Visual semiotics in the structure of Kufic calligraphy

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ABSTRACT

In the aesthetic study, semiotic interpretation is an intellectual approach to deciphering the hidden meaning of an aesthetic achievement's taste. The study's goals include comprehending the artwork's structure, which necessitates an in-depth interpretation of the language by translating it into official symbols. This research method uses a linear formation sample with semantic attributes attached to the Kufic calligraphy of artworks. The findings reveal that the emergence of geometric lines in a linear composition has a decorative abstraction that may be used to argue that the artist intended to place it there and that this is a symbol of the cosmos and its existence. This study adds to our understanding of compositional insight in Arabic calligraphy as an expressive aesthetic expression that alludes to the text in the sense of meaning that lies underneath the direct meaning.

1. Introduction

Unquestionably, linear composition plays a significant role in the aesthetics of Arabic calligraphy. When calligraphy is arranged and composed, it is considered to develop into a distinct formative artistic work that attains a level of distinction and originality [1]–[3]. As a result, the vocabulary of the textual structure used to construct linear composition (letters and words) is the language of linear composition. The arrangement of these elements is believed to be what distinguishes this arrangement from others. The study's title, "Visual semiotics in the structure of Kufic calligraphy," poses the question, "What is a calligraphic sign in its plastic manifestations?" The source of the reflection presented is a sign with a learned identity that has evolved over centuries in Kufic Arabic calligraphy in Islamic civilization: a sign whose initial visual approach prompts an interpretation between a written and painted sign (aesthetic sign); a sign with a learned identity that has evolved over centuries in Kufic Arabic calligraphy in Islamic civilization. Because this emblem is Islamic, the research allowed for the development of its iconicity before stressing its plastic identity. The way this linear composition appeared reflected the aesthetics of Kufic calligraphy.

The semiotic interpretative composition analysis in Kufic calligraphy is founded on a secondary margin that emphasizes the art's quality to integrate it into creative areas, rather than on the cultural and civilizational imperative of enlightening all of its creative components. As a result, the study challenge might be summarized as follows: What is the difficulty with the semiotic interpretation of Kufic script formations? According to Mahdiyeh, calligraphy (writing) is a system of signs that, in modern semiotic studies, is compared to language, spelling, symbolic rituals, and polite behaviour rules [4]. After the semiotic efforts of the linguist de Saussure [5] and the philosophical and logical research of the general semiotics scholar Ch.S.Peirce [6], Luis Jorge Prieto [7], the most important researcher who expanded the circle of semiotic research in what was known as the semiotics of communication, sees calligraphy as a two-sided communicative system: formal and semantic, as we observe it. They are the functional entities assigned to deliver archives in a certain textual format and linguistic meaning. The distinction between language and calligraphy, on the other hand, is that

language is a direct communication system that we use to replace language, whereas calligraphy is a communicative system that we use to replace language. Three components must work together for the semantic act to be complete: the sign, the object, and the interpreter. The representamen is important because it allows us to see the signing process as a creative and hermeneutical process in which each sign draws its meaning from other signs in the infinite sign process [8].

Furthermore, we established the original and subcategories of interpretation by including the interpreter among the theoretical concept of the logical-semiotic approach to phenomena. Furthermore, we have categorised the three representamina: the direct interpreter, the dynamics, and the ultimate interpreter, since the representamen is decided by what the sign seeks in a quasi-mind in the form of an emotion, an act, or proof. Additionally, we classed the three interpreters as follows: direct interpreter, dynamic interpreter, and ultimate interpreter, as the interpreter, is determined in a quasi-mind by the sign's desired emotion, act, or proof. This research emphasises the visual interpretation of transportable scenarios associated with iconic perception through a great effort that includes everything related to interpretation and semiotics [9]. Now, thought has become the shape of a sign. In that situation, if we can discover and use the correct way to think or the correct way to modify signs, the truth can be defined as nothing more or less than the end product of this approach [10]. The goal of the study is to shed light on the signifying motions. This sign, which provides the depiction of this generation and will be a question of following step by step, exemplifies well the movement that distinguishes the signifier-occurring in the text [11]. The reader must believe that every word in the text has a hidden significance. Readers' grandeur comes from realizing that texts may express anything, but their creators intend [12]. We can be certain that the supposed meaning is not the genuine meaning as soon as he claims to have discovered it because the latter is the farthest away. As a result, a real reader identifies the text's emptiness as its secret [13]. In his classic book "Open Work," Eco devotes an entire chapter to Poetry Open Work, in which he discusses the idea of poetic in connection to the aspect of reception or receptivity. Nothing is more open than a closed book, yet its openness requires movement from the outside [14].

