## Debunking the Handwriting Experts

## Graphology Found to Have Some Truth, Much Error

By Emily Davis

WHEN you sign your name with a flourish or with a steady, pushing evenness, you are telling the world something about yourself but what?

Science sees no good in attempts to read character in the bumps on one's head. It refuses to believe that red-haired people are by inference fiery tempered. Nevertheless science cautiously thinks that there may be something significant in handwriting. Rather slowly and quietly these significant facts about handwriting in relation to personality are being discovered. The scientific discoveries are sweeping away the glib character readings of the handwriting fortune teller and replacing these untested ideas with provable facts.

One of the psychologists who is doing much to put the science of handwriting on solid ground is a woman, Dr. June Downey, professor of psychology at the University of Wyoming. At a recent meeting of psychologists Dr. Downey reported to an interested audience her latest discoveries as to what it means to write backhand.

Now, graphologists, who read character from handwriting, have always maintained that the slant of your handwriting is a barometer of your emotional traits: If you write a straightly vertical hand you are thereby expressing yourself as a person of normal emotional make-up, not readily excitable, moderately responsive. If your handwriting slants far forward it is supposed to betoken eagerness, warm affection, whereas a slant to the left indicates reserve and coldness, an anti-social nature.

Psychologists long ago pointed out a feeble link in this line of reasoning, for left-handed people are most frequently addicted to back-hand writing, and surely left-handedness does not imply a chilly attitude toward the world. Still, there remained to be accounted for a large number of right-handed people who push a backhand pen.

Dr. Downey wondered if these right-handed individuals could be left-handers in disguise. She questioned about 700 of her right-handed acquaintances and found that four per cent. of them wrote backhand. At the meeting she reported

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"Sexless" handwriting

to the psychologists that she has analyzed 45 of these supposedly right-handed back-hand writers, and has found that some of them had been left-handed babies who were taught to use the right hand. Some were ambidextrous, using both hands for skilled tasks. Fully 60 per cent. of the back-hand writers had a dominant left eye or else they depended on the two eyes impartially.

Hence, an urge to write back-hand need not alarm you with the fear that you may thereby betray a heartless and chilly nature. It means more probably that you have a tendency to be left-handed, which may have been long ago suppressed by well-meaning parents, or more probably still you have a tendency to be left-eyed.

The child who persists in writing back-hand in spite of school fashions in penmanship is seeking to attain a harmony of movement in accordance with his own psychological traits, Dr. Downey reported to the group of psychologists. In the same way, the child who is right-handed naturally slants his writing forward, because the centrifugal force within him works most readily in that direction.

"Personality is the most complicated problem that any psychologist can approach," Dr. Downey declared in an interview following the meeting where this announcement was made. "Yet the quest for short cuts to personality goes on, for the greatest of all sports is reading people.

"There is no denying that it would be profitable for us in our dealings with bankers, voters, landladies, and rich old relatives, if we could find an infallible gauge of their characters by noticing the ways in which i's are dotted or t's crossed. But graphology can never become scientific, that is to say reliable, unless it is built on a firm foundation of scientific psychology. At present the psychological information of the graphologist is a thing of shreds and patches.

"Often the graphologist proceeds by the easy way of superficial analogy and argues that the individual who puts generous flourishes on his g's will also be generous in his dealings with his neighbor, or asserts that loops running high above the base line indicate aspiration, and that loops extending far below the line show materialistic tendencies.

"Such deduction fails to analyze the writing movement. It does not explain how a motor habit can be an index to a mental disposition. Nor does it satisfactorily link graphic speed, rhythm, and form with phases of personality, for very little is known positively about these matters."

The complexity of the problem has been shown by evidence that a trait of handwriting, such as large letters, may be due to a variety of causes. Some people write large because of bad eyesight, others because of mental disease, or from a habit developed through imitating some one else's dashing style. Further, it has been found that an individual's writing varies from day to day with the weariness, excitement, effects of weather conditions, lighting arrangements, unconscious imitation, drugs.

Still, Dr. Downey and other psychologists believe that there may be some law and order in handwriting as an expression of inner conditions, and they are proceeding to test out assumptions of graphology with the expectation that some day a usable set of facts may be developed. Dr. Downey adds cautiously, however,

Shakespeare's writing shows signs of the disease which probably caused his death. Note the irregularities, the jerky tremor, and confused ending of the signature above. His strange fist was not due to alcoholism. The name Shapespeare written by patients suffering from this malady is very different. (Courtesy "Problems of Personality; Studies in Honor of Morton Prince.")

