



**UWL REPOSITORY**  
**repository.uwl.ac.uk**

Informing personal branding through self-assessed handwriting analysis:  
proposal of a supportive online platform

Bakalka, Laura and Lelis, Catarina ORCID logo ORCID: <https://orcid.org/0000-0003-4402-8876>  
(2018) Informing personal branding through self-assessed handwriting analysis: proposal of a  
supportive online platform. *Visible Language*, 52 (3). pp. 9-29. ISSN 0022-2224

**This is the Accepted Version of the final output.**

**UWL repository link:** <https://repository.uwl.ac.uk/id/eprint/5749/>

**Alternative formats:** If you require this document in an alternative format, please contact:  
[open.research@uwl.ac.uk](mailto:open.research@uwl.ac.uk)

**Copyright:**

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

**Take down policy:** If you believe that this document breaches copyright, please contact us at [open.research@uwl.ac.uk](mailto:open.research@uwl.ac.uk) providing details, and we will remove access to the work immediately and investigate your claim.

**Rights Retention Statement:**

# **Informing personal branding through self-assessed handwriting analysis: proposal of a supportive online platform**

*Laura Bakalka, American University in Dubai*

*Catarina Lelis, University of West London*

## **Abstract**

Despite the abundant existing literature on the psychological aspects of graphology and visual communication, very little research (if any), has been conducted, as to the links of interpreting personal handmade markings on graphic self-branding processes. This research aimed to investigate possible interrelations between fields of handwriting analysis (graphology) and personal branding, underpinning methods and patterns of building graphic personal identities amongst higher education students. Furthermore, it aimed to promote the use of graphology in self-branding processes. This involved secondary sources of information, along with empirical works, totalling 25 semi-structured interviews and the collection of 97 handwritten samples to detect commonalities/differences of handmade markings. Participants included higher education students and instructors from visual communication fields across two cultural contexts: Saudi Arabia and the United Kingdom. The achieved findings were discussed with two professional UK-based graphologists. Given that self-branding is considered complex and time consuming amongst visual communication students, the outcome proposes an online personal brand design platform, innovating current methods of self-related research, yet grounded on current usages of conventional handwriting and providing a visual scope of relevant design applications, considering internal and external influencing factors.

## **Keywords**

Personal Branding, Handwriting, Identity, Personality Traits, Graphology, Online Platform

## **Research Question**

How can handwriting analysis inform visual communication students' personal branding?

## **Background & Rationale**

The research entailed potential psychology-related similarities between graphology and visual communication. Both handwriting and visual communication serve as external

representations of internal attributes or concepts (in cases of design). Individuals are prepared to seek new areas of their personalities that are brought to their consciousness, and such information may be of major importance in later life choices, such as in defining career paths and in being translated into personal brand logos that imply meaning and seek uniqueness in demonstrating behaviour among audiences. This study serves those who are constructing or redesigning their graphic identities, by incorporating most applicable personality assets into relevant conceptual visual representations.

Handwriting analysis is used by specialists in various fields, including medical diagnoses, to enable the detection of certain diseases (Kristin and Stansbury, 1980). Although proven useful in different disciplines, graphology is met by rejection in the academic context. Kristin and Stansbury (1980) suggest this may be due to the linear research processes in most academic domains: creative minds are known to use inductive and lateral methods of looking at the overall patterns (*idem*). Influenced by adjacent European countries, the UK adopted graphology by the nineteenth century. The British Academy of Graphology incorporates professional and academic practice of the field (Nezos, 1992). The visual communication field delivers forms of conceptual messages, depending on the interpreted meaning, profoundly grounded by semiotics. Brand design and the definition of visual-graphic identities are activities that emerge within the broad scope of this field and, similar to handwriting, graphic identities depict specific visual characteristics e.g. style, shape, colour and typeface. Personal inquisitiveness questioned connections, and values handwriting analysis may have on the visual communicative fields. Bannister and Fransella (1980 *apud* Holdsworth, 1982) defined the 'self' as an abstract result of a socially constructed understanding: self is known to include characteristics, which are built of previous encounters, imposing on the individual's values.

Psychometrics are individuality assessments; according to Cattell (1957, *apud* Cooper, 2010) predictions are constructed on behaviour, which are articulated and grounded on factors of 'trait' and 'state'. The author states that traits are most common amongst psychometric tests and are stable behavioural processes. These are divided into three elements: the first factor is 'attainment', which acts as the gained knowledge within a setting; the second is 'ability', which is related to cognitive levels or 'thinking skills'; the third factor is the external influences of the current state of behaviour. Unlike trait, 'state' measures the changing

attributes known as mood and biological motivation condition. Therefore, assessments of traits and states differ.

Within the context of personal branding, Osterwalder, Clark, and Pigneur (2012), suggest that core personality traits and interests are stable, as satisfaction is a combination of interest, expertise, talent, and personality. Individuals' occupations are based on personality types and are aligned with skills and performance. Career satisfaction occurs when there is an alignment between work environment and the individual's personality. 'Optimal' experiences, as described by Csikszentmihalyi (2014), are characterized by the psychological mental state of an individual when he/she is immersed in an activity that requires intrinsic interest, full involvement, great motivation, and skilful abilities, that will ultimately provide enjoyment, due to the alignment of the development opportunity it represents and the ability to achieve its goals.

Fishbein and Ajzen (1975, *apud* Szmigin, 2015), in their Theory of Planned Behavior, claim that attitudes are shaped based on experiences defining cognition, feeling, and performance. These factors determine the range of favouring and may change at different periods of one's life, clearly indicating that individuals' identities and ways of behaving change/evolve throughout their lives, anticipating that the methods and resources they use to present themselves will vary. Psychological tests are often used as measurements of ability, skills, cognition, attitude and are constructed and provided in different formats, depending on purposes and measurement systems (Cooper, 2010). Similarly, in visual communication, the extent of logo developments is subjective (Hodgson, 2010). Nevertheless, redesigning any logo includes some parts of the previous characteristics (*idem*).