Arabic calligraphy's aesthetic and structural aspects play an essential role in constructing linear forms of symbolic dimensions and the text [15]. This is accomplished by imbuing symbolic meaning into several phenomena that define Arabic calligraphy, including the phenomena of connection and separation, extension and transmission, and the phenomenon of (dry and soft) variation in Arabic typefaces and diversity within a single letter. The following indicators can be constructed based on the notions expressed in the theoretical framework; (1) Because these notions function in the same coherence in understanding the religious text and exploring its visible and hidden dimensions, the concept of interpretation, its levels, and its epistemological categories are consistent with Arabic knowledge in this subject; (2) Because the letter, with its linguistic connotation, has become a double sign in Arabic calligraphy because it includes symbolic and aesthetic connotations in addition to its linguistic connotations, the essence of objective interest in the interpretation of symbols and signs is appropriate for research in the letter and Arabic calligraphy; (3) The categories of clarification, explanation, and interpretation may be invested as an organizational intellectual arrangement to profit from them in hermeneutical research processes to expose the meanings of the form and symbols, as well as their implications, in Arabic calligraphy forms; (4) Because of the many features of the multiple interpretations created by the text, the Lebanese underpinnings of linear composition, most notably the text on which the composition is based, may be seen as the initial beginning point for interpretation.

2. Method

One way to research was to pick out a group of linear formations with a specific meaning [16]. The formal and chromatic structure of the formations that exhibit this quality varies according to the linguistic content variables. As a result, models that accurately represented the research sample were chosen [17]. Clearing things up and explaining things, interpretation and analysis, and interpretation were all reasons why the interpretation method was chosen as the mechanism and foundation for the analysis questionnaire. The questionnaire had a series of steps to make sure that it could help people analyze their sample samples. According to stringent engineering regulations, the composition is a square contour with Ayat al-Kursi written in square Kufic script because of its comprehensive discipline with a drawing angle of 90 ° that regulates all of its characters. Thus, the letters are comparable, save for their extensions and movement. There are no double areas in letters or spaces

due to space limits. Although the values of the distances between letter bodies and between them are identical, there is a relative balance between form and space; see Figure 1.
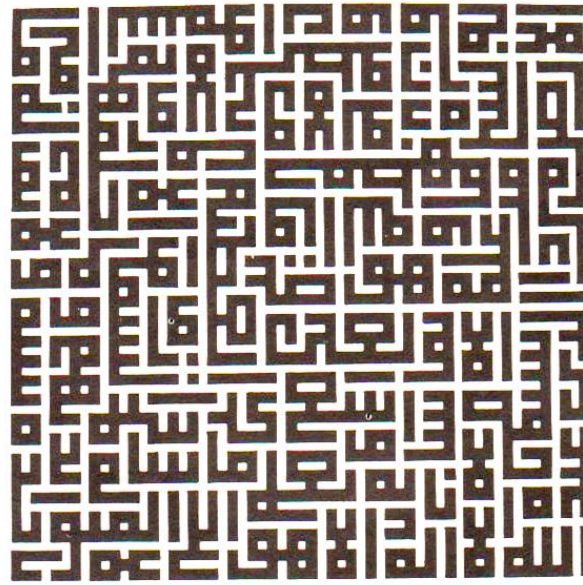
Fig. 1. Ayat al-Kursi has written in square Kufic script

