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Graphopathology: A Novel Approach to Understand Human Illness

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Abstract

Graphology, the subject of handwriting analysis, has its own sound rationales. We know it very well that handwriting is a motor skill, regulated by our brain. Nerve impulses travel down the arm, into the hand, directing the fingers to maneuver the pen. Knowing this fact, a clear relationship can be drawn between the inner ailments of human beings, physical as well as mental, and the corresponding changes in their handwriting patterns. This particular branch of graphology is termed graphopathology, which studies the alterations shown in the handwriting strokes, due to psychological or physical disturbances. The common conditions studied so far by such approach, include Parkinson disease, depression, high blood pressure etc. For graph pathologists, characteristic prodromal symptoms (the graphical symptoms preceding the development of a disease) are of immense importance. These analyses can surely contribute a lot in early detection of the illness, and thus it actually helps in community welfare.

Keywords: Graphology, motor skill, graphopathology, prodromal symptoms

Introduction

Graphology is the study of physical and mental characteristics of an individual through analyzing his handwriting pattern. Derived from two Greek word; grapho meaning writing and logos meaning study, graphology, as a subject, has its own rationales. We know it very well that handwriting is a motor skill, regulated by our brain. Nerve impulses travel down the arm, into the hand, directing the fingers to maneuver the pen. The pattern of characteristics, potentials, intellect, talents, strengths, weaknesses, abilities, emotions, traits, orientations, values and overall physical and mental well-being that make the complex human being, are all encoded in handwriting every time the pen is put on the paper. Elaine Quigley, the famous graphologist of United Kingdom correctly described that handwriting is actually nothing but brain-writing, manifested on a piece of a paper. The pen can be considered a tool which is directed through the movement of arm, fingers by impulses that originate in the cerebral cortex. According to the beliefs of graphologists, and also supported by other professionals, handwriting comes directly from the writer in a uniquely personal and individual way, irrespective of how the person was taught to write, perhaps in his or her childhood. For this reason, even those who try to disguise their handwriting patterns, hardly succeed.

Though graphology, as a subject, was initially considered as a pseudoscience, and most people were quite speculative about its rationalities, but, nowadays, it is a well-accepted and increasingly used tool for assessing humane characters, physical, as well as mental. Naturally, its applications are many, such as in making personality profiles for job seekers

at the time of interviews, for understanding the psychological and physical state of an individual, for determining marital compatibility between two persons, and last but not the least, in medical field. This last mentioned branch of graphology is termed graphopathology, which studies the alterations shown in the handwriting strokes, due to psychological or physical disturbances. In this article, this particular application of graphology in medical diagnosis has been highlighted.

Gradual Evolution of the Subject

Today the subject graphology is being practiced with a modernized approach, but actually, its origin in ancient. Rudimentary form of handwriting analysis was known to and used by ancient priests, monks and philosophers like the Chinese philosopher Confucius, Aristotle, Goethe, Alexandre Dumas, Emile Zola *et al.* Mention of its use is also found in ancient Greek, Roman and Asian texts. It was during 1622, an Italian Doctor, Camillo baldi wrote the first book on handwriting analysis known as 'How to judge the nature and the character of a person from his letter'. Some other renowned books published on graphology during 19th and 20th century were 'Psychology of handwriting' by Wilhelm Preyer, a german Professor of Physiology, 'Psychology of Handwriting' by Robert Saudek of Czechoslovakia, and 'Encyclopedia of written word' by Dr. Clara Roman, a Hungarian psychologist. During the middle of 19th century, the term handwriting analysis was replaced with a more scientific term 'Graphology' and eventually Graphology got the recognition of empirical science. In the present era, this subject is widely taught in various institutes in Britain, Italy,

France, Germany, Hungary, Switzerland, America, and Israel among other countries. In India, since 1990 the awareness about Graphology has been on the rise. Nowadays, Graphology is being successfully used worldwide in the fields of child development, personality assessment, career selection, behavioural rectification, recruitment, criminology and in clinical evaluation of mental disorders and physical health and also as a therapeutic tool to cure mind and body related problems. So, undoubtedly, it can be said that Graphology, as a subject has evolved a lot so far, and the famous 20th century French psychologist Alfred Binet correctly called it 'the future of science'.

Basics of Handwriting Analysis

For starting the basic graphological analysis, first one needs a handwritten piece of paper from the person concerned. Then the analyst can proceed step by step in the following way, by critically observing the following points:

- a) **Pressure of the Strokes:** Some people press the pen hard into the paper, while others use a light touch. High pressure means high emotional energy, while light pressure is a sign of introversion. Average pressure means a relatively calm and anchored person.
- b) **Slant of the Strokes:** Most of the writings tend to slant to the left or right. A right slant shows the high energy level and confidence level of the write, while a left slanted writing indicates unwillingness to write, or a desire to hide emotions. A straight vertical slant means a balanced state of mind.
- c) **Baseline:** While writing on a white, unlined paper, most of us cannot write in a perfect straight line. If the writing pattern in upward, it indicates optimism and a happy mood of the person. Downward writing may be a sign of discouragement or fatigue. Wavy writing that moves up and down randomly indicates an unstable or uncertain mind state of the person.
- d) **Size of the Letters:** Large letters mean the person is open-minded and extrovert, while small letters indicate an introvert and reclusive nature of the person.
- e) **Spacing between Letters and Words:** More spaces between the letters indicate a generous and independent nature of the person, while closely spaced letters mean the person is self-conscious and introvert. Graphologists also like to look at the gaps between the words; the closer they are, the more the writer enjoys crowd.
There are many more points to consider, these are only some basic ones.

