

GRAPHOLOGY HANDBOOK

FOR TYROS OR PROS

leslie w. king

REPHOTOGRAPHY
FOR TYPE OF PROS

INTRODUCTION

INTRODUCTION

According to Alexander Luria, Russia's foremost neurologist and brain surgeon, handwriting is brain writing. He points out that victims of gunshot wounds and brain tumors show that the disturbance in a certain function of writing does not arise in association with a narrowly circumscribed lesion of one part of the cortex - but is observed in several different parts of the brain. From this can be drawn the assumption that there are no specific cerebral centers in the brain for complex forms of mental activity, and writing is one of the most complex.

In all languages using a phonetico-literal system of writing, the writing process begins with analysis of the flow of sounds of speech which is recoded and ends with the identification of discrete phonemes that compose words.

The cortical ends of the auditory and speech motor analyzers are essential. Analysis of sounds changes from the recoding of identified sounds to optic signs (graphemes) which must be clearly distinguishable from each other and whose spatial organization must be mastered. For this portion of the writing process, the cortical ends of the visual and visuo-spatial analyzers are important. In the final stage, further recoding of the visual images of the letters into a system of corresponding movements must be made so that these can be recorded and analyzed by the motor analyzer.

Throughout the entire process of writing, during which impulses must be accurately directed to the corresponding muscle groups and their movements denervated instantly upon completion of the movement, it is necessary to maintain both the underlying task of writing, the intermediate program of recording the consecutive series of sounds for use graphically, accurately recalling graphic images for writing, and the writer must think of the message being written. Disturbances to the entire process anywhere along the many pathways interconnecting the lobes of the brain neurally with each other are peculiarly specific to the type of lesion and its location.

A lesion of the kinesthetico-speech analyzer is a disturbance of the differentiation of closely similar articulemes so that labials such as b-p-m are confused or the palato glossals d-l-n are confused.

I work up^t in the janitor department at the
 university of north carolina building 105 the only
 boy held's born is Don Adams¹. He is
 a real nice guy. My job is Male: 16½ years

To complicate writing still further, Robert Saudek, founder of the international psychology journal, Character and Personality (now published as the Journal of Personality), discovered that physiological disturbance at the onset of and during puberty takes a specific toll on the appearance of writing. Deterioration of the quality of writing increases to such magnitude that it is immediately noticeable and signals the degree of distress that the writer is experiencing. Omissions of letters, words, components of letters or parts of words, perseverations or repetitions of letters or words and anticipations or reversals of letters or words in sequence may occur.

Omitted words, omitted parts of words, components of some letters missing, occasional missing letters - all show the effect of puberty, but more important, the writing indicates retardation of genital development.

Transportation is mainly by transport by water.
 There are big play grounds for the children.
 Many are some are still done old fashioned. (2)
 They have big water cycle and can race and go
 like ten times a year. Beaches enjoy money there.
 Some races are seen in Holland. Galleries and water

Klara G. Roman, a graphologist with her doctorate in abnormal psychology, states that disturbed handwritings may reflect functional disorders which accompany the process of maturation. The writing above indicates retardation of genital development and possible malfunction of the endocrine glands as well as indicating the stresses of puberty identified by Saudek. Below, is another type of imbalance which occurs infrequently in the puberty period.

We are really enjoying
 our visit here and
 love the snow. (3)

Daddy
 I'm 14 years old and
 I play the bass.

Saudek, in his research studies of deaf and mute children, observed that lack of hearing and speech may impair the calligraphy of writing but does not interfere with the spontaneity of execution. Some thirty years later, Helmer Myklebust, professor of language pathology and Psychology Director, Institute for Language Disorders, Northwestern University, observed that when hearing loss is severe and has existed from the preverbal age that it has a marked effect on the read and written

word. He found that deaf children omit essential words from their sentences and that their sentence structure in general includes characteristic errors of substitutions, additions and unusual word order.

*I say a little boy play with his toy
in the picture. he play with his toy
in the table. he hold a chair on his right
hand. he hold a little girl on his left hand.
he had 5 family. father stand behind the table
and a little boy follow his dog. father little boy
watch the baby. he had book, play every ball
and a shoe with a house. he had a box with a toy
on the other chair. a little boy like to*

(4)

Male, 15 years

Myklebust also states that psychoneurological findings point towards the act of writing being controlled by the cortex in the hemisphere of the brain opposite to the writing hand. It is thought that the ideational part of speech occurs in one hemisphere, normally the left. Other intellectual functions such as perception, memory, recording of current experiences employ homologous areas of both hemispheres of the cerebral cortex together with the coordinating, integrating work of the higher brain stem.

Michael S. Gazzaniga, assistant professor of psychology at the University of California at Santa Barbara (1967) and R.W. Sperry of Cal Tech have been doing studies of human patients who have undergone an operation to separate the hemispheres of the brain for medical reasons. From the beginning, they observed that the operation made no noticeable change in the patients' temperament, personality or general intelligence but that, in responding to sensory stimuli, they favored the right side of the body (controlled by the left hemisphere). They learned, through experimental studies that perception remained equal in both hemispheres but that the speech centers were located in the left hemisphere. Tests of motor control showed that the left hemisphere had normal control over the right hand but was poor at directing individual movements of the fingers in the left and vice versa. Tests using visual stimuli indicated that the right hemisphere can generate an emotional reaction although it may be incapable of verbalizing the cause. Some of their recent tests indicate that the right hemisphere

seems to be incapable of forming the plural of a given word.

Gazzaniga states that up to the age of approximately four years, the right hemisphere is on a par with the left in handling language and studies of the child's development of language suggest that a "ground plan" for language is inherent in the human organism and seems to reside in both hemispheres. The maturation process appears to inhibit continued language development in the right hemisphere.

Robert E. Ornstein of the University of California's Langley Porter Psychiatric Institute believes that the right hemisphere is the intuitive, nonverbal part of the brain that is concerned with simultaneous processing of information and is therefore concerned with the whole activity of the body, not its parts.

Handwriting is affected by the emotions, according to Wladimir G. Eliasberg, a neurologist. He says that a number of muscles are involved in the writing movements, extensor-flexor muscles, abductive-adductive muscles and other muscles whose purpose it is to fixate the arm and hand so that the moving muscles can do their work. The postural muscles cooperate ad hoc to help the writing muscles.

One result of this is that psychological factors have strong influence on the moving muscles and practically none on the fixating muscles. Eliasberg showed this experimentally by having patients suffering Parkinson's disease write for a period of time, then spend three minutes in friendly, comforting conversation with him, then write for another period of time. The psychological factors in the "befriending" period acted on the writers to reduce the degree of tremor in their writing within three minutes' time, but did nothing to loosen the rigidity related to the fixating muscles, the non-writing muscles. Eliasberg explains his results by defining tremor as a typical anxiety symptom. He says anxiety and befriending are both mainly cortical reactions on a conscious level and are conscious. Rigidity may be a striate component, possibly phylogenetically older than directed movement.

The innervation of a motor action is not sustained by a continuous flow of neurogenic energy but by intermittent impulses. The physiological tremor is a result of the oscillating character of muscle action. This is manifest particularly in slow movements and in the fine coordination of synergistic or antagonistic muscles. Note the extreme

tremor in the following writing where the fine motor movements are involved, and compare it with the smooth, free flowing movement of the sweeping lines where the gross motor movements are employed.

Happy New Year (5)
To two nice people -
Richard D. Harvey

diagnosed Parkinson's disease

In the following writing, the writer says he has been diagnosed as having arterial sclerosis which affects his speech and writing behaviors but does not affect his thinking processes or physical activities. He also has the beginnings of Parkinson's disease. While living with an irritable, tempestuous woman, he says the tremor in his writing increased to a very noticeable degree. He has since married a calm, easy-going woman and the tremor has modified to a very slight one, disappearing at times when he is well rested.

I once worked for Gary Cooper at (6)
Phillipsburg, Montana. He had
the largest herd of pure bred Here-
ford cattle in Montana. There were

Male, 63 years

The recall of an incident that was particularly traumatic and is in the emotional memory brings out a physiological response in writing about it. The following writings are of a twelve year old girl who had become a disciplinary problem to her mother. She also had a tendency toward suicide, pinpointed in the analysis. Under family counseling on a regular basis, she became more cheerful, cooperative and was no longer suicidal. Note the increased errors on the second

page of her letter where she refers to her cat and its kittens. The effect of her emotional memory and its disruptive influence on her concentration and thinking is very obvious.

Dear Mrs. King

(7)

My name is Janet. I guess you will want to know about my family. I have three brothers and me. My brothers are names and ages are Dennis 18 Duane 21 Larry 27 Janet 12 the birthdays are Dennis Aug the 11th Duane Mar. 7th Larry June 20th Janet Nov. 14th and I will be 13. We don't have a pet because Mom says that we'd have a fight. I want a cat and Duane wants a dog so we can't have a pet before Mom took my cat we had a dog and my cat had kittens

and they are ~~all~~ the "haters" were

~~white~~ 1 white, 2 black and white, 1 brown and ~~white~~
white, & 1 crazy. They were pretty but mom wanted
to ~~give~~ give them a way. I don't know any
more to write

rec'd. Dec 10, 1971

0372-0038-212206

(Counseling completed Sept. 1972)

⑧

Dear Mrs. King

Dear Mrs King I am usually happy
I get up at 6:00 and go at 7:30. My 1st
class is health. My 2nd class is music.
My 3rd class is math. My 4th class is ~~is~~
Langang arts. My 5th class is ~~science~~
science. My 6th class is Arts. My
7th class is Langang Arts. I get
out at 3:00. I get home at 4:15
and do my house work at about
4:30 but just my living room

The more intense the physiological reaction is to the emotions, the more disruptive its effect on the writing - and on the body. According to Anthony Verlangieri, a biochemist at Rutgers University, a few minutes of strong emotion such as anger can cause the adrenals to burn up 2,000 - 3,000 milligrams of vitamin C within a few minutes.

Mental or physical abnormalities are reflected in writing. The effects of a severe heart attack are visible in the following writing as dots on the ductus (line of writing), errors in the start of a word, "caved-in" form to a letter, particularly ovals, and inappropriate dots or lines.

The "Take A Break & Show," is a lot of fun.

Howard W. Pangree, (9)

Extreme difference in pressure ratios on the up and downstrokes in a writing are one of the early signs of the development of cancer, according to Alfred Kanfer who investigated its effect on writing in careful studies conducted at Strang Clinic in New York City (until his death in 1974).

*2520 N. Strivell hwy (10)
Muhlenker, Wis*

Handwriting signals when something in the physiological or neurological makeup of the writer goes out of balance. On May 22, 1971, I suddenly lost the ability to write spontaneously. It happened almost as if I had suffered a stroke. On top of other signals that had been recurring in my writing, it became a warning to me to give myself more rest, put myself under less pressure and to set up a schedule for daily exercise. On August 29, 1972, I took a second sample of my own writing using the same pen, same paper and same background to write on.

*ellable twisted in my fingers. This (11)
is absolute best writing I can do!*

and, obviously, with same paper and ground (desk) in order to obtain as near a writing sample as possible. (12)

The following writing is that of a woman who responded to questions I asked concerning her health. I never include health in an analysis but will frequently ask questions in a separate letter in order to further my knowledge in this area of graphology. I asked about her having suffered a possible stroke or highly traumatic emotional experience because of the tremor that frequently appeared in the connections between letters and because of the loss of pressure in the upper zone and occasional squareness of letter forms. I asked what was wrong in the middle of her body due to the disconnected form of the "p" at the beginning and end of words.

1 - eyes did have shocks more than one, hardest one was my son was at Pearl Harbor when the bombing took place God was with him as he was in the midst of it all, he was one of them help pick up their boys in baskets. (13)

2 - eyes have poor circulation
 3 - feet broke left hip Oct 10-1961
 still have the pins in I was told if the pins should shift will have to have new ones in, still have cutting pains from hip to the toes when storming windy.

Mental disturbance shows in writing through the loss of control over space relationships, letter height and alignment variations that are extreme.

Case, Ann

(14)

~~I will keep~~
~~the car: when I get~~
~~back to work I~~
~~will pay you \$100.00~~
~~a month. I have contact~~

Smoke inhalation, which caused the following writer to be hospitalized for several days, caused her writing to grow disproportionately large but still demonstrated more control than the writer above.

(15)

I take Christ
 as my Savior,
 Amen Amen

Another form of paranoia incorporates a strange, yet systematic code in writing wherein letter structures or combinations of letters are handled in a unique manner. It usually can be deciphered. Schizophrenia, on the other hand, also affects letter structures. Frequently, in advanced stages, the letters become very segmented and written words are meaningless.

(18)

File 20, 1967

MIS LESLIE KINCO,

DEAR MIS KINCO,

WILL YOU PLEASE TELL ME WHAT IT

IS AND WHAT I CAN DO TO IMPROVE MY WRITING (THIS IS
NOT REALLY FAIR, (SINCE I'M EXCITED) I COULD LIKE TO KNOW
IF YOU'RE INTERESTED IN MYSELF KNOW I AM NOT, YET NEVER
IS IT REPEATED, DUPLICATED, EITHER, YES, BUT AT TIMES,
SPECIALLY TRYING TO GET DENIED, THEORY, IDEAS IT
IS HARDLY LEGIBLE, AND AT TIMES IN 2-3 MINUTES, IF
I REST UP IT GETS BETTER, (COULD IT BE THAT I AM
TOO FAST & FRUSTRATED) I TRY TO BE CLEAR AS I
CAN. I THINK I AM SENSITIVE AND RESPONSIVE TO
CIRCUMSTANCES AND SITUATION PARTICULARLY YOURS.
UNLESS I DRAW THE WORDS THEN I GET NO SENSE
ITS JUST DIDDLE, AND ITS SITUATION, LINE-IT-UP IS
I AM NOT BOLD OR INTRUSIVE AS MY WRITING WOULD
INDICATE, I DON'T HAVE ANY MORE, NOR COULD I FILL TO
YOUR DEPT. IN WRITING.

IT IS VERY IMPORTANT TO ME. WILL YOU PLEASE
FOR ME WITH AN HONEST, AND REPORT.

WHEN YOU KNOW MY LIFE I AM SURE YOU WOULD, OR
I WOULD NOT WRITE TO (TAKE UP YOUR TIME)
I HOPE YOU WILL.

SEE YOU, SEE YOU, BEFORE I GO,
I HOPE TO MEET YOU TO.
SINCERELY

Genetic inheritance affects the appearance of writing through its size and style. The individual with inherited artistic talent writes with a control, rhythm and spontaneity that others can only approx-

imate. The individual who, by nature, prefers a flowing, flourished writing indicates inborn creative talent related to manual dexterity. This is emphasized by the controlled manipulation of the writing instrument which produces an uncontrolled, spontaneous, artistic appearance.

(19)

Milton H. Ross
— Utah's Penman —

80 years old

The writing below is of a police sergeant who studied penmanship with Milton Ross. Sgt. Olson had just started wearing bifocal glasses and remarks on their effect on the alignment of his lines of writing. Evidence of ill health at the time can also be noted in the lack of pressure to his upstrokes.

(20)

there
Note the varying slant of my lines. I just got bifocal glasses and if I move my head only slightly, away it goes. Note also how rust has taken over since I quit practicing

No rhythm.

Best of Luck
D. Olson

The writing of Liberace shows the type of writing style that could easily be developed into the penman's artistically flourished calligraphy. The opposite style writer, the one who's writing is simple and plain, shows inborn talents related to work, productivity, practical application of knowledge and abilities. Writers of the two different styles may approximate the other's style but cannot approach it fully, nor for long, even with practice. Of the two below, Arthur Fiedler and Liberace would have more difficulty copying eachother's styles than would Phyllis Diller and Liberace or Diller and Fiedler. Styles of writing can be compared to body physique. Weight may be added or removed but the basic body structure remains.

have become very interested
in designing homes and
buildings. I have recently


(21)

Liberace

(23)

Phyllis Diller

Did you know that I
am a "Spark", that is
a person who chases
fires? I have the title
of Honorary Fire Chief in
about 129 Cities of the World
Arthur Fiedler

My favorite thing
is homemaking,
cooking, playing
the piano & being
with the kids &
my husband. I
enjoy reading &
being alone. 
Love Phyllis Diller

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The combination print-script writing that is so well done that it is totally blended indicates, in and of itself, a higher than average IQ. It, too, being a basic style of the writer, reflects inherited qualities related to the intellectual. Compare this with the basic style of a woman of the same age who retains the school model writing in high majority, and of the writing of a teacher who uses the school model in her regular writing. (Some teachers depart from the school model for writing outside the classroom.)

That was 6 years ago and I've come a long way, baby!

By the way, Leslie, it's much more comfortable to write on this paper with some cushioning underneath! (24)

31 year old female

I'm going to the doctor's office on Thursday to see what's wrong with me. I might have to go to the hospital for tests. Don't know yet. (25)

Enclosed is something I

31 year old female (26)

my long un-musical, unromantic name. We have given each of our children a name that is rhythmic, short, or unusual. I feel that a name should suit the child's personality.

teacher, female, early 30's

Size is another basic in handwriting and is related to genetic inheritance in the same way that style is. In other words, there is a limit to how far you can depart from what is part of your own character. Experiments have shown that individuals can assume different sizes for brief periods of time in writing but that they feel very physical reactions while writing a size that is alien to their own.

Size is related to some basic qualities of the personality and individual aptitudes. The individual who, by preference, habitually writes the small letters from .05 - 1.5 millimeters high illustrates natural aptitude for concentrated activity of an intellectual or scientific inclination. This is the type of person who works best alone or with a limited number of others who share his singleness of purpose. He works well behind the scenes, out of the public eye. His rewards are enjoyed best if they come from those in his field and if they develop out of his work.

The writer who preferentially writes small letters taller than 3.0 millimeters high illustrates his aptitude for interpersonal involvement with others in groups and with the public at large. He works best in the public eye. His rewards come from recognition, adulation, attention, being active and noticed in relation to some people oriented endeavors.

Who's to know why it suddenly
 looks so rich and exciting? And (27)
 anyway what if they do? Just
 go on living with any, or all of

Zsa Zsa Gabor (28)

Thus be it ever when freemen shall stand
 Between their lov'd home & the war's desolation,
 O'blest with vict'ry or peace may the heav'n rescued land
 Praise the power that hath made & preserved us a nation!
 Then conquer we must, when our cause it is just,
 And this be our motto - "In God is our trust."
 And the Star-spangled banner in triumph shall wave
 O'er the land of the brave the home of the brave.

Francis Scott Key

Large size writers may have some variation of size to their small letters which result from conditioning influences in the environment, but if the majority of emphasis is on heights of more than 3.0 millimeters, the significance remains that such a writer is more suited to people related activities.

(29)

like —————

Hedda Hopper

I want to know
 maybe I get take her
 ad me —————

Hedda Hopper:

The reverse can be true of those who are basically small writers, referring to heights that vary from .50 - 1.5 millimeters. Conditioning influences in their lives will be responsible for enlarging occasional letter heights.

(30)

well I will cheer you, and please
 write to me when you have time to
 write, will you please and thank you
 ever so much, if you would like
 this for your all friend Anna, Paul
 take it love

Female, institutionalized, diagnosed paranoid

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Environmental conditioning influences are largely responsible for the variability of most writing characteristics. Some characteristics are more stable than others and therefore come less easily under conscious control. Proportions of component parts of letters in the same letter structure, ratios of long and tall letters to the small, widths of letters and loops, letter spacing, connectives, alignment and pressure are illustrative of these. Those characteristics that are less stable and therefore come more easily under conscious control are the slant of letters, diacritic marks, capital letters, form of some letters such as "e", "g", "m", "n", "r", right margin, initial strokes on words. Those of intermediate difficulty are left margin, disconnection patterns, line spacing and the form of such letters as the personal pronoun "I", oval portions of some letters and the speed of writing.

The socialization process which is part of every child's growing years, and the role school training in writing plays in it, can be seen in the varying number of school model forms that people retain throughout life. Also of influence are the letter, word and line spacing learned during the school years. On a bell shaped curve, the departures from the school model influence in either direction affect the legibility or ease of reading the communication and symbolically reflect the writer's ability to communicate.

The spacing between lines that is selected by a writer, if he departs from the school model, is almost a conscious process but is influenced psychologically.

Wilhelm Roentgen
(1845-1923)

(31)

Fakt und Fiktion der die Arbeit mit Vorverständnis liest, wird sich sagen dass in Folge dessen die am Elektrostaten abstrakten Elektricitäten immer die Rechte in beträchtlichem Maasse der klein gefundenen werden kann. Einmal in Folge von Einfluss der menschlichen : Folge von Reibung in und über dem Körper.
Eine zu klein gemessene Gyroskopikalität müßte aber bedeuten, dass auch die Ihren Versuchen ein "Wahr" Gyroskopikalität vorhanden gewesen wäre. Es handelt sich also hier um einen sehr interessanten Punkt der Arbeit!

Der Versuch muss mit richtigen Anwendung wiederholt werden; um die selben

Courtesy: Rudolph S. Hearn

Alan Sheppard
(astronaut)

Hope the enclosed will satisfy the requirements
↓
of the analyst experts. Just got them in time
since the crew is going to disperse tomorrow.

(32)

Am going to the Cape myself on Thursday so
perhaps Louis & Liana will come north before
Monday. If so they will call.

Courtesy: Bertha Brown

Love to all -

Alan.

Winston Churchill
(English statesman)

which marks the opening of the
new Command being to
the Commander in Chief of
the Eighth Army as his troops
the fame & future they
surely deserve.
W. S. Churchill
15.10.42

(33)

Carl G. Jung

I am glad that
you and others carry on
the work I once began. The
world needs it badly.

(34)

yours cordially

Murderer

(35)

any of the above things. Leslie you asked a tuff question as to why I selected the word execution over murder, probably because it gives me a feeling of indifference whereas murder instills in me something personal that is the feeling of something personal. This is about the only explanation I am able to give, as I am not quite sure just why I

Tom Smothers
(commediene)

My name is Tom
Smothers. I'm
twenty nine years
old. I'm a real
folk singer and
say funny things.
I have one child

(36)

Joseph Smith
(Founder, Mormon Church)

(37)

my Dear Emma do you think that my
being cast into prison by the mob
renders me less worthy of your friend-
ship no I do not think so but
when I was in prison and ye visited
me inasmuch as you have don it to
the least these ye have don it to
me these shall enter into life
Eternal but no more
your husband J. Smith Jr

Franz Werfel
(Poet-playwright)

(38)

Daß die Zeit unsres Tages am Abend jüngerster,
Daß jede Hand voll Stechern der Schuld ist,
Daß die Wollust selbst noch voll Ungeduld ist in
Gottrechul nur aus Nichts! - Da bleibt keine Wahl.
Der Mangel liegt ewig im Material.

Franz Werfel

Courtesy: Rudolph S. Hearns

Sigmund Freud
(four years prior to his death)

(39)

Handwritten text in German, likely a letter or note, written in a cursive script.

Courtesy: Felix Klein

Control of heights and widths of writing helps to present a more balanced looking writing as a result of basic psychological stability in the personality and partially as a result of conditioning influences in the environment and some conscious control by the writer. Letter spacing usually follows along evenly when letter widths and heights are controlled, but they may range from too narrow to too wide and thereby affect the general balance of the writing.

Cathie Taylor
(folk singer)

(40)

I am twenty-two
years old, was born
in Winnipeg, Canada,
and raised in northern
California.
I have been singing
for twelve years.

Dorothy Collins
(singer-actress)

(41)

What a joy being
in "Carrie Get your
Gun" - in Salt Lake
City —
and what a
wonderful company
I love them all!

Salesman

The Alumbertalked referred to on page 12
is now made by the Emerson Company and
the Wallensack Company and plays
8 hours through the night. It has three
3 underjellow speakers - and a tuner as
auxiliary equipment - and 24 hours of

(42)

Loan Officer

Since your auto is registered in
both you and your wife's name I
will need both signatures on this
title application. Will you sign it
Herbert H. King and have your wife
sign it Leslie Wynne King, and
return it to me.

(43)

Sorry to inconvenience you again.

Female English Professor

What a beautiful name for a town - Beautiful. I have traveled
extensively but never heard it. If the town lives up to it, I
should like to visit.

(44)

Thank you again for your trouble.

Female Ph.D. Candidate

BA in Psychology
working toward Ph.D.
in clinical Psychology
May 26, 1964

(45)

I've nothing else to write

Width of spacing between letters may range from very narrow to very broad with an effect of tightening or loosening the looks of the writing on the horizontal plane. Normally, width of word spacing is comparative to width of letter spacing but may be found to be opposite. Thus, narrow space between letters and wide space between words serves to cause the word to appear more isolated from its fellows and, conversely, broad space between letters and narrow space between words increases the effect of closeness. Psychological factors are at work here, both consciously and unconsciously. The writer can more easily control his space between words, for example, than he can control the amount of space between letters. Size of small letters is relative.

Ann Blyth

(46)

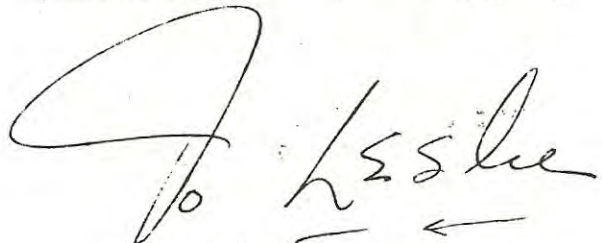
As Honorary Mayor
of Colusa Lake
California
Come visit us—
Ann Blyth

Harvard Mathematician

(47)

This pen is a drawing pen, made in Germany under the name "Repiatograph." One can purchase them, frequently, in stationery stores; I bought this one in a shop in Tolosa Falls. The ~~or~~ breadth of the point comes in at least 6 different sizes; this particular size is near the middle of the range.

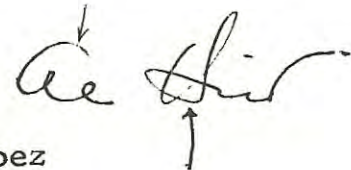
Al Hirt



 Its very nice
 of you to come
 backstage

(48)

Trini Lopez



When I
 fall in love
 it will be forever.

(49)



Dinah Shore

I have the worst
 handwriting in
 the world! —

(50)

Victor Borge

I was indeed delighted to
 perform in the beautiful
 and exquisite auditorium.
 And I look forward
 to the two more performances
 which will follow.

Victor Borge

(5)

Frankie Fanelli

To me, the most important
 part of my life is my family!

Pray to God, we make it!

(52)

Frankie Fanelli

Another variance to writing which reduces its balanced look and is a result of conditioning influences on the individual from the environment is variation in heights of letters in comparison to surrounding letter formations and to their own form when it appears elsewhere.

The range varies from being unnoticeable until close scrutiny is taken to being so extremely obvious that it is difficult to overlook it. The more variation there is on both the horizontal and vertical axes, the more lacking in control and balance the writing appears.

Ernest Hemingway

I was terribly sorry to hear this morning
 from your father that you were
 in a bit of a hurry for a few days more
 and ahead of this note to tell you how
 much I hope you'll be feeling better.
 It has been very hot and muggy
 here in Rochester. But the last two days
 it has turned cool and lovely with the
 nights wonderful for sleeping. The country
 is beautiful around here and I've had a
 chance to see some wonderful country along
 the Mississippi where they used to drive the
 logs in the old lumbering days and
 the trails where the pioneers
 saw some

(53)

Jacqueline Kennedy (Onassis)

I pray that things will work
 out for you - as I said - I would have
 helped you if I could - I hate to put
 an end to your dream - but I think you
 were hoping for a miracle that just won't
 happen in the twentieth century -

(54)

May you and your family stay as happy
 as you are with each other - and I am sure
 God will be kind to you

Very Sincerely
 Jacqueline Kennedy

Jimmie Rodgers

Jimmie Rodgers

I'm 5'11" inches
tall Brown Eyes.

(55)

From here I go
to Australia for
a month.

Glen Yarbrough

It was a great
Audience

(56)

I like the
new hall

I love you!
The best

Sirhan Sirhan

June 12, 1968

I hereby retain
 Russell E. Parsons, as
 my counsel, to represent
 me in my case
PEW v. Sirhan, et al.
Supreme Court,
No. A. 22342,
 and request that
 he be substituted
 as counsel in
 the case of
 the Public Defender.

(57)

Sirhan Sirhan

Speed of the writing is partially an environmental influence and partially an inherited characteristic. If an individual writes faster than his optimum capability, usually due to a circumstance that demands speed over appearance, characteristics in the writing are introduced that are not related to personality and the writing should not be analyzed unless these are taken into consideration.

Alvino Rey

I introduced the
 talking guitar on
 NBC in 1931
 and have had many
 hits.

(58)

Maxwell Maltz

Psychic Cybernetics
 means steering
 your mind to
 a productive
 goal
 Maxwell Maltz

(59)

Another environmental influence on the individual and on his personality in handwriting is the sphere of activity in life wherein the majority of his interest lies or from which area his ego needs are best filled. Not all individuals write with more emphasis on the tall or long letters and letter components, but for those who do it is significant psychologically. Emphasis compares to need.

For there to be emphasis, the height or length has to be disproportionate to the height of the small letters or to the length or

height of other parts of the writing. At times, the writer will place emphasis on the small letter heights and the long or tall letters are no more than one-half to one times the small letter height.

Janey B. Hart
(Pilot)

(60)

In the professional fields there should be no differentiation on the basis of sex. The words doctor, lawyer, corporation president are neither masculine nor

Ed Ames

If I had my
choice of any other
profession I would most
prefer to be a pro
fessional tennis player.
Regards
Ed Ames

(61)

Radio Listener

were done with the lady on graph
analysis. I believe it has merit. If
you please pass this card on to for
a short analysis of my handwriting
Ed Ames

(62)

Jack Benny

Jack Benny

(63)

I wish I could
think of an
answer to
your question!

Murderer

18 year old male, convicted of pre-meditated murder of teenage girl

General Science

(64)

John P. Lavin

- 1 Spectrum - band of colors produced when sunlight passes through a prism
- 2 infrared rays - rays below the last visible rays of the spectrum
- 3 ultraviolet rays - rays beyond the visible rays of the spectrum
- 4 Wave length - The distance from crest to crest of an energy wave.
- 5 Frequency - the number of waves per sec. of any ray.

Angularity of the connectives between letters in words is a result of either psychological conditioning influences and/or physical health as it takes its toll on the writer. In the following examples will be seen the writing of a 32 year old army nurse in comparison with her writing of 22 years later. There are degrees of angularity in writing.

Army Nurse

(65)

so thrilled that a half dozen times during the evening had run over to help them all out again & show them off. We had a good orchestra - negro - & they played "Happy Birthday." I happened to think of the "Whirling Dervish" while we were dancing, so we asked them to play that, but they couldn't remember it, so I sang it for them 3x, & then they went to town.

22 years later

(66)

asked by X-ray in my neck, the one found by X-ray in my neck, the never bothered me. Nor do I have heart trouble, other than a millmer. I do have inflammation of the arteries, and my capillaries feel I have muscle pain from

Judge Isaac Parker
(Federal Judge for 21 years)

(67)

I take pleasure in truly introducing to you Mr Geo Y Mr. of this State and a friend of mine for
Frank Turk

J B Burdette
and to Mr. Turk

I C Parker

Because handwriting is the product of the brain while it also reflects all the influences we have discussed, genetic, socialization and education, conditioning influences from the environment, and dysfunction in health or mind, the writing of the handicapped can also be analyzed. Those who must write, using the instrument in some original way or holding it in an unusual manner, are reflecting their individual personalities so long as they are accustomed to writing in that fashion.

This is the writing of Ann Ann Adams, artist who was stricken with polio and spends most of the day in an iron lung. She is paralyzed from the neck down but holds the writing instrument or the artist's brush in her mouth.

(Courtesy: Charlie Cole)

Mamy thanks for
your lovely offer -
God bless you -

(68)

Ann Adams



The following is the writing of a man whose hands were replaced by iron claws.

Iron Claw Writing

There are very few things that I cannot accomplish if one tries. (69)

The next writer is a young woman in her 30's who was injured at birth and does not have the use of her arms or hands. She knits, types and writes using her feet.

Dear Mrs. King:-
 Because of an injury at the base of my head at birth I have never been able to use my hands and arms.
 I spent twenty years in American Fork where I was taught to use my feet. I can do almost anything other people can do with their hands except feed myself.
 I appreciate the fact that John Barlow mentioned my name.

(70)

This writer only has thumbs on his hands due to a factory accident. He fastens the writing instrument to his thumb and around his wrist by elastic bands, the number of which affect the quality of his writing.

2 bands

(71a)

(71b)

3 bands

my writing is conditioned or influenced by the number of elastic bands on my wrist.

What shall I tell you with my script? Note the rhythm (2) and the

When programmed changes are inserted into a writing on a daily, regular schedule designed to hasten desirable changes in the personality, all of the factors that help to keep a balance in the writing need to be carefully kept in balance as alterations are made.