With the complex image of the form in the formations of square Kufic script, which often leads to difficulty reading and following the text, the calligrapher adopted a key to the closing of the text that facilitated its opening and follow-up depending on the recipient's mental reference and storage of sacred texts, and the calligrapher adopted a unique system in the movement of the text by composition. The image of the writing begins to complicate, and the dilemma of following the text emerges. Majesty and the first four words of the verse text (There is no God but He) in the right corner from the bottom, in Figure 1, spread the secret of the text, then the image of the writing begins to complicate, and the dilemma of following the text emerges. The words, as though they were alluding to disorder in their many forms and locations. However, with further refining and emphasis on following the text, it displays a spiral pattern in its movement, starting with the word Majesty and spiralling to the centre, ending with the words (the Most-High). This spiral path is one of the most imaginative precursors to the composition style used in Arabic calligraphy; it transcends the linear or iconic approach. These forms and texts are both visually and linguistically appealing.

This structure depicts a chaotic interaction between form and text; he achieves a stunning calligraphic aesthetic by entwining the form with the texts and varying the relationships between letters and words. This decisive geometric orientation is associated with mathematical precision and certainty, in which case there is a tendency toward abstraction with both a great deal of freedom and a great deal of coercion, with freedom in letter movement ignoring the order, line, and legibility and forcing discipline and adherence to a fixed geometric structure. Its primary objective is to demonstrate how the aesthetics of a mathematically abstract geometric system contribute to its delight, correctness, and regularity. It also adds to the enjoyment of reading the text concealed behind the geometric curtain. Mathematics is a rational approach that unites the disciplines of thought, and Arab philosophers viewed mathematical subjects as subjects drawn through abstraction and generalization, as accuracy and certainty are available not only in pure mathematical knowledge but also in mathematical relations, and this formation elicits a sense of order, perfection, and reassurance of the mathematical links contained within it, derived from the calligrapher's effort in visualizing the figure's structure. The ground for the composition was created by the meandering of the decorative plant figure and its massive presence on another floor, which serves as the background for the white panel, and the composition's structural elements were represented by the square Kufic line of the noble verse (Blessed be God, the Best of Creators, Surat al-Mu'minun verse 14), Figure 2. Due to the degree of illumination in this location, unexpected black and white treatments arose due to the colour contrast between the composition's ground and the painting's general lines. The proportionality of the distribution of letters and words in an intertwined line construction in the form of beautifully decorated

squares and hexagons was also embodied by the supremacy of the noble verse (may God bless the best of creators) in the top form, in addition to the composition's balance in the lower section, and the proportionality of the distribution of letters and words in an intertwined line construction in the form of beautifully decorated squares and hexagons.
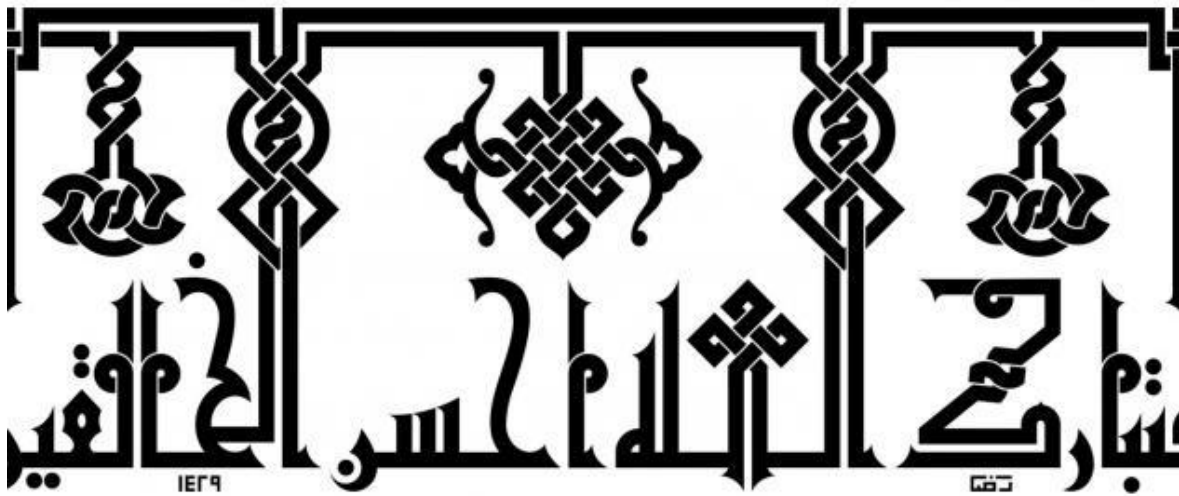