According to Aaker (1996), a logo/symbol is the tangible signature element of a brand's personality whilst a brand, according to Wheeler (2009), forms an intangible relationship with its audience, being built on experienced emotions and associations. Brands strive towards differentiation and interaction, often by adapting a certain, preferably unique, visual language. The brand acts as the overall scope that includes visual features of identity (either institutional or individual), along with communicating core values, by building a reputation of its positioning and strategy (Aaker, 1996).

Khedher (2014) states that personal branding is a process of self-marketing. This involves the establishment of brand identity differentiation, brand's positioning through behaviour, communication and symbolism, and the evaluation of the brand's image to achieve personal and professional objectives. Accordingly, Aaker (1996) claims that a brand's identity should represent its purposes and values; the extension of a personal identity must reflect image, behaviour, style and personality. Lin's analysis framework and findings (2010) focus on the relationship of the user's personality traits and the proposed personal brand disposition. The brand's proficiency and experience impact trust, effecting excursion of brand allegiance. Engagement and accessibility also affect performance of brand allegiance.

Likewise, handwriting is an external expressive form of an individual, a visual mark of communicated existence and emotional state (Nezos, 1992), subject to life experiences. Handwriting is a personal mark of movement embodied onto a surface, manifesting the core components of the quality of writing (Nezos, 1992). Graphology (handwriting analysis) is known to be open to interpretations, but some general rules have been agreed working as simplified models of identity awareness, where the main areas of credibility are: layout, zones, size, baseline, pressure, shape, legibility (Kristin and Stansbury, 1980). Accurate interpretations depend on complex formations of multiple aspects of human traits (Nezos, 1992). It is believed that combinations of signs are infinite, and the simplified-model results are incomplete interpreted indications (idem).

Subject to many modern field requirements, technologic tools are heavily applied within the creative industries (Casey, 2013). In the context of writing, technology has greater speed of processing and predicting words, faster than the common human's speed of cognition. The handwriting expert and forensic document expert Wendy Carlson (idem) confirms that cognition is becoming vulnerable as a result of this phenomenon, adding that cursive handwriting is declining due to technologic communication, reducing performances of both sides of the brain, those of which relate to functions of cognition and movement. According to Mueller and Oppenheimer (2014) multitasking on computers is met with high distraction. Jan Olsen also confirms that writing fulfils the requirements of later recall (Casey, 2013). According to Wheeler (2009), the three elements associated with the sequence of recognition in visual communication are fragmented shapes, colours, and then the complete form (including textual elements), recommending that legibility is a must. Docmail concluded that a significant portion of participants could not make sense of their writings (Casey,

2013). Recent research shows that cognitive performances of computer note-taking methods are lower; dictation is written word for word, rather than processing information in one's own words (Mueller and Oppenheimer, 2014).

Hietajärvi (2012) believes branding trends are shifting towards personal types as an effect of media consumption. Most social network platforms are visual means of self-branding, where basic recognition may be the desired result of what the ordinary public persona defines as 'success'.

Baer and Vacurra (2008) believe that information design is defined as the organisation and decluttering of complex information, implying significant moral standards. The greater the density of intricate information, the greater the need for design. Effective communications carried out in graphic design deliver hierarchy, by specific applications of colour, imagery, type, and symbols. Harris states "Art is about self-expression. Design is selfless" (idem, p. 88).

The process of building the first author's graphic identity faced several alterations and transitions. Her journey of self-discovery altered the visual approach, through which she previously chose to represent herself. Graphology has continually fascinated her. What would be a new area of study within her postgraduate studies challenged and motivated the researchers to proceed with this passionate subject. The stated topic of research was selected as the Master's major project on the MA Advertising, Branding and Communication at the University of West London.

Questions arose of impacts of students comprehending their individualities, and visually representing them accordingly. Assumptions were raised as to the type of attitudes associated with their current identities. The gap identified was the lack of research covering the impact graphology may have on visual communication students, despite its great importance in alternative fields. The overall objective was to detect motivations and goals of the targeted audience in relation to self-branding projects, amongst academic institutions. The investigation also looked into links and commonalities between technologic mark-making tools and the conventional handwriting processes.

An analysis model of concepts, dimensions, and components has been created as a summary of the topics this investigation looked into. Three main concepts are: Graphology,

Psychology, and Visual Communication (Design). The most relevant key points of dimensions and components are also addressed in this paper (Figure 1).

	Concepts	Dimension	Component
Graphologists Interviews + Handwriting Samples	<b>Anatomy:</b> Handwriting Analysis (Hand skills & Mark-making)	Graphology	1- Inner Personality: Zones
			2- Energy: Pressure
			3- Outer Personality: Slant
			4- Impression: Size & spacing
			5- Personal Space: Speed
			6- Approach: Movement & shape
			7- Self image: Pronouns & signature
		Literacy	8- Academic Background
		9- Cultural background	
Visual Communication Students Interviews	<b>Psychology:</b> Visual Communication motives	Fields of Education	1- Visual Literacy
		Performance	2- Motivation Type
			3- Time towards reward
		Academic field of education	4- Identity Brief requirements
			5- Influences
Visual Communication Students + Instructors Interviews	<b>Design:</b> Visual Identity / Branding	Self	1- Logo type
			2- Visual Identity / signature (identity)
		Perception	3- Internal
			4- External

Figure 1. The research analysis model

## Method

A qualitative approach, via descriptive and interpretive analysis informed the exploration of processes and causes of constructing personal brands as a phenomenon. Influenced by inductive reasoning, the method included observations and interviews. Adopted by Rolf Faste, the Design Thinking process will contribute a basis of the research as it concerns user-centered design. According to Brown and Katz (2009) the design process is studied through a structured process and is verified through trial and error routines. This suggests five stages of creative strategies to be applied in project development, based on the user needs, and suggesting methods of innovative problem-solving: emphasize, define, ideate, prototype, and test.