In the following writing, which comes from a librarian who was very stable and reliable but lacked self confidence and assurance so much that it was interfering with her contentment and happiness, all that was needed was to enlarge her writing in much the same way that a photograph is enlarged. It needed to be magnified on both the horizontal and vertical axes because it was ideal to retain her proportions.

therapy, so I suppose I'd better get started now. Is it all right if I pay you on the 30th of each month? This seems to be the best time as it is payday. It (the graphotherapy) sounds too good to be true. Anyway, here's

Over a subsequent three month period, she made changes to her small letter height which had a range of 1.0-2.0 millimeters, bringing it to a height that was 2.0-3.0 millimeters. She widened her letter forms so that they were better proportioned to her heights and she balanced some of them better. She brought the personal pronoun I into better ratio with her small letter heights.

Although the difference between the two writings is startling at first glance, the difference is only slight. Her own ratios and proportions to letter heights in the extensions and to component parts of the same letters remained the same proportionately. So did her space between letters, words and lines. All increased relative to the increase of her small letter heights.

While going to a one millimeter overall larger writing size was good for this particular individual, writing larger is not insurance that the writer can develop confidence. It's the balance and proportion that are the significant difference. There must also be a regard for the writer's basic size. This starts where the individual is, what his needs are in his work and private life, and what his basic writing style, size and proportions are.

Female librarian's writing after three months of graphotherapy
to build self confidence

~~therapy~~ after looking at St.-Colombo
book-grapho-therapeutics, but I have
since changed my mind. Like every
thing else, there has to be some (73)
truth to it. Needless to say, I'm
convinced now. Just look at the

This has been an introduction to the field of graphology as a whole. The theories introduced in this book are primarily concerned with the area of interpersonal relationships. It is important to learn how you deal with others in your daily life and work. Learn to understand your own drives, fears, defenses, attitudes and behaviors and you will have more understanding and tolerance for others.

For this reason, this book does not extend into the field of mental or physical health as it pertains to writing, nor does it deal extensively with sexuality as it is indicated in writing. These are appropos for advanced study in graphology.

Writing illustrations have been selected with the idea in mind that they could and should be referred to as you read explanations in the theory section.

Hoping you have rewarding reading,
Leslie W. King
1976

SIGNATURES OF THOSE WHO'S TEXTS WERE USED

(75)

Cathie Taylor

(82)

W. Paul Wharton

(83)

D. McRouten

(76)

Thomas B. Smith

Doc Smith

(77)

Siberac

(84)

Y. J. J. J.

(78)

Ernest Miller Heisinger

(79)

W. H. Shon

(85)

Lore
Dorothy Collins

(80)

Janey B. Hart

(86)

with right hand

All is well - Edu. L. Krauer

(87)

Dorothy Collins

(81)

with left hand

g. J. Jung

(88)

(89)

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A GENERAL EXPLANATION OF GRAPHOLOGY THEORY

GENERAL EXPLANATION OF GRAPHOLOGY THEORY

Handwriting analysis is based on symbolic use of space and spacing. As you learn graphological theory you will be studying material that is either empirically or clinically researched. The latter has been done, for the most part, in universities in America and in Europe. In America, research has largely been confined to research of the principles of graphology, investigated by psychologists who had little to no knowledge of graphology. In Europe, experimenters were primarily university professors who were well trained in graphology as part of their own educational requirements to obtain their degrees. Consequently, experimentalists in Europe were (and are) psychologists, physiologists, philosophers who contribute positively to the research on graphology; and experimentalists in America are psychologists who seek evidence of validity; and doctors or psychiatrists who correlate limited factors of writing with their own fields. In America, where control groups have become an integral part of experimental design, they have frequently indicated that experimental evidence for graphology is validated. In Europe, control groups are not always used.

Empirical principles are a compilation of signs and meanings that have been observed by graphologists and have been apparently accurately applied to a given number of subjects, then passed down in the body of knowledge that comprises graphology. Experimental research employs an experimental group and a control group, each of which are given the same tests to determine whether the effect was significantly higher for the experimental group in relation to the controls or whether little to no significant difference existed.

Both types of knowledge must be used by graphologists in the present stage of the development of graphology because experimental evidence is relatively little. Unavoidably, then, symbolism and interpretation are at the base of most graphological judgement regarding assigned meanings to writing characteristics. In order to proceed to the point of objectivity at all, then,

it is necessary to accept some of the principles on empirical evidence.

Handwriting characteristics are measured on vertical and horizontal axes in addition to measurements of rhythm, slant, primary and secondary pressure, and speed of execution. These classifications fall roughly into two categories: (1) the use of space and spacing on the written page and (2) elements of constriction and expansion in the writing execution. These, in turn, are related to the "zone" of writing in which they appear. Zones illustrate the manner in which the writer divides the parts of his letter formations. For example, consider letters "a", "e", "i", "o", "u" and others as single zone letters falling in what will be termed the middle zone, or the zone of reality and day to day activity. Consider letters such as "h", "k" and others that are similar as two zone letters that have a portion in the middle zone and an extension into an upper zone. The upper zone is the zone of the mind, intellect, theory, thought, and is not readily apparent in behavior on a day to day level. Letters such as "y", "z" and others that are similar, are also two zone letters with a part in the middle zone but their extension is downward to what is termed the lower zone. The lower zone is related to the middle zone in the way that activity is related to hands, body and feet and forms a portion of the observable behavior.

SPACE AND SPACING

Space considers direction: up, down, left, right, and the amount of three dimensional space used by the writer and registered in the pressure that he exerts through the writing instrument into the paper and on the writing instrument itself by his grip.

USE OF SPACE

This is related to constriction-expansion because one involves the amount of space a writer uses and the other involves what he does to the writing characteristics in order to elaborate or minimize his use of space. Spacing is found between letters, between words, between lines and between extensions of letter forms from one line to the next. It is found in the space allowance

made for the four margins surrounding the writing. It is also inherent in the overall ratio of the three zones to each other and in the total amount of space that they collectively occupy. Margins, line margins, primary pressure and letter slants are additional characteristics of space measurement.

CHARACTERISTICS ON THE HORIZONTAL

Variables on the horizontal axis are letter widths, space between letters, space between words and margins. Physical measurements can be made in millimeters of these characteristics. The modal height of the Middle Zone (MZ) is used as the significant criterion. If letters measure less than two-thirds the height, they are constricted. If space between letters measures less than one-half MZ height, letter space is constricted. If space between letters is more than one times the MZ height, space is expanded. If this is found in conjunction with too narrow a letter width, these characteristics together become constrictive. On the other hand, if there is wide space between words, the effect is to isolate the words from one another and this is considered constricted. To determine word space, divide the MZ height by word space (WS). Anything less than .33 is constricted. Words that are close or touching give evidence of expansion. In effect, the writer is intruding on other people's personal space, thus betraying his own personal insecurity and dependency.

The horizontal components are related to the individual's emotional-social relationships, his interpersonal relationships in his day to day activity. These components symbolize his reaction to his environment and to reality. These relationships are behavioral in content and may be observed. Lower zone (lower looped forms below the baseline of writing) components are also, largely, behavioral in content and may be observed. Upper zone (upper looped forms above the apex of the middle zone) are related to the writer's values, the enculturation factors that he has accepted and lives by; his ideas, opinions, mental life. This is not behavioral in content and is not observable until he takes action (middle or lower zone activity).

Handwriting characteristics on the horizontal axis range from overly crowded indicating lack of discrimination to overly spacious, indicating lack of discrimination for an entirely different reason.

LETTER SPACE refers to the reciprocity between an individual and his emotional environment. It refers to the individual's emotional feelings and reactions and to his ability or inability to express those feelings spontaneously and appropriately. It relates to his generosity in interpersonal relationships, to his understanding of others' emotional needs. The spacing also indicates the writer's degree of receptivity to other people's ideas, manner of behavior, methods of working, emotional reactions generally and is a definite influence on the writer's own ability to learn.

Ideal spacing indicates the ability to give and take - adaptability; a degree of personal assurance; receptivity to others' ideas; emotional generosity that is genuine and not impulsive; orderliness and organization; ability to learn without feelings of distraction; understanding of others' feelings and emotions, spontaneity, warmth, friendliness. These are only a few of the connotations. Many more can be added.

Constricted letter spacing indicates the writer's lack of spontaneity due to insecurity; conservatism due to fear of over-extending himself; conventionality or conformity according to the writer's reference groups (cultural upbringing, peer group, community pressures, etc.); emotional inaccessibility; inflexibility due to insecurity; inhibition and reserve for the same reason; lack of discrimination in associations and undertakings because of the need to "fit in" with the reference group(s); loyalty due to fear of changing loyalties. Such a writer is likely to over-react under sufficient stress or to react inappropriately in unfamiliar situations.

Expansive letter spacing indicates the impulsive writer; the writer who over-reacts emotionally; superficial; permissive; overly accessible emotionally; gullible; dependent upon environmental stimuli; lack of discrimination in undertakings, activities and associations due to lack of standards and inability to analyze logically.

WORD SPACE refers to the individual's contact directly with other people

in his daily relationships, his social attitudes, his desire to work in groups or alone, his ability to communicate, his assurance or its lack, his relationship to his environment and contact with reality, his desire for physical contact and communication, his instinctual reactions. It also affects the writer's willingness to take risks, his conservative versus progressive attitudes, his degree of need for security, tradition and convention.

Ideal word spacing indicates that the writer maintains a proper perspective in his interpersonal relationships and social behavior. He has the ability to work alone or with groups. He has normal communication ability, normal degree of self-assurance, good contact with his environment and reality - which also provides him with a reasonable degree of risk-taking ability and progressive attitudes. He is orderly, organized - with resulting efficiency.

An expanded word spacing, the result of words crowding upon one another, indicates the writer who has a pathological need for relationships with other people, is dependent upon his environmental stimuli, is emotionally dependent, insecure, needs to work with the public or with other people, is not well organized, orderly or efficient, is non-discriminating about his interpersonal relationships, social activities and general behavior. Because of insecurity and a lack of self-assurance, he is not generous.

A constricted word spacing, giving the effect of isolating the words, indicates the writer's degree of feelings of isolation and loneliness. It also indicates his lack of good communication, his dislike of physical contact, lack of relationship to his environment or to the people in it, lack of need for social activities. Such a writer can work well alone and/or in intellectual endeavors. There is little generosity because of his minimal relatedness to other people, but when such a writer does something generous, it is genuine. A writer with constricted word spacing is orderly, organized, efficient, because of his artistic or intellectual needs. Because of lack of a genuine, relatedness to people on an emotional plane, he may over or under-react or react in-

48

appropriately when he does become emotionally involved or desires to exhibit emotional response.

LETTER WIDTHS are another use of horizontal spacing. Widths can occur in any one of the three zones and take a part of their meaning in the ultimate determination. In the middle zone they indicate the degree of a writer's assurance, insecurity or anxiety. They indicate his degree of receptivity to new friends, new moves, new experiences, new methods of working, new activities and behaviors. In the upper zone, they indicate his degree of receptivity to new ideas, new concepts, intellectual pursuits, intangible thinking, lack of reality, paranoia, intellectual withdrawal. In the lower zone they relate to interest in physical activity, materialistic pursuits, sex, memories of past experiences, reality and they contribute to good or poor interpersonal relationships on a close, personal level. Thea Stein Lewinson has said, concerning letter widths, that a person's feelings of inferiority or delusions of grandeur and all the changes in attitude during his lifetime that he might experience "...register themselves in the different modifications of the breadth of letters."

Ideal widths show self-confidence, assurance, lack of hesitation, spontaneity, frankness, imagination in the writer's daily relationships - the area of activity and reality. In the intellectual area, ideal widths show imagination that is original and creative, inventiveness, good capacity for thought. In the materialistic area, it indicates imagination that is applied, such as streamlining procedures or developing a new and innovative use for something that needed only a slight change for improvement. It indicates well developed interest in physical and sexual activities, a developed emotional memory for experiences, contributes to good interpersonal relationships both in social activities and in close personal relationships.

For extension widths that are ideal to be their most valuable, the upper zone extensions must return to at least the apex of middle zone structures and lower zone extensions must return to the baseline. If the writer does other-

wise, he is not bringing his thoughts down to reality or he is not fully applying his material imagination or is not beneficially using his memories of past experiences. When extension loops are shortened so that they do not reach the reality area, some distortion exists in the zone which this occurs.

Constricted widths in the middle zone may include retracing which is the covering of a downstroke by retracing it upwards. Where retracing occurs, there is evidence of anxiety, evasiveness or secrecy, and guilt in the writer's interpersonal relationships. Where constriction occurs, insecurity is indicated as well as a lack of self-confidence, self-consciousness, self-defensiveness, analysis of possible involvements from the aspect of whether or not the writer's security will be improved or threatened by it, analysis of others' motives, tendency toward over-conservative behavior due to fear, vulnerability to inappropriate behavior under stress or emotion, emotional impulsivity.

When widths in the lower zone are retraced, the writer's close, personal relationships are affected and there may exist some sexual problem. The writer is also tense, unimaginative and dependent upon his environmental relationships. Where the lower zone is constricted, he is factual, serious, his behavior and activities or what he is likely to undertake or try to complete will be strongly affected by others' possible criticism or encouragement.

Widths in the upper zone cannot be retraced in the manner that indicates anxiety, but they can be constricted, to the point of indicating intolerance. Such a writer is self-critical, has a tendency toward feelings of guilt or self-blame, the writer is suspicious of others' motives and resents or refuses to accept innovations, change, new ideas or concepts, unfamiliar beliefs or customs, etc. His insecurity causes fear of change and inability to accept the unfamiliar. Before such a writer can accept new concepts, he must figuratively give up the security of his old beliefs and this he cannot willingly (or quickly) do. He will therefore be conforming and conventional according to his cultural and peer group standards.

Expanded widths in the middle zone indicate egocentricity, obtrusiveness, anxiety, impertinence, superficial amiability. Such a writer is emotional and changeable due to his anxious need to "fit in" and socialize and his inner feelings of inadequacy and inferiority. He over-responds or reacts inappropriately.

Expanded widths in the upper zone indicate a tendency toward delusions of grandeur, fantasy, lack of reality-orientation, withdrawal, exaggeration. Because of the withdrawal from reality, the interpersonal relationships are poor and because of this, the writer is likely to exaggerate reasons to become suspicious of other people's behavior toward him.

Expanded widths in the lower zone will cause the writer to be especially sensitive to his environment and interpersonal relationships. Such a writer will exaggerate what happens to him and what he is involved in. He is egocentric in the sense that he views his world subjectively. He is therefore vulnerable to both criticism or praise and these can affect his behavior, sex life, activities undertaken or dropped and his general attitudes and view of his personal circumstances. Because of his exaggeration and his dependence on his environment, he is emotional and impulsive. His impulsivity will incline him towards undertaking a variety of activities and pursuits. These in turn become dependent upon other people's reactions. Such a writer is largely outer-directed as opposed to the inner directed personality of the self-assured writer.

CONNECTIVES between letter forms are another use of horizontal space arrangements. They include disconnection with all its variations (which will be discussed under the chapter on measurements). Connectives indicate how the writer responds to his fellow man - the kind of contact he maintains when moving from the "I" of the word he is writing to the "You" of the succeeding word. Connectives are related to interpersonal relationships although one form, the arcade, can be thrust into the upper zone and thus bear an influence there. The arcade is a unique form and may be found as a connective in the upper zone area

as in this example (*of*), or from "y" to "o" as in this example (*you*). Examples are illustrations of how the form may be used and are not confined only to the examples provided.

Basically, there are six connective forms: garlands that are right tending and garlands that are left tending; angles; arcades, thread and disconnections. The whole writing shows which types are emphasized and provides the degrees of strength although minor use of arcades, if found, are to be expected.

Well-formed garland connectives ideally represent - when found in moderation - adaptability, flexibility, receptivity to others' ideas-concepts-opinions and behaviors. They indicate an easy-going, friendly, socially responsive nature. When found as the only connective form or appearing 90-100% of the time, they indicate stereotypy of response, lack of originality, high degree of conformity and as such is one indicator of average or below average intelligence. The more variety of connections found in a writing, the higher the indication is that the writer is of higher than average intelligence but other factors must also be sought and found.

Definite angle connectives in moderate degree indicate independence, initiative, an investigative and analytical individual. As the degree increases, they indicate self-discipline, resentment of interference or of being ordered about, positiveness and inflexibility. When found in high degree, they indicate a tendency toward disciplinarian or authoritarian attitudes and behaviors.

Thread connectives (which are a severely modified form of garland), when found in moderate degree, are evidence of quick thinking and quick responsive, spontaneous reaction to others' behaviors and to circumstances. Such a person effortlessly performs tasks that he has thoroughly learned. It is also evidence of a person who avoids friction, who tries to grasp details without wasting time over them, who feels rushed and who is impatient about getting a given project completed. The degree of thread in a writing is very important for it indicates adaptability with good reason or a constant state of superficiality and social reaction.

Garlands that pull leftward before proceeding rightward range in degree from hesitancy and indecision if few, to fearfulness, withdrawal and a need for self-protection and feelings of security when found in high degree. In high degree, such a person is defensive when placed in a condition of challenge or stress.

Arcade connectives, when found in minor to moderate degree, express the writer's individualism, creativity, originality, independence and emphasize intellectual orientation if such orientation is found. They also indicate a quality of independent thinking and behavior which is strongly related to the writer's personal standards. When arcade connections are found that connect diacritic marks to SUCCEEDING letter forms (e.g., *The, tie*) they indicate higher than average intelligence, independence and creativity.

True disconnections, in moderate degree, indicate intuitive ability and increase empathy, comprehension, originality. If artistic talent is present, they contribute to increasing it. When artistic talent is not present, they indicate a desire for communication and clarity or exactness. Disconnections that appear in high degree indicate a disconnectedness of ideas, possibly a jumble of ideas or frequent interruptions of new thoughts that distract the writer from full concentration. Disconnections that fall in the category of airstrokes indicate the writer's desire to avoid friction in his interpersonal relationships. If not overdone, they contribute to the quality of the writer's ability to adapt or to be flexible in response to circumstances and requirements placed upon him.

Printing indicates a stereotypy of approach when it is the only method of writing used. It shows concern with detail and minutia, a strong desire for order, orderliness and organization and a need for clarity and communication on an intellectual level - not on the level of interpersonal relationships requiring contact and adaptability. It also indicates lack of spontaneity for the separated letters signify separation from emotional spontaneity and contact

or involvement socially. The fact of printing, if done with fluency, increases talents and aptitudes present in the writer. If crudely executed, it expresses a need for clarity and communication and order.

LEFT AND RIGHT MARGIN arrangements generally and the line margin arrangements individually also involve horizontal use of space. The closer they are to the left, the more they relate to conformity, formality, conventionalism - all components of a need for security. If extreme, they express fear, inhibition, anxiety and withdrawal, according to the degree of strength. The closer margins are to the right, the more they involve courage, independence, non-conventionalism, lack of conformity, a concern with the present and future, spontaneity, interest in and concern for interpersonal relationship, outgoing, involved personality. If extremely close to the right, there is little discretion or discrimination and there is also indicated a high degree of impulsivity or a desire to escape the effects of the past.

Left and right margin arrangements complement each other and need to be considered primarily in relationship to one another. When the spatial arrangement of each is compatible, they reveal the same personality characteristics about the writer - balance, stability, planning and organizational ability that leads to compatibility. When they are incompatible in their arrangement, the one with the narrow margin takes precedence. However, if extremes of width that are either too narrow or too wide are involved, conflict is expressed between the two opposing spatial arrangements. Traumatic experience may be one cause.

INITIAL STROKES on letters that commence words and final strokes on those that end words (or letters) are also part of horizontal spacing. They may carry the same structures that are available for connective forms and retain essentially the same meanings.

When minimal or non-existent beginnings are employed, it is indicative of the writer's personal independence, emotional maturity, desire for efficiency in social communication, dislike of wasted time or effort (in the same context)

quick thinking, decisiveness and ability to see through to the essence of a problem or statement.

Garland beginnings, when in moderation, indicate the writer's desire to sound out other people as to their views and reactions before committing himself. It is evidence of adaptability in interpersonal relationships due to a need for security. When in excess, such beginnings indicate the emotional immaturity of the writer and exhibit his need to conform to other people's standards to gain their liking and approval.

Thread-like stroke beginnings indicate a hesitance or lack of assurance or purposefulness about starting a project. Usually, they are related to the writer's degree of strength and stamina, especially when found well defined or frequently.

Arcade beginnings show a need for self-protection and indicate defensive behavior. According to the degree of strength, they indicate a need for security or a constant state of inhibition, fear and withdrawal.

Angular beginnings in moderation indicate independence and a desire to ward off interference as well as impatience and a need to do things according to the writer's own ideas. If in high degree, they indicate a defensive, resentful attitude which includes a need for the writer to justify his position; and resentment from being placed in that position. Angular beginnings, when brief or tick-like, indicate impatience or, in upper zone a desire to attain or obtain - but in speedy writing, are related primarily to fast movement.

A left tending garland is in the peculiar position of also being a right tending garland for the initial stroke of the following letter. It is usually identified as a "hook" in writing (e.g., *cat*). In moderation, it indicates the writer's desire to grasp or to "get hold of" as much as he can. It indicates that many things catch his interest. Because it moves leftward before moving forward, it indicates the need to "hold onto" what has been gained. If found in high degree in the writing, it indicates emotional immaturity, a lack

of discrimination and a need to cling to the things that offer security. Such a writer would exhibit loyalties in his interpersonal relationships but they would be due to his insecurity. He would be possessive about his few close relationships with other people.

Lack of endings on the final letter of a word, if stopped short of the baseline, indicate fear to extend oneself, inhibition, self-protectiveness, need for security and withdrawal. The degree of the personality trait involved is dependent upon the degree of the lack of endings. When finals reach the baseline but end abruptly, they contribute to the speed of writing if it is a fast writing. Otherwise, they contribute to insecurity and the lack of generosity (except for impulsive generosity) that accompanies insecurity, and the subjectivity that is a part of insecurity.

Finals that form garlands indicate spontaneity, adaptability, a willingness to extend oneself for the sake of another, assurance, emotional generosity -- except when the garland ends in a hook. Such a final indicates selfish or subjective motives behind the generosity. When the garland rises above the apex of the middle zone, it indicates that the writer will indulge in obtrusive or some behavior gauged to draw attention to himself. The need for notice that such a final indicates is due to emotional insecurity; a need for recognition.

Finals that angle abruptly without first moving rightwards, indicate abruptness. If they rise above the apex of the middle zone, forcefulness is used to compensate for the emotional insecurity illustrated by the rising stroke. Strokes rising above the middle zone apex that also end in over-elaboration, indicate a tendency toward ostentatious behavior to command attention.

Finals that thread out, when found in a fast writing, contribute to the speed of the writing. Otherwise, they indicate adaptability to the point of personal indecisiveness in relationships with others, they indicate a lack of force, a lack of desire to exercise control over others. Finals that end with increased pressure indicate the writer's decisiveness, tendency to exercise

force or control in his interpersonal relationships whenever possible. However, if a writing is fast it is next to impossible for the writer to maintain speed and to slow down to produce a heavy pressured final.

Word finals belong in the middle zone. When they drop to the lower zone, this zone exercises an influence that is usually negative. It may be frustration, dependency or negativism. When finals rise into the upper zone, this zone exercises its influence in the form of seeking notice, prestige, ambitions, etc. Either treatment of finals indicates the writer feels some insecurity in his interpersonal zone.

SLANT OF LETTER forms is another component on the horizontal axis. Because this is where behavior takes place, and because mental attitudes have to be acted out for them to be observed or for them to affect the writer's environment, only middle zone slants should be considered. These are the upslants and downslants.

Left slanted downstrokes indicate the writer feels a need to keep people at a distance. This is a form of defensiveness or self-protection. It affects communication for he will find it difficult to explain his motives and he will lack spontaneity. This is conducive to much pre-planned behavior on the part of the writer. To others, such a writer appears aloof or difficult to get to know. In his behavior, he frequently resorts to whatever seems expedient at the time, particularly if his ego is at stake. The stronger the left slant, the stronger these traits.

Left slanted upstrokes indicate emotional withdrawal and a need for security. Such a writer is emotionally inhibited, self conscious and fears or distrusts interpersonal relationships that become too personal. If an upstroke is slanted to the left, it automatically causes the downstroke to be left slanted, but the reverse is not true. Left slanted downstrokes may also be found in right slanted upstroke writing.

Vertical downstrokes indicate control, lack of spontaneity due to conscious control being overlaid. There will be difficulty in reacting impulsively or in exhibiting much strong emotional feeling. The behaviors that are observable are dignity, poise, control and thoughtfulness. Such a writer exercises organization and efficiency in his undertakings as well as in his personal and social life.

Right slanted downstrokes indicate the writer's attitudes and behavior in relation to his environment and in response to other people. Since the downstrokes symbolize the actual action that a writer takes following his initial response (which is the upstroke), the more that the right slant exceeds the school model, the more it may be considered genuine evidence of emotional demonstrativeness or impulsivity. One must never overlook that the school model influences the slants that writers employ just as much as it influences letter forms and spacing arrangements. What correlates with the school model is always conventional behavior according to the standards of the particular culture. The writer who slants more to the right than the school model is an individual who is impulsive in emotionally charged situations. He can be influenced through his emotions. He is a social type of personality in that he feels the need to be with people, communicating with them, working with them (although other characteristics may lessen this need). He does need people to respond to him. Right slanted upstrokes indicate his initial emotional response; the degree of right slant of his downstroke shows how much of his initial response he exhibits.

Emotional stability is shown by how closely paralleled the angles of up and downstrokes are. A range of slants of more than 30° would indicate changeableness. Slants should be measured according to their range for anything that measured too mechanically would indicate stereotypy.

PRESSURE is related to the grip the writer uses on his the writing instrument, and to how much average range of pressure he employs by pressing into the paper, and to how rhythmically he writes with subtle changes of pressure on the up and down strokes. Some writers deliberately choose an instrument that produces a broad inky line without pressure; other choose an instrument so fine that for the line of writing (ductus) to approach some breadth at all, pressure must be great. In this hardbook, our concern will be with the average range of pressure on the paper and with the breadth of the ductus. Grip pressure, in brief, is related to neurotic tension and has an effect on the quality of the line of writing as well as on letter forms.

Pressure indicates the amount of available energy that the writer has at his disposal and how he applies it. It is a measure of the amount of will power that the writer can bring to the accomplishment of a task, and the amount of creative force upon which he can draw. It is a measure of the kind of and capacity for emotionality that the writer has. It indicates his degree of personality balance.

Very light pressure writers and very heavy pressure writers indicate the degree of stress affecting the balance of the personality. The lightness indicates the chronic presence of anxiety, a degree of apprehension without specific source. The heaviness indicates tension which, though present most of the time, may be labelled and explained by the writer.

Because of the emotional drain on the personality, neither of the above writers will feel a surplus of energy or enthusiasm. Both are driven to accomplishment through fear instead of creative energy that leads to productivity. The anxious personality is one whose feelings of adequacy have been undermined or were never built. Such a writer will strive to his utmost to accomplish a change in his situation but if such does not come about, will regress to apathy. The tense personality feels driven to accomplish and is incapable of wasting time, is impatient, works fast, can't stand delay, persists in his endeavors to make something work out. Both types of personalities are in an unpleasant state and feel driven to try to lessen it. Both are frequently inefficient in their approaches which results in inflexibility or stereotypy of response.

The light pressure writer exhibits little strength or has had his strength over-taxed and there is minimum if any reserve. Light pressure writers react quickly to environmental stimuli, reacting favorably to beauty and unfavorably to disharmony or harshness. Such a writer is oriented to the intellectual sphere.

The heavy pressure writer is materialistic, oriented toward productivity and activity, use of his energy and force or power. He enjoys challenge as much as he enjoys accomplishment. He has great capacity for emotional experience and involvement with his fellow man.

Moderate pressure indicates the writer's good balance between intellectual and material drives and his everyday activities. It indicates the person with sufficient stamina to work well and to accomplish his purposes. Such a writer needs ordinary amounts of sleep on a regular basis whereas the heavy writer can do with less over a prolonged period because of the reserves of energy at his command and the light writer requires somewhat more because he expends his energies in his daily activities.

The rhythmical versus arrhythmical flow of pressure is also very important in determining a well balanced, mentally and physically healthy individual. The difference between the two has been shown, in some research studies, to determine tendencies toward criminality. In other studies, rhythmical disturbance in the writing has been indicative of various types of mental disturbance - from being mildly neurotic and functional to severe psychoses.

Rhythmical control of the ink flow during the act of writing is expressed in the coordinated, rhythmically consistent alteration of pressure from light to heavy, usually found in upstrokes (a sign of expansion) as light pressure and in downstrokes (a sign of contraction) as a heavier pressure. There is evidence of the writer's energy - available in all three spheres of his life, intellectual, reality, productivity. There is evidence of his balanced nature, creativity, adaptability, liveliness and assurance. Such a writer can relax at will.

Arrhythmical writing indicates instability, mis-directed energies, unrealistic abstraction, frustration, conflict, outer-directed rather than goal or inner directed, lack of enthusiasm, stereotyped behaviors, inflexibility, tension, sudden changes of mood or eruptions of emotion, impulsivity, lack of control, lack of endurance, indecision.

Writing may be rhythmical but carry the opposite pattern of light upstrokes and heavier downstrokes. This is evidence that the writer is compensating for some deficiency. His energies are consciously directed into specifically controlled areas but they are incompletely harnessed, once the writer's self-dis-

cipline relaxes, he rides the crest of his own emotions until he can bring himself back under control. Such a writer frequently feels dissatisfied and will strive harder to gain his goals. He may use either intellectual or artistic capabilities to do this. He has both. He is also well coordinated. It takes more developed motor control to exert a rhythmical displaced pressure pattern (heavy upstrokes, lighter downstrokes) than it does to maintain a normal one.

Another form of displaced pressure is the pressure moving on the horizontal axis only. This indicates the writer is using extra effort, drive, force and energy in goals related to the environment, interpersonal relationships or plans for the future. The zone where the horizontal pressure occurs will define the area where the writer is investing his energy.

Two other types of pressure affect the writer's relationships on the horizontal axis: excessive, yet erratic pressure that leaves a spatter of ink or a fuzzy outline on the ductus is one. This indicates the writer's over-indulgence of himself and his sensual desires. He is surfeited and has brought himself to the point of exhaustion or breakdown as a result. The other is the indentation in the paper that is not filled with ink. It indicates the writer's extremely low state of energy. There is no surplus. The state has been brought about, usually, through ill health, over-taxing the strength or stress. Should the writer disregard the warning in his writing, he will drive himself through his mental energy alone.

Greatly dependent upon the writer's selection of writing instrument is the fact that he may produce a very thin line (ductus) of writing and yet may exert very heavy pressure; or, he may produce a ductus as broad as two or three millimeters and exert no pressure at all. The width of the ductus is also important in the consideration of the writer's energy level, mental and physical health, emotional responses, in the depth of his emotions and in his attitudes.

The two extremes are the pastose ductus and the sharp ductus. The broader the ductus, the more pastose it is considered. The finer the ductus, the more

etching-like it is in appearance, the sharper it is considered.

Pastosity indicates the writer's sensuousness, sexuality and wealth of emotional reaction to anything that stimulates any of the writer's senses. The writer is emotionally impressionable which may lead him into impulsive behavior or commitments, but he is also emotionally resilient. When a writer chooses a writing instrument that provides width of ductus without pressure, he exhibits his need to get along with others without friction or argument. They avoid exertion wherever possible, conserving their energies for selective use.

The sharp writer is the person who is self-disciplined, the type of person who perseveres in the face of discouragement or obstacles. Such a writer does not relax. His is primarily an aesthetic or intellectually oriented nature, with a coolness of emotional reaction, a detachment from complex emotional involvements. Extremely sharp writing, uncolored by any areas of pastosity, indicate the writer's withdrawal from the material world.

The narrow ductus writer, whose writing is not etching-like, is a writer who will not harbor emotionally based grudges or prejudices over a period of time. He is able to place emotional experiences in proper, logical perspective, unless the emotional input continue to arouse him. Anger subsides quickly too, if not reinforced and the extremes of joy and happiness are retained for their details long after the emotional memory is lost. Loyalties, if intellectually placed, are long lived; if emotionally placed, require constant reinforcement. Persistence is short lived unless the writer has an intellectual reason for it. Goals, when developed at all, are developed carefully and not as a result of the arousal of emotion. Traumatic experiences, if suffered, will do less long term damage to the narrow ductus writer than to his broader counterpart. A caution to keep in mind about both narrow ductus writers and light pressure writers is that the conditions are not stable over a life-time. Age, experiences, education, goal orientation, all may have had their effect upon a writer and may have changed a one time heavy pressured, broad ductus writer to

the writing you see. Care must be taken in explanation of the personality traits so that he is not led to think of his past personality in relation to your statements. This is a rule of thumb to use as a general guide about almost everything in handwriting analysis, but it applies more to some than to others.

