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Examination of the Josef Mengele Handwriting

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ABSTRACT: Through the application of basic forensic document examination principles, the known Josef Mengele handwriting from the period 1938 was examined and successfully compared to disputed handwriting made in 1949 and circa 1970s. These examinations resulted in the positive identification of Josef Mengele as the writer of the disputed material. Although these handwriting examinations did not confirm that Josef Mengele's remains were in Grave 321 at the cemetery at Embu, they verified the witness accounts of the last years of Dr. Josef Mengele's life.

KEYWORDS: questioned documents, Josef Mengele, handwriting, disputed documents

The Pre-Sao Paulo Examinations

The forensic science effort to identify Josef Mengele did not start with the discovery of a pile of bones in Grave 321 in a small remote cemetery in Embu, outside of Sao Paulo, Brazil on 6 June 1985, but rather in a small obscure laboratory in Virginia, just outside of Washington, DC, where examinations were being conducted to discover the identity Josef Mengele used to leave Europe and enter South America. At a time when it was still thought that Josef Mengele was alive and hiding somewhere in South America, the Office of Special Investigations (OSI) of the Department of Justice, charged with finding Mengele, asked that the author conduct handwriting examinations of various travel documents in an effort to identify the document Mengele used to leave Europe at the conclusion of World War II.

These examinations consisted of the study of all available known handwriting of Mengele which was provided by the Berlin Document Center located in West Berlin, Germany. These known writings were the original documents that Mengele completed in 1938 when he joined the SS ("Schutz-Staffel"). These handwritten applications and long autobiographical letters were the same writings that were later used to identify the documents found in Sao Paulo, Brazil.

About April 1985, after numerous eliminations, an international travel document in the name of "Gregor Helmut" was examined. The signature on this document in the name of Gregor Helmut was identified as the handwriting of Josef Mengele. With this identification it was now possible to state that Josef Mengele left Genoa, Italy on a French ship for Buenos Aires, Argentina, in August 1949. This was the first forensic science conclusion in the search for Dr. Josef Mengele.

Much later we were to learn that Josef Mengele used this same identity when he traveled to Switzerland in 1956 to visit his son Rolf, only switching the first and last names to Helmut

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Gregor, introducing himself to his son as “Uncle Helmut.” This information was provided by Rolf Mengele in the form of statements and documents after the remains were identified as his father’s.

From Gerald Astor’s fine book entitled, *The Last Nazi—The Life and Times of Joseph Mengele* [1], we learn that Mengele actually lived in Argentina using the name “Helmut Gregor.” The signature as it appeared on the international passport in the name of Gregor Helmut is in Fig. 1.

Preparation for the Examination of Foreign Handwriting

It would be a great oversight by this author if the subject of preparation for an examination of this type was not discussed and emphasized. An actual examination of foreign handwriting should never be attempted until certain basic and very important principles are first followed.

Some familiarity with the language that you are working with is necessary. It would be preferable to be able to read and write the language, thereby being familiar with the basics of the language such as the alphabet, accentuation, diacritical marks, punctuation, word order, syllabication, capitalization, compounding, and orthography. This is, of course, the ideal, and we know that the ideal seldom occurs. So what must we do to be prepared for a language that we do not understand or speak? First, we must be willing to take the time to learn something about the language, which usually means that we must be given the time by the person who retains us or asks us to do the examination. With sufficient time, we can research the information in books such as *The Manual of Foreign Languages* [2], or speak to language teachers, or contact national organizations (of the language we are working with) to obtain information and actually study a random sample of writing in the language we are going to be working in. If you have time, the most ideal would be to contact people who write the language you are going to examine and are about the same age as the person whose handwriting you are going to be working with, and collect samples from them in that language. These would be old writings as well as recent ones.

In the Mengele examinations, the author was fortunate in having a personal familiarity with the German language as well as having sufficient samples of German handwriting by persons born about the same time as Mengele in the files. A study was also made of the various national systems taught at the time Mengele would have been learning to write.

The German language consists of 26 Latin letter forms with the diagraph β which is pronounced like the “ss” and properly should replace the letter under certain conditions such as at the end of a word. There are no accent marks in the German language and the diacritical marks appear above the ä, ö, and ü. In the actual study and comparative process, this information was essential because Mengele’s diagraph was quite unique in that it was constructed from the old and new handwriting systems taught. His diacritical marks were also quite unique in that they resembled bolts of lightning (also the insignia for the SS) and remained with him from the early writing in 1938 to the last examined in the 1970s.