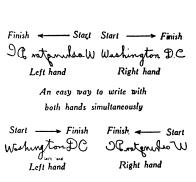
that penmanship may be a lost art before handwriting is understood sufficiently to form a really serviceable code to character.

As Dr. Downey and other scientists have tested some of the ideas of graphology, they have blasted a good many of the most widely accepted notions. Their studies of handwriting in comparison with the personalities of many people reveal that heavy strokes of the pen do not necessarily go with a forceful personality. Nor can upsloping lines of writing safely be interpreted as an outward sign of confidence or ambition. Nor do people who cross their t's with long bars have plenty of perseverance. It follows that employers seeking go-getter salesmen would take a long chance in relying on impressive signatures of applicants.

On the other hand, Dr. Downey did find that people who are preoccupied with details are apt to turn out small, fine writing. She also found that people with what she terms "explosive" temperament, that is, readily expressive persons, have a style of writing that is more light and flowing than people who are "inhibitive," or over-repressed, by temperament. This particular finding she considers the most promising d is c o v e r y of temperament as expressed in handwriting so far made.

Alfred Binet, noted French psychologist, gained the confidence of





The hard way to write with both hands simultaneously

graphologists sufficiently to test their success and failure in reading certain facts from handwriting.

"His experiments show that one can guess the age of a penman within about ten years from his writing," Dr. Downey said. "But the possibility of ten years' error in the ordinary lifetime range of three score years and ten would render this diagnosis of age valueless in any practical situation, such as estimating the age of a kidnapper or a thief who might have left an incriminating note."

In the course of a lifetime, an individual goes through four general stages of handwriting: crude learning; then stereotyped school penmanship; then greater variation and originality; and, finally, in old age a weakened script with tremors, perhaps, indicative of weak muscular control, or with large lettering more easily to be seen by failing eyes.

One difficulty in reading an individual's age precisely from his writing is that some people continue to write a childish fist long after they are away from all copybook influences. This does not mean that they are immature, Dr. Downey explained. Far from it. Intellectually precocious young men with this peculiarity have come to her attention. She tentatively explains their cases by suggesting that people whose writing matures late are of a "sensory makeup." They are of the thinking, inactive type which is sensitive to the impressions of sight, hearing, and touch, from the outer world, and which is more likely to excel at brain work than at physical skill. Those whose writing matures early, on the contrary, are of a "motor makeup,"

Dr. June Downey, who finds that right-handed people slant their writing forward, and left-handed people slant back because the twist of the body is more natural.



William Shake your

After three weeks' drinking a man wrote Shakespeare's name as shown above . . . but after taking the cure, the man wrote the signature shown below proving Shakespeare did not die of alcoholism

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she believes. These would be people of an active type, using the hands and the rest of the body with ease and skill.

"Binet and other investigators have also shown that one can tell the sex of a penman with considerable accuracy," Dr. Downey continued. "They call attention, however, to the fact that there are some women who write a distinctly masculine hand, and a few men who write a feminine hand. An occasional individual writes what we may call a sexless hand."

It is a debatable point, she believes, the degree to which sex in handwriting is due to inner traits of the penman or to the outer influence of social codes. Society looks indulgently upon a scrawling male signature, and charitably ascribes such writing to genius. But women are expected to write a neat and pleasing script, and usually make an effort to do so, she points out.

Your own estimate of age and sex based on handwriting is about as good as any "expert's," the experiments indicate. Binet found that experience in studying handwriting did not give an advantage in such judgments. The same was found to be true in a very recent test at a California State Teachers' College. In this case amateur judges gave their opinion of sex represented by penmanship samples, and the guesses ran up a score of two out of three These judges associated correct. with masculine writing such traits as irregularity, uneven form, angles, and individual slant. Feminine writing was characterized by regularity, curves, conventional form, and uniformity.

Curious changes take place in the handwriting of individuals suffering from diseases, and "experts" too hasty to apply a little untested knowledge have not (Turn to page 234)

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hesitated to say that a doctor could diagnose a patient's condition from day to day by examining a current piece of his handwriting sent to the doctor's office.

Mental diseases appear to set a particularly readable stamp on handwriting, Dr. Downey explained. Patients suffering from melancholic depression, a disease marked by sluggish energy, are found to decrease the size of their writing. Patients who are maniacally excited often enlarge their writing to an extraordinary degree, especially during an acute attack of elation. Other mental patients who are victims of delusions decorate their handwriting with elaborate and fantastic flourishes, particularly if they have delusions as to their own grandeur or importance.