The broad ductus writer, whose writing is not pastose in its fullest sense, has easily aroused sensibilities, nonetheless. He is warm in his interpersonal relationships, responsive to his environment and becomes easily involved. He tends to carry emotionally based grudges or prejudices. He has a long lasting memory for emotional experiences. Anger, joy and happiness, all last longer with him in emotional content than they do for the narrow ductus writer. He is self-reinforcing where emotional stimulation is concerned, and can keep emotional feelings alive without constant external input. He would suffer longer from traumatic experience.

Another type of pastosity results from scattering of areas of breadth of ductus or ink-filled letter forms or inky corrections. This may, where no physical abnormality exists, apply to an estimation of the writer's sexual desires. The alternative definition may lie in insufficient oxygen reaching the brain, usually through faulty circulation.

The writer with normal ductus width shows a nature that falls between the two extremes of narrow or sharp ductus writers and pastose or heavy ductus writers. His nature is more spontaneous than the narrow ductus writer's, less spontaneous than the broad ductus writer's. He is less prone to superficiality than the narrow ductus writer, less emotionally involved than the broad ductus writer. The normal ductus writer meets a happy medium in his involvement and activities - being neither over nor under-involved.

RHYTHM, ARHYTHM AND REGULARITY of all the variables on the horizontal axis is the final consideration before moving on to the vertical axis. Rhythm is distinguished from regularity by its pattern of spacing arrangements and pat-

tern of letter widths. Regularity is a mechanical exactness lacking in variation. Arhythm is evident when there exists no distinguishable patterning; spacing and letter widths are erratic. 63

Rhythm in any one or all of the horizontal variables indicates consistency in behaviors related to the particular area where rhythm is found. Extreme regularity in any one or all of the variables indicates rigidity or stereotypy related to the area where found. Where regularity exists, adaptability does not exist, but perfectionism does. Extreme arhythm of any one or all of the variables indicates a great deal of conflict, confusion, instability present in the area where found.

CHARACTERISTICS ON THE VERTICAL AXIS

Variables on the vertical axis are related to the individual and his environment in all its aspects. The relationships range from one extreme of total confusion and lack of discrimination, lack of control and loss of reality orientation to the other extreme of isolation, over-responsiveness, over-control or rigidity, lack of discrimination and loss of reality orientation. Extremes of response on the vertical axis are concerned with the writer's long term planning and organization ability, goal directed activity, relationships to the world at large and to the extent and breadth of the activities and ideas that interest the writer and in which he engages.

MIDDLE ZONE LETTER HEIGHTS relate to the individual's desire to satisfy his need for reinforcement of his self-esteem. He may wish to satisfy his ego needs through the reward or outlet of work and work-related achievement. He would respond to the question, "Who are you?" by giving the title of his profession, such as architect, doctor, secretary, housewife, etc. An individual may wish to satisfy his ego through self-aggrandizement or he may desire to achieve satisfaction through his role in life such as good provider, good father; or good wife and mother. Such a person will meet life's demands as the situations arise.

If the middle zone is constricted in height, the writer's ego will be reinforced through his work or talent-related achievements. If unfulfilled, frustration leading to stress and feelings of inadequacy result. If the condition persists it can lead to tension and/or anxiety. Such a writer is critical, observant, analytical, attends to details, is discriminating about the type of undertakings that he involves himself in (according to his enculturated standards). He may appear to others to be concerned overly much with trivialities, though this quality is appreciated by others as perfectionism. Such a writer appears modest and is quick to eschew flattery or praise unless it is for some personal achievement that he has worked hard to gain. He needs approval of his work; his desire for prestige and praise is found through his work.

If the writing is extremely constricted, the writer has an anxious need for appreciation, approval and acceptance that is found in voiced approval from others and in demonstrations of appreciation. Such a writer needs attention and will strive hard to not only obtain it but to deserve it. He is particularly vulnerable to criticism that is either directed personally toward him or that is directed toward his work. His anxiety results from the strain of trying to merit others' approval and appreciation by meeting or surpassing their standards.

If the middle zone height is expanded, the writer seeks self aggrandizement as a means of satisfying his ego needs. He has a feeling of self importance that is egocentric in nature. He subjectively compares himself to others and needs to rate himself higher and better. While such a writer will work hard for reinforcement of his self-esteem, he is generally far less concerned with details - which he considers trifling - unless they are directly related to his concern with building himself up. The expanded middle zone is also related to the writer's practical concern with the present and reality. These relate directly to the interests he becomes involved in and which affect him. He is competitive in situations where the reward is adulation, fame or prestige.

He is generous in situations where the reward reinforces his image of himself. He likes to be magnanimous and, because of this, is more likely to be generous in person and perhaps on the spur of the emotional moment than he is likely to act generously where face-to-face-relationships are not involved.

A great deal depends on this writer's prior experiences, concepts and the standards he has accepted. If fortune and/or success are equated in his ideals with the concept of self-importance, he will be materialistic. If social behaviors and orientation towards other people are a part of his ideals, his feelings of self-importance will come from working with and helping other people. If physical abilities and derring-do are part of his ideals, his feelings of self-importance will be fulfilled by acts of courage, risk-taking, physical activities and adventurous behavior. The zones of writing and the horizontal axis will supply the variables for these answers.

IF THE UPPER ZONE IS CONSTRICTED in height, it indicates less emphasis on the theoretical or intellectual aspects of life than upon either or both the physical-materialistic nature or the social life and daily activities. If it is extremely constricted, it indicates little to no interest in anything concerned with thought or mental planning. It may be due to intellectual inability or to mental laziness or to energies and interests that are re-directed to other areas of the writer's life. Neither the constricted or over-constricted upper zone writers are concerned with meeting other people's or society's standards. They are concerned with the reality of their own activities and involvements and, from this viewpoint, are restrictive in the breadth of their outlook. By de-emphasizing the upper zone, the writer by inference increases the importance of one or two other zones (spheres in his life). In this sense, the writer of a constricted upper zone, being both unconventional and non-conforming as well as having directed his interests toward what is realistic and practical from his own viewpoint, will feel little obligation to others who do things for him. This is more particularly true of the over-constricted upper

zone writer.

IF THE LOWER ZONE IS CONSTRICTED, it indicates a lack of interest in the material-physical side of life. The writer has a lack of desire or need for physical activity or will engage in only short-lived physical activity. This may be due to interests diverted elsewhere, to actual physical handicap or to lack of energy and stamina for prolonged periods of work. Such a writer may work hard, far beyond the capacity of others, for the duration of short lived physical activity in order to get it over with; or he may exhaust all his energy resources in a small output. The answer lies in the state of his health and his motivations.

Constricted lower zone writing is also related to lack of interest in sex or infrequent indulgence in sexual behavior. The reason may be due to actual under-developed energy, or to ill health, to age, to a glandular condition or to interests and energies being directed into the intellectual area of the writer's life.

The lower zone indicates tendencies to personality characteristics that are needed and used by the writer in his productivity, achievements, motivations, and bear a relationship to goal planning. It is an index to the amount of dynamic energy, zest, exuberance and enthusiasm that he applies in his productive work pursuits. A constricted lower zone indicates the constriction of these qualities. It indicates that to be completed, projects must be short in duration, easy or without obstacle and discouragement.

A constricted lower-zone writer generally needs encouragement to complete projects or he does them superficially or incompletely, or gives them up where feasible. Such a writer is negative in his outlook. Ratio is important.

IF THE UPPER ZONE IS EXPANDED in height, it indicates the writer's interest in intellectual pursuits, goals and/or inventiveness and creativity. It indicates the presence of reserve mental energy. The writer's general attitudes are oriented in intellectual directions. It also indicates a desire to meet or to surpass society's accepted standards. There is indicated integrity, feelings of

obligation to others and interest in learning and development. If the upper zone is extremely expanded, it indicates the writer's superficial interest in intellectual pursuits, personal egotism, adherence to the writer's own standards and laws of conduct, desire to be lauded for very little reason, lack of feelings of obligation to others.

IF THE LOWER ZONE LENGTH IS EXPANDED, it indicates the writer's emphasis upon material interests in life. These include interest in tangibles rather than intangibles, material evidence of success, goal striving ability, determination in completing what has been undertaken, productivity, physical activity, physical energy and interest in sexual behavior. If the lower zone is over-expanded, it indicates the writer's restlessness, nervousness, general state of tension and may include abnormal sexual drives.

WHEN BOTH horizontal widths and vertical heights in all three zones are in proportion, the writer's balance in all areas of development and inner harmony is indicated. This also indicates stability, integrity, honesty, reliability and well developed interpersonal relationships.

If heights only are in balance, there is indicated the desire for achievement of full personal balance and harmony and the potential for its development. If widths only are in balance, there is indicated imagination, breadth of thought, and self-confidence as well as good interpersonal relationships.

Any zone that is over-expanded in height to the detriment of one or two of the others indicates that most of the writer's interest, energies and drives are expended in that particular area. This is true of width expansion in any individual zone also. It is very significant, however, that one or two other zones are minimized in order to achieve the over-development in either height or width of one (or two zones). The reason must be ascertained.

Generally speaking, middle zone emphasis in zone ratios indicates passivity regarding the environment and may imply contentment. Extreme emphasis indicates egocentricity and/or apathy. Upper zone emphasis in zone ratios in-

dicates an intellectually oriented person who is using intellectualism as a form of escape or withdrawal from social and/or interpersonal involvements. This indicates a certain degree of egoism. The extreme of emphasis is indicative of a lack of reality, impracticality and subjectivity. The writer lives in a self-made fantasy world. Lower zone emphasis indicates the writer's concern for materialistic pursuits and the type of person who will generally take action to work something out. This personality needs to plan as he works with something rather than being able to mentally plan in advance of doing. It indicates productivity, physical energy and stamina, also, by the emphasis. On the other hand, extreme lower zone emphasis indicates a lack of reality orientation, lack of discernment, lack of discrimination and fantasies connected with lower zone activities or with memories of past lower zone types of experiences. There is also indicated lack of organizational ability and lack of intellectual development -- not ability, just lack of interest in that area. Such over-emphasis of the lower zone may be due to a glandular imbalance.

SPACING BETWEEN BASELINES. School model spacing between baselines ignores the need for adequate space to bring the upper zone fully up and the lower zone fully down. As a result, there is an overlapping of extensions of, in the school model, about -1 times the height of the MZ (ES/MZ). Even though writers can space their letters and words so that the extensions avoid actual tangling, some writers dislike the close proximity of the overlapping extension spacing and place more space between baselines. Others may actually narrow their baseline spacing so that the extensions overlap still further. Baseline spacing, then, is related to extension space between upper and lower extensions. What may at first appear to be broad baseline spacing may prove to be necessary due to the length or height of the extensions and the need to have more space to avoid overlapping. Extension spacing becomes the more significant measurement area for spacing on the horizontal axis.

EXTENSION SPACING, if overlapping not more than one times the height of the middle zone, is following the conventional school model arrangement and means conventional and conforming. If space between extensions exists but is not too broad

there is evidence that the writer has good discriminatory ability in the objective sense of the world. He can view things in context or in proportion, which gives him a degree of objectivity. It indicates analytical ability, good organizational ability, judgement, observation, efficiency as a result of the other characteristics and foresight, for the abilities mentioned give the writer a certain skill in considering consequences.

Constricted extension spacing (too large a space between extensions) isolates the lines of writing from each other and symbolizes the writer being out of touch with reality and the world around him. It may, behaviorally, symbolize the writer's discomfort in personal relationships with a resulting escape into idealism or isolation from interpersonal/social activities. Such escape may be oriented toward mental activity or paranoia. Basically, it indicates the writer separates himself from the world around him. He works well alone or with very few others.

If extension spacing is expanded (too much overlapping to the point of entanglement with letter forms from the two lines of writing) such a writer is attempting to squeeze too much activity into too small a space of time and is losing efficiency as a result. This will impair his concentration which in turn will affect his memory and accuracy. Resulting confusion and poor discrimination will increase the inefficiency, thus wasting further energy and setting the writer up for frustration. If the overlapping is extreme (down into the middle zone of the following line), nervousness and restlessness is symbolized. This may be due to a glandular condition.

There is a difference in causation when speaking about overlapping or constricted extension spacing. If the expansion (overlapping) is caused by the upper zone entangling with the lower, the cause of conflict will be explained by the kinds of characteristics associated with upper zone. If the expansion is caused by the lower zone overlapping the upper zone of the succeeding line, the cause of conflict will be explained by what is found in the characteristics in the lower zone. One caution: on a small sheet of paper, an ordinarily expanded writer may have difficulty in compressing his writing and so may exhibit tangled extensions whereas on a larger sheet

this would not occur. It symbolizes the writer's inability to adapt to conditions at all or easily, but it may also give an erroneous view of the writer's organizational ability unless writing on a larger page is available.

ALIGNMENT. Although a writer moves rightward on a horizontal plane during the act of writing, the writing itself fluctuates on a vertical plane and so can be considered part of the vertical axis. The only variable related to alignment that is strictly relevant in context with the horizontal axis is straight alignment. If measured by a ruler, writing that adheres almost exactly to the ruled line is considered overly straight and is representative of compulsion, rigidity, over-control. If it has some slight deviation but does not exhibit mechanical near-perfection in straightness, it indicates the writer's inner self direction, goal direction, singleness of purpose and conscious control or discipline. Such a writer is a self-starter whereas the mechanically straight line writer is a follower who is very uptight and tense about doing something exactly as required. For this tense individual, any deviation from the norm, habit or routine would be greatly disconcerting. For the self starter type of individual it would rouse irritation at the delay or interference. Both the self starter and the rigid writers have a degree of selfishness in their personalities due to the self interest motivational factors involved.

Some writing characteristics, such as slant, are extremely easy to change - and maintain - at will; others are so difficult that for some people it is impossible to change. The direction of alignment of the line of writing is in this latter category. It is very difficult to alter and maintain the specific kind of alignment that you normally employ.

There are seven categories of alignment, all of which may be found in letters and words, as well as in lines. Within each category, there are classifications that relate to degrees of strength of development. The categories are: upslanted, down-slanted, vacillating, convex, concave, step-up, and step-down alignments.

LETTERS represent the briefest period of time in the writer's day. When noticeable alignment variations exist, it indicates frustration. Words are the next most brief period and are symbolically significant when change occurs word to word al-

though the evidence may be considered less severe. A line of writing represents a longer period of time than the two foregoing characteristics and the lines of writing beginning a page are related to those at the end of the page to represent an even longer period of time in the writer's life. In this respect, a page or two of writing represents the passage of time across a period of months or years in a writer's life and can thus indicate his general attitudes and orientation, goal planning ability, motivation and directedness, emotional and mental stability, general consistency and reliability in behavior, attitudes and thinking.

UPSLANTED AND DOWNSLANTED LINES of writing involve not only their evenness or vacillation but their direction as well. The two determinations need to be made in conjunction.

If upslant is slight, it indicates a buoyant, cheerful disposition and outlook on life. The general attitude is one of optimism and hopefulness with a degree of enthusiasm occurring as a result. When the upslant is extreme, it indicates loss of control due to a specific state (mental or physical) that the writer is in. It may be chronic or acute. The writer may be under the influence of stimulating drugs or tranquilizers or he may be in the early alcoholic stage. It may also be due to the writer's extreme weariness during which controlling himself requires more effort and energy than he has to invest. If the writing characteristic is related to mental disturbance, such extreme upslant may be related to the euphoric mental state of the manic-depressive.

If the downslant is slight, temporary weariness, discouragement, negativism or withdrawal is indicated. These states may be chronic or acute. The writer may be under the influence of depressant drugs or in the advanced stages of the alcoholic state. It may also be due either to extreme weariness or to tension. If related to mental disturbance, such extreme downslant may be related to the depressed state of the manic-depressive. Consistent downslant, whether slight or extreme, indicates an alert that the negativistic outlook of

the writer is so consistently pessimistic that the possibility of suicide may be present. This is also true if only the end of lines at the right margin are downturned. If words are inserted downward in a line of writing, there is indicated an alert to seek other evidence. Suicide may be effected through direct aggression against oneself or against someone else which may bring about society's reprisals and a death sentence. Suicide may also be effected through drugs, alcoholism or excessive risk-taking. One caution should be observed: following a severe illness or operation, downslanted alignment may be only an indication that the physical health requires rebuilding. By inference, it may also precede impending ill health.

Vacillating alignment is the most usual category of alignment found in writing. It indicates, in its moderate degree of development, that the writer is subject to influences from the environment (circumstances and/or other people) and is constantly adjusting his behavior to adapt to such requirements of him as they arise. Such a writer may have goals but will not be as "single-track" minded about them nor as selfish in purpose as the straight alignment writer. Moderate vacillation (not noticeable to the eye until measured) indicates adaptability and flexibility of attitude. Such a writer is emotionally responsive in interpersonal relationships and in regard to other people's needs. Extreme vacillation (requiring no measurement to ascertain it) moodiness and subjective emotionality is indicated. The more the degree of vacillation, the more conflict is indicated with resulting inconsistency and unreliability. The writer forms few if any goals and cannot sustain those he does form. He has a variety of interests - none of them specific - that are neither pursued in depth nor long lasting. When the vacillation is very extreme, disorientation and lack of reality is indicated. This latter may be due to a drug state, alcohol, or to smoke inhalation, anesthesia, or following a severe operation. If not due to any of these causes, mental disturbance is indicated.

Convex alignment is evidence of the writer's mental and/or physical fatigue

or is related to his lack of sustained motivation. Such a writer undertakes a project with exuberance, energy and interest or enthusiasm, but within a given period of time (determined by word, line or page) his interest and/or energy fades. Other factors, usually circumstances or other people, are required to reinstate his interest or to encourage the writer to continue. When convex alignment is extreme, it is an indication of mental disturbance.

Concave alignment indicates a drain on the writer's mental energies as well as indicating his motivation. Such a writer undertakes projects with a short-lived enthusiasm or without positive assurance of success. The motivation behind undertaking the projects in the first place is usually involved with other aspects of the writer's personality or with his conditioning experiences (which do not show in handwriting analysis). Once into an undertaking, the writer drives himself to continue, discounting possible dejection, discouragement or interfering obstacles; and he continues to completion. During this period the writer may discover that the task is easier or more rewarding than previously assumed and it may be physical energy and genuine enthusiasm that takes over in isolated instances, but the alignment is related to the writer's general attitudes that accompanies all of his undertakings. When concave alignment is extreme, it indicates frustration and conflict related to the motivating desires and is evidence of a severe drain on mental energy. This in turn has a negative effect on concentration.

Step-up and step-down alignments are rarely found consistently line by line down a page of writing but may occur in scattered lines throughout a page. Step alignment exhibits a steady increase or decrease of energy and interest invested in a project and available for continuance of the project. It is also related to the writer's general attitudes. When alignment is step-down, there is evidence of a drain on the writer's mental energy which is being used by him to keep himself working on a project although he is discouraged with it or physically tired. It indicates some motivating force behind the writer's desire to

complete what he started. It is also evidence of conflict and/or frustration. If step-down alignment is extreme it is evidence of depression, negativism and may indicate suicidal tendencies. Mental disturbance is present.

When alignment is step-up, it indicates an inner state of excitement that threatens to get out of control. To keep himself controlled, the writer exerts energy that should be available for more stabilized activity and is therefore wasting his energy or using it inefficiently. In time, this becomes a drain on the writer's energy resources. When step-up alignment is extreme it is evidence of mental disturbance.

TOP AND BOTTOM MARGINS are considered part of the space measurements on the vertical axis because they provide evidence of the writer's feeling of his place in the hierarchy of social relationships and margin spacing also indicate where the writer places his values in life.

A wide top margin shows the degree of formality or respect that the writer accords the person he is writing to. If the page of writing is not a letter, it is indicative of the writer's subservience or feelings of inferiority, illustrated by the broad space left at the top margin. If combined with a narrow lower margin, however, instead of subservience, it becomes evidence of a materialistic nature -- verified by the zonal spatial relationships.

A wide margin at the bottom of the page of writing indicates withdrawal stemming from inhibition. If combined with a broad top margin, it indicates isolation or loneliness and withdrawal. If combined with a narrow top margin, it is indicative that the writer is using preoccupation with intellectual pursuits as an escape from social involvements -- verified by the zonal spatial relationships and determinations made on the horizontal axis.

Top and bottom margins are considered variables on the vertical axis because they are in accord with components on the vertical axis for zones. The only time margins at the top and bottom of a page would not correspond to vertical values for zones is when their meanings are in accord with meanings for

COMPONENTS ON BOTH AXES

A number of variables among handwriting characteristics occur in both the horizontal and vertical axes and therefore can seldom be considered independently of either. Interpretations thus become more complex although the components themselves are still subject to objective analysis. Most of the variables of this order can be statistically counted and/or measured physically. Technically speaking, while they require varying degrees of space, it is often more definite to consider them from the point of view of whether they are expanded or constricted in the same way that horizontal movement was considered from the point of view of whether it was forward or backward moving.

Diacritic marks fall into this complex type of handwriting characteristic. Diacritic marks are those additional marks placed on paper in conjunction with a letter form to give the letter its meaning or sound. In English they are confined to the dot over an "i" or "j" and the t-cross. In addition to these, German adds umlauts which alter the sound of a letter and change the meaning of a word. French adds accent marks for the same purpose, etc.

Diacritic marks may be considered using the following variables - pressure, length, location, direction of movement, movement or lack of it, width or contraction.

When placed close to the middle zone apex or within the middle zone itself, diacritic marks are constricted because they pull in. Constriction is a movement inward toward the writer's body. It has the same constricting effect that elongated lower extensions have in that both involve a writing execution that is directed downward toward the writer's body. When diacritic marks are made with a minimal amount of stroke movement and a minimal amount of stroke width, these, too, are considered constricted. This would be similar to a speaker not using his hands to accent or elaborate his words. Extreme pressure digs into the paper and is therefore downward in movement which equates with constriction. When location of diacritic marks is to the left of a letter structure or when

components on the horizontal axis. An example would be extreme constriction of horizontal widths indicating fear, insecurity and inhibition, corroborated by extremely narrow margins, top and bottom. Another example would be ideal spacing arrangements both horizontally and vertically and broad margins on all four sides, all of these components together indicating artistic tendencies.

There are many possible combinations of margin widths on the vertical axis and these do not necessarily correspond to what is found on the horizontal axis. When top and bottom margins are wide but do not correspond to left and right margin spacing, they indicate the person who is investing all his effort, time and energy in the immediate present. If extreme, the writer lacks both mental and physical energy. When top and bottom margins are narrow but do not correspond to left and right margin spacing, the writer is non-discriminating, sometimes obtrusive, is tenacious and slow to change until pushed into it.

When all margins are narrow, the writer is nervously on the go all of his waking hours and is involved with so many things that he is, literally, never finished. When all margins are broad, the writer allows himself time to spare and is well organized.

When margin spacing at the top and bottom of a page does not agree with the findings in the vertical components of zones, they indicate well entrenched personal attitudes. For example, when a bottom margin is made wide but is not in accord with zonal emphasis, the writer attempts to avoid long term involvement with other people or projects. The writer will more willingly expend his time and energy in intellectual pursuits or fantasies. When extremely wide, fear is indicated in connection with continuing with projects involving either physical or sexual effort for a prolonged period. The writer will withdraw if possible. When a bottom margin is narrow but is not in accord with the zonal spacing on the vertical axis, the writer is fearful of moving on to new and untried projects. He prefers to remain with the familiar and to continue doing things the way he has learned them or to continue in an established routine.

the stroke has a preponderance of "weight" on the left, constriction is the result. A diacritic mark may also be left tending in its construction in that it moves leftward and this is also considered constriction.

When placed above the middle zone apex far into the upper zone, diacritic marks are considered to be expansive in that the movement is outward and extended like the raising of the hand and arm away from the body. Expansion is an outward, often upward movement away from the body (self). It has the expanding, reaching effect that tall upper zone formations contain. Both involve the execution of a writing movement that is exploratory. The movement takes place in space in the area of intangibles or intellect. When diacritic marks involve a maximum of stroke movement such as circled "i-dots" or long t-crossings which also comprise a maximum of stroke width, they are considered expansive. Light pressure touches the paper and dashes on without delay. This equates with expansion. When diacritic marks are located to the right of the stroke or when the preponderance of "weight" is on the right, they are considered expansive. They may also be right tending in construction in that movement is rightward and, thus, expansive.

Constriction, generally, is an indication of fear, insecurity, inhibition, hesitance, indecision and withdrawal. Conservatism and conventionality are self-protective behaviors stemming from the aforementioned fears and others.

Expansion, generally, is an indication of progressiveness, assurance, willingness to chance failure, flexibility. Independence and originality as well as non-conventional behaviors stem from the aforementioned attitudes and others.

When considering diacritic marks, consideration should be given to whether the expansion or constriction occurs in the horizontal axis or the vertical axis and whether the different components are in accord with one another or in conflict. The degree of constriction or expansion and whether or not it exists in the horizontal or vertical axis adds further interpretation to the strokes.

Constriction on the vertical axis indicates feelings of inferiority and

inadequacy, insecurity, persistence, tenacity, loyalty, fear of change, tension. Constriction on the horizontal axis indicates loyalty due to fear of change, exactness, perfectionism due to a fear of overlooking something important, desire to remain with the status quo - the familiar and the safe - tenacity related to clinging to the familiar, lack of emotional demonstration, lack of enthusiasm, fear of getting involved, lack of self-assurance which the writer may or may not realize. If the writer arranges his life so that it is well ordered and conventional there is little need to undertake the unfamiliar or to test one's adaptability and independence. The writer can be quite content. He does not realize he is maintaining a status quo unless he is stressed with forced change or forced to make a decision involving a move into something unfamiliar. When evidence of extreme constriction is found, it indicates the writer's withdrawal, negativism, tension and may include anxiety or apathy.

Expansion on the vertical axis is indicative of presence of imagination, willingness to explore intellectual areas and intangible ideas, personal aspirations, inquisitiveness, self-assurance, desire for prestige or to be outstanding in some way. Expansion on the horizontal axis indicates the writer's impatience to get into something, get on with something or to continue without interruption. It indicates enthusiastic involvement, ideas, willingness to undertake the unfamiliar, flexibility, eagerness, self-assurance or self-confidence, emotional demonstrativeness. When evidence of extreme expansion is found it indicates the writer's lack of reality controls and uncontrolled emotional reaction or unrealistic euphoria.

Three more variables that also encompass both vertical and horizontal axes are simplified, ornamented or elaborated letter forms. Simplification of letter forms involves a degree of constriction. Ornamentation of letter forms involve a degree of expansion. The extreme of simplification is stark, skeletal letter structures evidencing extreme constriction. The extreme of ornamentation is elaboration and is also evidence of constriction. The zone in which one or

the other of these alterations of letter forms occurs is important for its definitive interpretation. Also of importance is the amount of pressure applied and whether pressure is rhythmical or arrhythmical. Other considerations include whether or not the form itself is free-flowing and smoothly executed and the construction of the form (i.e. garland, angular, arcade, thread, etc.) as well as the amount of space the form covers and where the spatial emphasis if any is placed.

The first determination is whether or not the school model has been altered and if so in what manner. Since in the United States there are many school models according to the particular region and in addition there exists many modifications of school model forms longitudinally across generations of public school students, these can be only generally used by analysts. The same is true on a lesser scale for any given foreign country and very markedly noticeable when comparing cursive handwriting between countries. Each one has its own, characteristic style. Thus, particularly when analyzing a child's writing, it behooves the analyst to first obtain a sample of the teacher's writing in the style of the method currently being taught in school to that grade level (and child). However, for adults, a general knowledge of the school model is all that is necessary for those of ages contemporary with the analyst. For older generations, allowance must be made for the thinking and accepted practices that were common during their developmental years.

Departure from school models may result in any of the three already listed and may occur across all three zones or appear in only one or two or be intermittently distributed. Departures that are simplified or ornamented (the latter including flourishes and smooth, fluid movements) are indicative of originality and creativity. Simplification implies efficiency and straightforwardness, a desire for unelaborated facts, a minimum of applied imagination and a tendency toward a need for security, carefulness and attention to detail because of the degree of constriction inherent in the minimally structured forms.

Departures from the school model, that are ornamented, are indicative of imagination that is applied (in the zone where found), humor, self-assurance, a liking for the "limelight", likes to be noticed or "on stage", enjoys dramatizing behavior and/or appearance. Such a writer has dramatic ability and may have artistic ability. He is also somewhat egocentric because of his constant awareness of the impression he is making on other people.

The axis involved as well as the zone where involved adds significant variables in the interpretation of departures from the school model. On the horizontal axis, in the middle zone, for example, ornamentation contributes to self-importance, adaptability in order to get along in a group (which includes the possibility of being either hypocritical or superficial), and the writer needs social and interpersonal relationships because they provide an outlet for his need for self-dramatization and imagination. Such a writer likes to work better in groups than alone and likes especially to lead group activities. Such a writer dislikes routine, dislikes trivia or anything that requires undivided attention for prolonged periods of time, can do many things at once and usually can do them well. When this writer is unreliable it is due to the influence of exaggeration, poor planning, restlessness leading to undertaking too many activities and/or emotional responsiveness.

On the vertical axis, in the middle zone, ornamentation would contribute to imagination or exaggeration regarding the role the writer plays and in his day to day activities and social relationships. He would be creative and inventive in areas where others would see only practicality.

In contrast, simplification on the horizontal axis in the middle zone, would contribute to pragmatism, factualness, impatience with distracting influences or seeming exaggeration, matter-of-factness in social and interpersonal relationships, independence, desire to work alone, unconventional behavior due to lack of need for a social outlet.

Simplification on the vertical axis in the middle zone would contribute

further to the matter-of-factness and independence but would add relatively little new. On the other hand, simplification on the vertical axis in the upper zone would add mental maturity, mental efficiency, directness.

With a little thought and a lot of application to the meanings of zones and the horizontal and vertical axes as well as left and right tendencies, any combination of writing components may be worked out.

When writing forms are simplified to the point of illegibility or the simplification becomes so over-simplified that essential strokes are dropped (e.g., upstrokes within letter forms) the simplification becomes skeletal or stark and loses much of its positive value and the values of constriction become paramount. It is essential that the zone and the axis be taken into consideration.

Constriction, generally, is inhibition, insecurity, ability to do only one thing well at a time, fear of being wrong, compulsion for method, routine or direction from others, uncertainty, indecision, ultra conservatism to avoid criticism or ridicule, avoidance of being "tested", avoidance of competition for fear of failure, avoidance of change due to fear of the unknown, conventionalism according to the mores of the peer group culture due to fear of being thought of as different, lack of self assurance, inflexible due to fear unless emotional impulsivity interferes, criticalness of others due to a need to build up self-esteem, defensiveness and self-protection.

When writing forms are ornamented to the point of illegibility (e.g., too many obscuring flourishes or circular movements) or when elaboration is used within the letter forms which thus delays continuous forward movement, (e.g., double-looped ovals, looped "m" stems, greek "e" formations with loops) constriction is indicated. In addition to the above interpretations, egocentricity and subjectivity are added due to the writer's constant awareness of himself in relation to other people's opinions of him. Also indicated is deceitfulness, evasion and/or secrecy used as defensive measures under stress.

Extreme constriction indicates anxiety, withdrawal, lack of reality orientation, lack of concentration. Extreme expansion - before it becomes a form of elaboration that prevents forward movement - indicates withdrawal or escape into the zone where the expansion occurs, lack of reality or fanaticism, exaggeration, paranoid tendencies, loss of ability to concentrate, mental confusion and possible disorientation.

In addition, elaboration of letter forms indicates self-protective defensiveness or caution and expedience in behavior directly proportionate to the amount of stress on the writer. Elaboration in the upper zone indicates the writer's attempt to build himself up in the eyes of others or a claim to importance which is non-existent in fact. Elaboration in the middle zone is relevant to his behavior in interpersonal relationships or social situations when directly challenged. Such a writer will manipulate other people, blame others, lie, evade the truth, rationalize, alibi or resort to silence to protect himself and "save face". Elaboration in the lower zone indicates some sexual problem areas or the effect of traumatic experiences which need verification in the middle zone. Elaboration of letter forms on the horizontal axis is directly related to interpersonal relationships except where they appear in the upper zone which is concerned with fantasy or eccentricity. Elaboration on the vertical axis is rare but can occur in instances of extreme over-extension of the upper or lower zone strokes. Lack of reality orientation is indicated, correlated specifically with the zone where it occurs and influenced by left or right tendency.

Speed of writing is another variable that is comprised of components from both horizontal and vertical axes. Again, it is more accurate to use the criteria of constriction versus expansion when determining writing speed.

