most famous Koi-San caves is the one found in Swaziland, called the Nsangwini Cave, which is described as one of the most splendid galleries of Bushman Art in Africa. Not only the walls of caves were used to leave these 'paintings' on, but also rocks, bones, pots, weapons and wet clay became the surface to paint or carve messages upon (World Almanac and Book of Facts, 2002).

Initially, these pictures were used to communicate messages and to remember things by means of visual symbols (Gelb, 1969). The pictures that were used by

the pre-historic human were different from the auditory sounds made, i.e. they did not correspond exactly to the forms of speech. This was known as primitive semasiography. The signs and symbols used by the cave dwellers changed over the years from the initial simple drawings of real objects, to linear, geometric designs – called ‘pictographic’ or ‘ideographic’ writing. These pictograms generally had only one meaning, and could only be interpreted in one way. To wit, these geometric, linear designs started as pictures of animals, weapons, etc. – they are the result of the schematic development from the real objects or pictures. These were best drawn by the American Indians, as they scraped away layers of rock for more permanent cave drawings: “Native American artists created petroglyphs by scraping away the desert patina on the rock, a dark layer of mineral deposits, to reveal the lighter original stone underneath” (Oliuier-Hirasawa; 2001, pg 36). These scrapings obviously proved easier to mark, as the rock became lighter, as well as remaining unblemished for longer. Consequently, the schematic development reached a stage where the geometric picture could not be traced back to the original design or drawing of animals, from which it had originated (Gelb, 1969).

These cave dweller pictures or pictographs (Sellers, 1997) were also called the descriptive-representational devices. In other words, the pictures actually described something. An example is that of the American Indian drawing from a rock in New Mexico. On this rock, there is a message to other Indians that means ‘no thoroughfare’. The picture delineates an upright goat and a horseman upside down on his horse, which is supposed to depict falling down (Refer Appendix A). The drawing shows any horseman approaching this rock that a mountain goat can climb this rocky trail but a horse would be too clumsy and would falter and fall down (Gelb, 1969).

3.2.2.2 Word-Syllabic Systems

Much later, people started a system called “phonetization” (a revolutionary step in the evolution of handwriting). This phonetization enabled the speaker to create a sign or symbol, much closer to the sound of actual speech rather than still drawing pictures of the animal or person (male or female), etc. Suddenly, there was a greater correspondence between the written word and the spoken word (phonetically). This meant moving away from the pictures that could be interpreted in one way, towards signs and symbols that were more specific and that concurred with more exact forms of speech – “...gains insight into the role that pictographs played in these long-vanished cultures” (Sellers; 1997, pg 77). These symbols changed again, becoming letters that formed the alphabets of signs, which once more represented sounds (refer to Appendix B). These sounds led to what was called phonetization (Gelb, 1969).

There are seven different places where a fully developed system of writing could claim its independent origin. These places include:

1. Sumerian in Mesopotamian (3500 BC)
2. Proto-Elamite in Elam (3000 – 2200 BC)
3. Proto-Indic in the Indus Valley (2200 BC)
4. Chinese in China (1300 BC)
5. Egyptian in Egypt (3000 BC)
6. Cretan in Crete and Greece (2000 BC)
7. Hittite in Anatolia and Syria (1500 BC)

Currently, these are the seven different origins of writing that have been historically investigated and recorded. However, with further excavation and exploration, every few years could yield new writings and as such, the origins of handwriting as we know it, could change. Nevertheless, for the purpose of this dissertation the following systems seem to portray the most important in the conception of handwriting (Gelb, 1969).

a) **The Sumerian System**

At around 4,000 BC, the Sumerian people, who lived in what is known today as modern Iraq, developed one of the earliest examples of handwriting. This type of 'handwriting' was called 'Cuneiform', as derived from the Latin word *cuneus*, (proven to be acquired from the above pictographic writing) which means 'wedge-shaped' (www.parkerpen.co.uk/history/cave.html). This name was derived from pressing the triangular tip of a reed or a stick (which was extremely abundant in the Sumerian country because of its marshes and swamps) into newly made wet clay tablets. The Sumerians developed this writing to accommodate a rising administrative and economic need for public use. They used clay tablets to basically list supplies needed or financial accounts. Usually scribes maintained this method and these clay tablets were preserved in vast libraries (World Almanac and Book of Facts, 2002). The marks made on these clay tablets were used in combination to represent certain objects and ideas. The earlier tablets that were found simply depicted pictographs, hence the so-called cuneiform was derived from the above mentioned pictures. The handwriting or wedge-shaped writing was developed from the pictographs. The stages in the development from picture to cuneiform writing were eased by the discovery of about a thousand tablets in southern Mesopotamia, known as the Uruk IV stratum (Gelb, 1969). These tablets depicted the earliest stages of development that led to the cuneiform handwriting.

In Sumerian cuneiform, it was difficult to adequately represent the proper names of people living in the larger cities. There were people that were often named the same names (there was not such a variety of names as today), which obviously caused problems when writing documents and the like. Common Sumerian names included "Enlil-Has-Given-Life". It was this difficulty amongst the Sumerian names that prompted the development of phonetization as touched upon in the beginning of this

section. The Aztec and the Mayan writings support this progress in the development of handwriting, especially for the pronunciation of proper names. They employed the concept of phonetization for correct articulation. The phonetization in many different civilisations thus emanated from the need to be able to express the words and sounds that the pictures of old were unable to depict or describe (Gelb, 1969).