"Many autographs of normal people show the same tendency to overelaboration, and one finds difficulty in repressing a suspicion that an overelaborated autograph really does indicate a certain amount of preoccupation with one's self or one's career," she commented. So have the flourishes once considered the height of elegance fallen under psychological suspicion!

It would be a rash conservative who would predict that tricks of handwriting will never prove to be definite outer symptoms of disease, useful to doctors just as the knee jerk or a peculiar pain is useful as a clue to a disease condition. But so far too little is known about all this for handwriting to be a reliable barometer for the doctor's medical kit.

If medical graphology is ever put on a firm basis, it may explain some of the mysterious ills from which geniuses and other historic personages have suffered, Dr. Downey believes. Many famous individuals of the past have suffered from maladies which set a stamp on their careers. Often these maladies are hinted at most vaguely in their biographical data, and students are baffled, knowing that the disease might explain mysteries.

Mentioning Shakespeare as an example, Dr. Downey said that Dr. Charles L. Dana, of Cornell University Medical College, thought he might be able to determine the cause of Shakespeare's death at the early age of fifty-two by studying the six veritable signatures that we possess from the dramatist. The six signa-

tures, all made within three years of his death, show many defects. They have even been cited as the writing of an illiterate man and as one proof that Shakespeare did not write the plays attributed to him.

The fact that Shakespeare wrote Gothic script and not Roman accounts for some of the weirdness, but not all. Scrutinizing the bad form of the historic signatures, Dr. Dana saw evidence of loss of normal control. For a long time, the doctor had his patients write the words "William Shakespeare" in the hope of identifying the pathological signs so evident in the poet's signatures.

His quest was never successful. He did satisfy himself on the negative points that Shakespeare did not show signs of writers' cramp or al-coholism in his writing. Writers' cramp is chiefly a modern disease, which followed the introduction of steel pens, as Dr. Dana knew. But in view of Shakespeare's many plays it was interesting to make sure that he had not overtaxed his writing arm. Alcoholism as we see it was comparatively rare in Elizabethan days, Dr. Dana pointed out, when he reported his work in the volume on "Problems of Personality: Essays in Honor of Morton Prince." Shakespeare's writing is not like modern alcoholics'. Nor did he apparently have paralysis agitans, as Dr. Dana had been inclined to think.

The most that the psychiatrist was able to conclude was that Shake-speare died from some form of vascular disease. His defective signatures would be explained by a clot affecting his left mid-brain, Dr. Dana pointed out.

"There is one form of handwriting which is very strange but not pathological, and which has attracted many psychological experimenters," Dr. Downey pointed out. "This is mirror-writing, so named because it can be easily read by holding it up before a mirror, which restores it to the normal form. To write it, the penman begins at the right-hand edge of the paper and moves toward the left.

"Parlor vaudeville performers delight their audiences with such maneuvers, but any one who cares to practise can become expert at mirrorwriting. It is also possible to write with both hands simultaneously, each moving out from the center or each starting at the edge of the paper and working in. In these experiments, one hand writes normally, the other reverses the script."

If you try these experiments, you will realize the principle which Dr. Downey calls upon to explain mirrorwriting. The easiest movements of the body are centrifugal, or out from the body as a center; the hardest are centripetal, or in toward the center, she has found. So, if you are righthanded you will find it hard to write mirror fashion. If you are a lefthander or if you are inclined to be left-handed, it will be much easier. In any case you will find it difficult to start at the two edges of the paper and work in toward the center, for this is a centripetal motion. Because of this principle, mirror-writing is thought to be the natural writing of the left hand. But since normal writing is fixed in a different mold, and since mirror-writing therefore appears outlandish to most people, the left-handers do the next best thing. They turn themselves at an awkward looking twist and write back-hand.

"Many left-handed children write mirror script naturally and puzzle their teachers who do not know how to read it," Dr. Downey said. "I remember once eyeing in dismay a slate full of figures which meant nothing to me. But when I questioned the six-year-old boy who made them, I found that he knew the answers to all of his problems. Not only had he reversed each digit, but he had put all the answers on the left side of his slate."

The small boy had an illustrious precedent for his Alice-through-the-Looking-Glass writing. Leonardo da Vinci, great painter and scien-tist, also puzzled his contemporaries and biographers by writing a script that few could decipher. It was this same device of mirror script, as samples of it in existence show. Many speculations have been advanced as to whether da Vinci was left-handed and so naturally wrote reversed script. It is considered true that he had a paralyzed right hand in his late old age. It may be that in earlier years his right hand was injured, and with his usual inventive genius he discovered that he could write more easily with his left hand if he reversed the motion. At any rate, after his discovery he continued to use the mirror script in his secret documents and his will was written in this striking manner.

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