All writing components or characteristics that contribute to steady, rhythmic, smooth, forward movement contribute to speed. Writing characteristics that hinder forward progression are: left tending strokes, arrhythm or irregularity

in the extreme, angularity of both letter forms and connectives, extreme disconnection, segmentation, elaboration, precision, retracing and retouching. Important to the accurate classification of the speed of writing is whether or not the writing remains legible IN CONTEXT. When writing is speedy and legible it indicates good health, energy, enthusiasm, desire for mental stimulation, impatience with any slowness or inefficiency, or delay, quick thinking, good comprehension, spontaneity, decisiveness, interest in a variety of pursuits or projects, basic honesty, forthrightness, assurance in areas that are familiar to the writer, genuine emotional response. Writing that loses legibility with its higher rate of speed indicates that the writer is under undue pressure. This is verified when strokes of letter forms are missing and/or letters or words are missing. Before reaching an opinion, it is highly important to learn whether the writing is a reliable sample of the writer's ordinary script or if it has been executed under circumstances where the writer was either distracted or rushing to take down the message verbatim or, as at a lecture, attempting to write full notes while listening and assimilating the context of what was being said. Under temporary conditions, the rushed effect of the writing may be discounted, including all errors and deletions. If, on the other hand, the sample is consistent with writing as it is regularly produced, it indicates a high degree of impulsivity, emotionality, willingness to take unconsidered risks, evasiveness, impatience or irritability, and egocentricity. If there exist many deletions in conjunction with retouching, a keen state of anxiety is present. With a high degree of variability, conflict and frustration are also present.

When writing is slowly done and legible, it indicates low energy and/or ill health -- provided the writer has habituated the motoric act of writing earlier in his life. If the writing is slowly executed and illegible, it indicates some mental deficiency or mental illness. If the writing contains tremulous strokes, ataxic disturbance and/or angular, squared, or otherwise

deformed loops or ovals in addition to the slow execution, any analysis of the writer will be impaired due to the state of his health. If attempted at all, it should be done with great caution and should be based primarily on the constriction versus expansion of the spatial arrangements.

Slow writing, as a style and not as a result of poor health, indicates the writer's concern for other people's opinions and a desire to meet other people's standards in order to warrant their approval or notice. It indicates conventional attitudes and conformity to accepted regulations and behaviors (qualified by the cultural standards that the writer has accepted and also qualified by his peer group affiliations). He will conform because he is afraid to do otherwise. He is conventional, including following fads and current trends in thinking, dress and behavior, because he is afraid to set himself apart. He is dependent, outer-directed and predictable.

Conformity, conservatism and formality are all part of slow writing in varying degrees. Slow writing also indicates the writer's inner need for caution, his hesitancy, fear of disapproval or criticism and lack of self-assurance even when the ideas and projects are familiar. Slow writing also indicates the writer's willingness to accept routine, his desire for interests that are closely related, with few exceptions (and those for other reasons) the slow writer also heeds detail, is a perfectionist, works with exactness and precision. He is slow thinking, slow to reach conclusions or to make judgements and slow to decide to act; but he is also patient towards other people.

The measurement of intelligence has been applied in graphology by a number of graphologists. A number of psychological studies have attempted to validate graphological measures of intelligence. Where this has been done with a means other than psychological intelligence test measures, this has had generally favorable results. Crepieux-Jamin's success, working with Alfred Binet, was in the '90's. Charlie Cole claims to be within five points

in either direction of a standard Stanford-Binet score. Most studies that have attempted to validate graphology scores against standard test have not had notable success, however. But until psychological testing procedures to establish intelligence quotients for a completely broad population, including minority groups, have been established for accuracy and adequacy, this lack of correlation does not appear alarming.

However, for the very reasons that psychology IQ test measures are proving inadequate in some areas, I suggest that handwriting analysts do not set firm scores on intelligence estimations from handwriting. It seems more reasonable to rate intelligence as low average, average and above average. The extremes (or the tails of a bell-shaped curve) would be superior intelligence and below average intelligence or inferior intelligence. The latter would take in all those with measurable I.Q.'s below the Stanford Binet score of 85.

Limited research that I have done in this area seems to indicate that there are two types of I.Q. being measured in handwriting analysis, both of which indicate what is being utilized by the individual and not what may be his potential. Briefly, the higher the degree of originality of form and speed of writing with connectives chosen for their efficiency and forward movement, the higher the analytical and logical ability of the writer. The higher the degree of originality of form, ideal spatial arrangements and rhythm of writing, the higher the creative and artistic ability of the writer. If both classifications are high in degree of strength, superior intelligence is present.

This chapter has been a relatively concise explanation of graphological theory although, perforce, confined to the more common handwriting characteristics and definitions. Minimal discussion has been presented that was related to either mental or physical illness or to erotic needs and problems. This is because they require a more thorough presentation in their entirety which is beyond the current scope of this book. Minimal discussion has been given to the psychological interpretation and development of the traits and characteristics mentioned, for the same reason.

A COMPREHENSIVE
HISTORY OF GRAPHOLOGY

INTRODUCTION

Historically, graphology has had relatively the same sequential development as psychology, psychiatry, medicine, biology and chemistry. Where it differs, the departure has occurred primarily in this decade and the last although the foundation for it was set by Ludwig Klages, a philosopher-psychologist, at the turn of the century. In my opinion, the divergence ought not to continue for, should it do so, I believe it will be to the detriment of graphology.

The developmental history in all of the sciences has its roots in magic and witchcraft during Antiquity and in empirical speculations during the era of the Greek philosophers. From Aristotle (384-322 B.C.) to the beginning of the Middle Ages, knowledge in all fields accumulated through empirical observation and conceptualization. But, although nature's laws may not have been understood, they were taken advantage of. Men had their glass, metallurgy and explosives from chemistry.¹ They knew something about the functions of their brains and nerves from Galen (131-201 A.D.), who experimented with and dissected animals.² In psychology, men had the Confessions of St. Augustine (354-430 A.D.)³ who was remarkably frank and introspective, demonstrating that this was an important adjunct to psychological self-

¹ Kieffer, W. F. *Chemistry: A Cultural Approach*. New York: Harper & Row, 1971.

² Villee, C. A. and Dethier, V. G. *Biological Principles and Processes*. Philadelphia: W. B. Saunders, 1971.

³ St. Augustine. *Confessions*. Trans. by E. B. Pusey. New York: Modern Library, 1949.

understanding.

Later, in the thirteenth and fourteenth centuries, near the close of the Middle Ages, advancement in scientific knowledge was stifled by the Catholic Church doctrine which revered Aristotle's sometimes limited or erroneous beliefs. Witch hunts were initiated by the Church in an anti-erotic drive that considered women as possessed by the Devil because they stimulated erotic desires in men. Witch hunts stimulated exorcism, persecutions, intolerance and psychotic movements which included self-flagellation.¹

The fifteenth and sixteenth centuries marked a slow change in the methodology of biology and medicine. Careful, observational research, started by men like Andreas Vesalius (1514-1564), who dissected human bodies to disprove some of Galen's theories, contributed to knowledge in a more systematically based manner. With the development of the microscope in the sixteenth century,² biology and medicine moved away from the behavioral science, qualitative approach and became quantitative in methodology.

With the beginning of the seventeenth century - the so-called age of reason - came the first real stirring of systematic thought in chemistry and the behavioral sciences. Attributed in history to the liberating effects of the close of the witch hunts and persecutions, man developed more reliance upon himself and on what he could observe and understand by inductive reasoning. Manipulative experiments were made in chemistry, conducted by Robert Boyle (1627-1691), starting that science toward an experimental, scientific

¹ Alexander, F. G. and Selesnick, S. T. The History of Psychiatry: An Evaluation of Psychiatric Thought and Practice from Prehistoric Times to the Present. New York: Harper & Row, 1966.

² Villee and Dethier, 1971.

methodology which, however, did not reach actual fruition until the eighteenth century.¹

In psychology, the holistic concept of the organism was introduced by Baruch Spinoza (1623-1677) in detailed, conceptual discussions that contributed greatly to theoretical understanding of psychology without which later scientific advances could not have developed. During the age of reason, individual observation and qualitative statements were still prevalent in the behavioral sciences and, to a lesser degree, in chemistry but the results of speculation were more carefully organized than before, laying a firm foundation upon which eighteenth century philosophers, scholars and psychologists could build.

The eighteenth century - the age of enlightenment - saw the completion of the separation of the methodology of chemistry and the behavioral sciences. By the beginning of the century, experimental discoveries from medicine, physics and biology became a powerful influence for experimental work in a truly scientifically controlled manner. With constantly increasing experimentation in a tangible or physical (as opposed to conceptual and philosophical) way came new discoveries rapidly one after the other. The natural sciences became committed to a sequence of speculation-observation-controlled experiment-replication-development of a law or principle. Such methodology permanently separated them from the still philosophically based behavioral sciences.

Psychology and psychiatry, needing some method to organize the spiraling input of information from psychological observations and from discoveries in the natural sciences, resorted to systems of classification to quantify the knowledge. Still far from providing true understanding or an operational

¹
Kieffer, 1971.

procedure, they nevertheless brought the behavioral sciences closer to objective conclusions about neurotic and psychotic behaviors. (In the eighteenth century, it was these extremes of behavior which preoccupied psychologists and challenged their understanding.) The classification systems were useful from another aspect also, for they readily made available classified information on which the nineteenth century investigators built.

In the beginning of the nineteenth century - the romantic reaction - idealistic philosophy flourished in psychology. Man took a serious interest in his social environment, in his attempts to understand himself and in the functioning of his own mind. A psychotherapeutic approach was advocated but no procedure proposed. Jean Moreau de Tours (1804-1884) viewed manifestations of mental disturbances as a disturbance within the whole personality. Conscience, sexual impulses and man's need for security feelings in the real world were recognized and classification systems became more concerned with man as an individual entity. Emphasis was placed on case histories of the mentally ill and metaphysical explanations of mental disturbance waned.

In the latter part of the century, those involved in investigation and understanding were expected to take an active interest in laboratory research which was increasingly replacing conceptualization. Experimentation in the natural sciences progressed in importance and in some cases was subsidized. Emphasis was upon clinical data and organization of knowledge became imperative from an objective, precise viewpoint. Emil Kraepelin (1856-1926), a psychiatrist with a well founded interest in neurology and physiology, introduced clinical discipline by insisting upon detailed and comprehensive observation, meticulous collection of data and definitive reports. Under his influence, the movement from qualitative speculation to quantitative studies was begun - although it was only during the middle of the twentieth century

that sophisticated experimental procedures and quantitative measurement methods in personality assessment developed to fruition.¹

From antiquity through the nineteenth century, developments in psychology and graphology traversed parallel paths. The turn of the century initiated objective research studies and introduced the use of instrumental or mechanical means of experimentation where feasible. During that period Kraepelin became interested in the investigation of graphology but Klages (1872-1956), with his philosophical orientation, was antagonistic to attempts at objective, measurement types of studies and enjoined his contemporaries not to cooperate. At this juncture, the foundation was laid for the separation of the methodologies of behavioral science and graphology.²

Toward the close of the nineteenth century the era became more dominated by experimental developments from the natural sciences and medicine. Men like Kraepelin in Germany and Pierre Janet (1859-1947) in France were attempting to coordinate the new experimental methods with the existing philosophical-psychological approach. Janet advocated strict methodologies, including scrutiny of entire case histories of those he worked with. From his careful research, although still observational, he developed a theory of the unconscious. In the climate of experimental emphasis, concepts and theories were forced to become operational or wither. Sigmund Freud (1856-1939) introduced his philosophical conceptualization of psychoanalysis using a methodology that not only explained behavior but demonstrated that, given cer-

¹ The majority of the developmental history to this point can be attributed to material found in: Alexander and Selesnick, 1966; and Ellenberger, H. F. *The Discovery of the Unconscious: The History and Evolution of Dynamic Psychiatry*. New York: Basic Books, 1970.

² Roman, K. G. *Handwriting: A Key to Personality*. New York: Pantheon Books, 1952, p. 9.

tain conditions, behavior could be altered. Due to a foundation in neurological research methods of his time, he was able to fit psychoanalysis into the prevailing scientific climate quite well.

Under the influence of Kraepelin's quantitative methods - although he refers to few actual measurements in his work - experimental psychology moved toward the use of measurement, scales and statistical analysis to validate a theory. With the development of multivariate experimentation, modern statistical analysis of human behavior was ushered in.

Early in the development of psychoanalytic theory it separated from its parent psychology and continued using conceptualization, longitudinal studies of individual cases, description, symbolization and theory. Under the influence of the psychoanalytic approach, quantitative methods were eschewed. Not a single measurement appears in the work of Janet, Freud, Alfred Adler (1870-1937) or Carl Jung (1875-1961). In some cases, a theory was based largely on the history of one or two individuals. By way of comparing the two trends in psychology, the descriptive or qualitative method is rather like saying a person has a fatally high temperature without measuring the temperature with a thermometer, but by observing him closely.¹

Because the proponents of graphology were professionals in related fields during its developmental history, advances and concepts in those fields influenced graphological theory. Therefore, in its development is reflected not only the concerns of the general preoccupations of each era in world history but also the orientations and extent of knowledge of those scholars, philosophers, theologians, biologists, chemists, neurologists, physicians, psychologists and psychoanalysts. In my opinion, this should justify

¹Cattell, R. E. *The Scientific Analysis of Personality*. Chicago: Aldine Pub., 1966.

a firm position for graphology within the behavioral sciences. That it does not occupy such a position in the United States may be related to several factors: (1) the second phase of its developmental history beginning with Klages, (2) the third phase of its developmental history beginning with Max Pulver (1889-1952), (3) more noticeable interest in experimental research expanding in the United States than in Europe, (4) prejudiced studies and prejudiced selectivity of those that were replicated and/or referenced in the literature of psychology regarding graphology.

With Klages' leadership, graphology turned from initial attempts at quantification and continued this orientation with the advent of the psychoanalytical theories of Pulver, which became a very tangible part of graphology. Graphological theory, steeped in psychoanalytic theory from Freud to Jung in the beginning of the twentieth century, nonetheless failed to participate in the acceptance accorded psychoanalytic techniques in the United States. In contrast, graphology in Germany found wide acceptance in both the academic and business communities.¹

It is my opinion that the reason why graphology has been considered as either a quasi-science or occult in the United States rests with the type of research investigators did during the first two decades of the twentieth century. Experimental designs were generally poor, the hypotheses were often ill-chosen, and there was heightened selectivity of what was referenced in bibliographies and/or replicated, with the weight on studies that tended to repudiate graphology.²

¹ Misiak, H. and Sexton, V. S. German Psychology in the Twentieth Century. In History of Psychology: An Overview. New York: Grune & Stratton, 1966.

² King, L. W. Graphology: An Evaluation of Some Research Performed in Its Investigation. In Study Section Supplement No. 2, Newsletter of the American Association of Handwriting Analysts, 1972, 8, (5) 4-8.

Peter Castelnuovo-Tedesco, in his doctoral thesis, states that behaviorist psychologists in this country appeared to set out to debunk graphology as a sort of retaliation against European subjective psychology, and that it occurred especially during the 1920's.¹ For whatever reason, if any, many experimentalists did do a disservice to graphology. One among many was June Downey of the University of Wyoming. From the studies reported by Alfred Binet (who collaborated with seven graphologists, including Crépieux-Jamin) Downey elected to experiment with the determination of the sex of the writer from the writing samples. Binet had reported a study on the sex of the writer with a range of 66% - 79% correlation; but he had also reported the differentiation of superior intellect individuals from average intellect individuals with a range of 61% - 92% correlation, with Crépieux-Jamin's scores being the highest. Why Downey elected to experiment with the differentiation of sex as indicated in writing instead of the apparently more valuable investigation of intelligence may lie in the fact that she did not use graphologists in her study but instead utilized untrained individuals as judges. Whatever the reason, her research indicated results no better than chance, but some individual correlations exceeded Binet's control group scores who were, also, non-graphologists; and one judge nearly equaled the graphologists' best score, which was achieved by Crépieux-Jamin. This did little to enhance graphology and stimulated additional pointless research in the same area - that as late as 1957, was used to invalidate graphology.²

¹ Castelnuovo-Tedesco, P. A Study of the Relationship between Handwriting and Personality Variables. Genetic Psychology Monograph, 1948, 37, 17L.

² Ibid., p.175; Downey, J. E. Judgements on the Sex of Handwriting. Psychological Review, 1910, 17, 205-216; Engle, T. L. Handwriting Analysis. In Psychology: Its Principles and Applications, 3rd ed. New York: World Book Co. 1957, 35-36; Hull, C. L. and Montgomery, R. B. Experimental Investigation of Certain Alleged Relations between Character and Handwriting. Psychological Review, 1919, 26, 64-65.

With only infrequent validating studies made generally available to the academic world, psychologists developed an increasing apathy toward the subject. It was either unrecognized or considered charlatanism. The general public responded with mis-trust or considered it only a pasttime or parlor game. The advent of the arrival of World War II refugees reawakened interest because among them were a handful with professional graphology education and a few were themselves psychologists. Yet, regardless of the efforts of such people as Klara G. Roman, Thea Stein Lewinson, Herry O. Teltscher, Alfred Kanfer, Werner Wolff, and Rudolph S. Hearn, all of whom published material in psychology (and related) journals, acceptance of graphology did not become widespread and it had little effect upon the public at large.¹

In the mid-fifties, the zenith in psychoanalysis in the United States had been reached. Experimental psychology with its sophisticated experimental designs, statistical refinements and emphasis on both reliability (replication ability) and validity started on the ascendance. At the same time that businesses were cautiously starting to use graphology in personnel selection, graphology studies in journals and references to graphology in psychology textbooks - never overly frequent - plummeted.

In my opinion, it is time now for graphologists to further develop their methodology - particularly those in the United States who desire to see widespread, serious, legitimate use made of the science. Validation and Reliability tests are necessary for this purpose. Theories no longer may be accepted on empirical knowledge alone. Personality assessment procedures used for the benefit of the public will then be less generalized and even more effective than they are at present in the hands of skilled analysts. History has illus-

¹ A selected list of their publications in English in professional journals may be found in the Bibliography.

trated convincingly the sequential development of all of the sciences as a movement away from conjecture, theory, generality, inadequacy, description, toward specificity and sophistication. Graphologists err if they claim that present methods are sufficiently comprehensive to deal with human behavior in a modern world. We have only to search history to find improvements on old methods, yet the proponents of the old methods thought them fully adequate at the time.

THE HISTORICAL DEVELOPMENT OF HANDWRITING ANALYSIS

Although the historical development of handwriting analysis spans more than a thousand years - from being considered symbols of a god from the underworld by ancient cultures¹ to consideration and mention in the works of Aesop, Aristotle, Caesar and Cicero,² its practical development spans a mere 100 years.

Lewinson and Zubin have said that two viewpoints were largely prevalent in graphology's period of development, the speculative and the objective. Into the former class, they place the Greek philosophers, artists, and scholars who depended on "subjective impressions". The Chinese philosophers of the 11th century belonged in that group as did writers and philosophers of later times, among them Goethe, Poe, Elizabeth and Robert Browning, Lavater and Leibnitz. In the objective group, they placed the 16th century physician Baldi, Abbe Flandrin, Abbe Michon and Crépieux-Jamin as well as Saudek, Downey, Freeman, Thorndike and others.³

In its chronological order, handwriting was recognized first to portray something of character hundreds of years before Christ was born. Robert Backman, in a lecture to the Midwest Handwriting Analysts Association, mentioned that references to handwriting analysis exist on cave walls in ancient temples in

¹Wolff, W. *Diagrams of the Unconscious: Handwriting and Personality in Measurement, Experiment and Analysis*. New York: Grune & Stratton, 1948, p. ix.

²Olyanova, N. *Psychology of Handwriting*. New York: Sterling Pub., 1961, p. 13.

³Lewinson, T. S. and Zubin, J. *Handwriting Analysis: A Series of Scales for Evaluating the Dynamic Aspects of Handwriting*. New York: King's Crown Press, 1942, p. 4-5.

India and that a book owned by the Brahmans, written in a language few scholars today can decipher, interprets handwriting. Backman commented that handwriting analysis was sanctioned by Pliny, Emperor Augustus and Albertus Magnus and studied by Aristotle, Galen, Ptolemy, Avicenna and Averroes.¹

A scattering of comments in relation to interpretation of personality from analysis of the handwriting appeared spasmodically down through the centuries, except for most of the period of the Middle Ages. In 120 A. D., there appears a comment on the writing of Octavius Augustus' writing in the book, *De vita Caesarum*, by Suetonius Tranquillus. The author commented on the fact the Emperor didn't hyphenate words but simply squeezed them in at the end of the line even if it meant curving the line downward. A Chinese philosopher who lived during the Sung Period (1060-1110), named Kuo Jo-hsu, commented on writing that appeared to show whether it came from a "noble minded or a vulgar person".² But it was not until the 12th and 13th centuries, under the influence of the Islamic culture, that the physical act of writing moved away from the classification of an "art" practiced almost exclusively by monks, and became a means of communication indulged in by the educated classes of the period.³ Under general usage, individuality crept into the letter forms as part of the transformation from conscious, formal artwork to unconscious influences that are visible in writing style. This, today, is reflected in the normal development of handwriting from rote reproduction of school copy to writing fluency.⁴

¹Backman, R. E. *Some Comments upon the History of Handwriting Analysis*. Chicago: Midwest Handwriting Analysts, 1964, p. 9-10.

²Jacoby, H. J. *Analysis of Handwriting: An Introduction into Scientific Graphology*. London: George Allen & Unwin, 1952, p. 17.

³*Ibid.* p. 18.

⁴Lewinson and Zubin. P. 3.

In 1265, Roger Bacon mentions handwriting as revealing personality traits four times in his "Tertiam" and in "Compendium Studii Philosophiae", which was written five years later, he mentions it twice.¹

The seventeenth century saw an increased interest in analysis of personality from writing. In France, Francois Demelle published a book in 1698 entitled "Advice for Judging False Inscriptions or Comparison of Handwriting and Signatures". In the book, Demelle attempted to show that the action of writing also portrayed the action of the will of the writer.² In Italy, in 1611, Alderisius Prosper published a treatise in Latin entitled, "Ideographia".³ Later, an Italian scholar who was, at the age of 22, a doctor of medicine and a professor at the University of Bologna, wrote a book entitled "Treating of How a Written Message May Reveal the Nature and Qualities of its Writer". The book, published in 1625, is filled with references to sources for statements made. Its author, Dr. Camillo Baldi, apparently spent years gathering together references and comments about handwriting. At the end of his book, he comments, "...it is necessary to observe carefully whether the characteristics of the handwriting recur, moreover whether they are in any way artificial and whether they result from various deceptive causes which are due to writing materials."⁴ This, from a writer in 1625! Then, in 1695, in Germany, another book was published called "Chiromantisch-Physiognomisches Kleeblatt", authored by Nicolas Spadone. The book was the largest of the original books on the subject that first appeared, being 800 pages in

¹Backman, p. 14.

²Ibid. p. 16.

³Roman, p. 3.

⁴Jacoby, p. 13; Backman, p. 16-17.

in length and occupying three volumes.¹

As in all other areas of science and knowledge generally, where interest and application advanced markedly during the 17th and 18th centuries, so it was with graphology. The heightened stirrings of sustained interest in ascertaining character from writing analysis began in the European Royal Courts and was quickly popularized by famous artists, scholars and writers of the day. Thomas Gainsborough is reputed to have kept a sample of the handwriting of his subjects at his easel as he painted their portraits. Gottfried Wilhelm von Leibnitz, the German writer, philosopher and mathematician remarked, "...the manner of writing as far as it does not follow that of the school master, expresses something of natural temperament", in his *Opera Leibnizii*, Vol. vi, written in 1739.² Johann Kaspar Lavater, a Swiss poet, mystic, theologian and physiognomist, originated a system of physiognomy and published a book on it between 1775-1778, entitled "Physiognomical Fragments for the Promotion of a Knowledge of Man and of Love of Man". Later, a French professor of medicine, Moreau de la Sarthe, translated Lavater's work and added a chapter on handwriting analysis.³

Up to the beginning of the nineteenth century, the majority of approaches to handwriting analysis were strictly observational, speculative and/or empirical. Though this approach continued, namely in the works or remarks of Sir Walter Scott, Elizabeth and Robert Browning, Edgar Allen Poe, George Sand, Piere Charles Baudelaire, Alexandre Dumas, Emile Zola, Anton Pavlovich Chekhov, Thomas Mann, Cesare Lombroso, Johann Wolfgang von Goethe, Carl Jung, Albert

¹Backman, p. 19

²Jacoby, p. 19

³Alten, E. H. *The Psychology of Handwriting and its Importance to the Physician*. *Medical Record*, 1939, 150, p. 72.

Einstein and others,¹ the stirrings of interest in an objective approach appeared.

In the first quarter of the century, a group of theologians in France regularly gathered together to systematically investigate the concepts of handwriting analysis. These included the Bishop of Amiens, the Arch-Bishop of Cambrai and the Abbe Flandrin (who subsequently became Abbe Jean Hypolyte Michon's teacher). Michon (1806-1881) devoted his life to continuing his teacher's early endeavors. By attempting to collate graphological findings, through collection of thousands of writings and interpreting minute details or "elements" of handwriting, he hoped to show that writing revealed personality characteristics. He coordinated the writings in such a way that if, in the writings of people with a well known quality of personality, he found coincidental writing characteristics, he attributed those characteristics to the personality trait. He considered writing similar to a mosaic in which signs could be removed or added. If certain signs were missing from a writing, he considered their absence as significant of a lack of that particular trait or the presence of its opposite. Michon formulated a law of "balance", claiming, "One sign does not cancel the significance of another. The counterweight of opposing signs must be considered." In 1872, he brought out a book titled, "Les Mysteres de L'Ecriture", in which he introduced the use of his coined term, "graphology". Publication of his book followed the organization of a Societe Graphologique, a year earlier in which he and his students formed the nucleus of the now more than 100 year old Societe.² In 1971, the French organization celebrated both its 100th Anniversary and its recognition as a public foundation, proclaimed in a decree Feb. 4th by the Minister of the Interior. The

¹Jacoby, p. 20 and 22; Saudek, R. The Psychology of Handwriting, 2nd Ed. London: George Allen & Unwin, 1954, p. 11-12.

²de Sainte Colombe, P. Grapho-Therapeutics: Pen and Pencil Therapy. Hollywood: Laurida Books Pub. Co., 1966, p. 3; Eliasberg, W. Political Graphology. Journal of Psychology, 1943, 16, p. 178; Hearn, R. S. Handwriting: An Analysis Through Its Symbolism. New York: Vantage Press, 1966, p. 14; Roman, p. 4; Singer, E. Graphology for Everyman. London: Gerald Duckworth & Co., Ltd., 1949, p. 25.

recognition as a public foundation permits the Societe to accept tax-deductible gifts and legacies.¹

Between 1872 and 1885, much correlation of existing knowledge in graphology and physiology was taking place in Germany. In this way, concepts were contributed to graphology that Michon had not included. Albrecht Erlommeyer, Director of the Sanatorium for Nervous and Mental Diseases at Berndorf near Koblenz, published a monograph in 1879 that still retains its importance. In the book, "Physiology and Pathology of Writing", he described for the first time pathological variables such as agraphy, ataxy and tremor writing. Regarding ataxic and tremor writing particularly, he referred to severe malformations of letters, slipping or skidding of the ductus, arrhythmical increases of pressure, loss of rounded forms, etc.²

Interest in determining relationships to criminality and writing also occurred during relatively the same period. Baron Richard von Krafft-Ebing in Germany, Havelock Ellis in England, Cesare Lombroso in Italy and Alphonse Bertillon in France, all applied handwriting analysis to the study of criminals' personality syndromes, classification of so-called criminal "types" and/or experimental research. This was a new approach, for until that time, criminals had been classified as mentally ill. In 1895, Lombroso published a book called "La Grafologie". In France, Bertillon, who had developed the Bertillon System of identifying suspected male criminals and who later appeared as one of the expert handwriting analysts in the trial of Captain Alfred Dreyfus in 1899, published a book in 1897 entitled, "La Comparaison des E'critures et L'Identification Graphique". Another eminent figure of the time, Sir William Herschel, son

¹La Graphologie, 1971, Vol. 122, No. 2, p. 5-6. (Published in Paris, France)

²Alten, p. 72; Olyanova, N. Handwriting Tells. New York: Bobbs-Merrill Co., Inc., 1969, p. 356; Singer, p. 27-27.

of England's outstanding astronomer and chemist and grandson of the discoverer of Uranus; and, in his own right, discoverer of the practicability of applying fingerprint tests as accurate identification, extended his interest to graphology. He considered it as important in character delineation as he foresaw fingerprint identification would be to criminology.¹

Toward the close of the century, Michon's successor, Crepieux-Jamin (1858-1940), brought out "L'Ecriture et le Caractere", first published in 1887 with a Preface by Dr. Paul Relot. In it, Crepieux-Jamin compared the study of details of writing to the study of the alphabet. He advocated consideration of the overall aspects of writing through application of a theory of "resultants" which produced new traits from combinations of traits existing in the writing. One of the leading principles of his theory was primary and complex writing qualities of a writing. Only the primary qualities show, he theorized, whereas the complex, or resulting, characteristics are derived only through combination of the primary values. An example of a primary quality is sensitiveness, whereas jealousy is a complex value resulting from several primary ones. Crepieux-Jamin also based the exact determination and valuation of every writing characteristic on first, the estimate of the superior or inferior intellectual capacity of the writer. Thus, an individual sign in writing would be meaningless unless it assumed diverse manners of expression which, in the final analysis, could be considered characteristic of a particular writer. In building the characteristics found in a writing to form an analysis, he assigned equal weight to each criterion. Saudek later was to take exception to this procedure, claiming that the repetition merely confirms that the appearance of the characteristic was not ac-

¹Encyclopedia Americana, 1953, Vol. 3, p. 580; Olyanova, Handwriting Tells, p. 357; Teltscher, H.O. Handwriting - Revelation of Self: A Source Book of Psycho-graphology. New York: Hawthorn Books, 1971, p. 3.

cidental and that the trait was indeed a part of the writer's personality. Saudek also expressed amazement that Crépieux-Jamin, "...who recognized that writing could not be an autonomous product should still consider a signature an entity...." sufficient to be quite suitable for a personality analysis of the writer.

Michon had claimed that the absence of a "sign" in writing indicated the presence of the opposite characteristic in the writer's personality. Crépieux-Jamin, however, repudiated his teacher's earlier theory, claiming that analysis may only be based on existing qualities and that no consideration should be given to what is not evident in the writing. This precept is still adhered to today.¹ He also demonstrated the falseness of another belief, that of size of stature being related to size of writing. He showed that the physical size of a writer (and by inference, the size of the writer's hands) had no bearing upon characteristics found in writing. To exemplify his contention, he used the writings of a midget and of a giant, noting that nothing of their physical stature was indicated in the writing samples which were non-representative of the actual height of each individual.²

At the turn of the century, Alfred Binet, the founder of intelligence testing, took an interest in experimenting with graphology due to the Dreyfus case in which graphologists had testified in court. Members of the Société Graphologique in Paris collaborated with Binet in his tests - although Binet later commented negatively on their lack of concern for scientific method in a

¹Saudek, R. Writing Movements as Indicators of the Writer's Social Behavior. *Journal of Social Psychology*, 1931, 2, p. 338; Saudek, *Psychology of Handwriting*, p. 17-18; Wintermantel, F. *Bibliographia Graphologica*. Stuttgart: Ruhle-Diebener Verlag, 1958, p. 25.

²Crépieux-Jamin, L'Age et le Sexe dans L'écriture. Paris, 1924; Saudek, *Psychology of Writing*, p. 4.

257 page book reporting the results of the experiments. Disregarding the fact that some of the investigations (in age, sex, criminality, intelligence) had results well above chance, Binet failed to pursue the experiments, commenting that they were fraught with much possibility for error due to suggestion and sheer chance.¹

In Binet's first experiment, he presented the graphologists with 180 envelopes, addressed approximately equally by both men and women; and requested that the sex of the writer be determined graphologically. Crépieux-Jamin scored the highest, with 79% correct while a control group with no training in graphology scored almost equally well with a range from 66% to 73%. Chance only would have yielded 50%. Another experiment involved judging age from writing samples. On this, Crépieux-Jamin made an average error of five years, although teachers did quite well with an average error of ten years. Intellectuality was investigated, with writings of people of known superior intelligence paired with writings of those with similar education and social level but mediocre intelligence. The graphologists' scores ranged from 61% to 92%, with the highest accuracy being achieved by Crépieux-Jamin. In a final test, Binet secured the writing of eleven imprisoned assassins and paired them with the writings of honest citizens from an ordinary station in life. He requested that the graphologists identify which of each pair had superior general morality. Again, correct judgments exceeded chance but not greatly. Crépieux-Jamin had three errors out of eleven possibilities, or a score of 73% which was the highest accuracy achieved. In his book Binet commented that, in some cases, the results were quite disastrous and made the graphologists angry.²

¹Wolf, T. H. The Emergence of Binet's Conception and Measurement of Intelligence. *Journal of the History of the Behavioral Sciences*, 1969, 5, p. 129.