Examples of this phonetic transfer from pictures into sounds, included the drawing of knees to express the word 'Neil' (from kneel), the 'sun' for the word son, and together they formed the proper name Neilson. This phonetization became imperative in differentiating words that were similar in meaning but were initially expressed by the same sign (pictograph). The introduction of phonetization into the writings of man opened totally new doors to the expression of linguistic forms by the written symbols they depicted. This system of phonetization was then developed into a standardised system that allowed everybody to read and interpret the writings in the same manner (World Almanac and Book of Facts, 2002). This included setting up rules and actually teaching these writings to others. In the beginning, these phonetic symbols consisted of about 2000 signs but the Sumerians reduced this to about 600 signs. This form of writing rapidly spread throughout the rest of Mesopotamia.

The Sumerian cuneiform was subsequently taken over by the Semitic Akkadians and some time later it moved on to the Elamites. The Hurrians of Northern Mesopotamia, as well as the Hittites of Anatolia then borrowed the writings from the Akkadians (World Amanac and Book of Facts, 2002).

b) **The Egyptian System**

Roughly 1,500 years after the Sumerian era, a totally different writing system was developed in Egypt. The Egyptians designed a very beautiful stylish way of writing derived from the Greek, called hieroglyphics – which translates as the “Writing of the Priests or Gods”. This writing was mainly used for sacred purposes and when ‘written’ was carved into stone. Again, as the ‘handwritings’ (or rather drawings) above, the basic alphabet consisted of signs, representing objects, ideas and sounds. There were even 24 signs that stood for separate letters. These hieroglyphics were used by the Egyptians to “...record [sic] a sophisticated literature that included religious writings, philosophies, history and science.” (World Almanac and Book of Facts; 2002, pg 463).

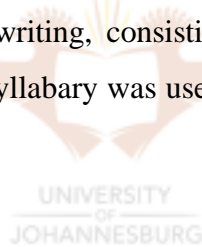
Nevertheless, by 5,000 BC, the Egyptians were already using papyrus, pens and ink to impart or share ideas and knowledge and to communicate – they were far ahead of even the Sumerian people with their ‘Cuneiform’. The phonetic system was also initiated into the writing development of the hieroglyphics - probably by incitement from the Sumerians and their ‘new’ system. Throughout most of its history, Egypt always used a word-syllabic writing that in principle changed very little up until the end of the Egyptian history. Hieroglyphics was not writing that was implemented on a daily basis. There were rather two forms of cursive writing that were introduced for this purpose, namely the hieratic and the demotic (www.parkerpen.co.uk/history/hieroglyphics.html). [These two types of cursive writing are just shortly mentioned in this chapter and are rarely elaborated on in other texts. For the purpose of this dissertation, I wanted to highlight the beginning stages of cursive writing, i.e. it was already introduced as a form of writing with the Egyptian system.]

c) **The Hittite System**

The Hittite Kingdom, located in what is now known as central Turkey (Beal, 2000), engaged a system of writing similar to that of the Egyptian Hieroglyphics, but as far as its decipherment goes, the knowledge is limited (“One only hopes that in the third edition even more texts will be added” (for translation from the Hittite System) (Beal; 2001, pg 496).

The general system of writing is clear but extensive research still has to be done in the interpretation of the individual signs. At this point, this system cannot be compared entirely to either that of the Sumerians or that of the Egyptians. It does however have a likeness to the Sumerian cuneiform, in that the Hittites also wrote with the wedge-shaped reed or stick.

This writing, as that of the Egyptians, was mainly based on pictures, but it was a logo-syllabic writing, consisting of 60 signs, each representing a syllable. The same syllabary was used in Syria at the first millennium BC (Gelb, 1969).



d) **The Chinese System**

This is the only writing of old that has not had to be deciphered by any of the learned people. This writing has passed from generation to generation and thus the knowledge has not been lost. This writing appeared around the middle of the second millennium BC during the Shang Dynasty and consisted of pictographs which were later supplemented by phonetic characters (World Almanac and Book of Facts, 2002). The first inscriptions made by the Chinese were made on animal bones, tortoise shells, bronze vessels, weapons, pottery and even on jade. There were a limited number of signs that were used in this period – not more than 2,500.

e) **The Proto-Elamite, Proto-Indic and Cretan Systems**

These three systems share a commonality – the opposite of that of the Chinese System. They are all still fairly undeciphered, or only partly deciphered. There are several hundred clay tablets available of the Proto-Elamite writings, but they cannot as of yet be read, or rather interpreted with academic or educated correctness. The Proto-Indic writings disappeared as suddenly as they appeared. They were only present for a number of centuries before they disappeared and thus not much is known about them (Gelb, 1969).

The Cretan System is the only system of these three that is partially deciphered and thus limited literature is found on these three writing forms, specifically. The learned have only been able to follow the main line of this system's development. This system was similar to the Egyptian hieroglyphic writings.

