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## **Introduction: What is graphology?**

Graphology is the study of someone's personality through his/her writing. We have to keep in our minds that it is NOT a perfect science. We are not supposed to learn everything about someone using it and there are lots of factors that can alter what we would assume, like what was the situation when the text was written and that it might reflect someone's temperament in a different period of his life both on the short and long term. That being said, it's proven that there is some sort of relationship between personality and traits in handwriting. For this reason it can be a powerful tool since it can let us know general behaviour habits of a potential target in a Social Engineering attack and help us identify good or bad targets or simply help us make more successful pretexts. Also, getting samples of someone's writing should happen often in physical security assessments ( dumpster diving, papers left around a office etcetera ) so doing a quick analysis of them has pretty much zero costs and can be very rewarding.

Multiple methods of investigation exist and they all have different approaches to a graphology analysis (like the italian and the french schools), so we will quickly go through the most important general principles.

## **Graphology in Social Engineering**

Why would a social engineer care about how someone writes? Well, getting to know as much as possible about employees of a company is precisely one of the first step done by a

social engineer, through in-loco recons and OSINT techniques. Graphology adds a nice layer to all those techniques and can be crucial in finding the perfect pretext during an assessment. Often while presenting pretexts we need to play little games with words to make people more willing to do what we are asking them and knowing someone's personality can indicate us great keywords to use to do so, or finding targets to avoid because suspicious, that might simply refuse or even call a security guard on us. From someone's text we can deduce if he doesn't like authority, so pretexts in which the social engineer fakes being an executive or in general from a higher position than the target might not be successful, while on the other hand telling how an executive asked us to complete an annoying task and how we don't like him might be a good way to connect with the target. We can identify people that like to help others and those would be great targets in most cases. We might be able to assume if someone is having a bad time and use compassion to connect with them and complete a SE attack. There are unlimited scenarios and i hope this short guide will make you curious about learning more about graphology and maybe it will help you out during an assessment.

## **Glossary (from handwriting foundation)**

*Alignment* - The spatial organization of the writing on the page

*Baseline* - The line, imaginary or actual, on which the writing rests

*Connection, degree of* - The extent to which individual letters are joined to produce connected writing

*Connection, form of* - The way in which letters are joined in connected writing, namely arcade, garland, angular, thread, copybook and wavy line (qqv)

*Direction* - The way in which a line of writing proceeds – in the Western world, left to right

*Disconnected script* - Writing in which the individual letters of a word are not joined by a connecting stroke, often called printscript

*Dominant* - One of the main characteristics in the writing analysed

*Ego* - The conscious inner self, the balance between the conscience and the pleasures of life. The image of oneself

*Elaboration* - Letterforms written in a fancy style, often tasteless

*Evenness* - Relating mainly to the regular formation of letters in a word

*Flourish* - A fancy stroke, often in the initial or the signature; can also be at the end of a letter

*Form* - The shape of letters

*Form Level* - The overall appearance of a handwriting, the accent being on speed, spacing and the form of the letters; rhythm and originality are a prime factor. It sets the standard from which the traits of the handwriting are judged - positive or negative

*Fullness* - Describes letters in which more than normal space is evident, mainly in the loops (qv)

*Garland* - A form of connection in which the letters n and m are open at the top, resembling u and w

*Graphology* - The study of handwriting to determine the character and personality of the writer

*Initial stroke* - A pen stroke at the beginning of a letter, not always essential

*Loop* - A round or oval shape that curves around to cross itself; can be open

*Margin* - The space left at the sides, top and bottom of a sheet of writing, acting as a frame

*Pressure* - The depth of the stroke, from which there would be an indentation on the reverse of the paper

*Resting dot* - A dot formed either by pressure or ink spread when the pen stops the writing movement, while still resting on the paper

*Rhythm* - The flow of the writing movement which gives life to the overall pattern; an interplay of tension and release

*Shading* - The contrast between the thick down strokes and the thin up strokes in the handwriting

*Sign* - A piece of writing, word or letter indicating a characteristic (a factor)

*Signature* - A personal sign in whatever form it is manifested; it is a person's mark of recognition - not necessarily legible