The investigated materials derived from a) a total of 25 semi-structured interviews with both UK based graphologists (N=2) and higher education students (N=18) and instructors (N=5) from diverse subject fields within communication and the visual languages, across Saudi Arabia and the United Kingdom, and b) the collection of students and instructors' visual samples of handwriting (N=97).

An ethics form and declaration were sent to and approved by the University's Academic Research & Ethics Committee: it included a breakdown of the research information, and data management declarations. Consent forms were signed and collected prior to interview sessions.

Most meetings were held within university premises, yet external visits and online sessions were also established.

Academic connections across the Middle East and the United Kingdom allowed the researchers to acquire access to two academic contexts. The Saudi-involved institution was Dar Al Hekma University, while the main British institution was the University of West London. Participation was also met via direct access from course instructors and, contingency plans allowed reaching student participants from alternative universities through further connections. In these cases, online interviews, and external meetings were more convenient. As a result, students' participation amongst the UK involved: The University of West London, The Royal College of Art, Chelsea College of Arts, and University of Nottingham.

The one to one semi-structured interview sessions took an average of approximately 20 minutes, focusing on perception of visual identity/branding representation. The involvements were open discussions, maximizing response, e.g. motives and feelings. Handwriting samples would be collected to detect possible similarities and/or differences of writings. These sessions were brief, in which the participants would be provided with a blank sheet of paper and a selection of pens and pencils. The sampling sentence that was dictated to the participants was "The quick brown fox jumps over the lazy dog"; this pangram is widely known within typography development and includes all roman alphabet characters. Samples collected in Saudi Arabia, where English is generally the second language, were from individuals who have mid to high English linguistic capabilities. This is an academic requirement set for applicants. Thus, the educational level provided in the Dar Al Hekma University is of high academic quality, applying international curricula, where classes are delivered in English.

Two graphology workshops were also attended addressing impacts of schooling curriculums on the phenomena of similar handwritings. Another discussion raised, was the comparison of experience and writing qualities between utilizing conventional and technological writing tools. In addition to these, the empirical works included interviewing professional graphologists in the UK, those of whom were associated with the British Academy of Graphology, with over 20 years' worth of experience. The objective was to discuss and validate key findings from observations along with the categorial analysis of collected samples such as writing zones.

## **Results**

### *Semi-structured interviews*

Student's motivations of academic work performances were categorized as purpose-driven, content, achievement, appreciation, credibility, satisfaction, and career orientated. Interests are focused on social aspects of 'competition' and 'belonging' and alternative personal hobbies, such as those grounded on visual style e.g. illustration. In certain cases, individuals compare themselves and their abilities to others. Academic accomplishments' motivations are short-term based, being classified as personal contentment, enhanced student performance thus, affecting results, exhibition of work and up-coming graduation. Students define success using expressions such as 'being financially independent', having developed 'communicational abilities', being 'socially accepted' (belonging), achieving a certain level of 'status' (which is attached to credibility, reputation and recognition) and 'internal fulfilments', linked to ideal perceptions of self, which include contentment and satisfaction, along with morals. Most students who shared their visual identities have not tested them in terms of communicational impact, hence, their personal logo's success each had not been determined. Three out of 18 students were able to clarify their precise clientele profile in terms of region of provenance, culture, and industry. Alternative responses were broad, being commonly referred to as 'design agencies', yet no significant classifications have been made as to the agencies' types, which stand open to interpretations e.g. digital, design, advertising, etc..

Twenty-two percent of students claimed to have switched majors during early phases of academic years. A cause affecting this decision is the consideration of desired career paths in current job markets. The interviews also revealed that graphic identities of personally developed logos for students to include in their CVs and portfolios have been created during early academic years. However, redesigns/alterations occur due to indecisiveness, studies dissatisfaction and the personal unsatisfactory result of visual representation of one's self. Indecisiveness occurs mostly as a result of registration timing constraints, and reassurance occurs when satisfactory grades have been obtained and shared for credibility, supporting their identities and self-esteem. The complexity level of branding intangible personas is seen as greater than branding tangible products. Hence, instructors pointed out that design choices amongst students are becoming similar, adhering to logotype approaches, applying textual

contents, as opposed to colour and shape based creations. Successful/inspirational visual identities impacts the students had retained from in-class examples. However, only one student described her logo as being based on her actual handwritten signature.

Among students, timing allocations are believed to be unbalanced throughout the whole process of creating their own personal brand identity: more time is spent on self-related research and, as a consequence, creation and execution time is decreased.

Most students claimed their preference in utilizing mixed methods for their executions, using both conventional and technological tools. Students have also agreed on the experiential limitations of utilizing Wacom devices, along with the need for extra tutorials of brush adjustments on Adobe Illustrator, for instance. Processes that require extra time, effort and experience defect the flow of movement.

Early years and stages of creating a personal identity may be developed into a brand during senior levels, where the portfolio module is undertaken, and developments may be built on feedback given during earlier years. Identity developments in portfolio modules may include scaling, bilingual and colour adaptations.

An interviewed instructor expressed her views that self-branding is one of the complex tasks for graphic designers. Many of which, their industry circles along with other professionals' experience complexities when branding themselves. The main issue is that self-branded individuals become unsatisfied, constantly developing designs. Here, change becomes more frequent, as opposed to visual identity changes amongst corporate businesses.