The Mengele examination was simplified by the fact that the German language uses Latin letter forms as does the English language, but what if we were to be confronted by an examination where the Cyrillic alphabet is used such as the Russian language? The basic rules outlined above would still have to be followed. The time allowed for preparation would have to be extended and known samples of the language would be required. The most important consideration and requirement, however, would be the availability of *exact* known handwriting of the disputed text by the person suspected of having made the writing. These samples would have to be correctly taken and in sufficient repetitions to establish habitual characteristics. Once this has been done, an examiner should have no fear of conducting such an examination even if he does not speak one word of Russian.

When we conduct a handwriting examination we are not comparing “meaning”; we are

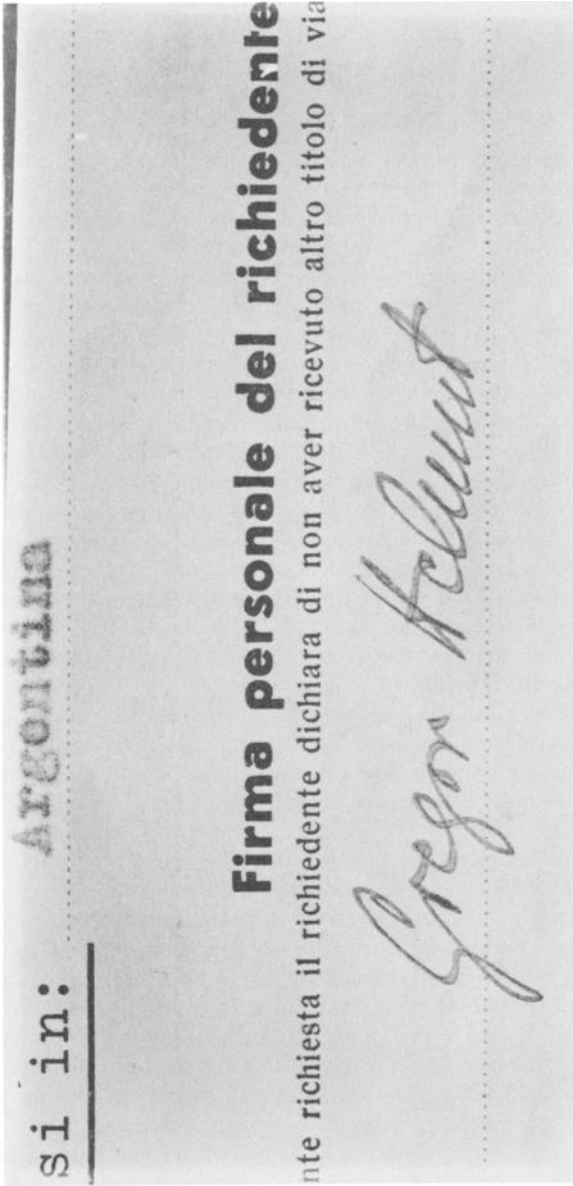


FIG. 1—Signature made by Josef Mengele on the international passport dated 1949.

conducting an examination of the letter construction, height ratios, shapes, and spacing habits that constitute the writing under study. This is done in the same way that we compare an illegible writing in English. An examiner should never fear an examination just because he does not understand what the writing under study says. The comparative process goes well beyond meaning. As long as he has taken sufficient time to prepare himself to work with the language, he should be on safe ground.

Preparation for the Sao Paulo Examination

Newspapers across the world carried the same headlines on 7 June 1985. They told of some remains, found in a remote grave in rural Embu, buried under the name of Wolfgang Gerhard and believed to be the infamous “Angel of Death,” Dr. Josef Mengele, the most sought after war criminal of all time. Could it really be that a worldwide search where millions of dollars of reward money was being offered could end in such a remote area? Is it possible that a man who was seen in various places throughout South America well into the 1980s could have died in a drowning accident on a quiet beach 60 miles (96.5 km) from Sao Paulo, Brazil, on 7 Feb. 1979?

Initial reports spoke of “diaries” and handwriting found in the home of an Austrian couple by the name of Bossert, who claimed that the man buried in Grave 321 at Embu had lived with them from 1975 until his death on 7 Feb. 1979, and that these writings were made by him.

On 8 June 1985, the author was contacted by the Office of Special Investigation and told to prepare to depart for Sao Paulo, Brazil to conduct handwriting examinations of the documents found in the Bossert home to determine if they were in fact written by Josef Mengele.