Fig. 2. The composition of the square Kufic line Surah al-Mu'minun verse 14

By repeating the braiding with the perpendicularity of two letters in the definition of Majesty's name and the word creators in the text, the calligrapher was able to create a fabric of a cohesive structure in a sober, non-monotonous rhythm. Apart from the repetition in the shapes of the gaps created by the braiding, the calligrapher constructed the composition using two horizontal axes, with letters being their favourite. The program takes an innovative approach to one of the Islamic religion's core scriptures, emphasizing the aesthetic qualities of Arabic calligraphy as the first result of its formal components with space to create a beautiful, cohesive, and coherent system. By repeating the braiding perpendicular to two letters, the researcher sees the linear composition as a carpet cohesive in a sober, non-monotonous rhythm. The calligrapher stressed that the number of braids should be equal to the seven pillars of Islam and that they should appear as universal motors that intertwined intensely with the two axes of the rectangular area of the carpet, about the interconnectedness of the inseparable concepts in Muslims lives.

3. Results and Discussion

3.1. Calligraphical Composition

The origin of Arabic calligraphy can be traced to Nabati, while Ibn Khaldoun believes that Arabic calligraphy began in Yemen and spread to Al-Hirah and then to Quraish [18]. Orientalists believed that Arabic calligraphy originated from the Phoenician line, from which the Arabic language evolved [19]. It defined linear composition as the process of arranging, assembling, and constructing those visual components, letters, words, syllables, and forms that had been studied independently in order to generate an aesthetic unit of creative expression [20]. According to Vanegas, the linear semantic configuration is a representational design framework based on the scientific organization of linear language functions [21]. However, these should be avoided because of their connotations as direct or active interpreters who make simple references to their subjects (in the spirit of law or tradition) or through similar relationships. This study defines linear composition as a concept used to express a formal (linear) form with an internal structure to overcome the text's internal structure of meaning, which is addressed through formal elements and colours to accomplish the text's intellectual, aesthetic goals.

3.2. Interpretation in Islamic Art

Islamic art evolved from a fundamental trend that rejects the formal embodiment of the human being, favouring a straightforward, banal depiction of the objects in his environment [22]. As a result, Islamic art was forced to reinvent itself to retain its distinct and autonomous character and spiritual and aesthetic elements. If he wishes to send what he wishes to say about the extraordinary experience he wishes to express, and he cannot identify a system capable of transmitting this experience, he must

create a new visual communication system [23]. Islamic art has evolved a distinct personality apart from other civilizations' art. Although Islamic art is not religious, it evolved from it, which has intellectual components in its character and knowledge system. While the arts of other civilizations have evolved over time and in response to shifting attitudes and beliefs, or as a result of any other factor, Islamic art has remained consistent in its vision. Thus, Islamic art has taken on the characteristics of a human enterprise with intellectual and aesthetic goals [24]. Islamic art is not realistic, nor is it an art above or beyond reality, but rather an intuitive art [25].