The main focus of most of these writings is the fact that the magnitude of the signs are simple pictures from the external world found in the surroundings of the writer, e.g. trees, flowers, etc. These pictures were created to symbolise the words of the objects they were drawing. These drawings were slowly but efficiently made more economical in nature, reducing the signs to mere linear, geometric looking symbols. This meant leaving out most of the detail that used to be part of the picture (Gelb, 1969).

f) **Others**

At the same time as the Egyptians developed their 'alphabet', so in the northern parts of Europe, the 'runic signs' or 'runes' were developed (Jarman, 1979). These runic signs, which defined the 'mysterious', were the secret 'alphabet' of the old religious priesthood. They depicted an

alphabet of sorts but were probably also derived from earlier pictograms or ideograms.

g) **The Greek Alphabet**

By about 500 BC, the ancient Greeks were using an alphabet similar to the one being used today. As a matter of fact the word alphabet is derived from the two first 'letters' in the Greek alphabet – namely 'alpha' and 'beta' (www.britannica.com/bcom/eb/article). However, this alphabet was first known as the "Phoenician Alphabet" (www.britannica.com/bcom/eb/article). The Greeks thus derived their writing system from the Phoenicians. The Phoenicians used a North Semitic epitaph, known as the Ahirom epitaph at Byblos, as the basis of their alphabet. As a result, the North Semitic alphabet can be considered the ancestor of all Western alphabets – which was spread across the world by the Phoenician sailors and traders. This alphabet consisted of 22 letters, written from right to left with only the consonants and phonetic values left unchanged from the epitaph of the North Semitic alphabet.

It was this development of the Greek alphabet using consonant and vowel signs to represent the single sounds in language that represented the last but most important step in the history of the development of handwriting. From this period up until our current day and age, no new inner structural developments have been made in the alphabet as such. We write our consonants and vowels much in the same way as the Greeks before us did (World Almanac and Book of Facts, 2002).

The Greeks passed this alphabet on to the Semites, from where it then conquered the world. The alphabet is thus known as the "alphabet of Semitic-Greek origin" (www.britannica.com/bcom/eb/article). Shortly thereafter, the Romans, who conquered Greece, were known to use a more square form of handwriting. This writing, as compared to the writing on

papyrus, was a more rounded, flowing writing with joined-up letters. This flowing, rounded writing is one of the precursors to the current form of cursive handwriting (www.parkerpen.co.uk/history/roman.html).

h) **The Development into the Twentieth Century**

In France, another form of writing developed, called ‘Carolignian’ (www.britannica.com/bcom/eb/article). This was created in honour of the then Emperor Charlemagne. However, a heavier, more ‘pointier script’, known as ‘Gothic’ style (1200 AD), replaced this script. The reason for the pointer look was partly blamed on the pen used, because the quill pens were cut at an angle, which made it easier to produce letters with such pointed angles. In the 15th Century a collection of Italian scholars found the Gothic script difficult to decipher and subsequently developed, a new script based on the earlier Carolignian hand. This handwriting became known as the ‘Italic’ script, as its origins lay in Italy. Both the Pope and even Queen Elizabeth I used this script. Early in the sixteenth century, Pope Eugenius IV decreed that all Papal Briefs should be written more legibly using this writing style (Gelb, 1969).

Another change occurred in the above-mentioned Italic writing style. From the 17th Century onwards, the ‘Copperplate’ style of writing was advocated. This writing was also known as the English Running Hand. It allowed the writer to write word after word, without having to lift the pen between the letters (similar to the cursive form of today) (www.britannica.com/bcom/eb/article). This script was widely used in business practices and in legal documents. The name ‘Copperplate’ was derived from the printed writing manuals produced by engraving a thin sheet of copper. Very special, narrow nibs were used to reproduce the fine line made by the engraving tool (World Almanac and Book of Facts, 2002).

The next style of writing - fairly recently developed - will be in existence for a long time yet to come - the style known as calligraphy. This style was and is used by highly skilled calligraphers to bridge the gap between writing and drawing. Currently, the Arabic, the Chinese and the Japanese writing forms are often considered as works of art, as they bridge the gap between writing and drawing (www.britannica.com/bcom/eb/article). Calligraphy is in full use both in the West and in the East as a very decorative form of handwriting – with thick and thin strokes being used. Calligraphy is mainly used for invitations, name cards, etc (www.parkerpen.co.uk/history/calligraphy.html).

As can be perceived from the history above, there are certain names given to the writings of man. Firstly, there was the word ‘clerics’ given to the clergy and the monks. The word ‘clericus’ means a person that is able to write. The hieroglyphic writing was ‘the secret writing of the priests or gods’ and the runic symbols or signs were defined as mysterious. It is thus generally considered that the universal knowledge of handwriting is a recent requisition (Jarman, 1979).



3.2.3 The Acquisition of Handwriting

Currently, there are two standard styles of handwriting, one known as cursive and the other known as printing. Writers are no longer forced to write as was demanded in the earlier centuries. The ‘cuneiform’ was ‘forced’ upon the writer, due to the pen used. The different syllabaries were ‘forced’ upon the writer, so as to be understood by most literate people. We now use the ability to write to express our personality - who we are, what we believe in, and so on, we do not just write for administrative or clerical reasons. We no longer have pens made of bamboo or feathers. Nor is our ink difficult to use or obtain, as we now use fountain pens, roller balls or ballpoint pens. Handwriting has thus evolved from the cave dwellers’ pictures, who used very primitive tools (sticks, stones and even

their fingers), to our current own common cursive or print handwriting, using fountain pens, roller balls, etc. (Grandin, 1994).

As handwriting has developed over the centuries, so people develop their own handwriting as they progressively get older. In school, the students are taught to write a specific way by using a copybook – which is country specific (depending on the country of origin, i.e. where the person learns to write).