Within the academic contexts, personal identities are undertaken during two semesters: the first, during sophomore or junior year, after which the students are taught design principles and semiotics along with fundamentals of relevant design software. The second, is undertaken during the senior year's semester, as part of the portfolio module. In this, development is vital as experience is gained from industry-work encounters such as internships. One instructor shared that academic standards are elevated following the summer of which the placement-led module is undertaken.

Lecturers also mentioned that in cases where sketches developed by the students are shared with their instructors, conventional hand marks are becoming less common amongst students in Saudi Arabia as opposed to the United Kingdom. This type of requirement enforcement varies amongst the academic contexts. In most cases, instructors have shared that works are digitally oriented, as opposed to written/sketched formats. Nevertheless, two instructors stated that the conceptual developments are enhanced where conventional tools are used. Other cognitive and intellectuality enhancements are grounded by classroom table distributions and layouts, including discussions. One instructor has shared that creativity is limited when students use technological facilities, as designs are created and edited prior to concept development. As a result, instructors have noticed that verbal and psychical gestures clarify conceptual in-class descriptions. Type-based descriptions are written towards the finalising stages of the process. Another instructor stated that usual requirements amongst some academic institutions are forms of a written documentation, which may be easier to grade. This instructor has stated the enforcement of generating an online presence amongst the visual communication students, due to the further impact leading towards employment.

It was also noted that the requirements are directed towards a theory-based approach, as opposed to industry-related practices. An instructor mentioned that receiving industry accreditation, is a requirement of practice-based projects in Saudi Arabia. It is questionable that the amounts of theory and practice-based outcomes vary amongst the institutions and regions. In cases where enquiries of the grading criteria were raised, the grading features are based around two types of deliverables, being tangible and intangible sorts. Both have received equal amounts of responses. Tangible deliverable includes aspects of layout typography, consistency, execution (includes print), and written (typed) documentation. The intangible deliverable, however, include the delivery of values, along with effectiveness of the communicated outcomes. The grading criteria is flexible, as opposed to the fixed assessment rubric.

In cases where graphologists were interviewed, one shared that there is a noticeable lack of handwriting usages, although the impacts of the analysis graphologists deliver have been preserved and are meaningful amongst the general public. In many cases, they shared that their clients have been noted to praise the outcome of information provided by the graphologists, for their accuracy; word of mouth serves as its successful marketing tool. Graphologists also shared that their clientele profile is commonly companies within the

financial sector, being involved with the human resource department and monitoring work performances of employees. Nevertheless, the graphologists also believe that handwriting is becoming a matter inducing negative associations, causing discomfort amongst some members of the public. They have pointed out that this may be linked to a lack of confidence as clients who are asked to provide a piece of handwriting are deeply concerned with the aesthetic value and the accuracy of delivered communication such as spelling. Graphologists believe that handwriting should be introduced in a fashionable manner, thus eventually becoming a trend.

### *Handwriting samples collection*

Comparably, although penmanship varies widely, the collected handwritings are becoming similar (*Figure 2*): categorizations based on shape and slant are put forward: within the category ‘shape’ the analysis considered the codes *straight/angular*, *round* and *thread*; as for category ‘slant’, the coding relayed on left, vertical and right slants, disregarding letter case, thus, grammatical applications. In cases as such, letter cases require further categorial interpretive aspects: size, form and originality (Kristin and Stansbury, 1980). Letter ‘B’ samples evidence the high usages of round applications, while letter ‘H’ has an equal amount of round and straight/angular letter approaches. The most common application of slant is vertical. These selected categories would be more credible and reliable within greater sections of writing. However, this method was conducted fulfilling the objective of allocating patterns of assessing letters in a social context, as opposed to individualistic writing interpretations. Furthermore, in alternative cases of assessments, writing would be generalised based on the highest applied hand-drawn value of letters of each individual. It is to be noted that the ‘pencil’ was the commonly favoured marking instrument out of other tools that were presented to the participants such as markers, ballpoint and technical pens.



Figure 2. Categorisation of ‘B’ and ‘H’ for shape and slant

According to McNichol and Nelson (1994), handwriting is set to dominate three areas referred to as ‘zones’: upper, middle and lower (being the ideal represented by a balanced application of all three. The authors believe that writers dominating the middle zone (also referred to as the ‘comfort zone’) may be self-centred striving to achieve relatedness and social belonging. The collected samples of handwritings also demonstrated the commonality of commitment to the middle zone (Figure 3).

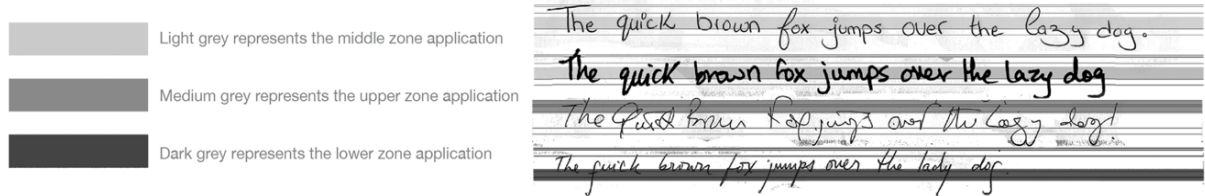


Figure 3. A sample of the collected handwritings evidencing preference for the middle zone

### Graphology workshops

Workshops’ sessions detected that handwritings that graphologists come across are becoming more confined to middle zones and it has been pointed that usages of print-like handwritings are becoming more common among people nowadays. In their opinion, this phenomenon may be a result of schooling curriculums promoting the copybook print style, as opposed to the more traditional cursive lettering. From a young age, individuals are taught that enlarging letters to reach top and bottom lines is the correct way of writing; as one progresses through academic years, educational workbooks undergo constant alterations e.g. condensing and/or removing lines. It was also mentioned that in many cases, personal negative attitudes are developed towards one’s handwriting. Note should be made that if on one hand some

technological devices may promote the use of hand skills, such as Apple Pencil or Wacom Pens, graphologists have highlighted the constraints of using such devices, as opposed to the conventional tools. These limitations that may vary depending on programme tools, functional capabilities and the perceived level of difficulty.