3.3. Interpretation in the Kufic script

Kufic script (Islamic art) evolves from conception to the development of an idea of a balanced cosmos based on two structures: the material world, which contains a perceptive structure, and the immaterial world, which includes its height and transcendence. The cosmos generated by these two structures is considered the most significant source of creative and intellectual dominance in creating Kufic script (Islamic art). Then, between the two structures, a duality with a great degree of holiness emerges: (1) the of lofty, sublime, and sanctity, bringing the receiver to the Absolute; (2) the pointing towards the ground, since it has a horizontal, earthy, active tendency. Furthermore, shifting the recipient's sight between this duality causes a shift in the symbolic and expressive notion, particularly in the Kufic script, in a way that is sometimes earthy and sometimes ethereal, dreamy, superstitious, holy, and fits the concepts of the absolute and ascension. In the end, the Muslim calligrapher's experience is a semiotic embodiment of the universe's symbolism; a sublime soul that is supreme, and earthly remnants, ascending in a journey towards the top, breaking the earthly chains and the hoop of the absolute way, which gives the recipient some sense of inner and soft pleasure. As a result, Arabic calligraphy, notably Kufic, evolves into a spiritual geometry with profound overtones, traversing physical distances and chronological ages to reach and remain in the environment of memory. It is a structure that houses intuition and sense in all of its cosmic, sensual, and imaginative expressions. As a result, we feel that the study of the Muslim calligrapher in the Kufic script confirms one of these dualities of reality (the duality of Majesty and beauty).

Linear formations with a semantic orientation are considered the advanced stage in the art of Kufic calligraphy because they deviate from traditional linear formation models, and they gain significance because they are the most treated in the art form due to their addition of expressive characters to the qualitative and aesthetic characteristics of Arabic letters, which is a creative endeavour. Contemporary calligraphers rely heavily on their expertise and understanding of the grammatical structure of the text. The text, which serves as the foundation for a linear composition's structure [26], is the first starting point for the structure of a symbolic composition, which is based on what the text refers to in terms of an additional meaning, which leads to aspects of the text's possible meanings. The text is what increased, which is the market for speech for the sake of meaning [27]. Moreover, the statement about the conceivable aspects of what the text raises in terms of many meanings is the cause for the plurality of formal structures for the same text, which is related to different degrees of human consciousness' knowledge of linguistic discourse. Although Arabic calligraphy is built on literary structure, from which it receives its essential reasons for being, it encompasses and transcends this to a more complete and larger (aesthetic/semantic rhetoric) level. The text is the basic element and primary motivation for constructing the linear semantic composition [28], as it is derived from what Its contents refer to the initial conceptualization of the formal structure (the construction of the idea), so the Arabic calligraphy's creative existence is only achieved in a textual, linguistic range that carries an absent meaning that can be interpreted by the shock of receiving the aesthetic form and quiet reflection on how it was created. In addition to the text, the aesthetic and structural characteristics of Arabic calligraphy are important elements in constructing linear formations of symbolic dimensions, and this is accomplished by investing in some of the phenomena that characterize Arabic calligraphy with a symbolic investment, such as the phenomena of (connection and separation) and (extension and transmission), as well as the phenomenon of (dry and soft) diversity in Arabic fonts.

Numerous researchers believe that calligraphers' desire and proclivity to create linear formations that resemble living or inanimate objects, such as a geometric shape, a bird, an animal, a tree, or a fruit, as well as other analogies to natural objects, resulted in the phenomenon of iconic diagnostic formations in Arabic calligraphy. This is how a writing structure is transformed into an iconic structure with a formal reading character. It has attracted calligraphers who are artistic, and it is viewed as a means of showcasing the calligrapher's abilities and transforming the writing style into a more formal framework [29]. Additionally, they point out that the rhythmic flow of the four seasons, the