On 8th and 9th June, preparations were made to conduct the necessary examinations. First it was decided that all needed equipment would have to be taken along. This included all microscopic, ultraviolet, and photographic as well as any supplies such as film, lights, and expendables.

Since the known handwriting of Josef Mengele had already been photographed earlier to do the examinations involving the Gregor Helmut signature, it was now possible to make enlargements (20 by 30 in. [51 by 76 cm]) of the known Mengele handwriting to make comparative examination easier in Sao Paulo.

On 10 June 1985, the author was contacted by Dr. David A. Crown and informed that he had been retained by the United States Marshal Service also to travel to Sao Paulo, Brazil to conduct the handwriting examinations. It was then decided that these examinations would be conducted on an independent basis with each examiner reaching his conclusions independently and later comparing the findings.

At about 6:00 p.m. on Monday, 10 June 1985, Dr. Antonio A. Cantu, then with the Federal Bureau of Investigation, now with the United States Secret Service, and retained to conduct the ink examinations of the documents; Dr. David A. Crown, private consultant; and the author departed Washington's Dulles Airport for Sao Paulo, Brazil.

The Sao Paulo Examinations

It is important to understand from the very beginning that the control and responsibility for all of the forensic science examinations conducted in Sao Paulo, Brazil rested with the government of Brazil, and that those countries that participated by sending various forensic science experts did so at the request of the Brazilian government. Our host and the person who controlled this investigation from start to finish was Romeu Tuma, Chief of the Federal Police, Sao Paulo, Brazil. All of the handwriting examinations were conducted at the Federal Police Station in Sao Paulo, Brazil.

The actual handwriting examinations started on Wednesday, 12 June 1985. The previous

day was spent setting up the area where we would be working, and making sure that everything needed was available. (Finding a quiet place away from curious onlookers was the most difficult.)

What thoughts go through your mind as you prepare to conduct an examination of this type—an examination that the world press is waiting to report? Your main concern is that the disputed handwriting be of a quality and quantity that would allow for a definitive conclusion. This was not the type of investigation that could accept a “wishy-washy” report that said nothing. It was unimportant if the writing examined was, or was not, that of Josef Mengele. What was important was that a positive statement could be made about the authorship of that disputed handwriting.

The examinations were divided into five general groups. The first group of examinations consisted of microscopic work using low power magnification. Each document was individually examined for the purpose of studying the line quality of the writing. The second group of examinations consisted of various types of transmitted and oblique light analysis to study the paper surfaces in an attempt to identify any type of unnatural fiber disturbance or indentations to the surface of the documents. The third group of examinations dealt with ultraviolet light work to identify the absence or presence of unusual fluorescence within the ink or paper products used. Upon completion of the ultraviolet work, the documents were all photographed using a 35-mm format. The final examinations were the comparative handwriting examinations using the available known handwriting of Josef Mengele and the various disputed documents found in the Bossert home in Sao Paulo, Brazil.

The most valuable known writing from a comparative point of view was the “Lebenslauf” (Fig. 2). This document is similar to an autobiographical sketch of an applicant, written in his own hand. It takes the place of our personal history forms where we write about our family, where we were born and lived, and where we worked and went to school. The most fortunate thing about the known file was that the Lebenslauf was written on two separate occasions with much the same information repeated in both copies. This then was the same as a collect exemplar written twice.

As we begin the actual examination of the Mengele handwriting, we are immediately struck by the excessive number of years that separate our known writing (1938) from our disputed writing (circa 1970) found in Brazil. Having examined dozens of cases over the last six years (and having testified in many of them) where thirty or more years separated the known from the disputed handwriting, it has become very clear that the passage of time in and of itself is not a restrictive factor in a handwriting examination. It is only when the passage of time is connected to other negative variables that the examination may be restricted.

In the case of the Mengele handwriting, those positive and necessary requirements identified in other cases where old writing was used, were present. In 1938, when the known handwriting was made, Mengele was already a fluent writer, having finished the University and medical school. His handwriting habits were already firmly established. A negative variable in this category would have been if Mengele was an uneducated farmer who had done little writing up to that time. Mengele’s age at the time of the known writing was another positive factor. He was already 27 years of age, sufficient time to establish firmly unconscious handwriting habits. This was later confirmed by the identification of numerous unique habits that he carried with him throughout his life.