Findings pointed that, during higher education years, handwriting usages have reduced dramatically, as opposed to alternative methods of mark-making such as digital note-taking or drawing devices. Only four students shared that handwriting was incorporated at some point during the personal branding process, for the inclusion of unique details in font/typography-based designs.

Practices utilized in self-discovery in personal branding include self-reflection, utilizing accurate personality type psychometric assessments which are available online e.g. Myers-Briggs (MBTI, 2017), and questioning others. Self-reflection primarily acts as an overlap and also a connection of past experiences, image, style, and emotions. An important aspect in personal reflection is to look for validity and accuracy and online assessments are considered as a validity resource. Here individuals search for possible links of online results (virtual) to the individual's areas of self-related awareness, regardless of forms and processes required. Usages of alternative online assessments, such as those created for personal interest e.g. 16 Personalities (2017), may be few and far apart, due to the developed ties to inaccuracy. The users define inaccuracy after taking the assessment, in which they become selective as to the provided criteria of results and applications based on the amounts of self traits they are aware of. The reasons for some discontinued usages of alternative online generic personality assessments are their broad results, inaccuracy and scepticism, mostly to their links to horoscope grounded information. Regardless of the degree of acceptance of online assessment results/descriptions, the 'validity' itself is the investigated aspect and it is possible that the cause of this is the lowered self-esteem and confidence this audience may be facing at this stage of their lives.

Finally, during the interviews' sessions, all students expressed high interest in a guiding tool linking self-research and design. Furthermore, some student participants shared they utilized methods of branding and self-related research, including accurate online psychometric assessments of personality, such as Myers-Briggs (MBTI, 2017).

Total	Profile	UK	SA	Findings
25-Semi-structured Interviews	18 Students	x	x	Short-term goals/motivations
				Difficulty narrowing clientele profiles
				Switches in academic major choices/career paths
				Issues of Indecisiveness
				Complexity of branding intangible personas
				Mixed-media project executions
				Usages of online personality assessments in Personal branding
				Interest in personal branding new self-guiding tool
	5 Instructors	x	x	Academic Requirements
	2 Graphologists	x		Logo-type design trend amongst students
				Discussion of collected handwritten samples
				Middle zone commitment
2 Graphology Workshops	N/A		Rise of copy-book print style	
			Experiential limitation of digital writing	
			Middle zone commitment	
97 Handwritten samples	N/A		Commonality of round shaped letterings	
			Commonality of vertical slants	
			Middle zone commitment	
			Pencil as favoured writing instrument	
			No significant contextual differences (shape, zone, style)	

Figure 4. Table of Findings

## Discussion and Proposal

Usages of online personality assessments may be few and far apart, due to inaccurate and/or sceptical results, depending on the assessment's type and purpose. The scale of accuracy is defined by the user after taking the assessment, in which they become selective of results based on the amounts of self traits they are aware of. The assessment accuracy and credibility is commonly gained through word of mouth, which more than often is influenced amongst students.

It became clear that the research detected no significant handwritten differences amongst students from the UK and Saudi Arabia in terms of overall style (shape and slant) and zone. This was due to the type of profiles this investigation approached: as part of both the UK and Saudi Arabia academic institutions' requirements, all involved participants had efficient (mid-high) English linguistic capabilities, being of the written and verbal sorts, namely in the case of Saudi Arabian institutions that strongly rely on British and/or American curriculums. Due to this, early categorizations of collected writings appeared to be similar.

In the collected samples, round lettered applications, such as those found in letter 'B', are interpreted as the desire to avoid conflict. These were majorly common amongst the analysed handwritings, meaning that these individuals are likely to be easy-going, desiring both efficient communication and acceptance. Individuals are also likely to be approachable, yet there is a constant search for confidence, hence change may be seen as a threat. The letter 'H' consisted

of this approach along with straight/angular shapes (Kristin and Stansbury, 1980). Straight/angular letters are indicators of logical thinkers and are demonstrations of dominance and determination. Moreover, they are less flexible individuals: while rounded shapes relate to the physical world, straight letters are associated with the mental domain. The vertical slant is interpreted as present-related and independent. The utilization of the pencil is linked to error correction tolerance, also depicted as fear of permanence (idem).

It is debatable that students may find comfort in writing on lined pages, which are graphologically depicted as both guidelines and barriers (Kristin and Stansbury's, 1980). However, it is also possible that, because individuals have grown accustomed to writing in a straight line, removing the baseline, causes a sense of imbalance. It may be questionable that students are subconsciously following dotted lines of successful visual identities, possibly resulting in the rising trend of noticeable logotypes.

As graphology had little/no previous ties with visual communication, this study introduces an approach in which this human science may be integrated and may be further carried out by linking direct input from graphologists and visual communicators. Similar to the online personality assessments that students are currently incorporating in their self-branding projects, this study also carries out the feature of self-evaluation. This is based on the individuals' approximations, those of whom believe their writings fit the given graphological criteria of samples (Kristin and Stansbury's, 1980). In depth psychological analysis of personality features and alternative fields, such as graphology analysis rely on human resources along with further requirements of funds, time and effort.

Due to the complexity of personal branding amongst the targeted profile, an online personal branding platform is proposed, after an exploratory research of existing supportive online platforms that was conducted in order to assess the innovation of the current and available technologies.