A scholar usually learns to write in the same manner as the rest of his or her fellow scholars. However, this standard of writing is only a means of teaching the person how to construct every individual letter of the alphabet. Once the scholar has mastered the ability to write, then the focus will move away from how to construct the letter and more toward the message content. This content will depend on the need of the person, i.e. is it a letter to a loved one, is it a letter to a prospective employer, is it an essay for a teacher, etc. Every particular composition will align itself more closely to the person's specific need in writing the letter, e-mail, draft, memo, etc. However, the actual letters that are being constructed will be more in agreement with the individual's personality. This means that the scholar will (over the years at school) develop his or her own style of handwriting, very much in line with his or her own personality development (refer to Appendix C).

Many studies done on the validity of graphology as a personality assessment tool have shown to be vulnerable to methodological criticisms. However, Powers introduced a matching procedure that produced figures that were all ...statistically significant ($p < .001$). The scripts used in Powers' study were copies of a standard passage, and the personality sketches were made by three psychologists in collaboration with each other, at least one of whom was intimately acquainted with the writer" (Nevo; 1989, pg 1332). Thus the tool may have certain methodological censures but the fact remains that the outcomes were statistically significant and this proves that there is a strong correlation to be found between the personality and the concurrent assessment by means of graphology.

A further comparable study was performed by Crumbaugh & Stockholm in 1977 (Nevo, 1989). The first researcher selected five people that were known to three further people. A standard sample of handwriting was gotten from each of the five people consisting of one whole page of material copied from a book. These samples were then sent to graphologists who had no prior knowledge or acquaintance of the sample group in question. The graphologist then had to write very succinct one-page reports on the assessment of each samples' handwriting specimen. The reports were coded and returned to the second researcher partaking in this study. These reports were then submitted to the three people who knew the sample group of people and were subsequently asked to match the reports they were given (that were coded for anonymity) to the people (the five sample subjects) they knew. This was repeated six times, thus there were eighteen matches in all done in this study. The resulting matches that were correct were "significantly different from chance ($p < .01$)" (Nevo; 1989, pg 1333), i.e. they were statistically significant in nature. Both studies have thus proven to be successful in supporting the belief that the analysis of handwriting is actually a befitting tool to be used in the assessment of personality in general (Nevo, 1989).

Certain studies may have proven ineffectual in that certain scholars mature earlier in life and will have a handwriting that can be analysed, whereas other scholars mature slightly later, and can only be assessed at a later stage in their development. Thus, the general age that is used as a guideline for handwriting to be analysed, is when the individual is about 17 years old, but there are definite cases in which the handwriting may still be too 'young' or undeveloped (Grandin, 1994) for the assessment to highlight any of the primary character traits.

3.2.3.1 The Copybook

The copybook is a model by which the scholars at primary school level learn to write. The copybook shows how every single letter in the alphabet is supposed to look and how it is supposed to be constructed.

From there, the copybook teaches (or rather the teacher teaches from the copybook) how the individual should construct the letters of the alphabet, i.e. which movements of the pen will be needed to construct one simple letter.

Copybooks vary from country to country (see Appendix D). In other words, every country has its own copybook to learn from (Sellers, 1997). Some countries may be very similar, others may vary greatly. An example of this variation is the Italian copybook, as compared to the German one. The German copybook is generally more angular in nature, whereas the Italian copybook is what would be called more rounded and open. What does not change however is the letter itself. In some countries, there are five (5) letters that are not included in the alphabet - the j, k, x, w and y – which are missing in the Italian alphabet (21 letters versus the 26 letters). They are present in most copybooks of the English speaking world. (Examples of copybooks – refer to Appendix D).

The copybooks of various countries often enough depict certain character traits that are commonly found in certain peoples. This means that when assessing the handwriting of an individual, it is very important to ascertain which country the person learnt to write in. Certain traits are inherent in certain nations that can be found in the copybook. An example of this would be the Italians. The Italian handwriting depicts a very open and rounded handwriting (refer Appendix D). The specific roundness and openness is what is taught to the children in primary school. Thus, generally Italians are found to be more open, gregarious people. (However, this is a generalisation and may in several instances not be the case). This means that when talking or dealing with Italians, the general consensus is that they are a very friendly, open people (obviously, as compared to other nations). The German copybook, for example, is very angular in nature. This angularity is translated in graphology as strictness.

The general population in Germany is often found to be stricter and more disciplined as compared to the Italians, who are more friendly and open. This means that a person can actually “acquire” a personality trait just by learning a specific copybook (Grandin, 1994).

However, by the time an adolescent reaches the age of twenty, he/she has developed a handwriting individual to their personality. Thus, you will have difficulties finding two handwriting samples that are the same. There are definite similarities that can be identified but the handwritings will never be the same. It is these differences that characterise the individual, that make him or her different from any other individual. It is exactly for this reason that many have started considering the analysis of handwriting as a very viable means of determining a persons’ personality. Be it for personal reasons or as a means of helping others – the analysis of handwriting has been proven to determine a persons’ likes, attitudes, beliefs, and character, amongst others (Grandin, 1994).



3.3 Origin of Handwriting Analysis

Generally, since man’s existence, we have done nothing more (apart from learning to speak) than teach ourselves to write symbols on certain surfaces using specific writing tools and equipment. Along with the evolution of writing came the evolution of graphology (at a much later stage in the development of writing, of course) – what the writing reveals about the writer’s character (Jacoby, 1939).