Other variables that often play a role in working with old handwriting were of little concern in this examination, such as a change of profession or nationality. Mengele’s profession, as we know, was medical doctor, but in that profession we expect a person to do a great deal of writing. Although Mengele discontinued the practice of medicine, he did not stop writing. He was a compulsive writer all of his life and kept long rambling logs of his thoughts. He wrote poetry and, in all likelihood, thought of himself as an intellectual. This compulsive writing, in his native German, kept his handwriting habits unchanged over the

Lebenslauf:
(Kurzgefaßt und eigenhändig mit Tinte geschrieben.)

Am 16. III. 1894 wurde ich als Sohn des Fabrikbesizers
Herrn Karl Mengele und seiner Ehefrau Walburga
geb. Kupfauer in Feingeborg a/Donau geboren. Nach 4
jährigem Besuch des Volksschules in Feingeborg, kam ich auf
den dortige Gymnasium, wo ich im Jahr 1910 das Zeugnis
der Reife erhielt. Darauf studierte ich in München u. Wien
Medizin. Im Winter 1912 legte ich die äzgl. Vorprüfung in Wien
ab und studierte dann weiter in Wien u. München Medizin
u. Naturwissenschaften. Im Herbst 1915 promovierte ich an der
philosophischen Fakultät d. Section der Universität München zum
Dr. phil. und bestand vor dem Prüfungsausschuss in München
im Sommer 1916 meine äzgl. Staatsprüfung.
Am 1. September 1917 erhielt ich die Bestallung als Apt. Im
Sommer 1918 promovierte ich an der Med. Fakultät der
Universität Frankfurt a/M. zum Dr. Med. Nach meinem
Studium war ich als Medizinaloberarzt zuerst 4
Monate an der medizinischen Universitätsklinik in Leipzig,
vom 1. 1. 1927 ab am Universitätsinstitut für Ethnologie u.
Rassenhygiene in Frankfurt a/M. tätig. Seit 1. 9. 1929
bin ich Amtshausarzt des kgl. Landwehrregiments.
Vom 29. I. 31. bis 31. I. 34 gehörte ich dem „Stahl-Regiment“,
dabei bis Oktober 1934 der S. H. an, aus der ich wegen
eines Nierensleidens ausschied. Im Mai 1937 beauftragte
ich meine Anwesenheit in die W. S. S. A. P., im Mai
1938 meine Anwesenheit in die 44. Im Sommer
ich als Major im Gebirgsjägerregiment 137, 18. Comp. in
Saalfelden i. /S. /O.

Josef Mengele.

FIG. 2—This document and another just like it dated 1938 were at the core of the known handwriting used in the examination.

many years that separated his known handwriting from the questioned documents he wrote in Sao Paulo, Brazil. This then leaves us with one more variable that often restricts an examination of this type: the person’s health during the years between the old and new writing. Little is known about Mengele’s health during the years between 1938 to the time of his death in 1979. This could have been a factor if some illness had markedly altered his handwriting. After examining the documents, it was apparent that whatever health problems he might have had, they did not affect his handwriting to any measurable amount and that health would not be a restrictive factor in the examination.

In the Mengele handwriting, you were working with a wide range of variation (normal for a fluent writer writing over an extended period of time). Each document, or group of documents, that were written at one sitting, were consistent within themselves, yet varied (within normal expectations) with writings made at other times. This natural variation strengthened

the value of the individual handwriting characteristics. If this variation was a result of speed you would find the characteristics displaying the variation consistent with speed such as abbreviation of words and exaggeration of the habitual movements that make up the individual handwriting habits. If the document being written was a more scholarly, thought-provoking writing, the writing speed would be slower and the writing smaller (since increased writing speed causes expansion of the writing, just the opposite occurs when we write slowly) with the tempo consistent with thought and reflection. As a general rule, the handwriting must be consistent and compatible to the situation under which it is being made and the content must, to some degree, reflect the rhythm and tempo of the writing. The mood of the writer often comes out in the form of speed, abbreviation, overall rhythm, tempo, and pressure. This variation can be seen in Figs. 3 through 5, which attempt to show the wide range of variation found within the disputed handwriting.