Unlike the current methods of self-branding, the approach presented in this paper promotes handwriting as a tool of self-related research, working similarly to alternative personality assessments. With an approximation of 20-30 minutes to take the assessment, this system provides a qualitative report of the internal (handwriting) and external (context) attributes along with the user's design preferences. Therefore, the system provides a range of possible design approaches that best suit the overall characteristic traits found in the selected material

(Figure 5). Narrowing the visual scope of relevant/potential design applications, the user undergoes three stages of the Assisted Design:

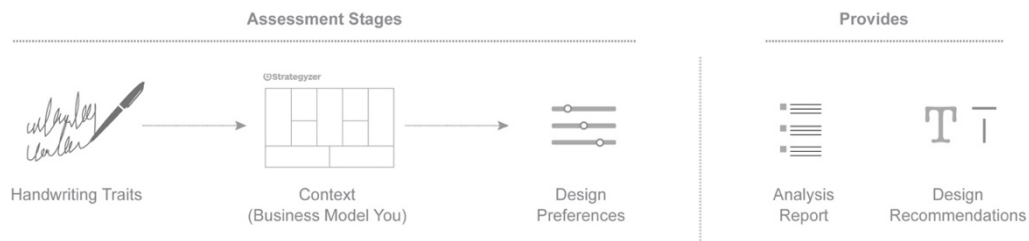


Figure 5. The main interaction structure for self-branding assistance

1. Handwriting Traits: the user is asked to self-assess their writings based on matching these with simplified sampling criteria that are presented to them in the platform’s interface (Figure 6).

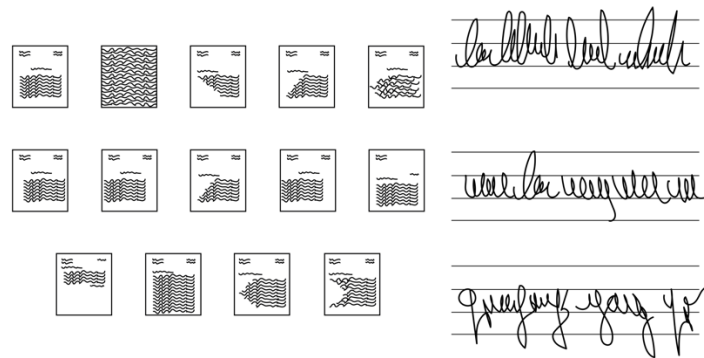


Figure 6. Handwriting self-assessment

Business Model You (BMY): Similar to the concept of analysing the Business Canvas, the BMY dissects functionalities of the individual as if he/she was a business, grounded on personal interests, skills, abilities and personality. This acts as a blueprint for professional activities and decisions. Supported on Strategyzer’s categorisation, the user is asked to complete his/her individual model (Figure 7). As the earlier findings were of short-term nature, the user’s narrowed keywords detect motivations, interests and specified audience segments in relation of their periodic interest.

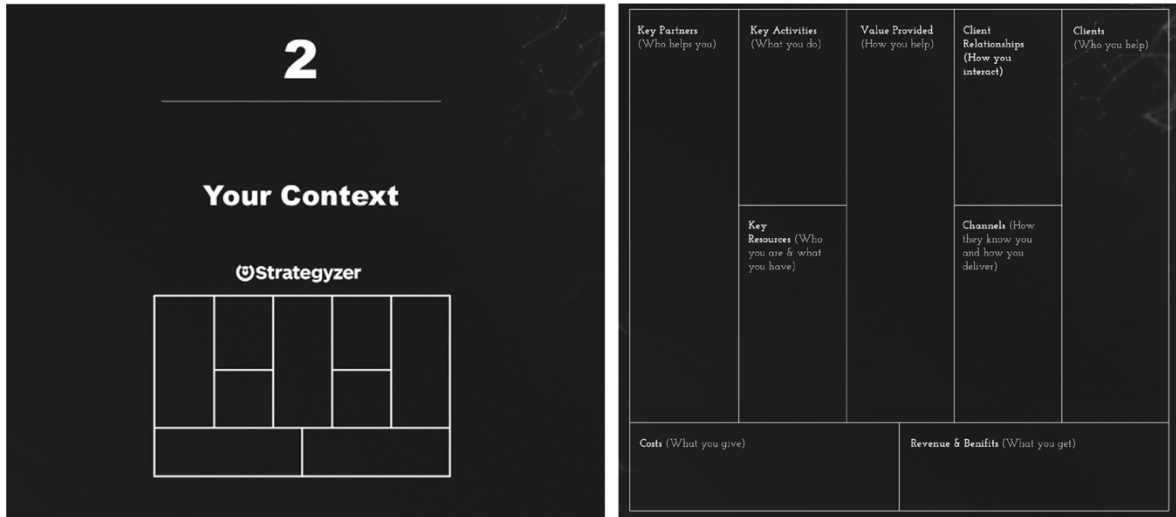


Figure 7. Business Model You

Source: Osterwalder, Clark and Pigneur (2012)

2. Design Preferences: sets a framework for design options, allowing the user to determine visual style preferences (Figure 8).