²Hull, G. L. and Montgomery, R. P. Experimental Investigation of Certain Alleged Relations between Character and Handwriting. *Psychological Review*, 1919, 26, p. 64-65; Wolf, p. 129.

Results of the experiments with age and sex of the writers brought new principles into the practice of graphology, which are carefully observed today. No graphologist today attempts to determine either from handwriting analysis, instead, requesting that the information be provided.

At about the time that Binet was taking an interest in graphological experimentation in France, a group of German psychiatrists and physiologists began serious experimentation in that country. In 1895, Wilhelm Langenbruch founded a periodical devoted to graphology and prevailed upon physiologist William Preyer, author of one of the classical works on infant psychology, to become a collaborator. Preyer recognized the necessity of determining experimentally all possibilities for variation in the production of writing, which was one of his outstanding contributions to the field. His experimentation led to his discovery of specific laws in relation to the production of writing movement. Completely ignoring individual letter formations, he searched for general properties which were related to human movement. He found them in the straight line, the point, curves in writing, and in obtuse, acute and right angles of writing. Accordingly, he traced all writing peculiarities to variations found in slant, duration of writing, thickness of ductus and interruptions of the writing movement itself. Preyer also showed that any production of writing - whether normally executed or executed with the foot, mouth or opposite hand to the normal writing hand - would, after a suitable practice period, be so similar to the normal writing style that both means of writing must originate in the cortex. Thus, with Preyer, started an emphasis upon the writing movement as opposed to concern with writing elements as propounded by the French School; although later, Saudek was to object that he "stopped halfway" in his investigations, using as an example Preyer's investigation of writing done in daylight compared to writing produced at night. Saudek maintained that Preyer ought to have included investigation of writing produced by people who had become blind compared to

writing produced by the same persons before the onset of blindness. Saudek stated that this example was only one of many which Preyer neglected to pursue. Notwithstanding his criticism, Saudek was quick to admit the importance of Preyer's contribution, especially the investigation of variation in the production of writing.¹

Two years after the founding of the first German periodical, a criminologist, Hans Busse who was well known for his extensive number of translations of Crepieux-Jamin's works into German, started a new periodical and formed a society for graphological research. His assistant editor was Ludwig Klages, a philosopher-psychologist. One of his chief contributors was George Meyer, psychiatrist at the State Lunatic Asylum, Berlin-Herzfelde.

Meyer was the first to discover that the intention of the writer is always manifest at the beginning of words, sentences and lines while the endings indicate the writer's real nature as registered unconsciously. This also led to Preyer's distinguishing between between spontaneously written and unspontaneously written script which made an indispensable contribution to handwriting identification. Meyer was also the first to examine samples of manic-depressives' writings in order to establish typical expressions of emotion in writing movement. His investigations provided graphology with three additional, fundamental laws, upon which subsequent developments in modern graphology are based. Through extensive methodical experiments with many subjects, he distinguished between spontaneous and unspontaneously executed writing. He found that increased effort of concentration produced a corresponding decrease in writing size. He concluded from those experiments that an increase in muscular tension

¹Eliasberg, W. Methods in Graphology. *Journal of Psychology*, 1914, 18, p. 125; Hull and Montgomery, p. 63; Saudek, *Psychology of Handwriting*, p. 20-21; Saudek, *Writing Movements as Indications of the Writer's Social Behavior*, p. 338; Singer, p. 26.

accompanies the effort of increased attention. His experiments also provided agreement with Crepieux-Jamin's findings that the character of writing is not related to the size or anatomy of the writer's hand - or to the writer's general strength. Meyer found that, instead, it is related to his psychomotor energies. He considered three main factors, extension, speed and pressure to obtain a unity of expression which he regarded as the decisive feature. Meyer also demonstrated the connection between emotional state and writing movement through studies with his psychotic patients' writing during their mental states of mania, elation and depression. Others, since Meyer, have also observed characteristic changes in writing that occur during changes in mental equilibrium. Those investigators include Bleuler, Blume, Eliasberg, Kraepelin, Kretschmer and Lewinson.¹

By the beginning of the 20th century, interest in graphology was well established in France under the leadership of Crepieux-Jamin and in Germany under the leadership of Ludwig Klages who came rapidly to the fore. In France, Crepieux-Jamin was still learning the limitations of graphology through the experimental work of Binet (who also, at the end of the 19th century, had been one of the first to investigate speed of writing movement). In Germany, Klages was taking his first tentative steps into graphology as Dr. Erwin Axel, via a series of articles which explained the various reasons why variations might appear in a writing and served to separate the German School from the French School of "fixed signs".²

In France, while Klages in Germany was still using a pseudonym, a psy-

¹Alten, p. 72; Bruck, M. A. Contribution to the Survey of Handwriting: The Gestalt of Handwriting of Apparently normal Persons in Comparison with Specimens of Institutionalized Mental Patients. American Journal of Psychiatry, 1956, 112, p. 640; Eliasberg, Methods in Graphology, p. 126; Freeman, F. N. An Experimental Analysis of the Writing Movement. Psychological Monographs, 1914, 17, (4), p. 3, 6; Saudek, Psychology of Handwriting, p. 21-22.

²Saudek, Psychology of Handwriting, p. 23.

chiatrist, Rogues de Fursac, investigated graphic disorders which he considered those of the motor-physiological pathway and compared to speech impairment as it is related to an organic nervous lesion. He claimed graphological disorders to be coordinated to the true impairment, such as schizophrenic writing lacking sensible words but maintaining perfect punctuation. In analyzing writing of the mentally ill, he discovered primary and secondary writing pressures which involve conscious, purposive muscular contractions that move the pen and design the form and balance it with automatic contraction that counterbalances the force of gravity. If the motor function weakens, the reflexive muscular contraction also weakens and the writing drags along through its own weight, betraying its abnormal pressure through pasty writing.¹

Klages (1872-1956) wrote and experimented under his own name after 1910. At first, he relied heavily on Meyer's findings, forced the separation of the German School from the French and insisted upon a scientific approach to analysis. Toward this end, he searched for a method to distinguish natural writing from unnatural writing and discovered the law of periodical variability of attention. The law elaborated on the findings of both Preyer and Meyer and served to further emphasize writing movement as opposed to writing elements. Klages discovered that certain writing forms may be modified at will; others are more difficult following the law of least resistance and that unnatural divergence appears in unnatural writing, which is further verified by occasional lapses into the normal style. So, gradually developed the theory of expressive movement. Incorporated were the theories of Preyer, Meyer and Rogues de Fursac. Klages considered handwriting to be an expressive movement involving contracting and releasing tendencies. Although later criticized by Wolff because his theories were not based on sound, experimental validation, Klages' theories form a tangible part of present

¹Rogues de Fursac, J. *Les Ecrits et les Dessins dans les Maladies Nerveuses et Mentales*. Paris: Masson, 1905; Eliasberg, *Methods in Graphology*, p. 126.

day graphological procedure. Klages was concerned for the psychic expression of the personality in handwriting and found "graphically fixed expressions of psychic emotions" in writing movement. He considered writing speed, pen and grip pressure and the writing expanse as evidence of internal impulses.¹

In Klages' theories, life and mind are constantly opposed to each other and their conflict (of mind and soul) is manifested in writing. According to Klages' metaphysically oriented concepts, logical thinking interrupts the rhythm of life and the exercise of will is inhibitory. Mind is the wish to control, to regulate, to inhibit and as such is seen in the contraction variables in writing. Soul is rhythm, the wish to experience and to expand, the power to integrate control and to grow beyond it toward productive individuality. As such, it is seen in the expansion variables in writing. (Saudek later added to this concept by considering expansion an expression of the degree to which man feels he is the executor of his fate.)²

Determination of the rhythm in writing is an integral key to discovering the amount of conflict between the writer's conscious control and his natural, somatic manifestations (i.e., gestures, postures, expressions) and is a significant variable in the gestaltic, Klagean approach to handwriting analysis. Form level considers the variables of rhythm in a writing; rhythm of form, rhythmic production of original forms (indicating a fullness of life), movement and distribution over the writing space. Klages also considered the degree of harmony of writing important in relation to the writer's total score for form level.

¹Alten, p. 72; Saudek, Psychology, p. 24-26; Saudek, Writing Movements and Social Behavior, p. 340; Wolff, Diagrams, p. xi.

²Booth, G. C. The Use of Graphology in Medicine. Journal of Nervous and Mental Disease, 1937, 86, p. 519; Lewinson, T. S. An Introduction to the Graphology of Ludwig Klages, Character and Personality, 1938, 6, p. 164-165, 169; Saudek, Psychology, p. 33; Wolfson, R. A Study in Handwriting Analysis, New York: Columbia University Thesis, 1949, p. 7.

Harmony is a "rhythmic condition", but its strength is evaluated from the distribution and movement rhythms evidenced in a page of writing. Harmony contains an undisturbed, rhythmic flow and expresses a balance between expansion and constriction (impulse and restriction; life and will). In Klages' theory, evidence of a high form level has no actual relationship to intelligence; it is a characterization of the degree of fullness of life. Form level, as distinguished from regularity (mathematically exact repetition) is the difference between conscious control and unconscious, or expressive, movement. Regularity in writing is due to the influence of the will of the writer.¹

Klages' solution to a double value for each writing characteristic is the estimate of the degree of form level evidenced in a writing. He had objected to Crepieux-Jamin's theory that the presence of a specific handwriting characteristic implied the presence of both positive and negative personality traits for that value found in the same personality. Klages' theory permitted a writing characteristic to represent the possibility of both a positive and a negative interpretation, but the choice of which depended upon the high or low degree of form level. As example, noticeable script irregularities may indicate either weak will power or an extremely strong and productive emotional nature - the decision dependent upon high form level for the latter and low form level for the former.²

Klages also investigated pressure in writing to determine whether it illustrated the physical or the psychic energy of the writer (later also investigated by Pulver and Saudek). He discovered that pressure may represent either the frustration and tension of the neurotic or it may indicate the organization of productive physical energy. In Klages' probing of this question, he considered writing to be a symbolical representation of the manner in which a

¹Lewinson, Introduction to Klages, p. 172-175.

²Alten, p. 72.

writer met obstacles in life (i.e., found in the friction of pen against paper). The writer may use force (increased pressure) to overcome obstacles, or he may avoid or lessen the friction imposed by obstacles by reducing pressure. He reveals how much surrounding circumstances control him by the degree of lessened pressure. As another measure of physical activity, Klages considered the degree of rapidity of writing related to physical activity as well as an indicator of the degree of quick thinking and connected thinking.¹

In sum, Klages considered handwriting one of the forms of expressive movement and a dynamic indicator of personality. As such, the gestalt approach integrates the variety of graphic variables so that the whole is greater than its parts. The criteria he used in addition to the subjective estimate of form level included measurable writing characteristics which comprised two major divisions: bond and release. These were form originality, form connection, ductus characteristics, size, pressure, speed, regularity, continuity, proportion between upper and under lengths of letter forms, direction of lines, letter widths, copious forms versus simplified forms, right and left tendencies, margins and slant of writing. Saudek was to take exception to Klages' interpretation of writing slant later, on the grounds that, contrary to its being a natural writing angle, slanting writing was entirely unknown up to the middle of the sixteenth century.²

Klages' importance in graphology cannot be underestimated. In 1929, the thirteenth printing of his book, *Handschrift und Charakter*, was used in German universities in preference to Sigmund Freud's works. Psychologists in Germany,

¹Perl, W. R. On the Psychodiagnostic Value of Handwriting Analysis. *American Journal of Psychiatry*, 1955, 111, p. 598.

²Lewinson, T. S. Dynamic Disturbances in the Handwriting of Psychotics; with Reference to Schizophrenia, Paranoid and Manic-Depressive Psychoses. *American Journal of Psychiatry*, 1940, 97, p. 102; Saudek, *Psychology*, p. 36.

Austria, Holland, France and England considered handwriting analysis as one of the most promising psychological tests; although their American counterparts dealt with it little or not at all and often with negative bias or incredible naivete when they did.¹

Both Robert Saudek (1881-1935) and Max Pulver (1889-1952) elaborated on Klages' concepts, adding to the dynamic theory of writing analysis the qualities of unconscious relationships found through the symbolic placement of writing on the writing field; and spontaneous relationships found through analysis of the speed of the writing itself.

Pulver was a Swiss writer and psychologist who taught graphology at the University of Zurich. A depth psychologist, he related the various movements and dimensions of writing to the unconscious as well as to the conscious, and was the first to apply diagnostic values to the movements in writing. His dimensions of writing added a third dimension to handwriting analysis; to the up and down movements and the forward and backward movements, he added the dimension of front and back achieved by the pressure of writing. He divided the levels as follows: (a) movements in the breadth dimension directed toward or away from the self and being a movement horizontally toward or away from the environment, (b) movements in the height dimension reflecting the writer's rational control and psychologically defined as the individual's ego feelings, (c) movements in the length dimension reflecting the writer's instinctual or material needs and urges and collective unconscious symbols, (d) the pressure dimension reflecting, primarily, the writer's psychic energy and secondarily, contributing to the physical expression of the writer, his urge for sexuality and his adaptability to his environment.²

¹In 50 years, since 1917, Klages' classic has had 26 editions in German.

²Hearns, p. 15; Lewinson, *Handwriting of Psychotics*, p. 105; Pulver, M. *Symbolik der Handschrift*, 6th ed.; Zurich: Orell Fussli, 1955, p. 15-26, 227-250.

Whereas Pulver's contribution to graphology was largely empirical (according to Dr. Rose Wolfson), Saudek set himself the task of accepting none of the graphological doctrines until he could systematically prove them either by experiment or by statistical inquiry. Toward this end, he employed photography and microscope as well as physical measurement. After 26 years of research and experimentation, he brought out "Experiments with Handwriting" which discussed the results of his own and other experimenters' studies on 100,000 men, women, and children of all nationalities and classes, with and without partial, temporary or permanent disabilities, and including both right and left handedness.¹

His studies investigated the writings of blinded people compared with the writings they performed while sighted and compared with those of persons blind from birth and with a control group of persons blindfolded for experimental purposes. He investigated spontaneous, unnatural and deliberately disguised writings for their individual peculiarities. He experimented with grip pressure on the writing instrument and on the written pressure pattern. He paid particular attention to the production of individual writing as a result of mechanical, physiological and mental factors. By his own estimate, Saudek succeeded in isolating eleven physical factors involved in the production of writing that have nothing to do with the psychological assessment of personality from the writing. Thus, by 1931, fifteen factors that affect the appearance or style of writing but which cannot be treated for personality traits, were known to graphologists.²

These are (1) writing implements and writing surface, (2) the school model and writing-position training, (3) degree of graphic maturity including the di-

¹Brooks, C. H. Your Character from Your Handwriting. With a foreword by Dr. Saudek. London: George Allen & Unwin, Ltd., 1930, p. 17-19; Saudek, R. Experiments with Handwriting. London: George Allen & Unwin, Ltd., 1928, p. 7.

²Saudek, Experiments, pps. 88-91, 130, 136-146; 252-261, 189-218, 223, 265; Saudek, Writing Movements and Social Behavior, p. 340.

voiced of the functions of reading and writing to permit rhythmical production of writing typical of the writer, (4) acute and permanent physical disorders as they affect writing, (5) manual skill versus degree of writing skill, (6) speed as a function of mechanical, physical, intellectual or psychic causes, (7) degree of visual sensitiveness as a relationship to memory, (8) mastery of writing forms as a relationship to sight, (9) previous and actual environmental influences, (10) standard of education, intellectual training and refinement, (11) intelligence of the writer as a relationship to education over his natural capacity or to natural intelligence no matter what the educational level, and its effect on speed of writing, (12) concentration on the subject matter, (13) concentration on the writing movement itself, (14) characterological factors such as those affecting writing style, letter form, etc., (15) psycho-pathological factors when writing is prepared by psychotic individuals in the acute state of the psychosis or in periods of remission.¹

With a background in linguistics (he spoke and lectured in five languages and brought his books out in three or four languages simultaneously) Saudek was extremely aware of national influences on writing, as well as the effect of education and tradition. He realized that all were at work - as well as the purely physical factors - to influence the execution of writing style, letter forms and the handling of space on the writing field. In a letter to Dr. Roback, he once wrote that, should he remove references to other countries' writings from the American editions of his books, he would abridge them by as much as 40%. He also warned (in *Psychology of Handwriting*) that graphological principles founded in one or two generations in one or two countries will change and graph-

¹Saudek, *Writing Movements and Social Behavior*, pps. 340-343.

²Roback, A. A. Dr. Robert Saudek. *Character and Personality*, 1935, 3, pps. 264-266. Saudek, *Psychology*, p. 48.

ologists will be obliged to amass new facts based on modern writing revisions that occur in each country as technologies cause cultural changes.¹

Although Saudek's system of analysis is not as broadly known among American handwriting analysts as the trait-stroke method of the French School or the gestalt method of the German School, his experiments and consequent contributions concerning speed and pressure in writing are well known and have given much additional information to both schools of graphology.

In summary, each graphological method discussed so far undertakes an approach to analysis from a different perspective. The French School begins with the angle of slant of a writing. Klages begins with an estimate of the form level of the writing. Pulver begins with an estimate of middle zone height and a regard for the degree of extraversion or introversion in the writing. Saudek begins with an estimate of the speed of the writing, which acts as the foundation upon which all other findings rest. In modern day graphology, the Schools are not as sharply divided from one another as they once were and, especially in the United States, there is a great deal of overlapping of method.

At about the same time that Pulver and Saudek were increasing the fundamental principles of graphology through their methods, Klara Goldzieher Roman (1881-1962) founded the Hungarian Institute for Handwriting Research in Budapest. She strongly felt the need of "objectifying graphological procedure and of dealing with investigative data in terms of measurement...." The feeling of necessity to accomplish this led to her invention of an instrument to mechanically measure writing speed and pressure and change variations as they occur during the motor impulse of writing as a result of changes in muscular tension.²

¹Saudek, *Psychology*, p. 48.

²Roman, *Key*, p. 12; Roman, K. G. *Encyclopedia of the Written Word*. New York: Frederick Ungar Pub. Co., 1968, p. xiii, 167.

Using the mechanical-pneumatic instrument that she invented ingeniously to meet the need of studying writing characteristics of stutterers more exactly than moving pictures could record Roman went on to examine the development of speed of writing and writing pressure in the process of maturation.¹

The longitudinal study utilized 2145 public school children between the ages of eleven and eighteen over a period of eight years in Hungary. In addition to the large experimental group, Roman used a control group of approximately 600 schoolchildren of varying homogenous groups. Some of these included stutterers, deaf mutes, juvenile delinquents, backward children as well as other normals. Initially the studies were conceived to investigate what handwriting changes occurred at various phases during the maturation process and to observe possible changes related particularly to sex of the writer. Results indicated that writing speed is a progressive function, constantly increasing in speed until a stabilization period sets in at about age eighteen. Females had a slight advantage over males until the stabilization period set in. Results were more cyclical for writing pressure. Prior to puberty, writing showed decreasing pressure until near or at puberty when pressure rose sharply. During the post-puberty stage, the pressure pattern lessened briefly, only to return with renewed force which lasted up to approximately eighteen years of age for both sexes when individual pressure patterns stabilized.²

¹For a good review of attempts at mechanical measurement prior to Roman's invention, see Freeman, F. N. *An Experimental Analysis of the Writing Movement*. Psychological Monographs, 1914, Vol. 4, pps. 1-46. For a more up to date review of modern developments using electrical devices, see Tripp C., Fluckiger, F. A., and Weinberg, G. H. *Measurement of Handwriting Variables. Perceptual and Motor Skills*, 1957, Vol. 7, pps. 279-294.

²Roman, K. G. *Tension and Release: Studies of Handwriting with the Use of the Graphodyne*. Personality Symposium No. 2, April 1950, pps. 52-54; Roman, K. G. *Studies on the Variability of Handwriting: The Development of Writing Speed and Point Pressure in School Children*. *Journal of Genetic Psychology*, 1936, 49, pps. 140, 150.

Delinquents' writing showed variable pressure distribution and very light to borderline pressure whereas a group of 1,000 normals showed no extremely light writing and very few borderline pressure. In addition to low pressure, delinquents' also exhibited slow speed. Extreme cases of speed were found among those suffering endocrine disorders such as hyperthyroid and extremely slow speed was found to be a clue to some major mental or physical disorder, including thyroid. Stutterers' writing contained other characteristics besides slow speed and generally heavy pressure. These were interruptions, repetitions, writing some letters over again, unnecessary dots, upstrokes formed in clumsy, uncertain or trembling manner.¹

Roman investigated brain injured war veterans' writing, with her collaborator, Dr. Erich Feuchtwanger carrying out the medical examinations, while she tested their writing performance on the graphodyne, later comparing it to their earlier writing. Through the investigation, it was discovered that right handed writers preferred garland connectives whereas genuine left-handers preferred arcades. Later, when Roman investigated twins' writings and the writing of left-handed persons, this discovery was born out.²

In most of her investigations, Roman used the graphodyne to augment her findings.³ Her close attention to objectivity, accuracy and statistical validity made her the first modern graphologist to apply techniques that were in increasing use in the behavioral sciences. Saudek's incredible volume of experiments, although meticulous in application and concept, failed to provide statistical validity. In addition, Roman was also the first to attempt to graphic-

¹Roman, Variability of Handwriting, pps. 150-153; Roman, Tension and Release, pps. 53-54; Van Dantzig, B. Writing, Typing and Speaking. Journal of Speech Disorders, 1939, 4, p. 298.

²Roman, Tension and Release, pps. 56-57; Van Dantzig, p. 298; Alten, p. 73.

³Thereby introducing significant neurophysiological data to graphology.

ally diagram graphological findings using an adaptation of the Rorschach psychogram where scores from the writing could be visually plotted to provide a picture in graph form of the writingspatial arrangement. (Adaptations of the Roman graph have since been made by Daniel S. Anthony of the New School for Social Research in New York City and by Charlie Cole of Los Altos, California.)

Another contemporary of Pulver and Saudek was Werner Wolff, whose interest in handwriting was stimulated while he was a student in psychology in Germany. Seventeen years before bringing out his classic work on the Diagrams of the Unconscious, Wolff formulated his hypothesis that, in writing or artistic expression, not only conscious thought is made visible but a biopsychological, unconscious pattern is also expressed. He combined quantitative and qualitative studies, correlating them with Rorschach findings analyzed by Dr. Bruno Klopfer, organizer of the Rorschach Research Exchange. He used a statistical investigation in establishing the validity of symmetry regularity in signatures. Many of his studies were conducted, using his students as subjects and experimenters, while a professor at Bard College in the United States, although the start of his investigation had begun before World War II in Germany.

Wolff found that handwriting detects short term problems and disturbances of the individual. He found that the signature shows unconscious configurational patterns expressing both dynamic symmetry and regularity of movement as well as expressing protective movements. Measure units in signatures were found to be multiples of starting, middle or end movements which were retained by the individual over many years. Relationships between constancy, symmetry and rhythm were in harmonious relationship, especially visible in a total movement such as a signature. Using a variety of tests and experiments and some purely empirical observations, Wolff's results indicated that graphic movements are a result of the individual's basic personality rather than dependent upon outer factors.

Such outer factors may affect writing form, but the inner personality is still strong enough to modify them. In sum, Wolff commented that the main discovery from his extensive experimentation was to demonstrate the existence of lawful relationships of expressive movements that were beyond the conscious control of the writer and were stable over time.¹

Still another contemporary of the foregoing graphologists was Paul de Ste. Colombe (1891-1972). Between 1929 and 1931, acted as the graphologist-consultant on a three man investigation team to test grapho-therapy (writing therapy). The other two investigators were Dr. Pierre Janet and Dr. Charles Henry, discoverer of a process to give phosphorescence to zinc sulphide. The idea of therapy in writing as a corrective technique to overcome mental disturbances and personality weaknesses was first introduced to the Paris Academy of Medicine in 1908. Dr. Edgar Berillon, psychologist and authority on mental diseases, outlined the technique, treating on its unique ability to combine mental and physical processes at one time. Until 1929, nothing was done. By the close of the two year experimental period, the favorable effects of a program of graphotherapy had been confirmed on alcoholics and problem children. In 1931, the therapy was put into practice in France but waited until the 1960's to become widely used in the United States, and then only due to de Ste. Colombe's sustained endeavors.²

In effect, the therapy involves a carefully supervised program of systematic writing changes achieved through regular once or twice a day writing exercises. The individual in therapy may or may not be aware of what changes he is making within his personality through the writing alterations and exercises.

At the brink of the second half of the 20th century Thea Stein Lewinson

¹Wolff, *Diagrams of the Unconscious*, p. x-xiii, 46-53, 61, 68, 93, 304-305.

²de Sainte Colombe, p. 13-15.

contributed an objective series of scales for statistically investigating handwriting analysis. Through her scales, she attempted to scientifically control subjective evaluation of variables in writing that were not subject to actual physical measurement and to provide values for those that were. There were 22 scales in all, categorized into four handwriting components.

In adapting the principles of Klages and Pulver to objective measurement techniques, Lewinson adjusted some of Klages' values in order to remove the subjective and intuitive qualities inherent in determining rhythm. Her point of departure is primarily one where rhythm is considered a mid-point between two extremes instead of personal estimation. Another important factor is her placing the scorings or ratings for the measured handwriting variables on a continuum from -3 to +3 so that a common denominator was available.

The scales were subsequently tested on the writings of twenty subjects to determine whether or not the scales would differentiate among the subjects. In the experimental group were five normals, seven schizophrenics, five manic depressives, one obsessional neurotic and two undiagnosed. The writings of the normals were found to deviate less from rhythmic balance than did that of the abnormal. No schizophrenics' writings had a contraction value on the form component, while three-fifths of the normals did.

The Lewinson-Zubin scales were subsequently tested in 1949 by a former student of Mrs. Lewinson, Rose Wolfson, who used them in an experiment which formed the basis of her Ph.D. thesis. She attempted to differentiate among a group of delinquent boys matched with a control group of non-delinquents. Results indicated that the non-delinquent group was better adjusted, contained more balance and less extreme tendencies in either direction on the continuum than the delinquents.¹

¹Lewinson-Zubin, p. 6-8, 82, 90, 96, 113-114; Wolfson, p. 63, 65.

This concludes the survey of the historical development of graphology. The survey has been confined to the experimental work of graphologists who have made contributions to graphology that have directly increased the body of graphological knowledge or principles. Selection was made on the basis of quantity of experimental contribution and breadth of acceptance. Many graphologists, especially those teaching on university campuses in Europe have contributed vast amounts of validating scientific research without altering the basic tenets of graphology. Many graphologists in this country, in the early history of graphological development here, contributed significantly to general public awareness of graphology, through books and newspaper columns. In particular, Louise Rice was one of these.¹ This chapter could increase by 100% were I to outline all of the achievements of the many who participated in the furtherance of graphology throughout its early history.

¹Louise Rice wrote many books under her own name and under the pseudonym, Laura Doremus. In addition, she wrote a daily newspaper column for one of the Harst newspapers. Her most singular achievement, however, was in 1908 when she persuaded the post office department to pass a regulation permitting the mailing of graphological analyses and literature. Until that year it had been prohibited.

THE CONTEMPORARY ANALYSTS

We come now to the contemporary scene. The number of active, professionally productive analysts is currently so great, both in the United States and beyond its borders, that some selectivity must be applied in reporting. Consequently, the first limitation will be to confine the report to the activities of contemporary American analysts and these will necessarily be further limited according to the extent of my awareness of their activities. Acknowledging that this is a disadvantage, the criteria itself which is employed in making the decision on whether to include or exclude an analyst from mention is (1) whether or not the analyst has published research of a graphological nature in a professional journal of any related field (i.e., psychology, sociology, psychiatry, neurology or medicine) and (2) whether or not the analyst has advanced graphology in the eyes of contemporary professionals in any of those related fields. In this context, the advancement is not related to the promotion and application of graphology for personal gain in the course of developing or increasing a market for services which is considered a normal part of public relations activity when working in a field professionally. This last limitation is, unfortunately, a necessary separation between the many excellent analysts practicing in the field and the few who are furthering it as a valid area for assessing personality or mental and physical impairment in the judgment of professionals in more scientifically accepted fields. The separation is dictated by the hundreds practicing it legitimately and the space in this handbook.

Suffice to comment that large numbers of analysts are individually contributing valuable publicity for graphology and furthering public reliance on

it as a reliable procedure through their activity in personality assessment, family counselling, vocational and child guidance and personnel selection. In the course of their professional careers, these analysts teach in Adult Education classes, lecture to thousands of business and professional organizations annually, write books and magazine articles and are interviewed for newspaper, radio or television media. Still others work cooperatively with psychologists, psychiatrists and lawyers.¹

Three institutions of higher education in the United States have or are offering credit courses in the field of graphology. The New School for Social Research in New York City and Aurora College in Illinois currently offer credit courses. In the past, Northwestern University has offered the subject as a credit seminar suggested to majors in psychology or sociology.

Madame Nadya Olyanova, a graphologist who has worked as consultant to the King's County Hospital in New York and the Menninger Clinic in Kansas, at one time screened applicants for scholarships at Northwestern University. She has also cooperated with psychiatrists and psychologists in both research studies (i.e., criminal pathology, drug addiction) and in personality assessments, in addition to her private work in personnel selection and personality analyses for clients distributed widely throughout the United States.

Daniel S. Anthony, currently teaching classes in graphology I - VI offering credit at the New School for Social Research, has done some significant research in the personnel selection field regarding insurance salesmen. He spent five years researching and testing a population of insurance salesmen to establish norms and criteria for that single area of personnel selection and prediction before entering the field as a consultant.

Dr. William C. Hallow, Director of psychology services at Illinois' Mercy-

¹Most of these analysts are members of the American Association of Handwriting Analysts, Inc.; American Handwriting Analysis Foundation; Rocky Mountain Graphological Association or Handwriting Analysts Inc. of Michigan.

ville Institute of Mental Health, uses graphology as a "time-saver" in his practice. Beginning in 1972, Dr. Hallow started teaching a credit course in graphology at Aurora College in Illinois, making this the third institution to include graphology in its curriculum.¹

Rudolph S. Hearn is a graphologist who, being primarily research minded, has devoted a great deal of time to research studies of graphological principles and related subjects ranging from criminology to dyslexia to the influence of civilization on handwriting. When he first came to the United States, following the close of World War II, he lectured on graphology in relation to criminology at the Institute of Criminology, University of Pennsylvania and has since lectured at universities in New Jersey and Connecticut.

David P. Mayer, associated with the Sociotherapeutic Center, Washington, D. C., where he provided graphological reports as a projective measurement technique for use in patient therapy, received a distinguished service award from the center for "outstanding contributions in preventive psychiatry". Mayer, who holds degrees in journalism, hospital administration, psychology and personnel management, undertook a comprehensive research study of the listening audience of WRC (NBC), Washington, D. C. in 1969, which was the first graphological market research to be done anywhere in the world.

Dr. Herry O. Teltscher, a member and director of supervision of the Morton Prince Clinic for Hypnotherapy and the Institute for Research in Hypnosis, uses graphology particularly "during the intake interview to arrive at diagnostic insights...which are most valuable in planning the treatment program." One of Teltscher's major research interests has been parkinsonism (Parkinson's disease) and with a few exceptions, the majority of his published studies have been concentrated in this area. He has worked in association with Dr. Wladimir Eliasberg, a psychiatrist, and Dr. Edgar Trautman, a neurologist and psychiatrist.

¹This is rather a poor record for so large a country when, in Germany, approximately eight large universities offer credit courses and 40% of the clinical psychologists practicing in Germany hold licenses in graphology. In Swit-

Another graphologist whose interest is medically oriented is Alfred Kanfer, a man who has devoted nearly 35 years to intensive research of pathology of handwriting, particularly where it relates to identification of cancer prone writers. His research has been supported in part by research grants from Thomas H. Hall, Jr., The American Cancer Society, Huntington Hartford and the Metropolitan Life Insurance Company. Cooperating with Mr. Kanfer in his research have been members of the staffs of the Hospital for Joint Diseases and the Preventive Medicine Institute Strang Clinic, both of New York City. In April, 1971, Kanfer and two associates, Dr. Robert S. Fischer and Dr. Emerson Day, presented their "test for identifying persons with a high susceptibility to cancer" at the 61st annual meeting of the American Association for Cancer Research. The presentation of his paper culminated more than 35 years of research that began in 1935 when he delivered his first paper on the subject in Vienna. In his teaching of laboratory technicians and doctors, Kanfer has successfully trained others to achieve the same high rate of accuracy (80-90%) that he himself achieves. In some types of cancer, he is able to identify people who show no medical evidence of it until as much as 4-5 years later.