When studying the figures in this paper, the reader should pay special attention to those areas that were more obvious in the actual examination, such as the baseline habit of the writer. The "Gregor Helmut" signature in Fig. 1 clearly shows the baseline habit that was

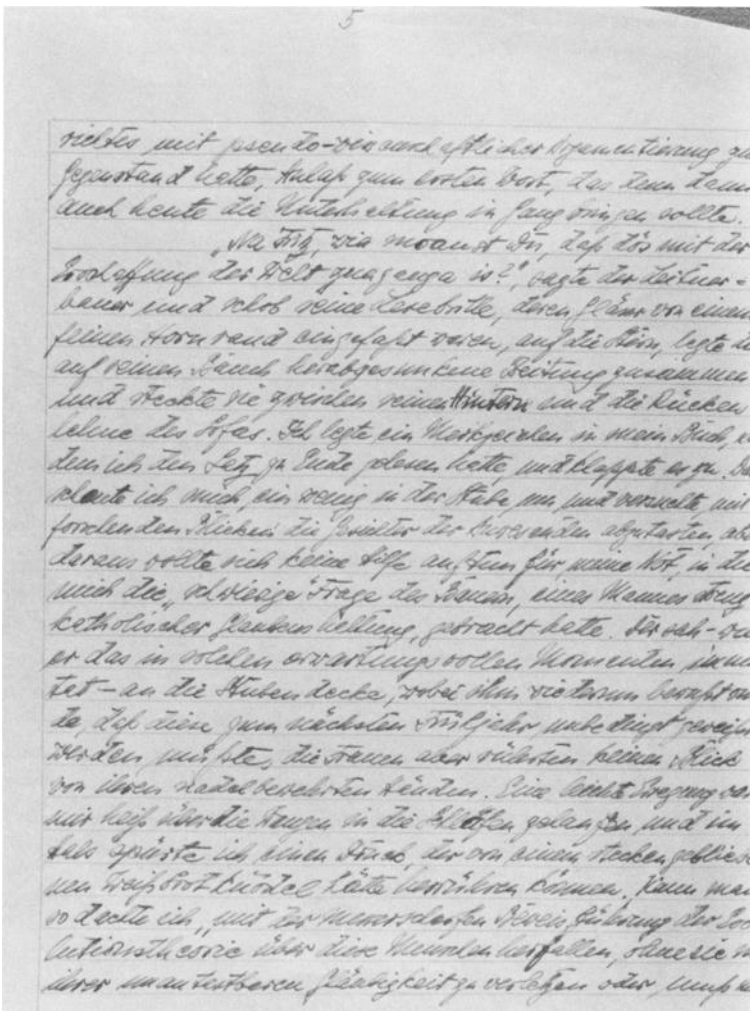


FIG. 3—One of the more legible disputed documents examined and identified as the handwriting of Josef Mengele.

Nach seiner physischen Organisation ist
 der Mensch ein Säugthier. Mit den
 Affen ^{simios} zusammen bildet er die Familie
 der Primaten.

In einer viele Millionen Jahre
 dauernden Entwicklung, die man die
 "Evolution der Organismen" nennt, hat
 sich der heutige Mensch (*homo sapiens*
recess) aus tierischen Vorformen über
 primitive Säugethierstufen und vor-
 menschliche Stadien gebildet. ☉

In regard einer frühen und noch nicht
 genau bekannten Stelle dieser Entwick-
 lunglinie hat er mit den höheren Affen
 einen gemeinsamen Vorfahr.

Jener mag schon die Tentation zum
 Bodenleben in sich getragen haben, die
 über den bipeden, aufrechten Gang und

FIG. 4—Another disputed document, more rapidly written, also identified as the handwriting of Josef Mengele.

present in all of Mengele's writing, both disputed and known. Whether an actual baseline is present or not, the writing is higher on the left than it is on the right. The signature actually goes downhill. This same baseline habit will be found throughout all of the writing examined.

The general handwriting characteristics always sought in an examination of this type such as letter construction, connecting strokes, height ratios, and spacing habits as well as the internal slant characteristics were all found to be consistent between the known and disputed handwriting. Of special note are Mengele's diacritical marks which resemble bolts of lightning. This is more easily seen in Fig. 4. His diagraph β is another unique letter formation of his own design.

A study of the early Mengele handwriting revealed a tendency toward quick, short dashes at the tops of some letters. This habit in later years became a very unique handwriting habit when he added a dash to the upper staff of the lowercase "d." Figures 3 through 5 reveal a small dash each and every time the lower case "d" is made. Linguistically, there is no reason for this in the German language.

10/1/76 Kleine Arbeiten im Saal. Radio repariert
 schreiben. Die mit letzte soll in überwiegen keine
 einlagen leicht zu regeln. Mithuntere spiegelung
 fassen, mit Radio faden aus der Zeit
 ist. Für 10/1/76 bestellt. Mit Selbst. in einem
 Speer, nach Ketz Hallung der Ro-Mifas.