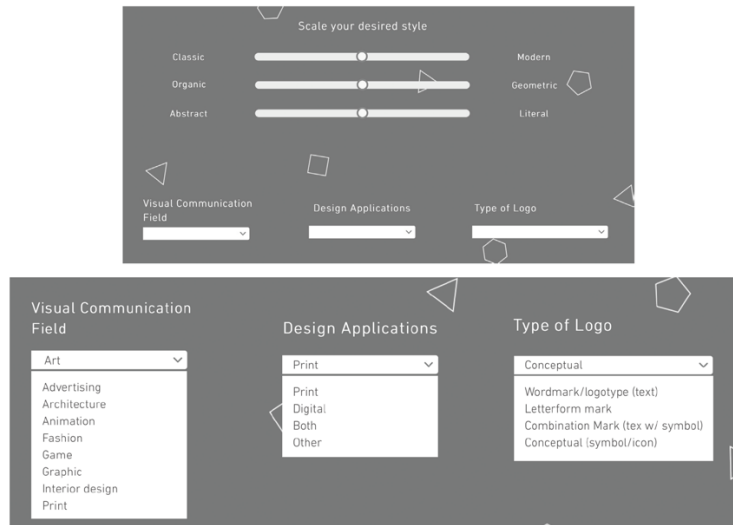


Figure 8. Design Preferences

After the assessment phase, the user is directed to his/her report page, in which an overview is presented (Figure 9). The handwriting traits are interpreted based on what the individual has selected from the provided templates. The individual's contextual areas are categorised, based on performances and goals.

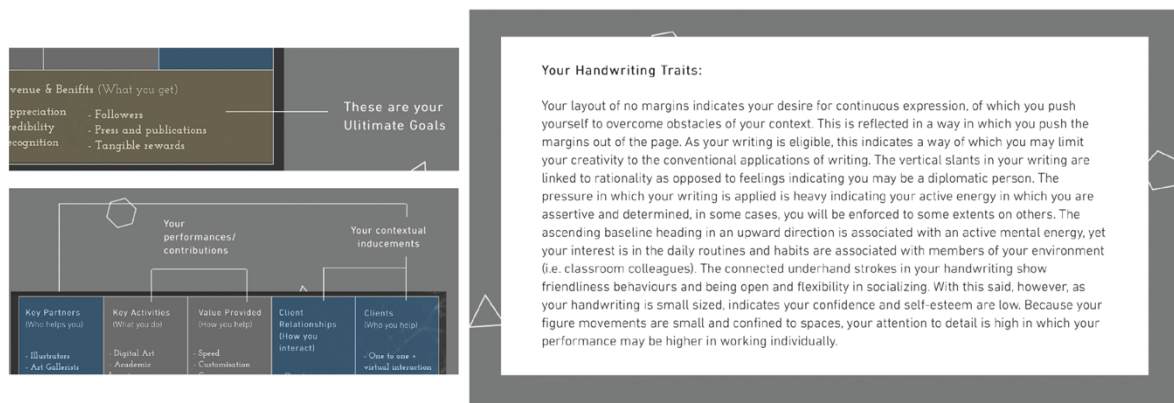


Figure 9. Sample of a Report page

Finally, the Results stage recommends designs, based on the user's report. In this page, connections of the user's results are depicted as concepts. These connections link several aspects of each of the three stages randomly, so that three concepts are put forward. One or two concepts may be selected for the final visual scoping. Furthermore, this serves as a visual guide of self-representation, without any prescriptive intention. Samples of imagery are gathered from existing and available online material as relevant inspiration (*Figure 10*).

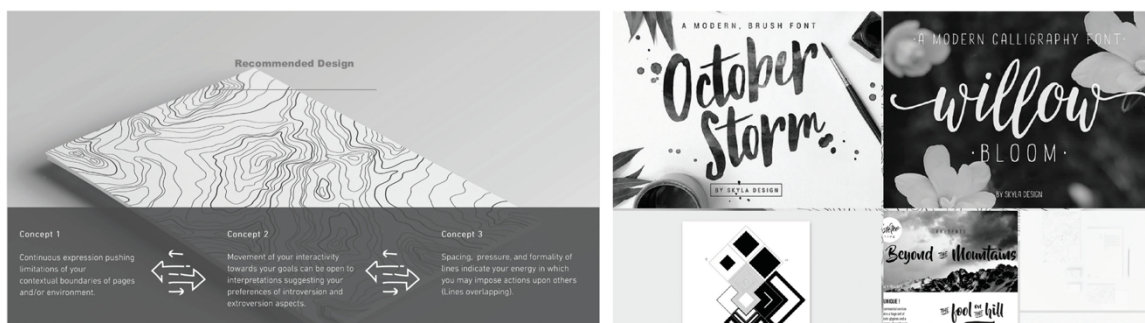


Figure 10. Results area and visual recommendations

The outcome is a mid-fidelity prototype, with fixed functionalities for certain buttons, which was tested and evaluated by two visual communication students, each taking thirty minutes. The evaluated aspects were: clarity, navigation, theme, relevance and results. Participants showed high interest in the theme due to its relevance to their field. More time was required on the BMY section as opposed to other areas. The navigation throughout the platform was linear, yet handwritten templates would require supporting textual clarity.

## **Implications**

It has been noted that structure and contents' variations apply within identity/branding requirements across the students from the international academic institutions that participated in this research. An example of this would be the bilingual considerations of audience profiles of marketing one's self within the Middle East where both Arabic and English are commonly used as opposed to the UK. Another example would be the certain applications of visual styles, e.g. bilingual similar font adaptations. Although comparisons of the specific requirements vary in amounts of theoretical and/or practice-based outcomes, international academic institutions may be shaping and influencing personal desired outcomes, perhaps in similar ways. More specifically, definitions of success vary amongst instructors and the academic institutions. As a result of these conflicts, personal identities may experience later developments and/or changes once the educational priorities and assessments have been completed, meeting the demands of course requirements. It may also be possible that later adaptations are applied after having had work experience.

The proposed online platform assists visual communication students in establishing their personal brands by removing virtual time constraints and innovating the traditional self-research approaches. Such an innovative platform would provide personal insights based on the individuals' self-evaluation of personal handwriting, determined by general elements/features of graphological credibility. As this is a self-based assessment, results are generated based on selected criteria of handwriting and design preferences sections along with type-based keywords in the BMY section. Processed data and selections are grounded by programmed codes of algorithm combinations of the three categories, which are then incorporated as textual summarized descriptions within the Report page. Concepts are formed based on the combined compositions, thus affecting the scope of relevant design manifestations from existing online imagery.