Huntington Hartford, the Atlantic and Pacific (A&P) Grocery Chain heir, has contributed extensively in an economical way to the development of graphological research in this country. Through his support of The Handwriting Institute, Inc., a private ad hoc research organization, present and past research in graphology was investigated and organized, careful statistical studies were carried out, suggestions for further direction in research for the future were made and Dr. Roman's pneumatic handwriting measurement device, the grapho-dyne, was refined and electrified for increased efficiency. Through his financial support research, ordinarily of the type only developed on university cam-

 zerland, according to the Vice-President of one of Utah's universities, graphology is a required three year study at the University of Zurich in order to obtain a doctorate in psychology. In France, the Psycho-Pedagogic Center, attached to the University of Paris, rehabilitates an estimated 700-800 problem school children and alcoholics annually.

puses, has advanced more toward objective, statistical methods demanded by American psychologists than it might have otherwise.

On July 2, 1968, the Research Institute of America, in a report to its members, stated that approximately 500 U.S. firms use graphologists in personnel selection either decisively relative to hiring or not or in conjunction with additional decision-making processes. This figure may be low because of the current reluctance of many firms to have the public learn that they use the method at all. However, for his Masters' Thesis in Business Administration, Roger Krueger undertook to investigate the accuracy of graphologists and the satisfaction of their clients. Using a questionnaire method, he queried clients of Daniel S. Anthony, Charlie Cole and Renee C. Martin. Of the three analysts, only Charlie Cole permitted returns to be addressed directly to Mr. Krueger and his rate of returns were also the highest. Results of the investigation were good, ranging from .

Firms that use Charlie Cole's services and have stated their satisfaction in writing are: Kennolyn Camps, Aristocrat Trailers, Color Service, Peco Corp., Prudential Insurance Co. of America, Stabul Finance Corp., Occidental Life, Dover Elevator Co., Burchill Realty, Trend Graphics, Valley Sanitary Supply, Tracy's Accounting Service Corp., Builders Associates.

Firms that use Daniel S. Anthony's services and have stated their satisfaction in writing are: Guardian Life Insurance Co., The Equitable Life Assurance Society, Mutual of Omaha and Companion Life, Mutual Benefit Life Insurance Co. and New England Mutual Life Insurance Co.

Firms that use Madam Nadya Olyanova's services and have stated their satisfaction in writing are: Haynes McFadden, Publisher, The Southern Banker, Nahum Tschachbasov, President, American Archives of World Art, Meriden Savings Bank of Connecticut, Davey Tree Expert Co. of Ohio, Rolscreen Co. of Iowa, Van Wert National Bank of Ohio, The Professional Sales Development Co. of Pennsyl-

vania, Investors Management Services of Utah and Utah Mortgage Loan Corp.

Renee C. Martin stated, in a newspaper interview, that Philip Morris Tobacco Co. and Alina Corp. of Long Island are typical of her clients.

In 1967, The Wall Street Journal stated in an article that the Central Intelligence Agency (CIA) "long has used handwriting analysis, in conjunction with other types of tests, to discern character and personality traits...."

The well known Lloyds of London has also used handwriting analysis for a long time, according to Charlie Cole. Other firms who use graphology in their selection procedures are Stauffer Chemical Co., J.C. Penney Co. in Arizona, Acorn Tire & Supply Co., the world's largest Goodyear Tire and Rubber Co. Service Center, Squibb International and Monarch Life Insurance Co. of Massachusetts which has employed the services of Dorothy Sara for 25 years.¹

This has been a sampling of the activities of analysts and the areas of application of graphology. It was not intended to be as comprehensive a survey of the contemporary field as was the survey of the development of handwriting analysis.

¹All of the material presented in this chapter was taken from my personal files and was either provided me in communications from the analysts mentioned or was published material now in my possession.

LECTURE I

THE PERSONAL PRONOUN

THE PERSONAL PRONOUN "I"

The personal pronoun "I" is a British and American phenomena of language. No other country uses a single letter formation to represent the individual or the self speaking. Consequently, little research has been done on this letter form since most research is based on graphology principles as developed in European countries. Jane Paterson in England, and Jane Green of the Education and Research Association in Minnesota have pioneered research in this area. The following material comes from Convention 1970 material as presented by Mrs. Green to members of the American Association of Handwriting Analysts in Chicago, Ill.

Mrs. Green has been researching the value of the personal pronoun "I" as a means of analyzing the self-worth of the individual for approximately three years. She has used the traditional anonymous questionnaire method wherein respondents gave some personal information in their answers to questions, but did not need to sign their names. Questions were so phrased that respondents started their answers with the capital "I". She has also worked as a social worker with problem children and has had the opportunity to learn their case histories, meet the children and obtain their writing for correlation with the facts. Her results are therefore solidly based, yet she cautions potential users to use the results only as a clue to the assessment of personality. Therefore, we present this material with the same caution.

LEFT EMPHASIS

Such an "I" indicates that the personality is preoccupied with the past. If the letter is left tending and tall, it indicates total defensiveness. If the letter is left tending because of increased space between it and the next word, discrepancy in relationships to people is indicated.

RIGHT EMPHASIS

A copybook "I" that is reversed so that it ends rightward instead of leftward, is indicative of a person who expresses him or herself in a unique way not readily

recognized by others (just as the direction of movement of the letter itself is not readily recognized). It is a form of covert defiance. Used positively it permits the individual to "do his own thing". However, if the reversed "I" is at the same time reclining and if it also has an uneven and/or spotty appearance, it indicates hesitancy - a person who is fearful of making decisions.

MIDDLE ZONE EMPHASIS

If the emphasis is through elaboration of the area in the middle zone (e.g., *I*), it is indicative of a person who wants to "be where the action is", it also shows one who takes practical action and who has memories of the past that are definitely part of his present. However, middle zone emphasis that comes about because the height of the "I" restricts it to the middle zone (e.g., *I, I am*), indicates a person who feels self-pity for himself (or herself); feels helpless in his situation and feels a need to over-compensate -- as an ego-saving defense measure. If the over-compensation is applied properly, society benefits; if used improperly, it is used against society. The most disorganized person will try to compensate -- although his attempts may result in over-compensation. When used in a productive way, the individual benefits society in general.

UPPER ZONE EMPHASIS

The majority of emphasis in the upper zone indicates that the individual is uninterested, personally, in middle zone realities or in the practical application of things. Instead, such a person is interested in philosophy and similar areas. If the stroke is made with no relationship to the past (e. g., *I*), it indicates that the individual is idealistic and ethical. A capital "I" that begins in the upper zone but connects to the following middle zone word (e. g., *I am, I am*) or letter indicates the person who is spiritual, philosophical in his emphasis but is also a person with realism. If upper zone emphasis is achieved through emphasis of height, it is indicative of the concept of authority -- either desire for it or striving for it or feelings of authority. (The opposite of the concept of height being authority is the one of submission, being near the ground, groveling)

LOWER ZONE EMPHASIS

If emphasis is placed on the lower portion of the "I" or if it extends into the lower zone, it indicates concern over love and power. It also indicates difficulty in relating to other people.

HEAVY PRESSURE

Emphasis upon a heavier pressure in the capital "I" than the pressure found elsewhere in the text, indicates that the individual has trouble in getting along properly in society.

LIGHT PRESSURE

Superficial, light pressure on the capital "I", which is lighter than the pressure normally used throughout the text, indicates that the individual suffers a lack of commitment to himself as an individual.

ELABORATED "I"

An elaborated (decorated or overdone) "I" is indicative of the person who wants notice and material things.

EXPANDED "I"

An "I" made with expansive loops is indicative of the individual who sees himself in keeping with his surroundings, fitting in -- no matter whether others may judge these to be good or bad.




SIMPLIFIED "I"

The "I" that is tunneled or simplified by under-expansion (e. g., *l*), is indicative of the person who has "selective vision" about what he thinks he is. The stripped down "I" (e. g., *|*) is indicative of the person who doesn't want things, doesn't want parents, doesn't want past obligations and doesn't want commitments.




RETRACED "I"

The person who writes an "I" with a retraced loop (e. g., *l*, *l*) has trouble getting along properly in society.



ANGULAR "I"

The angular formation (e. g., ) is indicative of the person who feels little commitment and obligation. This is more true if it is also heavy as well as angular which indicates that the person is a no-nonsense doer. It is also indicative of persistence and of a certain amount of rigidity. If there is an angular apex on an otherwise well balanced I (e. g., ) it indicates that the person does not go out toward other people in his personal life. If angularity exists on the horizontal portion of the "I", which is the male influence (e. g., ) it is indicative of the counterpart of the female formation and shows a rough, tough, male attitude. Found in the writing of a male, it indicates father influence and is normal; found in the writing of a female, it indicates father influence and confusion of cultural roles. Too much angularity in the pronoun indicates a highly argumentative nature.

CURVED "I"

The curved "I" (e. g., ) when proportionately balanced, is indicative of the female influence on the individual's personality. This is good to find in the writing of a female, but in the writing of a male, it indicates strong mother influence and a confusion of cultural roles. When, however, the curved form is overdone (e. g., ) it appears fetal-shaped and is indicative of the individual's strong need for protection. If the curved form takes the appearance of an "S" (e. g., ) it is indicative of a very great need for affection; and dependence.

COMBINATION CURVED AND ANGULAR

If the "I" is made as a dollar sign (e. g., *), it is indicative that material rewards replace the individual's self-esteem. It would be the result of over-compensation in material effort with material reward. If the combination is based on simplification that is then decorated (e. g., ) it is indicative of the person who is indecisive (the curve) and who is dissatisfied with himself (the cross out). Any weakness in the form of the personal pronoun I indicates a weakness in the individual's self esteem.

INCONSISTENCY OF SPACING

When the writer sometimes places his personal pronoun at a distance from the following word and sometimes close to it, it indicates ambivalence in his attitudes towards others. He sometimes relates to people and says hello; sometimes he does not care to acknowledge them and ignores them. It is a disturbance in the orderly progression along the horizontal plane, which is the area of social and interpersonal relationships. For this reason, it is also indicative of moodiness. Feelings of self-worth are variable in relation to every day, worldly affairs.

DISPLACED PRESSURE

The personal pronoun "I" when formed with displaced pressure (e. g. *I I I*) indicates the individual who is under stress.

DEFORMED "I"

The capital "I" that is made with tremor, hesitancy, unevenly and slowly is indicative of the person who has suffered a traumatic experience. The personality is in trouble.

SEGMENTED "I"

The capital "I" that is segmented, or fragmented (e. g. *I I*) is indicative of the person who has suffered a traumatic experience. The personality is in trouble. In addition, the individual has trouble communicating his ideas, hopes, desires, feelings.

BALANCED "I"

The writer who makes his capital "I" with proportionate balance between the male and female symbolic influences (e. g. *I I*), indicates a conventional, harmonious relationship with the opposite sex and with attitudes in this regard.

*For either of the \$-sign personal pronoun I's, the crossing through of the symbol that stands for the ego or self identity is significant. The more negative the writing, or the more intellectually oriented it is, the more significant.

LECTURE 2

SIGNATURES

SIGNATURES

In graphology, the signature of the writer serves the same purpose as the cover of a book serves - it is made to attract the attention of those who see it and/or it is made to project some idea of what is inside. What is actually inside the cover of the book or what is in the real personality of the writer may be quite different from what is projected. If the two are congruent, what the signature reveals (or what the book jacket promises) is what you get when you know the writer more personally (or read the book).

In writing, a signature may be a facade. It may only reveal a little of the true personality; it may reveal what the individual hopes to have you believe about him; it may indicate something that is not really there. If the signature is not a facade, when you and the writer become better acquainted, your first estimate of him will remain unchanged (unless your own estimation was faulty!).

Possible errors can occur when an attempt is made to analyze a signature without the text present for comparison. For this reason, it is dangerous to analyze autographs or signatures belonging to famous (or infamous) individuals without their regular writing. If you analyze and fully realize it is only the "public-image" that you are working with, you will be safe. If you analyze for someone else, it is your obligation to our science to inform them of the limitation of signatures without accompanying text.

Ideally, when a signature and text are in accord, they will both employ the same middle zone heights, same letter forms, same spacing arrangements for letter widths and spaces between letters, same proportionate heights for capitals and extensions and same space between the given name and the family name as is used between words in the text. The two will appear the same style. Congruency registers the writer's healthy personality integration, if the writing generally is positive in analysis. When negative, it indicates the individual is functional no matter what his problems.

When a signature and text are not in accord, the writer is projecting something about himself that either is very minor in his personality or is not there at all. If the interpretation of the writing is largely positive and the signature interpretation is more negative, knowledge of the type of work the individual does is very important. He may be in work that conflicts with his basic personality; he may have inadvertently given himself graphotherapy through repeated, very frequent writing of his name (such as signing letters) which would merely emphasize the hurry and rush he feels under those conditions; his signature may have become far more mechanical than the act of writing is for him due to (theoretical) lack of practice. There are exceptions which will be discussed further on.

If the interpretation of the text is largely negative and the interpretation of the signature is more positive, the individual will represent himself to be better put together on superficial acquaintance than you will find him if the acquaintanceship grows into

friendship.

In general, plain signatures, as well as plain text, indicates either the modesty of the individual with a desire to work alone or behind the scenes, or it indicates poor self esteem and feelings of inferiority. Since no single writing characteristic in graphology can or should be interpreted on a one for one basis, the decision as to whether the individual is insecure or secure, and the attributes each stand for, needs to be made when the total personality is evaluated. If no text is available, the evaluation must consider height and width ratios of middle zone forms and ratios of height of extensions to middle zone height, spacing arrangements, embellishments, etc

In general, plain signatures and a less plain looking text indicate that the writer is attempting to appear more modest than he is, or he may actually feel very insecure going into something although he has the genuine capabilities. Signatures are a very valuable indication of the individual's sense of his own self worth or self esteem. For that reason, he may underestimate himself far more than he ought to and his signature reveals that.

In general, a less plain text and more showy signature is in fact exactly what is symbolically illustrated. The individual has, for one reason or another, found that he must put up a more showmanship-like facade, or appear more self assured, or appear to enjoy being with people more than he actually does. His need to be alone, work alone, or work without being in the foreground publicly is a very real need that has been subordinated to another quality of his character.

In general, full, embellished or artistic writing accompanied by the same type of text indicates that the writer is self assured and outgoing, or crude and over-bearing, or very artistic. If a relatively plain looking text accompanies a signature that has the above appearance, the writer is putting up a facade. If the signature is plain in comparison to the text there is evidence of conflict as well as the facade of appearing more modest than he is, as discussed under plain signatures.

The signature represents, in part, the self-esteem of the writer. It also represents his relationship to his family (normally the nuclear family in the case of young people, adolescents and those who have not been married more than 3-4 years). In addition, the signature, according to Saudek is a mechanized function that is habituated relatively early in the formative years of a person's life and is modified only gradually under normal conditions throughout his life. It is the last writing habit he loses in illness or when near death. Under normal conditions, he does not even think while he is writing it -- he can do other things and write his name at the same time. He cannot do this with text, even nursery rhymes learned in early childhood.*

*You might prove this for yourself as an experiment in writing. If you do and you care to submit it, it will be welcomed.

Since the signature is formed so thoroughly early in life, it may not reflect the important self-development, or growth, that the individual achieves in his life. If it does not, there will be elements of conflict or of emotional immaturity and/or feelings of low self esteem and inadequacy in the personality. In graphotherapy, the signature is a good place to start improving the self esteem if it is under-developed, because it is so basic. However, some handwriting analysis books suggest that underlines improve self-confidence. Unless it is already there and the analysis would be largely positive, underlines may do more damage than good.

The signature gives an estimate of the individual's self-esteem and self assurance. The first is in the height proportions and the second is in the width proportions. No matter how small, if a signature is in proportion in both height and width, self confidence is present. If the width proportions are good, but the height is not, the person is assured when dealing with his peers on familiar ground (e.g., he has previously had success experiences in the same or similar types of situations). If the height proportions are good but the width proportions are not, the individual feels capable and will attempt the unfamiliar but his emotional feelings in connection with his peer relationships are not all that great for some reason.

If the signature is large in both height and width there is, of course, self assurance present but this person needs to work in the public eye, be noticed, receive recognition and perhaps approbation. Show people, politicians and public relations people are good examples. How well they do their job is determined through congruency with text and with what determinations are made from the text.

If the given name is emphasized, no matter what style of writing it is in and no matter what the size, it indicates the individual relies on himself - independence - more than on what his family can do for him, has done for him, stands for in prestige or importance or traditionally. When this emphasis appears in the name of a married woman, it implies that she retains her individuality and independence and that being married does not satisfy all her needs - she has ego needs that personal recognition or productivity has to satisfy.

If the given name is de-emphasized, no matter what the style of writing it is in, the writer lacks self-esteem, may be self-conscious, may prefer to operate "behind the scenes" and may be dependent. Emphasis is placed upon the family name which indicates that the individual feels reward or satisfaction through the family and what the family stands for. In the case of a married woman, it may be very important to her to be married and to have the security marriage represents. In my experience, this is further affirmed when a married woman prefaces her signature with the word "Mrs." and is increased still further when she uses "Mrs. John Doe" instead of "Mrs. Mary Doe" in any situation except the very formal where etiquette dictates otherwise.

If the initial of the given name is taller than the family name, this indicates egotism and a tendency to feel more important than other members of the family. This is true even when the sig-

nature is otherwise congruent, i.e., both names are handled the same way in spacing, size, style, etc. If the initial is taller and any other portions of the given name also add emphasis over the family name, conflict feelings are present. In the case of a married woman, the egotism may get in the way of compatibility. She won't be able to take a subservient position to her husband, although she may be dependent upon him in many other respects. It may show in excessive sensitiveness to criticism and inner feelings of hostility.

If the initial of the family name is much taller than the initial of the given name, although the rest of the signature is congruent, it indicates that the individual is placing some increased importance or emphasis on the name itself and what it stands for. In some cases, a married woman feels more important because of the family she married into and she will illustrate it this way. It does not lessen the importance or individuality of the writer himself (or herself) but shows some area of dependency on the family, where recognition, prestige, tradition or something else commendable is attached.

Other ways a writer has of achieving the same elevation of the importance of the family or family attachments while retaining his own individuality (or re-inforcing dependency needs) are:

1. to use step-up alignment so the family name is higher
2. use a rising baseline so the family name is elevated
3. place more attention on the initial of the family name
4. give more width between letters to the family name
5. ending stroke on the family name rises above MZ apex
6. a partial underline is used, primarily beneath the family name

Some individuals feel the need to protect their own egos or the name of the family (and what it stands for). Self protection can be seen when a capital letter is so broad in the upper zone portion that it overhangs some of the middle zone letters. Another means is used when a t-crossing is made longer than its stem and thereby creates an "umbrella" effect that protects the name. Sometimes the ending stroke on a name circles back over the whole name or a portion of it. This is used frequently to return to a t-stem and cross it, but some writers use the stroke merely as a circular stroke.

Some individuals are unhappy with themselves and/or with their family and what it stands for. They may use a t-crossing, an ending stroke or some inappropriate stroke to cross through their entire signature or one of the names. Since the given name is related to the writer's ego, and his family name is related to his feelings about the family and what it stands for, crossing off either can symbolically be interpreted in the context of the portion of the name crossed off. The whole name (signature) is also another, additional measure of the writer's self confidence. It shows how healthy his self confidence is, how well integrated he actually is between his own self importance and that of the family's position and obligations in relation to him. Someone who crosses out his entire signature or significant parts of both names wants to be a different person, have a different life, re-make himself or commit suicide. It is important to evaluate these findings in with characteristic from the text.

Other individuals don't want to be understood (and may not understand themselves, either). They reflect this by the total ambiguity of their full signature. Ambiguity may be accomplished by circling and loops that are so full, so overlapping that nothing particular of the signature can be deciphered. They want to remain either complex or obscure to their peers or to the public in general. It also may be an affectation, more than a facade. Some people give rationalizations for the development of such signatures. They say it is consciously affected in order to prevent forgery. It is consciously done - or was until it became a habit - but the genuine reason lies in their desire to be secretive about themselves, enigmas to others, not understood by others. The individual who does not have those character traits is unable to make fluent, extremely illegible circles and loops for his name.

The type of ambiguity discussed above is different from the ambiguity of a letter or two in the context of the signature which has the result of crippling that particular portion of the name, either given or family name. In this case, some portion of the name is legible, but it cannot be read at all or may only be read with great difficulty because critical letters in the name are ambiguous. If it is the given name that is affected, the crippling is done to the ego. If it is the family name, there is something about the family that the individual resents or feels hurt or embarrassed by. If crippling occurs in both names, the self confidence and self assurance is severely under-mined.

Another type of ambiguity is used by a writer who strings out his name in such a way that it resembles a shapeless line. This may be done to either portion of the name, given or family, or to both, or may appear in the latter half of either or both names. It implies the desire of the writer to conceal personal things about himself, just as the writer who writes a complexity of loops and circles, but the writer may conceal with a facade of simplicity, straightforwardness and/or modesty. If, however, in the course of a brief period of time (within a period of a year but generally far less) the signature changes from legible to illegible or from one size to a noticeably smaller size (either horizontally or vertically), or both, which intensifies the interpretation, it indicates that something traumatic has happened or is happening in the individual's life. It may be impending illness, but is more likely to be psychological. The individual feels under great stress, his ego is severely attacked and he feels worthless. There will be little stamina left to recover from any accident or illness which may coincidentally occur. There is also the possibility that, since mental health and physical health are intertwined, reduced mental health may leave the individual susceptible to physical ill health.

In relation to many definitions of the symbolic meanings of the given and family names, I referred to how a married woman feels about her status in relation to the name of her husband whose family name she assumed. For a man, it is slightly different. His relationship to his parental or nuclear family is indicated but, also indicated in the family name is how well he accepts his cultural role in

society. For best interpretation, the age of the writer and the contemporary views of society must be considered as well as careful evaluation with findings from the text. For a man, family name is also cultural role. He upholds or subordinates traditional roles. A man, also, never changes his family name unless it is his will to do so. It therefore has a very permanent and important connection with the total view of his self esteem and self assurance as well as any feelings of individuality or self-reliance that he may have.

Paraphs, or underlines, beneath a signature are important from the viewpoint of whether or not they are a crutch, used by an individual with poor self image who wishes to appear more than he feels. If they are a crutch, the signature itself will have more negative connotations than positive. If the underline is used for emphasis of self reliance, the individual's signature will indicate both self esteem and self assurance. The underline adds conviction and drive. If, on the other hand, the underline appears beneath only one of the signatures or is a partial underline, the positive effect is weakened. If the underline is a weak, fading line that turns down on the right margin, the effect is more negative to the writer to use it than if he used nothing at all. A weak foundation cannot support anything. If, in addition, the weak structure sags, it symbolically means the writer weakens under stress, discourages easily and/or may be chronically negative in outlook.

If the underline is a strong, straight and/or ascending line, it slants upwards, optimism and conviction is indicated, provided the signature itself is positive. In other words, like negatives in photography, what isn't in the original cannot be put into the photograph.

If the underline is highly over-worked or ornamented in the style that permen used to employ at the turn of this century, ostentation is indicated. The individual would have to have a preponderance of positive qualities to balance the over-bearing, obtrusive and egocentric qualities indicated by the underlines. The underlines have more of a weakening effect on the individual's positive qualities than those same qualities have in reverse action on the negative interpretation of the underlines.

Finally, when initials are used, instead of a name for the position in the signature of the given name, they have the effect of ambiguity, personal secrecy, poor or weakened self image and decrease the effect of the signature as a key to the person's feelings of inferiority, self respect or superiority. One exception may be considered here. If the individual has adopted this type of signature for business purposes, it is one of the acoutrements of his position for some reason or purpose. It will still reflect his business status or behavior, but will have less effect on an evaluation of his self-image. Whenever possible, the analyst who wants to increase his accuracy in interpreting signatures should question the writer's reasons for using initials.


If a writer uses a first initial, full middle name, or a full given name and a middle initial, the interpretation is not the same.

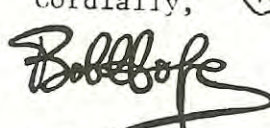
The given name is considered as first and middle name. The family name is the last name. Frequently someone who dislikes his first name will use its initial and spell out the whole middle name. The reverse is not necessarily true. At times, a father or son will use an initial for the name of the other person if both have the same name. Many sons prefer to do this rather than to use "Jr." However, if junior is used, it is considered as part of the family name.

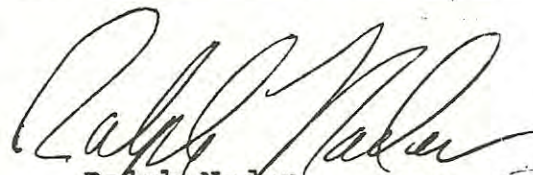
Some married women prefer to drop their middle name and use the name or initial of their maiden name in their signatures. The use of either is considered for the interpretation of the given name following the principles already discussed. In addition, the use of the full maiden name indicates the individual has not fully accepted the role of married woman for some reason. It may be lack of role satisfaction or something negative in the married state or a number of other possibilities which are more likely to come out through discussion than through analysis of writing. One caution is necessary in interpretation and this is the cultural one. In some cultures it is acceptable practice for the married woman to retain her maiden name as part of her name and signature. In some professions, it is more logical for the married woman to retain either her maiden name only and use it in conjunction with her married name formally for recognition, or to use both names in her new signature for purposes of recognition and carrying on her identity.

In summary, a signature is an identity. It is legally binding on documents, whether or not the individual is ever seen. It has the power to pass on control, orders, heritage, assignments, establish rights, recognition, identity. How the individual treats this very personal part of himself in communication to the rest of the world is an important part of his self image.

When analyzing signatures, observe how the writer has handled the space available to write in or to write on in relation to how well (or poorly) he adjusts the size of his signature. Flexible individuals adjust easily and unconsciously; those who are less adaptable often do not alter their size. The two signatures of Bob Hope that appear in this lecture (one below and the other on page 8) illustrate this principle. The signature below was placed at the end of a letter; the second one was an autograph on the frontspiece of his book, where the entire page was available.

⁹⁰
1972
Ralph Nader

Cordially,⁹¹

Bob Hope


Ralph Nader 1975⁹²

When collecting samples of signatures, and if it is possible, it is wise to obtain samples at different times over the years. For example, the two signatures of Ralph Nader were taken 3-4 years apart, from letters he had signed. The 1975 signature indicates a far healthier attitude both physically and mentally.

Disney's signature indicates eccentricity as well as talent through the unusual attention to the upper zone, including putting the mid-

dle zone component of the "y" into the upper zone. His name is totally illegible, meaning his ego is satisfied through his artistic achievements. The underline is overdone, but congruent with the rest of his signature style.

94

Very truly yours,

Bob Hope's signature is primarily ambiguous in his last name. All of the looping shows imagination applied to the area of reality. The continuous line, without interruption throughout his signature indicates energy, keen mind, very active, dependent on people for ego satisfaction.

This is an attorney's writing, indicating over-weening egotism and mental activity with little relation to reality. He permitted himself to be bought off in an important inheritance case. Is functionally productive, seen in the clear middle zone.

Gene Minshall
Continuity Director
KSL Radio
Salt Lake City, Utah

Yours very truly,

Richard J. Maughan Attorney

Both of these writers have active imagination in common with the above writers. In addition, they both have unusual applications of the figure-eight in their last names. Both imply quick thinking, facile witted individuals. Notice that in both cases, the given name has an align-

ment that is slightly downslanted. The last name has an increasing upslanted alignment. The sum of the alignment for the given and family names for both men is that it is a garlanded alignment. This is to be discussed thoroughly in the next section of the course. In brief, it indicates that they get into some things with doubts about the advisability, or with reluctance as to their ability to do it, but they go ahead anyway and become more enthusiastic as they go. In regard to the signatures, it also has the value of elevating the family name. Notice the elevation of family names in Nixon's, Fords and Proxmire's signatures that follow.

Richard Nixon (98)

Jimmy Ford
Gerard R. Ford (99)

The signature of President Nixon was written before he suffered the stress of facing the scandal that took place while he was in office.

Sincerely,

William Proxmire (100)
William Proxmire, U.S.S.

(101)
My heartfelt thanks for your wonderful support. Kindest personal regards -
Henry C. Wallace 1974

Notice that both Nixon and President Ford show poor self images and both aspire to intellectual heights to obtain ego-satisfaction. Because there is a lower zone in Pres. Ford's name, we also know he is a hard worker. Both show anxiety in interpersonal relationships.

Ronald Reagan (102)
RONALD REAGAN

Fred Kennedy (103)

In the case of Proxmire, judging by signatures alone, he would thoroughly enjoy the importance and recognition of the presidency. Judging by the height of his letters, his self esteem is well developed although, judging from their widths he is not as assured and at ease working with his peers as when he is in a leadership position. Contrasted with Pres. Ford, he wants to take

Nelson A. Rockefeller
NELSON A. ROCKEFELLER (104)

(A signature as large as this, appearing in a newspaper, may be enlarged and should not be analyzed for primary size although ratios are safe.)

up a lot of space, personally. If you examine the signature closely, you will find an enigma here. He elevates the family name while at the same time he crosses part of it out, twice. The first name is easily read, indicating self esteem and reliance on himself; the family name is illegible without knowing who it is. In President Ford's signature, the family name is fairly easy to decipher, but the given name is totally illegible indicating a sense of inferiority.

When you find that the writing of a person active in the public eye indicates poor self image, it is very important that you evaluate the image that the signature gives you with every bit of evidence that you can collect concerning ways in which the individual obtains ego-satisfaction. In Walt Disney's case, he received it by application of his fantasy life in a productive, socially acceptable manner. When you examine signatures that indicate anxiety in close inter-personal relationships and a general poor self identity, recognize that the ego must be fed somewhere. It has to be fed from outside the self, the individual can't give it to himself. Proxmire can, Nixon and Ford can't. Sometimes such writers aspire to great heights for recognition or aspire to a high level of productivity or some outstanding effort. The signature may not always tell what it is that is fulfilling for that writer, but it does indicate dependency on others for reinforcement of their self worth.

George Wallace and Ronald Reagan, also, do not present signatures of the typical, aspiring politician who wants to be constantly in the public eye. Reagan is more retiring, judging by the simplicity of his signature, left tending slant and small size. The only giveaway are the two over-sized capitals indicating egocentricity, particularly when the capital in the first name is larger than the capital of the family name. Wallace's signature, though legible, indicates a crippling in the given name. In comparison, "Wallace" is more legible. Since this was written after the shooting which crippled him, it may be a result of being paralyzed by an assailant. The rest of his writing is filled with anxiety which may indicate it is related to long-standing poor interpersonal relationships and feelings of ill-at-ease or anxiety. In such even, the unfortunate incident must have added to his burden. His aspirations to political office may be due to a need to fulfill himself (ego-satisfaction) which he cannot obtain in any other way.

It should never be over-looked, that people often do best what to someone else seems unusual for them, with their particular personality, to be doing. The reason is that their opportunities in life placed them in such positions, gave them experience in work that others (especially analysts) think ought to be difficult for them or completely out of their line. It is a research-proven fact that people live up to the job they are given until they reach their own level of incompetency (the Peter Principle).

Ted Kennedy's writing at first looks strong until you examine it carefully. The first name is crippled; the "K" hangs protectively over part of the family name; letters in the family name become more ambiguous as they go along; the lower zone form has a line cross it out.

People have many ways of negating themselves. Some make their identities totally ambiguous, using different types of representative complex movements that have no relationship to their name. Some use a scrawl. Some cross themselves out. The different means that people can accomplish these same ends are almost as many as there are those who feel the need to do it.

God bless you,

Rev. Ralph E. Baney

(105)

WARNER SLIMWEAR-LINGERIE

John Calhoun

June 1, 1965

(106)

AMBIGUITY

For some types of ambiguity, there is not even a semblance of the two names in a signature. Rev. Baney's is an example. Others, such as "John" in the John Calhoun signature, can be deciphered.

Sincerely yours,

Rabbi Jacob J. Hecht

(107)

Cordially,

D. H. Cashwell
President

(108)

CROSS OUTS

Note the myriad ways in which people who desire to cross out their signatures, or one of the names of the signature, manage to do so. It does not have to be done with a normal letter component that lends itself to cross outs (such as the t-crossbar). Nothing in Cashwell's name lends itself naturally to the crossout that he achieves. Note how Rabbi Hecht manages to effectually cross out part of

Very truly yours,

COOK & FRANKE S.C.

Robert F. Johnson

(109)

Sincerely,

J. E. Batchelder
Assistant Vice President
Underwriting & Renewal Services

(110)

his family name by artistic swirls and how neatly he avoids finishing Jacob which he represents with only a "Ja". Johnson provides another good example. In contrast, Batchelder scribbles his through.