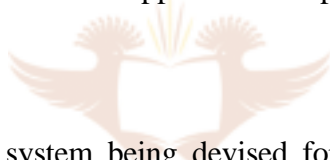
There are many places, or rather countries, where handwriting was considered to be a reflection of the persons’ personality. In the 11th Century in China, Kuo Jo Hsu claimed to be able to distinguish “the noble man from the common man from a moral point of view” (Santoy; 1991, pg IX) through his or her handwriting or handwriting analysis. This type of knowledge of character being revealed through a person’s handwriting is so

old that a document of Emperor Nero was found to say, about a certain man at court, “his writing shows him treacherous” (Rice; 1996, pg I).

Thus, the advent of graphology is not as new as many people perceive it to be. It is only the formal systematisation within the recent century that has brought this science to the fore – craving to be recognised as a viable science to be used in conjunction with many other professions (as delineated in the previous chapter).

3.3.1 The Evolution of Graphology

The world in general was making individual estimations about handwriting specimens without having any specific laws or measures to go by. Slowly, the people in Germany and parts of Europe began putting all these ideas about writing into a detailed system – how to approach the specimen, how to write the final report, etc.



The first attempts at a system being devised for graphology dates back to the beginning of the seventeenth century, when Alderisius Prosper published a study in Bologna, called *Ideographia* (Roman, 1952). This study strove to outline the relationship between handwriting attributes and character traits. The man who further developed this into a whole system in 1622 was Camillo Baldi. He is considered to be the founder of graphology. He published a book called “Trattato come una lettera missiva si cognoscano la natura e qualità del scrittore” (Translation: ‘The means of knowing the habits and qualities of a writer from his letters’) (Rice; 1996, pg 4). This is considered one of the first books published ‘depicting’ graphology as a science.

During the eighteenth century little if any interest was displayed towards this measurement tool. However, in the nineteenth century very significant development took place in this arena (Marley, 1972).

Around the 1800's, an interest arose in France regarding handwriting and the information it could reveal. A French man (Churchman Abbé Flandrin) continued Camillo Baldi's work (Jacoby, 1939) and proceeded to expand on this pre-science. Abbé Flandrin was the teacher of Abbé Jean Hippolyte Michon and together they studied over a thousand handwriting specimens.

Many scholars of literature and learned men (such as Goethe, Moreau, Einstein, William-Scott, Delastre, etc.) have generalised and given their own unproven thoughts and opinions about a writer's personality; this personality being revealed in their handwritings. Michon, however, systematically went about proving similarities, idiosyncrasies and theories using empirical and scientific investigation. Michon subsequently coined the name – graphology (study of handwriting). His ideas and writings were published in two books in 1872, namely *The Mysteries of Handwriting* and *A System of Graphology*. These two books were received with excitement, as they claimed that graphology was a science worth investigation. Later in the 1880's, another Frenchman, J. Crépieux-Jamin (Roman, 1952) further extrapolated upon the foundations laid by Flandrin and Michon. J. Crépieux-Jamin elaborated on the above studies – developing and modifying the current science through his own observations. With due justification he is thus known as the 'Father of Graphology' (in the French school of thought). He moved away from Michon's so-called 'fixed-sign' interpretation, shifting the emphasis to a holistic point of view, or as he called it, 'the over-all aspects' (Roman; 1952, pg 5). He stressed the importance of the whole, where the fixed signs contribute towards defining traits to varying degrees.

He furthermore classified the handwritings of man into seven categories and the hundred and seventy-five specimens collected are still in use today by many graphologists. This first French development of this science was obviously followed by many others on the European continent.

In 1935, Father G. Moretti, a Franciscan Catholic Priest, established guidelines on how to quantify the graphological traits of a writing sample. By assigning the

various degrees of each characteristic and establishing their interrelation, he gave graphology a much more scientific grounding. This eliminated any possibilities of a subjective (biased) interpretation. In 1945, he founded the Institute of Graphology in Italy – which is associated to the University of Urbino (Italy). Here graphology was accepted as an Honours degree within the faculty of psychology. Father Moretti dedicated his entire life to the study of the psychodynamics of the writing movement.

In Germany, particularly toward the end of the century, Dr. Ludwig Klages founded a theoretical school (Roman, 1952) and subsequently took over the authority. Their study was based on J. Crépieux-Jamin, but this was later downgraded and used less and less.

Robert Saudek did further research in Czechoslovakia. Max Pulver and his colleague Oskar Schlag instituted the science in Switzerland, and in Austria, it was Schwiedland and Langenbruch. In Hungary, the study only began in the 1920's. They were aware of the French and German schools of thought but followed their own path of development, independent of the above two (Roman, 1952).

Many an asylum seeker during the Nazi period sought refuge in Great Britain. Here the science was fairly unknown. But it was during this period that contact was made and the knowledge shared between experts. However, after this period, the British developed their own 'system' or rather 'school of thought' in this science, which was more conservative in nature, due to the conservative approach to life in Britain at the time. It differed vastly from that of the continent Europe. Any work or research done in this field was done in relatively secrecy, as many of the authorities in the field of graphology respected the fact that the service or science was a very confidential one.

There is vast publicity being given to graphology nowadays, as this has now become a science offered at tertiary level in Germany and in Italy, where in the 2000, graphology was officially given a faculty of its own with the relevant degrees up to and including doctorate level at two Universities in Italy – namely Urbino and Rome.

Europe has been the forefather of this science, with both Britain and America following its example. South Africa is beginning to create its own history (Grandin, 1994). Graphology was introduced here by a lady, by the name of Margaret Reeve, who arrived from England in 1947. At this point, it has a modest following that is growing steadily, as people are realising the benefits to be gained from this science. It is now offered at diploma level at our very own Pretoria Technikon.