*Slant* - The inclination of writing - leftward, upright and rightward

*Speed* - The tempo of the writing movement

*Stroke* - A single written line in whatever direction

*Temperament* - The writer's individual tendencies, relating to the emotions

*Thread* - A form of connection appearing as a slight wavy line, with no definition

*Wavy line* - A form of connection with a wavy appearance, but more definition than a thread (see above)

*Width* - The distance between the strokes of a letter

*Zones* - The upper, middle and lower parts of a letter; the Western f has all three zones in a single letter

## Graphology Principles Quick Charts:

### – Pressure

Light	Kindness, intellectuality, sedentariety
Heavy	Realistic person, vitality, sexual needs, health

### – Alignment and margins

All balanced margins	Writer is social, with a respectable sense of aesthetic, good in social situations. He/she is able to control well his life.
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No margins	Afraid to be alone, writer is a very social person with lots of friend and energy and likes helping others. Might be a little egocentric, thinking he possesses everything. Hard worker
All wide margins	Solitary and lonely, often lazy and with a great ego. Befriend with only a small number of people.
No left margin	Thinks about the past, connected to the family. Shy, might not trust people. Sometimes it's a sign of a financial crisis
Wide left margin	Writer is probably a brave person, focused on the future and reaching his life goals.
Uneven left margins	Unstable person with unstable emotions that make him undisciplined. He doesn't care about authority and manipulates situations for his own profit.
Wide right margin	Scared by the future, usually postpones his duties and procrastinates a lot. Low confidence in him/herself.
Narrow right margin	They want to not miss any opportunities might happen to them and like to take high risk tasks. Very confident people.
Uneven right margin	Impulsive people that shouldn't be trusted.
Top margin	Top margin is connected to the writer's respect to the authority. A narrow top margin means he/she is not respectful towards people with higher positions than him/her
Narrow bottom margin	Judgmental or impatient writer, doesn't plan his future and he/she is very spontaneous. Sometimes overzealous.
Wide bottom margin	Very precise person that is able to decide accurately about his/her future.

#### – Size

Size of a text represents the ego of the writer. Capital letters accentuate this more.

Big letters	Great self-esteem, demanding for attention
Small letters	Intelligence, critical personality, modesty

– **Baseline characteristics**

The direction of the written lines is related to will, change in mood and emotional stability of the writer.

Ascending baseline	Optimism
Horizontal, straight	Emotional stability, security.
Descending	Pessimism, lazyness
“Zig zag”, erratic baseline	Unstable mood, lack of self control
Convex archs	Enthusiastic person but without enough stamina
Concave archs	Pessimistic person than is able to control himself and find some energy and positive thoughts

– **Spacing between lines**

Large line spacing	Good planning abilities, self assured people that can get hostile in some situations
Close line spacing	Lonely, nervous and insecure people, easily scared.

– **Spacing between words**

Wide word spacing	Writer is independent, cautious, reserved. Sometimes he/she might feel a bit lonely.
Narrow word spacing	Insecurity. Writer needs to be in contact with people and might be sociable.

– **Spacing between letters**

Wide spaces between letters	Open to new experiences and ideas, broad minded and mature person. Egoistic and self centered person, he/she can easily get confused.
Narrow spaces between letters	Typically written by women. Represses emotions, anxious writer. Judgemental. Friendly and likes to help others.

#### – **Slant**

Towards the left	Suspiciousness, discretion, focuses on past events
Vertical	Independency
Towards the right	Appeasement, impulsivity, thinks about the future

#### – **Zones**

Upper zone	Abstract or critical thinking, philosophy, religion
Middle zone	Daily activities, personal reflection of the self
Lower zone	Sexuality, materialism, practical thinking

#### – **other handwriting traits**

// will come in the future, maybe, we will see also upcoming: pics.

#### **Useful links**

<https://www.2knowmyself.com>  
<http://www.handwriting-graphology.com>  
<https://en.wikipedia.org/wiki/Graphology>  
<http://www.graphology.it/>  
<https://bhagyashreewarke.com>  
<https://handwritingfoundation.org/>