31/1/76 Da die nicht anhalten, Fingerring mit
 Fingerring. Kahl abraden auf ein, das zu
 Kahl abraden der Hände führt, die abraden
 jährlich abraden sind schmerzhaft. Mit
 einem Tag. Kopf der Finger 4-5 cm
 abraden die mit abraden, die schmerzhaft
 und hoch ist, da sie mit abraden
 diesen unter Pläne, late. Schlicht
 sind die verfahren. Die werden über die
 die Kommand. die beladen gesunden
 abraden, abraden, abraden die anderen
 abraden u. abraden u. abraden. Die abraden
 der Zeit (eine die- abraden, aus abraden, von der
 Zeitung, abraden. Mit abraden schmerzhaft.

1/1/76 Die 8 reifen abraden u. abraden für den
 nach der Radio repariert fertig abraden. Die
 die Kommand. abraden mit Kommand. Grad abraden
 in abraden abraden abraden abraden.

FIG. 5—Diary-type of disputed document, more carelessly executed with total abandon to the writing process, identified as Mengele's writing.

It must be mentioned again that the variation in speed and legibility of the disputed handwriting allowed for the study of the handwriting and its variations under conditions of total conscious abandon to the writing process, yet the writing retained the unique characteristics of the writer, thereby establishing the unconscious habituality and complete consistency of the habits. When the study and comparison was completed, it was not possible to imagine another person being able, by accident or on purpose, to duplicate all those habitual handwriting habits under such varied writing situations and moods.

Of the 14 packets of writing which were identified as Exhibits Q(1-14), 2 exhibits were found not to have been written by Mengele, 1 exhibit involved typewriting only, and 11 packets were identified as the handwriting of Josef Mengele.

A case such as this should not "just end"; it should leave us something of value that we can use in future cases of a similar type. If this is true, then what did the Mengele investigation and examination leave us? It has reconfirmed, more clearly than ever before, that the identification of a person's handwriting need not rest on having contemporaneous writing, or writ-

ing in a language the examiner reads or writes; that handwriting habits, once firmly established through time and use, will change only slightly over the years, and that even the most latent and insignificant characteristics remain with us through good times and bad. But most of all it has reconfirmed that there exists within a large collection of handwriting from one person changes in rhythm, speed, legibility, and degree of abbreviation in the same way these changes occur in our speech.

When we are tired, or intoxicated, or ill, our speech will not be the same as when we are well and rested and sober. So we must expect that our handwriting will also be affected by these same factors. When we are sad our speech is different (slow and quiet in many people) than when we are happy (faster and louder). When we speak quickly we often abbreviate our words. These same factors occur in our handwriting. These changes to our speech are often dictated by our surroundings and the influences that interact with our lives. So it is with our handwriting. All of these factors are important when studying the handwriting of a person over an extended period of time. We must realize that over this period of time the person has reacted to many various feelings and moods. He has been happy and sad, sick and well, drunk and sober, weak and strong, and with these changes his handwriting was equally affected. If we study the handwriting of a person over an extended period of time and we find the writing to be consistent from day to day, week to week, and month to month, then we had better look very carefully at what we are examining because under normal circumstances a person's writing does not remain stable and constant to such a degree any more than a person's speech does. Yet, with all this natural variation, neither speech nor handwriting ever breaks from the well established unconscious habits that rule our lives.

When we fail to see this expected natural variation over an extended period of time, then we must ask ourselves whether this narrow range of variation is really natural and achievable. More than anything else, the Mengele writing examined in Sao Paulo had this natural variation with the same characteristics duplicated under various conditions of speed, abbreviation, and careless abandon so necessary for natural handwriting.

On 2 Aug. 1985, testimony was presented before the Committee of the Judiciary of the United States Senate in Washington, DC with all of the American forensic science team present. Upon completion of this hearing, the Committee ordered the United States Marshal's Service and the Office of Special Investigations to discontinue their search for Dr. Josef Mengele stating that from the evidence presented, particularly the forensic anthropological, pathological, and odontological evidence, it must be concluded that Mengele died on 7 Feb. 1979, on a beach 60 miles (96.5 km) from Sao Paulo, Brazil.

So ended one of the greatest and longest manhunts in the world and one of the most successful combined international forensic science efforts.

Acknowledgment

I would like to thank all those individuals in Sao Paulo, Brazil, who made it possible for me to conduct my examinations under the conditions necessary, and without whose cooperation and assistance the entire process could have been so much more difficult.

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