Nonetheless, this service would balance personal marks by incorporating the analysis of certain criteria, e.g. layouts found in student's handwritings in relation to personal goals and design preferences. The research also promotes conventional methods of handwriting – restoring its disposition within the higher academic institutions, thus subsequently enhancing cognitive performances.

An interesting future approach, building on this work, would be the integration of Lin's findings (2010) on the connections between extroversion and amiable personality qualities and characteristics of brand enthusiasm. This may be reflected within the resulting design choices, along with their conceptual and semiotic value. A fully functional version would be necessary for final validation purposes, of which multi-language formats would be addressed, and a broader range of students from a larger variety of backgrounds would be considered as well.

Such a tool could become a helpful resource for the careers offices in universities, or as a supportive mechanism for placement-led modules, in which internships and industry experience is a vital part of the assessment structure. Also, it would be interesting to verify if such a resource could have any impact in reducing the change of academic fields amongst students. Theoretically, this research raises the question of how relevant penmanship education and practice may actually be, as the findings point out to its possible benefits on personality and attitude definition, without disregarding aspects of representations of culture and tradition.

Should this study find a great deal of interest amongst a wider scope of visual communication students, further adaptations of the outcome may be considered. Such an approach should incorporate human resources such as graphologists. The outcome could introduce a funding area, in which personal branding may be further assisted with in-depth and thorough handwriting analysis, where writings may be scanned and uploaded to the platform for direct input from professional graphologists, for instance. Further considerations of this approach are yet to be investigated in relation to the alternative stages of the assessment along with further requirements of costs, time and effort. It would be interesting to investigate if students would be interested in a service that creates or guides the creation of visuals for their personal identities as opposed to design scoping of existing material. Nevertheless, such a case is debatable, as it raises the paradoxical conundrum of experienced designers designing for student designers.

## References

- Aaker, D. (1996). *Building strong Brands*, London: Simon & Schuster.
- Baer, K. and Vacarra, J (2008) *Information Design Workbook*. Graphic Approaches, Solutions, and Inspiration + 30 Case Studies. Massachusetts: Rockport Publishers. Inc.
- Brown, T. and Katz, B (2009) *Change by Design: How Design Thinking Transforms Organizations and Inspires Innovation*. New York: Harper Business.
- Casey, M. (2014) *Has Technology Ruined Handwriting?* Available at: <http://edition.cnn.com/2013/07/26/tech/web/impact-technology-handwriting/> [Accessed: 14 November 2016].
- Cooper, C. (2010). *Individual Differences*. Second Edition. London: Arnold.
- Csikszentmihalyi, M. (2014). *Flow and the Foundations of Positive Psychology*, Springer Netherlands, DOI: 10.1007/978-94-017-9088-8.
- Furtado, V., Ayres, L., Oliveira, M., Vasconcelos, E., Caminha, C., D'Orleans, J. & Belchior, M. (2010). Collective intelligence in law enforcement – The WikiCrimes system. *Information Sciences*, 180, pp.4–17.
- Hietajärvi, S. (2012). *Branding People*. Available at: <http://www.theseus.fi/handle/10024/45554> [Accessed: 20 January 2017].
- Hodgson, M. (2010). *Recycling & redesigning logos: a designer's guide to refreshing & rethinking design*. Gloucester, Mass: Rockport.
- Holdsworth, R. (1982) *Psychology for careers counselling: 'Knowledge of Self' conceptual model*. London: British Psychological Society and Macmillan.
- Kaplan, A.M. & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of Social Media. *Business Horizons*, 53(1), pp.59–68.
- Karahasanovic, A., Brandtz aeg, P. B., Heim, J., Lüders, M., Vermeir, L., Pierson, J., Lievens, B., Vanattenhoven, J. & Jans, G. (2009). Co-creation and user-generated content—elderly people's user requirements. *Computers in Human Behavior*, 25, pp.655–678.
- Khedher, M. (2014). Personal Branding Phenomenon, *International Journal of Information, Business and Management*; Vol. 6, Issue 2, pp.29-40.
- Kristin, K. and Stansbury, R. (1980). *Hand Writing Analysis: The Complete Basic Book*. USA: Newcastle Publishing Co Inc.
- Lin, L. (2010). The relationship of consumer personality trait, brand personality and brand loyalty: an empirical study of toys and video games buyers. *Journal of Product & Brand Management*, 19(1), pp.4–17.
- MBTI (2017) *A New Perspective on What It Means to be You*. Available at: <https://www.mbtionline.com> (Accessed: 1 March 2017).

McNichol, A. and Nelson, J.A (1994). *Handwriting Analysis, Putting It to Work for You*. New York: McGraw-Hill Education. Revised and Expanded Edition.

Mueller, P. and Oppenheimer, D (2014) 'The Pen Is Mightier Than the Keyboard: Advantages of Longhand Over Laptop Note Taking', *Psychological Science Online First*, SAGE, pp. 1-10. doi: 10.1177/0956797614524581.

Nezos, R. (1992). *Graphology: The Interpretation of Handwriting*. 3rd Edition. London: Scriptor Books. Volume 1.

Osterwalder, A., Clark, T. and Pigneur, Y. (2012) *Business Model You*. Hoboken: John Wiley & Sons, Inc.  
Szmigin, I. (2015). *Consumer Behaviour*. Oxford, UK: Oxford University Press.

Wheeler, A. (2009). *Designing Brand Identity*. Hoboken: John Wiley & Sons. Third Edition.

16 Personalities (2017) *Our Theory*. Available at: <https://www.16personalities.com/articles/our-theory> (Accessed: 2 March 2017).