Emergence of Graphopathology as an Independent Branch

It has already been mentioned earlier that Graphology, as a subject, has immense scope and its basic rationales can be applied in different fields. One of these is the field of medical science. Graphopathology, an amalgamated form of Graphology (handwriting analysis) and Pathology (disease conditions) has been emerged as a branch of the subject, and is being proved more useful day by day. Graphopathology is actually the branch of graphology that studies the alterations produced in handwriting patterns due to any kind of psychological or physical disturbances, may it be latent or evident, permanent or temporary. The presence of physical or psychological illness naturally affects the mobility of the individual, causing, as a result, the presence of faulty strokes and movements, with an overall alteration of the normal

handwriting pattern of the person concerned. Thus, it can be truly useful in understanding human ailments.

Graph pathologists believe in the fact that we, the human beings are ambivalent by nature, we think in terms of good-bad, health-illness, self-control-impulsiveness, and we always have a tendency to find the perfect harmony and equilibrium in our surroundings. Whenever, this harmony is broken due to our own sufferings, may it be physical or mental, the change in our body and mind are naturally reflected through the alterations in our handwriting patterns. There lies the logical aspect of the subject.

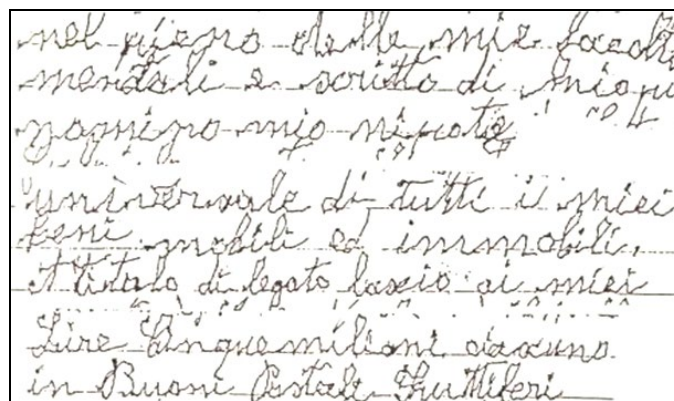


Fig 1: Handwriting pattern of a Parkinson's disease patient

For graph pathologists, prodromal symptoms are of utmost importance. Prodromal symptoms can be defined as the group of graphical symptoms that precede the development of a disease. Each pathological condition has a group of characteristic prodromal symptoms. Some basic pathological graphical traits that denote illness are mentioned below:

- a) **Torsion:** It indicated irregularities in the path of a letter. The stroke that should be straight, suffers inflections.
- b) **Shake:** Graphical waves that are agitated with shakes clearly indicate illness. Movement is not performed in a single stroke, rather constituted by small angles.
- c) **Breeze:** The path of the stroke is interrupted, providing the sensation that the pen went over the sheet of the paper without leaving ink.
- d) **Congestion:** When the inner parts of the letters are full of ink, making the writing untidy.
- e) **Fragmentation:** It means letters composed of two or more disconnected strokes.
- f) **Alteration in Slant:** When an otherwise normal writing slant gradually changes into an exceedingly right inclined, unequal slant, it is an evident symptom of illness.
- g) **Alteration in Baseline:** Descending lines show the unwillingness of the person to write, which may be due to his physical or mental suffering.
- h) **Alteration in Size of the Letters:** Disproportionate letters indicate unstable condition of the person.
- i) **Alterations in the Shape:** Exaggerated ornamentations or complications indicated some abnormality of the person.
- j) **Anomalies in the Distribution of Text and Blank Spaces:** A person may lose his or her normal sense of spatial orientation, while suffering from a disease.
- k) **Change in Writing Pressure:** Last but not the least, illness can be manifested in alterations in graphical pressure and morphology.



Fig 2: Common alterations in writing indicative of illness

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Conclusion

The above mentioned aspects of graph pathological analyses have been proved useful in understanding several human ailments, both physical and psychological, such as Parkinson's disease and other neurological disorders, different types of cancers, muscle pain related diseases, high blood pressure, depression and other mental sufferings etc. Though the graphologists are not doctors, and they, therefore, cannot treat the diseased persons independently, but they can definitely collaborate with other professionals for the early detection of prodromal symptoms, prevention and treatment of the persons. Thus, Graphopathology, can surely be considered as a novel tool for understanding human ailments, and beneficial for an overall community welfare.

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