(111)

(112)

Pres. Nixon during the increasing stress of the scandal in office dur-

ing (1) early 1974 and (2) a week prior to his resignation. Note the self protective stroke in (1); note the crossout and worthlessness in (2). For him, for the time being, at least, life had lost its value.

Patricia C. Hearst (113)

This is a large newspaper reproduction of Patty Hearst's signature, perhaps an enlargement over her normal size. Note how slowly it is executed. Note, particularly, that many letters are not really connected to one another - only give the semblance of being connected. Examine "r" to "i", "i" to "c", "i" to "a" in Patricia, and in Hearst, note the disconnection between the "e" and the "a". A writer who wrote fast would write more spontaneously than that. Other evidence is also present which you will study later in the course. Note the baseline alignment of the name. It is arcaded so that the family name is below the given name, and the whole signature is turned down at the end. This is not the writing of a mentally healthy and physically healthy 21 year old. The disconnections indicate someone who is not at ease within herself. The height ratios (it is unsafe to examine the large primary size because of the possibility of enlargement) indicate that she is living entirely in the area of ego fulfillment, day to day living, perhaps survival in her case. There is no lower zone to learn anything from. The middle initial is placed closer to the given name and is actually considered part of the given name, but the closeness sets the family name further off by itself. It is derogated in several ways: the "H" is smaller in height than the "P"; it is tilted so that it is off balance; it contains a gap in the spacing between letters and it is lower than the given name.

Gunn McKay (114)
Gunn McKay
Member of Congress

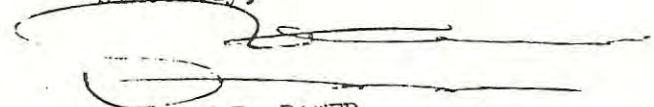
The given name in the signature above is connected to family name initial through the device of carrying the ending stroke over to and beneath it. This effectually ties the identity of the writer to his heritage from his family and, since he is male, to his social role. His treatment of his given name indicates self esteem, self reliance. There is conflict in the treatment of the two names several times.

George (115) *Wissbrun* (116)

These two signatures registers the extremes of willingness of the individual to take up space in life. George writes spontaneously, wide, broad, and fast. Wissbrun emphasizes tightness, takes as little room as possible but reaches far down into the lower zone to take up a lot of space. There is no ostensible reason for the letter form to extend

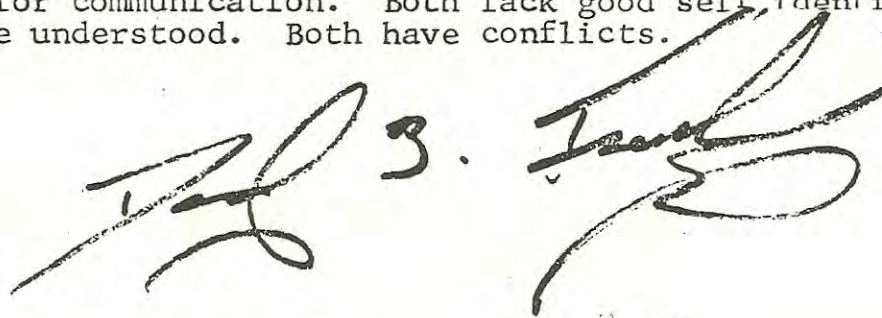
into the lower zone at all, so the inappropriateness of it makes it much more important. In George's signature, he has used step up baseline alignment to increasingly elevate his family name. At the same time, he decreases the letter heights vertically, leaving his given name the tallest. This registers self esteem and the elevating position of the family is making it important in some small way. When he was asked about it, he said he had put a hyphen in the middle of the name to make it important. In Greece, Papadakis is as common as Smith. Here, in Utah, his is the only family with a hyphen, which gives his name some distinction.

The Wissbrun signature registers an extreme degree of tension and anxiety in interpersonal relationships. The only release is through an excess of nervous energy which will have the effect of keeping this individual wound up tight to the breaking point.

Sincerely,

ALAN F. PATER

(117)


This person did, in a single written signature, what it took the person below two signatures written with two pens to achieve. Neither of the two people's signatures can be read. Complexity and total lack of desire for communication. Both lack good self identity, neither wants to be understood. Both have conflicts.

 (118)

 (119)

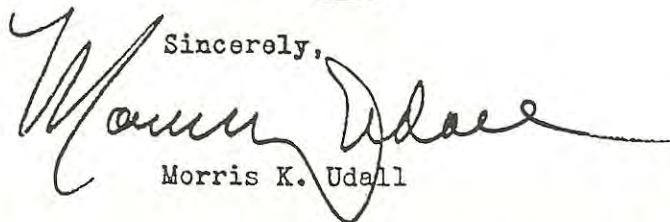
(120)

Sincerely,


Phyllis Moore

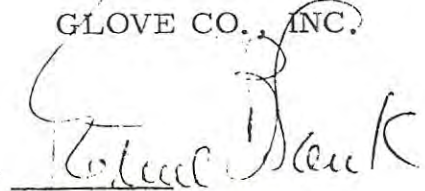
(121)

Sincerely,


Morris K. Udall

(122)

GLOVE CO., INC.

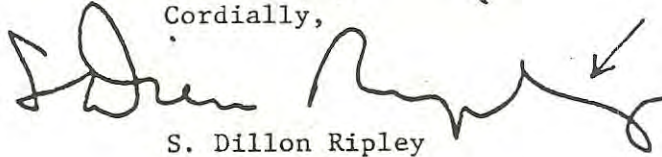

Manager

Ethel Blank

Would you be able to read these signatures without the typewritten names? At first glance, they appear as though you could. Note that Phyllis poses the problem in the Moore signature, but both names in the others are difficult.

Some shapeless, "thready" writing weaves around, vacillating, adding that quality to the connotations already discussed. An example appears below.

Cordially,

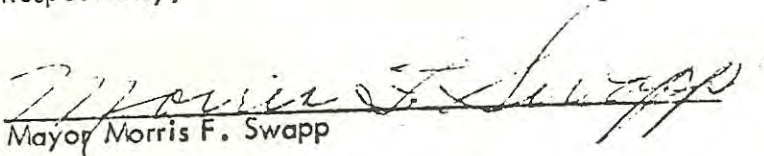


S. Dillon Ripley
Secretary
SMITHSONIAN INSTITUTION

(123)

Bountiful, Utah is a strongly Mormon city and its leadership are and have been ultra-conservative. The Mayor's job is a part time one; each of the Mayors while I've lived here have held other jobs. Both

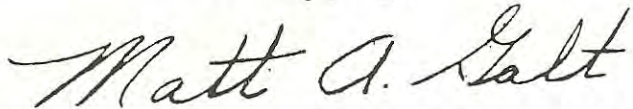
Respectfully,



Mayor Morris F. Swapp

(124)

are in education. Not surprisingly, their signatures show strong conventionalism. In both cases, they "toe the line" adhere very



(125)

Former Mayor of Bountiful

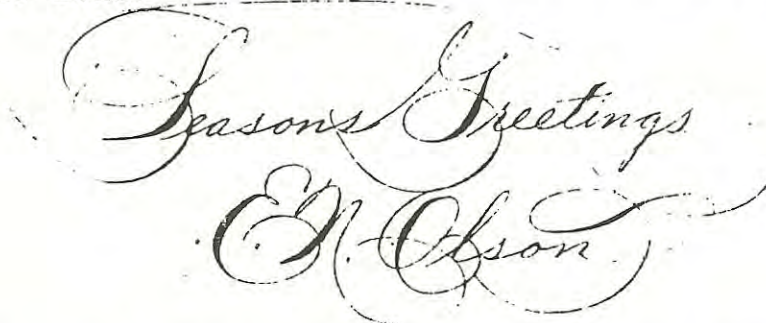
strictly to the baseline. Besides conventionalism, many other qualities are present that have already been discussed in this lecture.



Barbara D. Jamieson
Inquiry Department

(126)

The above signature is a crude attempt at an artistic signature, but falls short and appears ostentatious. Note the frequent eccentric forms, the gap in the family name, the middle zone letter "e" displaced to the upper zone.



(127)

The above signature is a penman's controlled, yet artistic form. It is easily legible regardless of the flourishes.

(128)

(132)

(137)

Sincerely, 1972

Sincerely,

Sincerely yours,
Ralph Nader
Ralph Nader
1972

Richard Nixon

Edward M. Kennedy
Edward M. Kennedy

(133)
George Romney

(138)
Princl. Kennedy,
Ethel Kennedy

In Sisterhood, (129)

Sincerely,

Patricia Carbine
Patricia Carbine
Publisher,
Ms. Magazine

(134)
Herbert Hoover
Herbert Hoover

Faithfully yours,
(A. Einstein) (135)

(139)
J. Edgar Hoover
J. Edgar Hoover, U.S.S.

Sincerely, (130)

A. Einstein

John R. Brown III

John R. Brown III
Staff Assistant
to the President

In Sisterhood, (136)

Gloria Steinem
Gloria Steinem

(140)
Sincerely,
Paul F. Thompson
Governor

Carl Albert
CARL ALBERT
SPEAKER
U.S. HOUSE OF REPRESENTATIVES
(131)

Mike Mansfield
MIKE MANSFIELD
MAJORITY LEADER
U.S. SENATE
(141)

Patricia Carbine has used a step-up baseline alignment in conjunction with a downslanted word alignment. In effect, she has elevated her family name, but the height of her capital "P" denies the elevation. She is still going to be most important in the family. She lifted the alignment on one hand and on the other caused it to descend, indicating conflict. She has a very large space between the two names of her signature, in contrast to Proxmire's closeness and to Schweitzer's, Humphrey's, Johnson's, Mead's, Clyde's and Peal's connected names (on page 16.) She has put a distance between herself and her family and what it stands for.

John R. Brown, III has done the same thing. He elevated the family name and derogated it at the same time by his over-large capital "J". His spacing separates the family name further than the spacing between given name and middle initial.

Gloria Steinem, on the other hand, has elevated the family name by vertical height and by the straight alignment. In contrast, Gloria is smaller and the alignment is slanted downward. Both names carry a "crippling" effect (looking at the "a" in Gloria and the "m" in Steinem. This decreases or weakens the self esteem that is illustrated in the

fairly tall middle zone height. The self esteem is also weakened by low self assurance, seen in the very narrow form of "o" in Gloria and the elaborated form of the "a" in Gloria, which serves to squeeze out most of the available width of the letter. Still, this signature indicates, as a whole, a more integrated self concept than either the Carbine signature or the Proxmire signature.

Both the Edward and Ethel Kennedy signatures show a crippling effect in the given names. His appears to be the word "church" if the capital "E" (made in the form of an "S") is ignored. Hers appears to be an unintelligible word due to the capital "E" made as a "P". Both of them separate the middle zone, the area of reality, from the lower zone, the area of physical activity and close personal relationships, by segmenting the "y". President John F. Kennedy did this also.

The small size of Einstein's signature indicates the ability to concentrate intensively. He is willing to work alone or in the background and is not oriented toward active social or interpersonal relationships. This, however, is not due to any lack of self assurance when dealing with others on a peer relationship basis as far as we can tell from this writing. The widths of the letters are as broad as they are high. His text may tell a different story. This is a suspicion because he has crippled his family name by the ambiguous capital "E". It may be modesty or poor self image that has caused him to only use an initial for Albert.

Margaret Mead

(142)

Margaret Mead

Wilma Scott Heide

(148)

WILMA SCOTT HEIDE, President
National Organization for Women

J. Paul Getty

(154)

Sincerely,

Albert Schweitzer

(143)

Hubert H. Humphrey

(149)

Hubert H. Humphrey

Henry S. Reuss

Henry S. Reuss
Member of Congress

(155)

Jean M. Westwood

(144)

Mrs. Jean M. Westwood

I have some very important news for you and your family.

Barry Goldwater

(150)

J.F.K.

(145)

Art Linkletter

(151)

Lyndon B. Johnson

(156)

Your partner always,

Congressman

Oral Roberts

(146)

John M. Ashbrook

(152)

George D. Clyde
Governor

(153)

Dwight D. Eisenhower

(157)

God bless you!

Sincerely yours,

(158)

W. Woodruff Forrest Seal

George M. X

The small size of Margaret Mead's writing, like Einstein's, is self-effacing, but hers is in the extreme. The lack of definition to the middle zone height, due to the thready, shapeless writing, shows extreme anxiety feelings, great discomfort in interpersonal relationships. Remember when interpreting such styles of writing in signatures that they may be due to the haste of writing numbers of signatures in a day and not a good representation of the individual where there is no text available for confirmation. It is safe to recognize that the individual is tense, uncomfortable in interpersonal relationships and has an inadequate self image. To put all of the weight of a finding on the evidence in the signature would be unsafe. However, without a doubt, those whose personality attributes drive them to take up a lot of space in life and aspire to recognition and notice would literally be unable to write so miniscule a signature. Compare Oral Roberts' signature with Margaret Mead's for vertical height. Compare George D. Clyde's signature and Margaret Mead's for width. They both have the same number of letters in their names. They have both written illegible signatures.

It is unusual for a middle initial or middle name to be made taller than either the given or family names, but J. Paul Getty has done so. For some reason, he has further derogated his first name by using only an initial. Below are other means that people use to accomplish a lessening of their own self worth and self image.

(159)
Irwin Shaw
Irwin Shaw

Sincerely, (161)
Wallace Bennett
Wallace Bennett

(163)
A. J. Ford
A. J. Ford

Sincerely,
T. E. McCarthy (160)
T. E. McCarthy

Sincerely, (162)
Mantovani

Sincerely yours, (164)
Mr. E. L. Waters

And ways in which people are able to lessen the influence of their family and/or social roles, and increase their own self reliance.

(165)
William Shakespeare
Shakespeare

(166)
Vernon C. Young

(167)
Jerry Lewis

William Shakespeare, by severely crippling his family name through extreme segmentation.

Vernon Young, by enlarging his first name. All is legible, giving him a healthy self image.

Jerry Lewis, by crippling his family name through ambiguity

The need for self protection from threat, ridicule or criticism of the individual himself personally (the ego) is illustrated many ways.

Very truly yours, (168)
William E. Harrison
Attorney General

Sincerely, (169)
Frank E. Moss
Frank E. Moss
United States Senate

As you have observed, finding a signature that illustrates a very good self esteem, self assurance, good self image in general, good relationship with the family, little to no insecurity and well integrated, healthy feelings of self worth or self identity, is difficult. Such a signature has to be in good proportion with relation to its heights of all letters in all component parts of the signature. It must have widths proportionate to heights. There must be reasonably good spacing arrangement, legible letter forms, little to no serious ambiguity. The writing needs to be spontaneously written which illustrates healthy mind-body coordination. The ductus, or line of ink, needs to be relatively firm. Alignment for the whole signature needs to be in accord. Few people have all of this.

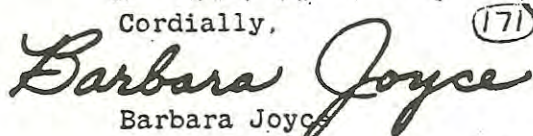
Among those in the specimens already discussed who come close to this ideal are: Matt A. Galt (page 14), but his over-control seriously weakens what might otherwise be very good self identity. E.N. Olson's signature, on the same page, is so spontaneously and artistically written as well as remaining clear and legible that, regardless of the fact he used only initials to represent his given name, the signature displays a healthy self identity. Carl Albert's signature, if the indications of something wrong with his physical health are over-looked, indicates a healthy self concept. (self-concept and self identity are synonymous.) Albert's signature is on page 15. John M. Ashbrook's signature, page 16, indicates a fairly good self concept. Albert Schweitzer's signature, same page, also indicates quite a good self concept. In his last name there occurs a very minor "crippling" effect where he runs the "t" into the "z", but this can be discounted in part due to the style and execution of the whole name. Mantovani's signature, page 17, so spontaneously and artistically written provides a good illustration of what probably is at least a good self concept. The oval letters, which refer in particular to the personal ego feelings are all almost as wide as they are high, and they show clarity of formation. One of them is corrected to improve its form, and the underline returns to the left, staying on the left, indicating some minor feeling of insecurity. The sum of the entire last name, however, is almost totally positive, which indicates a good self identity. The controlled alignment that is found is not noticed at first and therefore does not register over-control.

Other signatures that also indicate good balance, little evidence of insecurity, equal emphasis on the component parts of the entire name, good, but not rigid alignment, spontaneous writing, etc. are shown below. This closes the lecture on signatures. How is yours?

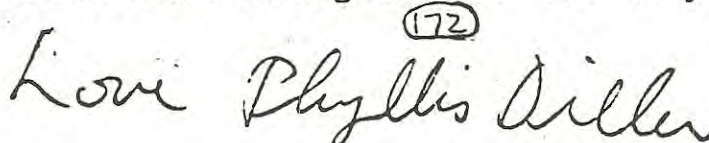
(170)


President, Valley Music Hall

Cordially,

(171)


Barbara Joyce
 for Better Homes and Gardens

(172)


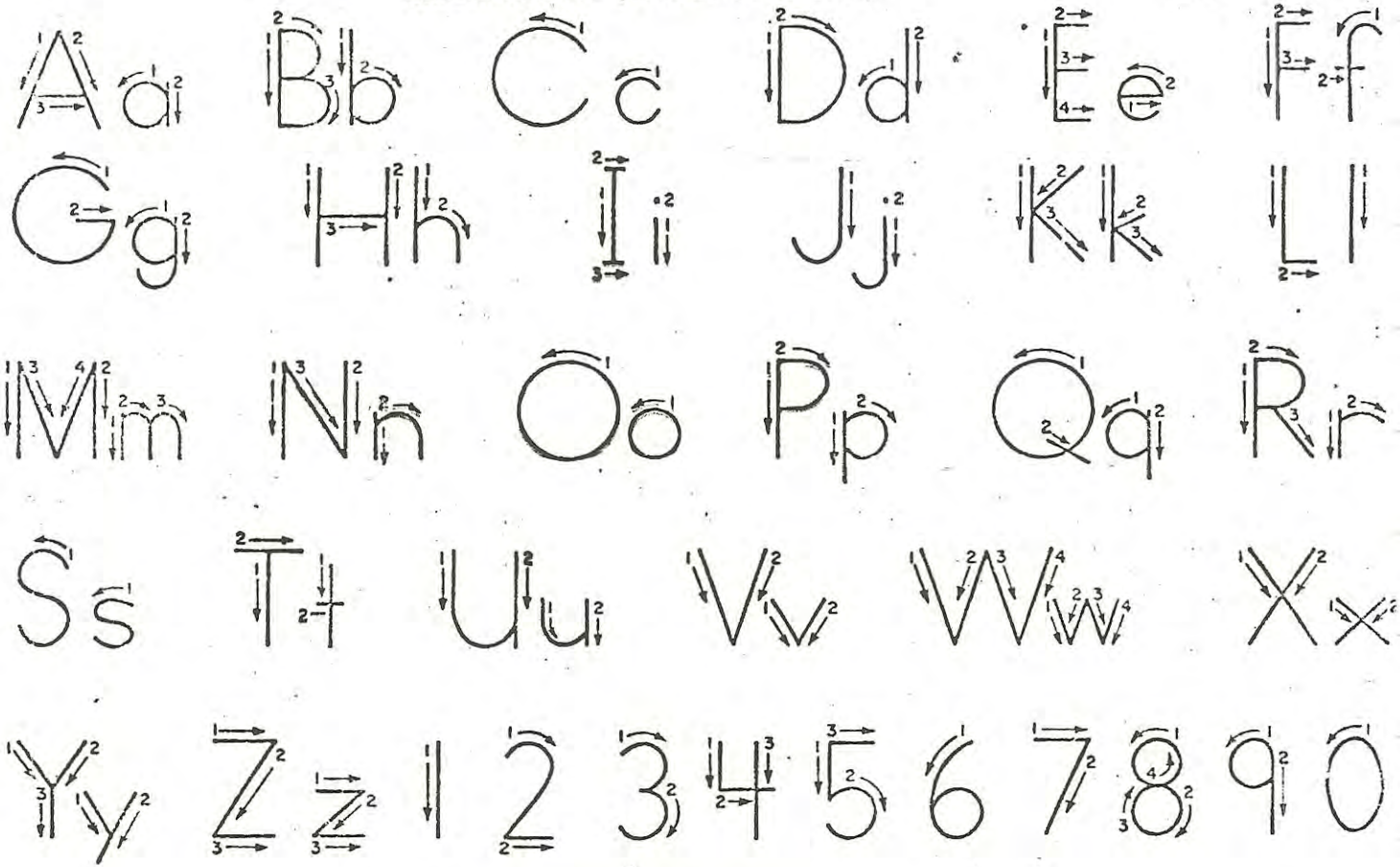
Sincerely,

(173)


A. B. Baker, M. D.

President, Epilepsy Foundation

A P P E N D I X



DOTTED LINES INDICATE ESSENTIAL FORM



SPENCERIAN WRITING

This style of writing was popular from 1870 to the 1900's when it was gradually replaced by the Palmer method which was supposed to be faster and therefore better oriented to industry's needs.

The following analysis of Spencerian writing was prepared by Major F.O. Anderson and was provided to me by Bertha Brown, past president, American Association of Handwriting Analysts, Inc.

Main Slant 52° 30' Connective Slant.
Correct Slant for letters.

PRINCIPLES.

1 2 3 4 5 6 7
STRAIGHT LINE. RIGHT CURVE. LEFT CURVE. LOOP. DIRECT OVAL. REVERSED OVAL. CAPITAL STEM.

How the simple lines or Principles
join to form letters and their parts.

How the simple lines or Principles join to form letters and their parts.

SHORT LETTERS.

SEMI EXTENDED LETTERS.

LOOP OR EXTENDED LETTERS.

DIRECT OVAL CAPITALS.

REVERSED OVAL CAPITALS.

CAP STEM LETTERS.

LETTERS FROM CAPITAL STEM.

SPACES BETWEEN LETTERS AND WORDS.

SPACES BETWEEN LETTERS AND WORDS.

The unit for measuring both the heights and widths of letters and figures, in medium standard writing, is the vertical height of small i, and is called a space. On the above chart the dotted horizontal straight lines show the spaces in height, and the oblique straight lines the spaces in width, of each letter, exhibiting clearly their proportions. Thus, we see at a glance that small i is one space in height, and three spaces in width. The small figures about the letters designate the Principles of which they are composed. The u, for example, is composed of principles 2, 1, 2, 1, 2. In respect to the diagram showing the three ways in which Principles join to form letters, it should be noted that, in small letters, the union is always by angle or short turn, while in capitals the broad turn prevails with occasional short turns and angles.

SPENCERIAN

A B C D E F G H I J K L M
 N O P Q R S T U V W X Y Z
 1 2 3 4 5 abcdefghijklmnopqrstuvwxyz 6 7 8 9 0

ZANER-BLOSER

A B C D E F G H I J K L M
 N O P Q R S T U V W X Y Z
 a b c d e f g h i j k l m n o p
 q r s t u v w x y z 1 2 3 4 5 6 7 8 9 0

When analyzing either handwriting or printing, it is the departures from the school model that are significant for interpretation of personality characteristics that are something other than conventional. Where a writing conforms to the school model, the interpretation is automatically that of a conventional, conforming personality in some degree. The degree depends on how much conformity to the school model is found, where it is located and how it fits in with the balance of the writing characteristics found.

PALMER

Aa Bb Cc Dd Ee Ff
 Gg Hh Ii Jj Kk Ll
 Mm Nn Oo Pp Qq Rr
 Ss Tt Uu Vv Ww
 Xx Yy 1 2 3 4 5 6 7 8 9 0

PALMER WRITING

When we give reports we,

1. Tell interesting facts.
2. Keep to our subject.
3. Tell events in order.
4. Speak clearly.

(175)

ZANER-BLOSER WRITING

I pledge allegiance to the flag of the United States of America and to the republic for which it stands - one nation under God, indivisible, with liberty and justice for all.

(176)

Q U I Z Z E S

QUIZ I

The beginning steps in learning to use the theories learned in handwriting analysis are to apply them accurately. There are many ways to approach this, one of them being to analyze actual writings. However, at first, this approach can be overwhelming to some students. I have found a rather fun way to make the first attempts at analysis is to analyze drawings according to graphological principles. Since people get carried away with accuracy in drawing human figures, I have chosen drawings of pigs to use for analyses. Analyze the pigs that follow according to this outline as much as possible:

1. Where did the person place the pig on the paper? Use three folds in the paper to learn whether it is placed primarily in the upper, middle or lower zone. Use another three folds (vertical, this time) to determine whether the pig was placed closest to the left margin, center or right margin.
2. How large in proportion to the size of the paper did the person draw the pig? This corresponds to overall size of writing.
3. How firmly were the lines drawn? Or were they short, light, feathery lines? These latter indicate anxiety.
4. Did the person make a minimum of disconnections or a great many? A minimum corresponds to what has to be done to complete the pig (like completing a "t" with a crossing and disconnecting the word at that position to do so.) Many disconnections, if weakly done, indicate fear, inhibition, indecision. If firmly done, the person thinks clearly. Enables clear thinking by keeping his different interests separated into clear cut categories or separately "labeled" and attended to one thing at a time. This difference can be seen in the difference between cursive and facilely executed printing.
5. Which direction is the pig facing: left, right, front, rear? A pig facing the left is hanging onto the familiar which is a sign that security is important. A pig facing the right is looking towards goals/future. A pig facing the front is open, straightforward, willing to face people. A pig facing the rear doesn't want to be understood nor to open himself up to others.
6. Which way is he walking or moving? Is it definite or slight? This corresponds to the direction of left or right tending movement in writing. Does he brace himself? Does he appear to have stopped suddenly? Defensiveness or sudden fear that things won't work out. Are his feet on firm footing so that he has a solid foundation? Is there conflict in different ways of handling the four feet? This corresponds to conflict in handling the letter forms differently. Are the feet too small or too large for the body?
7. Details correspond to good observation. Overdone, they can be used to seek attention. How are the details? At times (as in the use of the cob of corn in the drawing of a pig) the added details can be symbolically meaningful. With food, it can indicate that earlier the person found basic securities very important because they could not be taken for granted. Sometimes a tail is extended which places the pig in the upper zone where it wouldn't have been otherwise (like too high an ending on a word). Some-

- times it causes the pig to be closer to the right margin than it would otherwise be, indicating a reaching toward goals, future or progressiveness.
8. Does the pig look weak or strong? Certain or uncertain? Firm (secure) or infirm (insecure)?
 9. How heavy is the overall pressure? Is it too light (anxiety) or too heavy (tension)? Are there spots of pressure corresponding to arhythmical pressure in writing? Are there specific areas on the pig where pressure or retracing is applied, indicating preoccupation in that area?
 10. Has the person denied the pig a body? The body indicates acceptance of all the facets of life and living, particularly sexual.
 11. Does the pig seem to be made primarily of angular or curvilinear strokes? These correspond to the meanings for garland vs. angular writers.
 12. What expression has the person given to the pig's face? Happy, sad, pugnacious, withdrawn, etc. Does the pig have eyes to see with or are they hollow so he can't see or are they closed so he refuses to see?

Try analyzing the pigs that follow from these viewpoints. Answer as many of these guiding questions as apply to each drawing. Make full use of your graphological principles. The only thing you should avoid is trying to divide the pig itself into upper, middle and lower zone and attempting to analyze too much out of one single criterion. Brief analyses are in order at this point. An example is provided immediately following this discussion. Following that is an example of a student's interpretation of his own drawing. His analysis statements are numbered. My comments follow each statement.

The drawings of pigs that are provided for your analyses have been selected to give you an experience in handling most of the common (average or usual) styles of drawing the pigs, their location and size.

PIGS

APPROACHING THE ANALYSIS

The pig that follows this discussion is fully drawn in the upper third of the paper. It is comprised of many light, feathery lines.

The general size of the pig is moderate, representative of absolute size of the writing, i.e., miniscule, small, medium, large, very large or magnified. It is placed in the upper third of the paper representing interest in the intellectual sphere of life but, also, indicating that the writer escapes into this sphere in order to avoid interpersonal involvements through conventionally acceptable mental interests and activities. (If the pig were partially in the upper zone, partially in the middle zone, it would indicate interest in the intellectual sphere, but not an escape into it.)

The placement of the pig is more to the left of the page, commensurate with being closer to the left margin in a written text. The direction that the pig is moving in is also leftwards although, with examination of the pig's feet for movement, there is no indication that the pig is actively going (withdrawing) leftwards. The pig's head is in profile which means it is pointing leftwards (pointing towards the familiar and the secure) but the single eye in the pig's head is looking at the viewer (the world at large).

Examination of the legs and feet of the pig (lower portion or foundation of the pig corresponds to alignment of written text) shows that the legs are spindly but the feet are sturdy and firm because of their broad platform. Thus, the writer is standing firmly on a foundation, but the spindly legs indicate there is little emphasis in great physical activity. (If the legs were treated differently rather than the same way as these are, there would be evidence of conflict. If they were not drawn so as to give a firm, straight foundation, they would give evidence of indecisiveness in the same way that a wavering baseline would do.)

Examination of the head indicates it has many details, symbolizing a lot of time spent on it, again illustrating interest in the intellectual. (If emphasis were placed at the tail area, it would symbolize interest in sex.) The over-attention to the eyes seen in the curled eyelashes and eyebrows shows the desire to draw attention through intellectual interests. An eye drawn with a pupil as this is permits the person to see, to observe details, to discriminate and to show feelings. The pupil in this pig's eye is focused on the world at large, indicating an awareness of other people and implying the feeling of their awareness of the person drawing the pig.

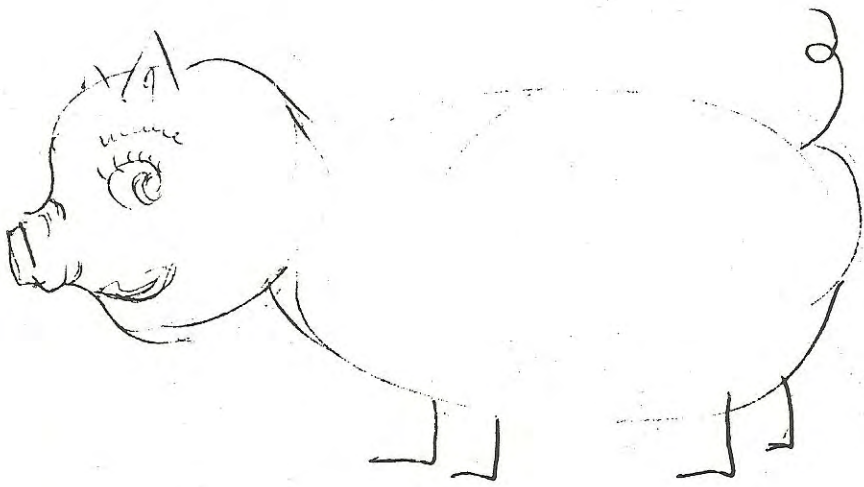
The tail is curled, spiraling upwards toward the intellectual area. The ears are pointed upwards (as opposed to flopping over); the size of the head is slightly larger, proportionately, than it ought to be for the size of the pig's body. All of these plus its location indicate interest in the intellectual. Combined with the feathery lines that indicate anxiety, the evaluation is that the person feels anxious in interpersonal relationships and escapes into intellectual interests. It is not fanatical or unrealistic escape because of the good foundation seen in the feet. It is mental penetration, attentiveness, observation, resulting in investigative

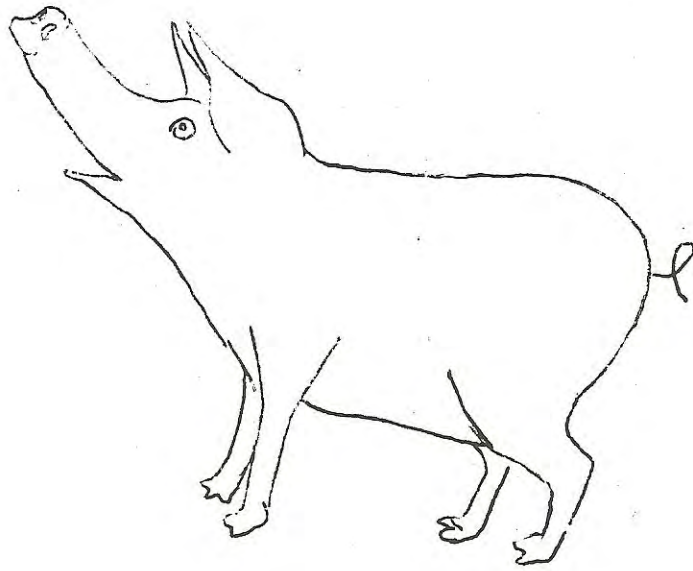
analytical ability. It also indicates ability to mentally plan something before becoming involved and gives the person who drew it the ability to originate ideas creatively and independently. The independence is seen in the removal of the pig from contact with the zone of interpersonal relationships (middle zone).