In the last thirty years, authors and scientists in Europe (especially Italy and France) and America have contributed to graphology to such an extent that this new field of study has lost most of the aura of charlatanism surrounding it. No longer can this science be accredited to gypsies, soothsayers and palm-readers. Teachers, doctors, scientists, psychologists and other professionals are slowly beginning to realize the wealth of accurate and revealing information that can be gotten from a handwriting specimen, by looking at the combination of characteristics, which form handwriting.

3.3.2 Further developments in the field of Graphology

As described above in the section on the copybook, the ability to ‘acquire’ a personality trait through the learning of handwriting, can be of monumental importance when dealing with people, who have socially ‘undesirable’ traits, or are simply unable to complete a ‘hurdle’ within their lives, e.g. passing a test, successfully applying for a post, etc. A criminal for instance portrays certain anti-social tendencies. Together, graphology and psychotherapy can “change” this trait

or behaviour that is anti-social. As was described above 'how' a trait is acquired, so a graphologist can by means of grapho-therapy modify a trait – be the modification positive (accentuate) or negative (de-emphasise) (Grandin, 1994). Graphology as such can be a complimentary science in many fields, especially within the supporting and assisting types of professions – as will be delineated in the following section.

3.4 Implications and Applications of Graphology for Psychological Assessment

Graphology, as it stands, has great implications in the field of psychology, especially within the sphere of psychological and personality assessment (as a projective technique). It is possible for the graphologist to ascertain or pinpoint a patient's problem by simply assessing the handwriting sample given. This means that the therapeutic process can be shortened, as the diagnosis is fairly immediate. Graphologists have the means to determine psychological disorders by "simply" assessing handwriting samples. Disorders that can be pinpointed through this type of assessment include: eating disorders, obsessive-compulsive disorders, any mother/father fixation problems, schizophrenia, satanic following, etc. to name but a few (this will be further highlighted and explained in the following section about the Methodology of this science). Not only can the graphologist determine the above disorders and problems, but in some cases, is even able to ascertain if the person has experienced a humiliating childhood trauma, which could include any type of abuse, emotional degradation, etc. This trauma may affect the individual to such an extent that psychological therapy is necessary in later life. This trauma may have been suppressed and the person has 'forgotten' it ever occurred. Graphology can serve to assist both the therapist and the patient in achieving greater understanding of the problem, which could have been a time-consuming process to pinpoint to begin with, if only the traditional therapeutic process was employed.

The graphologists' work however, does not stop here. The area of grapho-therapy can further assist the therapist and patient.

3.4.1 Graphotherapy

Just as an individual seeks to 'rectify' or achieve greater understanding about the self by engaging in a relationship with a therapist, so the individual may seek out a graphologist. The therapist uses an inter-relational, verbal approach by talking with the client during their sessions. The graphologist, in turn, also commences a relationship but on a different level. After a much shorter, initial discussion of the reason the client would like a graphological assessment, the graphologist will use this ability to 'find out' what the crux of the problem is that the person is facing, by means of this handwriting assessment technique. This is not to say that graphology is seeking to undermine or overtake 'conventional' therapy as such, but rather to marry the two concepts. This would equip the client with an even greater understanding of the self and would generally solve the 'problem' experienced at a greater pace (the speed of change will depend on the individual self, on the intensity of the problem, etc.) (Grandin, 1994).

The 'marriage' of graphology to psychology results in the term – 'graphotherapy'. Graphotherapy, in conjunction with conventional therapy, is used to speed up the process of solving the problem of the client – the process of psychotherapy. The therapist will still undergo the proper process of therapy but along with graphotherapy it will be a speedier process as the graphologist works with a different area of the psyche, the unconscious. He/she does this by assessing the writing, conferring with the therapist, and together understanding what the individual requires during the therapeutic session. Thus, the therapist will share information gained (as will the graphologist) and the client will be taught how to "change" or rather positively influence a less desirable trait, such as indecisiveness or tenseness. Both the graphologist and the therapist will attempt to change certain writing habits that represent this type of character trait. "Graphotherapy is a controlled change: preplanned and predetermined to react on a specific trait and on that trait only. It is sometimes used with the aid of other

therapeutic techniques, and sometimes used by itself with no aid other than the informed co-operation of the writer (Owen; 1998, pg 934).

Although this is a slow and laborious process, as conventional therapy is just as slow and laborious a process, but together the success rate may not be conclusively higher but it should be accelerated, which is obviously an objective not only the therapist, but also the graphologist would want to achieve – to the obvious benefit of the client.

Graphotherapy is a lengthy process, precisely because the individual is given repetitive handwriting exercises, in order for him/her to modify a particular trait. The individual or rather his/her handwriting needs to be constantly monitored over a long period of time and thus the co-operation of the client is extremely necessary in his/her desire to modify the specific trait.

This type of therapy would be most effective with younger adolescents and children as their writing is in a formative stage, but this is rarely the case, because adults will not notice the ‘undesirable traits’ being exerted at this early age. However, this does not mean that graphotherapy is not successful amongst adults. An example given by one of the foremost graphotherapists – Paul de Sainte Colombe (Roman, 1952) – is explained below:

“Let us take as an example an alcoholic who lacks the willpower to say *no* to that first drink which sets him off on a binge. The symbol of a weak will shows up in handwriting as a feeble t-cross (or, in extreme cases, no t-cross at all). Through handwriting exercises, consistently and conscientiously done, he will practice making strong t-bars until, in time, they come naturally to his hand. When that happens (for some it requires weeks; for others months), he will find that a seeming miracle has taken place. Where once he was weak

and self-indulgent, he now has strength to discipline his appetites” .

The contradiction in this instance is that graphotherapy was actually never termed thus by graphologists, but rather by two renowned French scientists – Dr. Pierre Janet and Prof. Charles Henry (Roman, 1952). P. De Sainte Colombe worked together with these two scientists in 1929-30 to apply these tests to assess their validity. Even then the validity was proven, however, the science has still not taken hold as a recognized profession. It is as such not recognized worldwide because of the aura of esotericism that accompanies it. As soon as more professionals use it in a complimentary fashion, it will gain a greater foothold. It is currently gaining this foothold but with difficulty, as in a sense it is considered a ‘new science’ by many.

3.4.1.1 The Graphotherapy Process

As there are processes that are followed in conventional therapy, so there is a process that has to be followed in graphotherapy. This process is highlighted below.

Step 1: Defining the problem

It is not always that easy for the therapist’s client to walk in off the road and say what the problem is. In some cases, they themselves do not even know exactly what the problem may be. Thus, the client has to firstly converse with the therapist, as well as with the graphologist or graphotherapist. The therapist will assess the situation and will initiate a relationship between both the client and graphotherapist. Once the situation of how the therapy (clearly with the clients’ consent) will develop is explained, the graphotherapist will consult with the client. The client has to understand that he/she will have to provide input in the form of written materials, as well as having to do written exercises. The graphotherapist needs a thorough and in-depth analysis (that he/she must

perform) to assess the current type of penmanship. This preliminary analysis requires at least three continuously written A4 pages, if not more. The graphotherapist would also need further written material that was not written for analysis – written notes from work, rough drafts, short memos – anything that was written by hand over the last three to six months, if available. This is obviously done to eliminate the requested (or ‘forced’) writing aspect that usually occurs with specimens being analysed. This “false front” (Hollander; 1991, pg 369) usually disappears the longer the specimen is; and with the other not ‘forced’ sample (for analysis) the graphotherapist can ascertain a reasonable picture of the personality.

Step 2: Considering Alternative solutions first

This next step has to be done in conjunction with the therapist, as not everyone immediately needs therapy. In specific instances certain recommendations may seem sufficient to achieve a more workable solution. These may come from the therapist, or the graphotherapist may suggest certain small changes in handwriting style to alleviate the issues at hand. But this may already be too intensive for the client, because he or she may not be able to follow the guidelines by his- or herself. Thus, in some cases, several people simply need the guidance to apply the suggestions properly. This would fall within the therapist’s area.

Step 3: Defining the Therapy Procedure

If the client, therapist and graphotherapist agree that modifying (strengthening or weakening) a character trait will achieve the desired goal, then therapy and graphotherapy should be suggested. Within this step the therapist commences with therapy and the graphotherapist determines which changes in the formation of script are required to correct the undesirable trait.

Within the therapy process with the graphologist only one trait (which more often than not will include more than one stroke of the pen – reverting back to the cluster concept of character traits) can be altered at a time. Otherwise, what is called the ‘domino effect’ (Peeples & Retzlaff,

1991, pg 369), will occur. The changes will react to all other areas of the personality, i.e. it may create more problems than there were before. Graphotherapy should start with the most significant problem first and work towards to the less significant. Thus the more problems that the person would like solved, the longer the person will be in therapy – with grapho-therapeutic support.

It is not always clear what the effect of therapy will have on the individual and it is again here where both the conventional therapy, as well as graphotherapy, may act as the proverbial ‘safety nets’ for each other. Any distress that the individual may be experiencing with the therapy may reflect within the writing patterns. Working together, the therapist and graphotherapist can assure that the clients’ wellbeing is reinstated. Also a chance comment about either of the therapists’ by the client can be resolved immediately (if there is negativity) - with only one therapist this may not have been averted and could have caused further distress to the client, who then would not continue therapy to his/her own detriment. The client may be more comfortable talking to either the therapist or graphologist (depending on which one is perceived as less threatening by the client).

The graphotherapy sessions will comprise of the graphotherapist teaching the client how to alter the given traits, in such a way so that they eventually manifest insignificantly within the personality. The exercise very simply will include as many of the specific strokes of the pen as possible, which the client has to practice at least between five to ten times a day for approximately three months. The client has to be made aware of the fact the change will not occur over-night but rather gradually. The conventional therapy sessions will endeavour to cement the changes within the person, to make them more real within the personality. It may be difficult for some people to simply accept they have now changed. Thus in conjunction with ‘conventional’ therapy, graphotherapy begins changing the trait – that may not always have changed through therapy, as the person may have falsified the fact that he/she was now ‘better’. Graphology, or the assessment of

the handwriting, can without a doubt prove if the person has so-called ‘changed’ or not. This may not always be the case for conventional psychotherapy, as people can lie with alacrity about their state of mind if they feel it is in their best interest not to continue therapy. Graphology can assess if this trait is still present or if there has been a modification of some kind for the positive.

Consequently, these two types of therapies are two extremely compatible and complementary sciences. Graphotherapy changes the trait from within, and conventional therapy changes the trait from ‘without’. But in summation, these therapies do not have to work together, the therapist can actually consult a graphologist or graphotherapist at the ‘end’ of a clients’ therapy, and request an analysis to ascertain the success rate of the therapy. Or there may be a request before the commencement of therapy for an analysis to verify the ‘problem’.