The writer is on the left of the page, facing the left but is not moving toward the left. The feet are firmly planted, indicating decisiveness. This signifies that the writer needs the security of the familiar in what she undertakes and is involved with but once the feeling of security is sensed or satisfied, she can move ahead progressively, independently and decisively using her planning and mental abilities efficiently.

SUMMARY

This writer is intellectually oriented, with interests on an intellectual plane that remove her from deep involvement in social and/or interpersonal activities. In the course of being realistic, of course, she deals with other people, but her personal needs are not satisfied in this area. The writer - or in this case artist since we speak of a drawing - is removed from physical involvements also, but can participate physically in whatever is realistic in context with her goals. She does not have much physical endurance or great energy, however, and tires quickly. (light lines, spindly legs, intellectual interests) She is escaping from social-physical involvements of living but, since it is intellectual escape, it is conventionally acceptable. Since she is stable (firm footing) and realistic it signifies useful application of the mental ideas as opposed to delusions, exaggerations, paranoia or withdrawal. The presence of evidence of anxiety indicate the artist has been hurt deeply in her interpersonal relationships and seeks to avoid further hurt. This would mean either a prolonged single hurt or the experience of many painful relationships with other people. Sometimes anxiety, although generalized ordinarily, is felt as a state of tension in interpersonal relationships and so these are avoided with the result that the tension is lessened. Being realistic, the artist can be superficially involved with people for relatively short periods of time but not deeply involved for long periods of time with any but the extremely few people (probably her close family) with whom she can be herself and be comfortable.





GUIDING QUESTIONS

Answer these questions, and the analysis of the pig on the preceding page will be completed.

1. The pig is looking up - what may this symbolize?
2. Pig is well balanced in relation to right-left of paper. What does this mean about the personality?
3. Pig is placed in the lower portion of the middle zone. What clue does this give you to the orientation of the individual's personality?
4. One hoof is drawn in while the others are outlined. What does this mean?
5. His foot placement is solid, but he gives the impression of stretching. What interpretation does this give?
6. The pig is drawn realistically. What meaning does this give?
7. The lines are firmly drawn. What meaning does this give?
8. The size of the pig is good for the size of the page. What information does this give about the personality?
9. His nose is emphasized. What clue might this give about the personality of the individual?
10. The pig's face is in profile. What information does this give?
11. He is facing leftward, but is also looking up. What kinds of information does this give about the personality?
12. He is in a standing position (i.e., not walking). What information does this supply?
13. Primary pressure of the instrument on the paper is heavy, but not extremely heavy. What information about the individual does this contribute?

ANALYSIS

1. This pig is looking up, showing a striving for aspiration in the sphere of philosophical, spiritual and ethical interest.

Comment: In today's times, these words are not particularly appropos. True, many types of characteristics in the upperzone reinforced by others in the MZ and LZ may add up to ethical. Safer to talk about UZ as intellectual.

2. The pig is well balanced in relation to the left-right margins of the paper showing the ability to think clearly and to use good judgement in organization.

Comment: Thinking is primarily in UZ configurations reinforced by clear spacing between words and lines, lack of retracing or tightness (which indicates emotional distraction). Left and right margins primarily show that pig is well balanced in the realistic, practical interpersonal relationships area. He is not hung up in the past and full or insecurity; he's a little uncertain of the future and the unfamiliar (slightly wider right margin) but is willing to try (signified by the looking up, stretching) with encouragement (facing left shows need for encouragement).

3. Lower portion of the middle zone indicates a high degree of respect towards formality and authority. In fact this is so strong that it tends to be expressed as subservience, or powerlessness.

Comment: Your pig fills the middle zone although on the lower side of it. This is merely hard reality, practicality, interest in interpersonal relationships primarily.

4. All details are good. One hoof is detailed, the others are outlined, which indicates good attention to details in areas that interest the subject and would include a fair degree of attention to matters in other areas. There is indication that the subject has a realistic viewpoint toward the world and a higher than average intelligence. Nostrils are drawn in for the nose; the eye has a pupil.

Comment: absolutely correct.

5. The pig has a solid foundation but gives the impression of stretching. This, combined with a slight upslant reveals a spirit of optimism - a person who is investing all of his time and effort and energy in the immediate present.

Comment: Your last statement should be due to your having taken the middle zone into consideration for its effects on reality. Did You? All very true for the analysis.

6. Heavy pressure and firmly drawn lines indicate that the subject is oriented toward productivity and activity and the use of his energy, force or power. He enjoys challenge as much as he enjoys accomplishment.

Comment: correct.

7. Angles, such as sharp hooves and ears show aggressive feeling, tension and anxiety.

Comment: When made as sharply as you have drawn them, or made even sharper, yes. Ears in nature are somewhat pointed for animals, but hoofs are not. You have also drawn the lower lip as somewhat pointed.

8. Medium size shows a good balance between head and heart, and the ability to adapt to situations or people without causing a fuss.

Comment: In this case, the medium size of writing cannot be related to the size of the drawing for interpretation. Medium or good size as this drawing is for the size of the paper is related to the subject's inner feelings about himself. You show some self confidence, not overly much, but the upward looking and the good left-right placement indicate that this quality is growing. So the pig shows potential for feelings of assurance and self reliance. (Also, I am not certain that I accept the MZ writing interpretation of balance between head and heart.)

9. His nose is emphasized, indicating a pretentiousness, doing things for show, or to make a fine appearance.

Comment: Very good. Overdoing something may also apply.

10. The pig's face is in profile, with a whimsical expression, implying that he may hide insincerity behind his unconventional or facetious humor.

Comment: very good.

11. Facing leftward indicates insecurity and a fear of moving ahead while looking up and stretching up indicates a desire for freedom from the restrictions of his past.

Comment: And an aspiration to higher goals in life.

12. The pig is standing, not walking and even with his feet planted firmly on the ground he is not sure of which way to go. This testifies to the presence of conventionality or conformity according to his peer group, or community pressure.

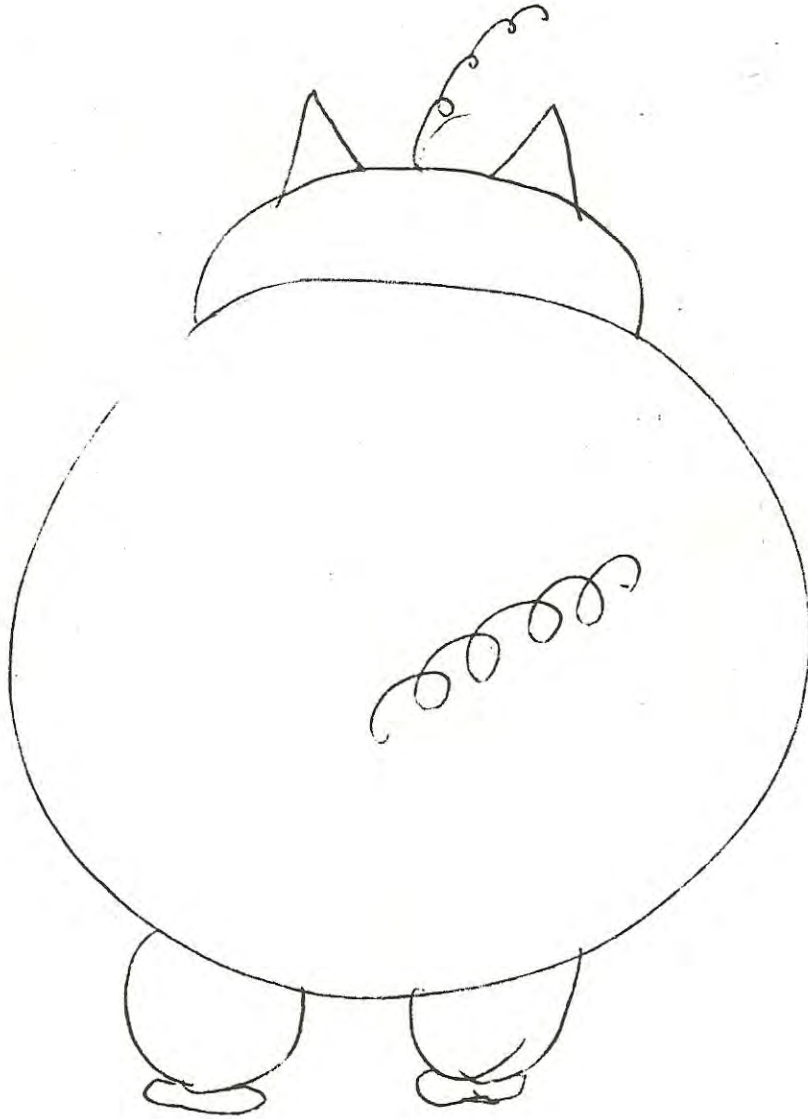
Comment: And resulting slight feeling of conflict (his aspirations and growing self confidence are overriding the negative effect of conflict).

SUMMARY

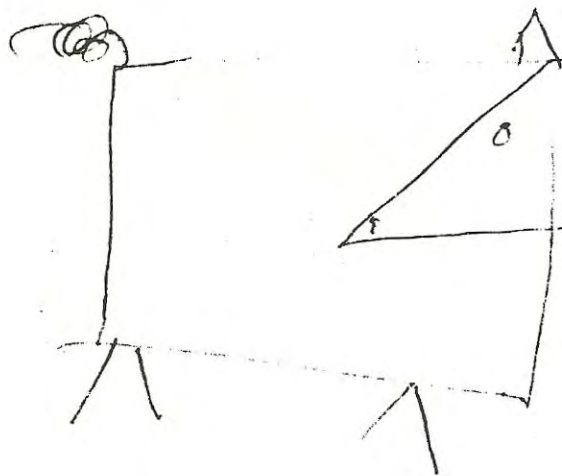
This is clearly the picture of a man who has the ability and the intelligence to move forward to his place in the sun. Insecurity however, combined with tension, will make him assume the attitude of reserve toward others due to uncertainty of their behavior or reactions toward him. Although he has a realistic viewpoint towards the world, his conformity ties him to the past. He is, without a doubt, visualizing the intellectual sphere in the hopes of finding new concepts or beliefs so that he can figuratively give up the security of his old beliefs and ideas. While by nature an optimist his insecurity demands constant reinforcement of his ego which may imply pretentiousness as he has a real need for praise and encouragement.



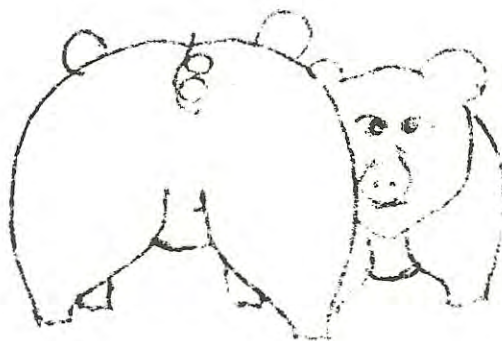
Male, early forties, worked as artist in civil service and quit his job before retirement when he saved enough money to support him for two years while he attempted to earn his living as a commercial artist. Had a wife and two children. The wife did not work.



34 year old saleswoman, manager of her own district. Does not share knowledge about her activities with her husband in areas where she believes he will disapprove.



Male: member of the Advertising Club of Salt Lake City.



Drawn by a 17 year old male on a folded paper napkin, as indicated by the lines outlining it. It was drawn at the bottom of the fold. At first he drew the hind side of the pig; when told it meant it did not want to communicate with others forthrightly or to be understood, he drew in the front view - although still partially obscured. He lives alone with his mother, since his father's death. He was an adopted child, adopted in infancy.



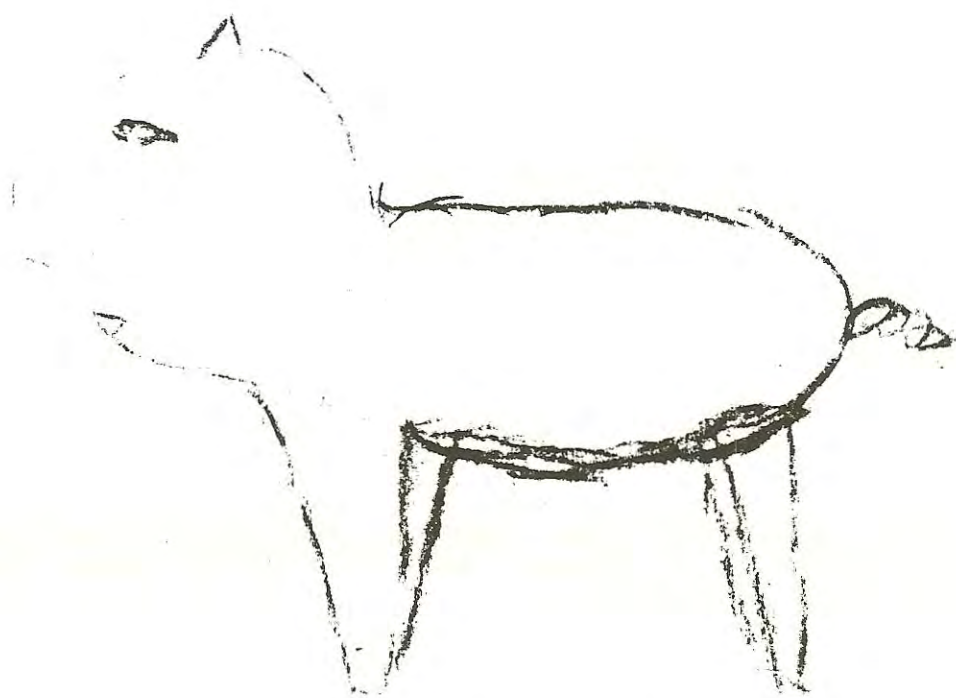
College student, 2nd. year. Early twenties, female.



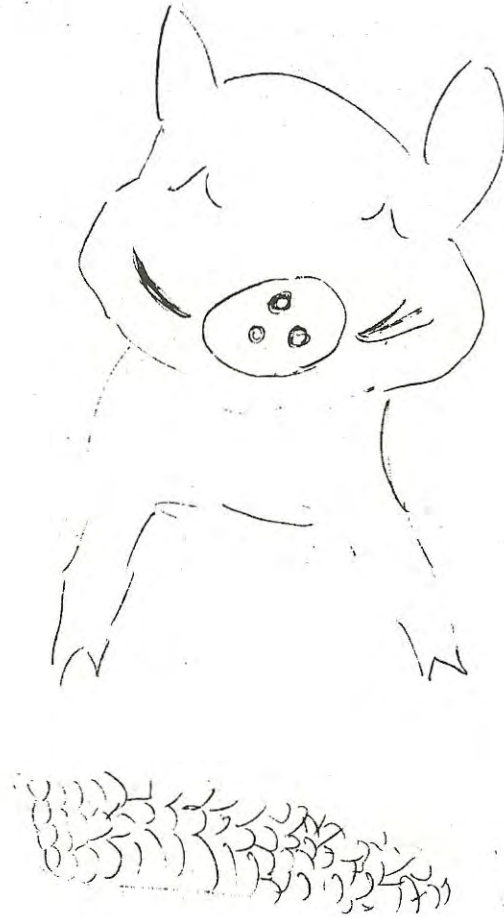
Young married woman - late twenties, two children.



Male: mid-thirties. In the advertising business.



7 year old boy; both
parents are profes-
sional people, off
working all day.



Female: early or mid-thirties. Wife of the owner of an international advertising agency. Had closets full of clothes, many of which she had not worn more than once.

Congratulations !!!
your names have in
now being made
to order.

(177)

Male: member of the Advertising Club of Salt Lake City. The 8½ X 11 piece of paper was folded in four like a greeting card with the words on the outside. The drawing was on the inside, fairly well centered although slightly to the left and placed in the middle and lower zones.



QUIZ II

The following writer was also the artist in the drawings of the two pigs that succeed his writing. What identical features of drawings and writing can you find? How would you analyze the pigs themselves?

The writer is the owner of an international advertising agency with branch offices in the main large cities of the world. He is in his mid-forties.

On the basis of the lecture on signatures, how would you analyze his signatures and the changes in their features over time according to his memory of them? Has success been the cause of any alterations?

Try to analyze his three basic styles of writing according to the basic theories and principles of graphology. What, if any, differences in his personality do you find? Are they contradictory or are they different sides of his personality?

Attempt to blend graphological statements together when forming explanatory sentences so that the analysis is not a "listing" of statements about traits (qualities found in the writer). Do the best you can according to this point in your training. Short analyses should be made, not more than one-half to one page in length. Try to verify whatever you say with other graphological indicators that are there but which you are not handling individually.

For example, in his capacity to make such great changes in his writing, he indicates great facility, skill, creativity and awareness. This is verified by the departures from the school model which are scattered throughout his writing styles, including the first paragraph which he terms the school model that he was taught. Comparison with an actual school model will show many areas where he departed from what was taught. Awareness and creativity are verified also in the frequent true disconnections found throughout all of his samples. His control and awareness are found in the way he handles the right margin, line by line. He does not hyphenate at all and leaves great space if a following word cannot be easily fitted in. There is no last minute discovery that a word won't fit with resultant squeezing. His facility is self evident in the consistency with which he can maintain a style change for several lines which indicates self direction, coordination, stability and personality integration.

When I was a child, I learned to write like this, and I still do when I am primarily interested in the legibility of what I write.

179

But often, perhaps more often than not, I don't write in a script at all, but print. Why? I don't really know, except that it seems legible, too, and just a little bit different.

180

This is a style of handwriting I seemed to develop when I was in my earlier years, around twenty.

181

But sometimes, more concerned with speed than with the legibility of what I write, I use this style. It seems fairly phoney, don't you think?

182

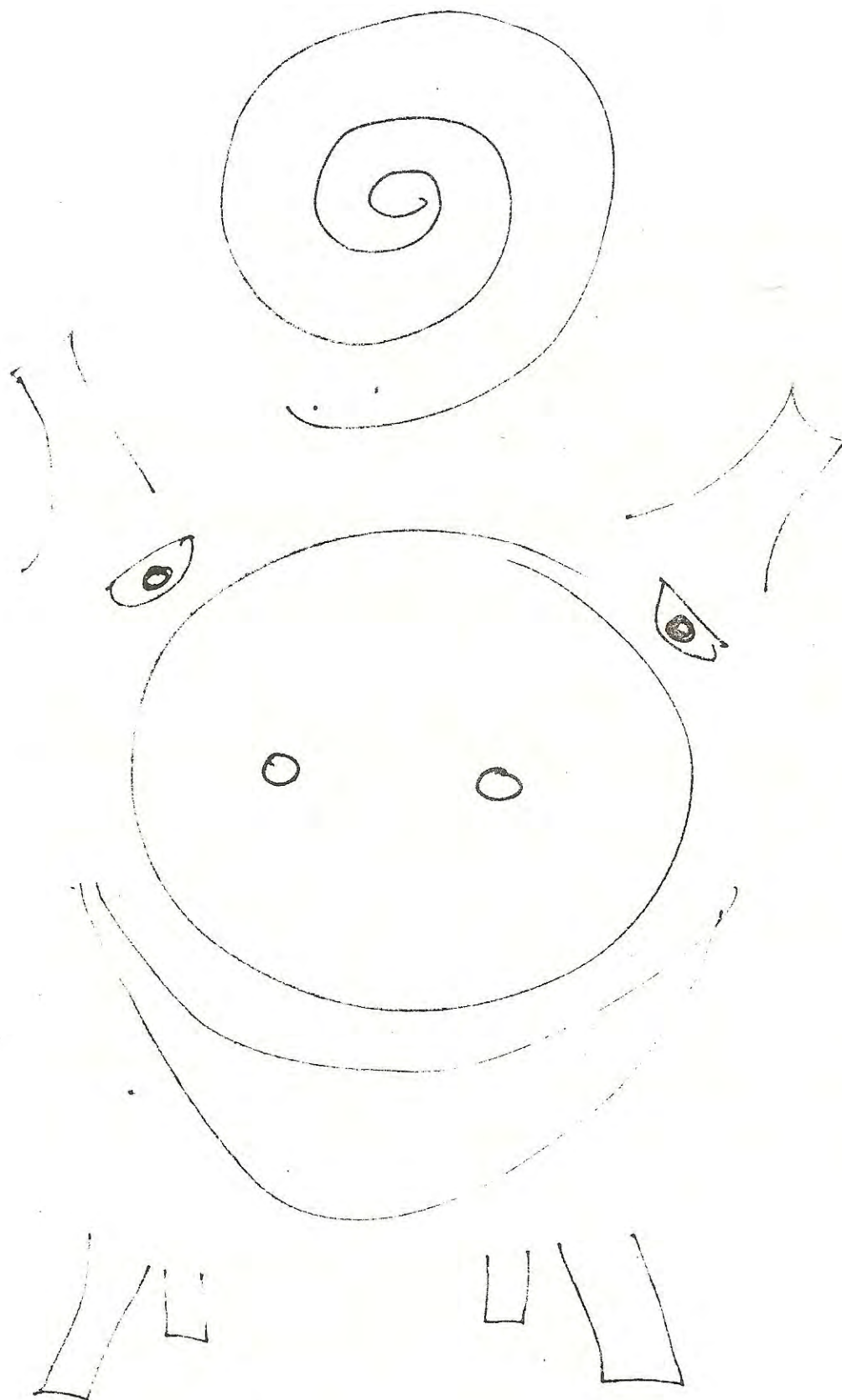
And finally, specimens of my signature, as used and abused through the days and nights of my springtime and summer years.

Jim Johnston 183

Jim Johnston 184

Jim Johnston 185

Jim Johnston 186





KEY TO ILLUSTRATIONS FOR HANDWRITING CHARACTERISTICS

(These are examples only and are not exhaustive possibilities)

ALIGNMENT

concave	71b-72
convex	57-58
downslanted	11, 67
X downslanted	53
letter, variable	4-9-50
step-up	31-24
step-down	1-18
straight	34-54-57
X straight	17-45-68
upslanted	20-65
X upslanted	29
word, variable	14-55-58
word, turned down at end	9-16
vacillating	2-14

AIRSTROKES

MZ to UZ	29-48
LZ to MZ	51

CONNECTIVES

angled	37-58
X angled	66-67
arcaded	32-46
X arcaded	153
X connected	26
disconnection, fake	13-21-113
disconnection, true	22-24-32
disconnected, moderate	24-27-71
X disconnected	68-113-126
garland, left tending	3-61-177
garland, right tending	35-41-62-71a
garland, strong	46-62
X garlanded	108
threaded	37-40
X threaded	112-123
variety of	24-47

DIACRITICS, LOCATION OF

i-dot, constricted	35-52-60
i-dot, expanded	21-46-48
t-cross, constricted	22-52
t-cross, expanded	29-48

DIACRITICS, PLACEMENT

i-dot, right tending	35-55
i-dot left tending	40-62
i-dot, above	7-17

t-cross, right tending	57-58-86
t-cross, left tending	25-164
t-cross, balanced	7-8-11-13

DIACRITICS, PRESSURE

i-dot, heavy	29-57
i-dot, light	28-31
t-cross, heavy	57
t-cross, light	2-40

DIACRITICS, SIZE

i-dot, constricted	21-23
i-dot, expanded	22-23
i-dot, X expanded	7-30-93
t-cross, constricted	24-27
t-cross, expanded	21-28-57
t-cross, X expanded	48-59

DIACRITICS, SPEED OF

t-cross, fast	29-54-58
t-cross, slow	51-53-57
i-dot, fast	34-80
i-dot, slow	52-84

DUCTUS

average	24-71a,b-86
broad, no pressure	11-25
broad, with pressure	38-39
broad, pastose	18-28-36
corrugated	11-68-154-103
pastose, MZ	28-37-64
pastose, LZ	37-41
pastose, UZ	31-76
pastose, all zones	21-25-27-39
sharp (stencil-like)	10-17-31-43
thin, no pressure	1-40
thin, pastose	9-117

FINALS, MZ

angled	55
angled, ends in UZ	29-38
arcaded	80-84-167
brief	9-12-47
X brief	22-24-52-54
flourished	19-20-175
garlanded	20-21-26
X garland	46
garlanded, with hook	62-65-178
garlanded, ends in UZ	26-45-178

garlanded, elaborated 46
 arcaded 48-55-56
 arcaded, LZ 21-25-27-40
 X arcaded 51
 threaded, fast 48-50-59
 threaded, slow 49-55-57
 right-tending 33-48-71
 left-tending 27-28-34-39-73
 left-slanted (downslant) 24-47-50
 horizontal 2-41-51-71

INITIAL STROKES, MZ/UZ

arcaded 13
 X arcaded 51
 flourished 19-38
 garlanded 21
 X garlanded 7
 left tending 21-25
 X left tending 7-20
 minimal 3-28-32
 none 8-12-24-31-33

LETTERS, MZ, FORM OF

angles 15-17-22-66-67
 arcaded 13-29-153-159
 artistic 24-60
 elaborated 3-14-181
 garlanded 12-41-56
 left tending 94-142-179
 right tending 12-35-48-162
 retraced 7-8-50-68
 school model 26-36-175-176
 segmented 12-13-24
 simplified 21-24-33
 skeletal 10-22-67
 threaded 23-30-35
 X threaded 99-112-142

LETTERS, UZ, FORM OF

angles 5-67
 arcaded 19-20-22-48-52
 artistic 19-20
 garlanded 19
 ends above baseline 4-30
 left tending 28
 right tending 41
 segmented 8-12-30-34-47
 simplified 24-47
 skeletal 22-35
 twisted 3

LETTERS, LZ, FORM OF

angles 60-61
 arcaded 64
 artistic 24-34-41
 elaborated 95
 garlanded 53
 left tending 4-28-33-38-53

right tending 27-51-59
 segmented 46-103
 simplified 20-24-31
 skeletal 22-26-36
 slant opposing 4-93-123
 threaded 17
 twisted 64

LETTER WIDTHS, MZ

constricted 27-29-30-37
 expanded 41-53-68-69
 flattened 72
 retraced 25-72
 ovals retraced (only) 50-72

LETTER WIDTHS, UZ

constricted 20-22-49
 expanded 41-51
 X expanded 55-64-92-93
 ends above MZ apex 20-28
 reaches MZ apex 5-64
 retraced 1-17

LETTER WIDTHS, LZ

constricted 20-22
 expanded 52
 X expanded 30-32-41-62
 ends below baseline 23-47-61
 reaches baseline 7-32-52
 retraced 20-51

PRESSURE

arrhythmical 35-43-66
 displaced, UZ 55
 displaced, LZ 55
 heavy 67
 X heavy 33
 light 41
 X light 40
 rhythmical 19-20-26-41
 variable 14-16-27-36

PRINTING

extreme degree 18-43
 slow 18-43
 fast 182

PRINTSCRIPT

22-24-27-48

SLANT, DOWNSTROKES, MZ

left 7-35-56
 right 36
 X right 25

SLANT, UPSTROKES, MZ

left 108-166-163
 right 35-36-73
 X right 67

SLANT, VERTICAL				
MZ upstrokes	7-56-101	constricted	93	
MZ downstrokes	67-73-101	X constricted	1-2-45-64	
		expanded	21-22-53	
		X expanded	30-41-63	
		variable lengths	16-21	
SLANTS, GENERAL		ZONES, MIDDLE		
ideal range	36-40-46	controlled heights	17-44	
stable	35-36-40-41	constricted	99-132-168	
		X constricted	4-28-31-44	
		expanded	7-68	
		X expanded	3-27-45	
		variable	18-29-57	
SPACING, EXTENSION*		ZONES, UPPER		
constricted	33	controlled	17	
X constricted	31-32	constricted	3-131	
expanded	27-44-53	X constricted	42-60	
X expanded	38-39	expanded	2, 92	
school model	175-176	X expanded	54-95	
SPACING, LETTER, MZ				
constricted	17-27-42			
X constricted	18-64-55			
expanded	48-72-73			
X expanded	46			
school model	19-20-60-65-175-176			
SPACING, WORD, MZ*				
expanded	27-29			
X expanded	18-20			
constricted	9-33-47-51-63			
	16-55			
X constricted	7-8-52-73			
school model	175-176			
SPACING				
arhythmical	16-29			
mechanically regular	17-41-42-53			
rhythmical	34-36-47-54			
SPEED				
Fast, illegible	29-59			
fast, legible	48-63-182			
slow, illegible	18-57			
slow, legible	1-3-6-7-41-44-45			
SYMMETRY				
ideal	6			
school model	175-176			
TICKS, BRIEF				
fast	52-178-182			
slow	30-64			
ZONES, LOWER				
controlled lengths	41			

*Broad space between words or extensions tends to isolate the words from each other and the lines from one another - giving an isolated or constricted psychological result in the individual's personality. Therefore, broad spacing is constricted; narrow spacing is expanded (bringing them closer or too close)

PAPERS BY THE AUTHOR

Counseling: To Do or not to Do?

\$4.00

Should a graphologist include counseling services for clients who prefer to work with a graphologist instead of some other professional therapist? Discussion of some pros and cons of this question is made in the paper and information is included as to what counseling entails. Suggestions are made for obtaining the necessary knowledge and experience. Some examples of case histories and writings are given. A suggested reading list is provided. This paper was first presented as a lecture at the 1974 AAHA convention.

Physical Health & Illness

\$6.00

This 36 page paper relies very heavily on the results of published medical research. The author supplies writings from her files to illustrate the medical information effectively. An appendix contains a series of writings of before and after open-heart surgery; a series of writings to show the effect of anaesthesia; a series showing the effect of disproportionate amounts of oxygen to the brain, etc. There is a variety of case histories. Bibliography from medical and other professional journals and books. Some references come from graphology books if the authors have reputations as working with medical doctors or neurologists or have degrees themselves.

Differentiating Among Schizophrenics, Paranoics and Neurotics

\$6.00

This 41 page paper relies very heavily on published research in the field of mental health. (There is more available in this field than there is available in the physical health field). The author provides reproductions of writings from her own files to illustrate characteristics as discussed in the paper. Some of the writings are from people diagnosed as "schizophrenic", "inadequate personality", "paranoic", etc. An Appendix offers definitions of psychotic disorders (1973) and a summary of a published report that details a graphological investigation of hospitalized neurotics' writings. It is included because it is very rare for the graphological half of a psychology research team to publish graphological views of the research and its results.

Evaluating Sexuality from Writing Characteristics

\$6.00

This paper has been presented at the 1976 AAHA convention. It goes into the historical, cultural development of religious mores, prohibitions and regulations concerning sexual behavior. From this, it draws conclusions on how the culture and its values throughout history have influenced actual sexual practices. An approach is provided to measure sexual behavior in the whole personality from the aspect of mental as well as physical involvement in the behavior and this being related to attitudes and self esteem. Case histories and writings are provided. A bibliography is given.

Leslie W. King: Box 364, Bountiful Utah 84010

PRIVATE AND CORRESPONDENCE STUDY

PRINCIPLES, PART I: This course offers a scientifically based sound foundation in graphology. The material presented comes from widely accepted empirical theories (some over 200 years old), validated research studies and quantitative methodologies. Some of the lectures are term papers prepared by the instructor for her psychology, sociology and social work classes at the University of Utah. Other lectures are abridgements of material learned in college classes in anthropology, biology, etc. which are pertinent to understanding personality more thoroughly.

The following is an outline of the current material being used in the Principles, Part I course:

- Comprehensive, 40 page history of graphology with footnotes
- Guide to the course material
- Discussion of the characteristics studied in each of 4 sections
- Basic sourcebook of graphology characteristics
- Some questions asked by students-as study aids for you
- 490 Study questions to help you learn as you answer them
- Examinations, quizzes, experiments to reinforce learning
- Measurement guide and instructions for its use

Personal Pronoun I

Signatures: Definition and Classification of
Mental Health

Differentiating Among Schizophrenics, Paranoics & Neurotics
Physical Health and Illness

Brain Lesions and How They Show in Writing

How Writing Instruments Affect Writing

Study on the Degree of Low Self Esteem in Prisoners' Writings

Study on Suicide: A pilot Study

Counseling: To Do or Not To Do?

Cultural Influences on the Personality

The Development of writing From 1½ Years to 18 Years

Anti-Social Personality

Sexual Problems

Drugs and the Personalities of Users

Behavioral Aspects of Interpersonal Relationships

15 Physical Circumstances that Affect an Accurate Analysis

Graphology: Investigation of Some of Its Research

QUANTITATIVE APPROACH:

The final portion of the course consists of an Equal Weight Criteria Scoring Method. You prepare three comprehensive analyses using this method.

The material in Principles, Part I is presented in four sections, plus the Sourcebook and the Equal Weight Criteria Scoring. You will be expected to study and correlate information from any five or more of your own graphology texts according to a study plan accompanying the course. (Tuition for course: \$395.00) An apprenticeship course is available to those who want to develop expertise.