Therefore, graphology cannot replace ‘conventional’ therapy. However, it is an intense method of assistance and subsequently, not only benefits the individual or client in question, but therapist as well. By verifying the end result, the professional can prove that the therapy itself has worked (again depending on the specific individual).

The further remarkable advantage is that this assessment technique does not allow for manipulation. Thus, when dealing with career counselling for instance, the handwriting can only serve to support the existing assessment techniques. In some cases, it may even prove to show the opposite of the questionnaire-type assessment technique, as the individual can sway it to represent a more popular career, he or she would actually not be suited for.

Many companies emphasise the importance of psychometric testing when assessing individuals for certain positions. The technique previously mentioned in Chapter 1, the PPA or Personal Profile Analysis, is one such a technique. The PPA, as will be extensively described and detailed in the Methodology sector, is a

test that chiefly assesses the individual's work behaviour. Thus, the different 'questions' or rather statements made, to which the individual has to respond to, can be manipulated. This means that the answers given by the individual can modify the results. In other words, the test can either be answered 'truthfully', and the resulting report reflecting the individuals' character in the workplace, or the individual being tested can slightly augment certain character traits mentioned in the statements of the PPA. Thus, the resulting report of the individual's working behaviour will 'misrepresent' the individual's real character in the workplace. Using the PPA or any other question type test alone in the personnel selection situation (or any other sphere, where assessment is used), may lead to a tainted result. In my opinion, it is thus best to actually use numerous tests for cross-validation purposes. This has been proven to be successful in Italy. There, they have taken five tests from the psychology environment, along with the graphological assessment technique and have compared the results and findings.

The five tests used in this instance are as follows:

1. Work Value Inventory – Donald E. Super
2. Survey of Personal Values (SPV) – Leonard V. Gordon
3. Survey of Interpersonal Values (SIV) – Leonard V. Gordon
4. Myers-Briggs Types Indicator (MBTI) – Carl G. Jung
5. Inventory of Personal Values (RIASEC) – John Holland

All of the above tests are presented in questionnaire type format. The different domains that the individual tests assessed in one individual (or rather the results thereof), were also assessed by means of graphological evaluation – both results were compared: "Da questo raffronto la grafologia ne esce piuttosto rinforzata" (Grave; 1997, pg 23). This broadly interpreted basically means that the results of all the tests reinforced one another but comparatively seen the graphological assessment technique proved to be of stronger value than the other tests. Furthermore, Rondia discloses that the single different tests used – the MBTI, the RIASEC, etc – mainly measure a specific feature of the personality, whereas graphology in one test can ascertain the global picture of personality, as well as

the diversity of the person: “Spesso il test ci mostra solo un aspetto del soggetto, mentre la scrittura lo fa vedere nella sua globalità e diversità individuale” (Grave; 1997, pg 23).

Graphotherapy as such, does not have to be limited to the personnel selection sphere or to people with certain types of problems. People with problems may consult a graphotherapist to assess compatibility in marriage or compatibility in business, or to augment certain traits etc. Such as in the case of an individual that wants to advance within the workplace and needs to be more assertive. The client can then consult with the graphotherapist and change or rather enhance and expand on the strokes that represent assertiveness.

In addition, the technique is not only limited to adults. As already mentioned, it is actually highly suitable and effective with younger adolescents and children as their writing is in a formative stage, but this will rarely be the case, because adults will not see the ‘undesirable traits’ being exerted this early on. In the case of children specifically, there is a section of graphology that deals with the doodles and scribbles. These doodles and scribbles are a sequence of movements that are individual to the child (as handwriting is individual and specific to the adult). Some children may use loose, circling movements, whereas others may use more angular, tense responses. This pattern will be repeated throughout the doodles and scribbles very much like the pattern found in the script of an adult. These scribbles have been found to express fundamental personality traits (Roman, 1952). Thus the child may also be influenced by the graphotherapy technique during play therapy. For instance, a child that is extremely aggressive (due to some type of abuse) and subsequently writes extremely angularly and pressurised, can be taught to create softer, flowing circles, rather than angular, hard lines.

In a nutshell, handwriting has been part of civilisation since the Cro-Magnon period as a means of non-verbal expression. It has evolved from the caveman drawings to the alphabet that we know and use today. It is this progression from the drawings to a

structured system that has led to the development of the copybook. This is the writing style that is used to teach children at school how to write. It is a set system by which children reproduce the letters exactly as they are depicted in the copybook. However, with the growth and development of the child into adulthood, the handwriting changes to adapt to the individuals' personality. Many researchers saw an opportunity to assess this variable of the individual. This led to the emergence of the science graphology. Graphology - the study of handwriting - allows anyone who utilizes this technique to gain insight into the individual's personality. There are numerous advantages to using this technique for assessment, for not only psychologists but also many different professionals. Graphology is not just limited to being an assessment technique. It branches off into Grapho-therapy, which is a form of handwriting therapy.

Thus in conclusion, graphology is an assessment technique that should be consulted by conventional therapist, child therapist, etc., as it can only enhance what they are currently striving to achieve – to successfully treat a client's problems.

The following chapter will serve to even further highlight the graphological assessment tool. This chapter will mainly deal with the methodology. The different aspects of the handwriting will be discussed and highlighted in depth in this section. In this chapter the reader will also be introduced to the Personal Profile Analysis as utilised by Thomas International. Both these tests are used for comparison purposes in this study.