phenomena of night and day, the movement of the sun and moon, and the never-ending life cycles of births and deaths were discovered in nature long before they were expressed in poetry, photography, architecture, and other arts. In light of this perspective, those concepts can be applied to plastic and linear art to depict reality through a certain pattern established within a given framework. Due to its role in revolutionizing artistic and aesthetic values, the consistency of lines, their flow, moderation, and construction systems, as well as their overlap with appropriate breaks, rhythm is of utmost importance in the fine arts as a whole, plastic art and Arabic crafts in particular, as one of the constructive and aesthetic aspects of the language of plastic expression. Movement, repetition, and continuity are three factors that work together to create the overall rhythmic framework [30]. Movements include linear, wave, spiral, rotational, radial, and vibrational motions. The structural connections between vertical and horizontal letters are essential for establishing movement in a linear formation, followed by other interactions such as space movement inside the formation or its meaning. The phenomenon of repetition in Islamic art has its origins in the Islamic religion, with the repetition of prayer and other intellectual ritual themes and the repetition of natural and human occurrences. Whether through colour, direction, or shape, repetition is one of the most fundamental beginning points for generating rhythm in linear painting. Continuity is established via the sequential occurrence of units that communicate with one another, one by one, so that each portion of the rhythmic units, which includes the motor sequence, has the chance to interact and communicate. Continuity is established through this sequence and represented in linear movement based on regular repetition and communication and organic linkage between parts, as in the case of lengthy or remote spatial intervals between component units.

4. Conclusion

The process of clarification and explanation establishes the initial point of view to comprehend the formations of Arabic calligraphy. It does not contribute anything to the artistic achievement other than to reveal its relationships and the modesty of the treated text. In Arabic calligraphy, the folds of formation have an expressive aesthetic effect, which the text refers to in terms of meaning that is not directly related to the language and what it refers to. This indicates that the composition can be understood in various ways, not because of its intimate relationship to the language and the subject matter but because of the expressive aesthetic effect created by the folds of its creation.

References

[1]   D. M. Alashari, A. R. Hamzah, and N. Marni, "Islamic Art and Language as a Source of Inspiration Leading to Traditional Arabic Calligraphy Art," *Umr. J. Islam. Civilizational Stud.*, vol. 6, no. 3, pp. 33–45, 2019. doi: 10.11113/umran2019.6n3.342

[2]   D. M. Alashari, "The aesthetics of calligraphy art in the Kiswah of the Kaaba," *Int. J. Art Des.*, vol. 5, no. 4, pp. 28–33, 2021. Available at: uitm.edu.

[3]   A. H. Hataf and M. S. Jabr, "The Aesthetics of the Decorative Composition of the Basmalah in Contemporary Arab Painting," *PalArch's J. Archaeol. Egypt/Egyptology*, vol. 17, no. 7, pp. 3637–3650, 2020. Available at: palarch.nl

[4]   M. Mahdiyeh, "Calligraphy as Graphically Autonomous Form: A Corpus Study of Persian Calligraphic Letterforms Using a Multimodal Approach," in *The Materiality of Writing*, Routledge, 2017, pp. 229–264. doi: 10.4324/9781315537306-13

[5]   A. A. Berger, "Semiotics and society," *Society*, vol. 51, no. 1, pp. 22–26, 2014. doi: 10.1007/s12115-013-9731-4

[6]   J. R. DiLeo, "Charles S. Peirce and the Rhetoric of Science," *Semiotics*, pp. 137–150, 1994. doi: 10.5840/cpsem19944

[7]   J. Martinet, "The Semiotics of Luis Jorge Prieto," in *The Semiotic Web 1989*, De Gruyter Mouton, 2011, pp. 89–108. doi: 10.1515/9783110874099

[8]   N. Everaert-Desmedt, "Peirce's semiotics," in *An Introduction to Applied Semiotics*, Routledge, 2019, pp. 241–249. doi: 10.4324/9780429329807-18

[9]   T. Burge, "Iconic representation: Maps, pictures, and perception," in *The map and the territory*, Springer, 2018, pp. 79–100. doi: 10.1007/978-3-319-72478-2_5

[10] L. Radford, "Signs and meanings in students' emergent algebraic thinking: A semiotic analysis," *Educ. Stud. Math.*, vol. 42, no. 3, pp. 237–268, 2000. doi: 10.1023/A:1017530828058

[11] N. Nørgaard, "The semiotics of typography in literary texts. A multimodal approach," *Orb. Litt.*, vol. 64, no. 2, pp. 141–160, 2009. doi: 10.1111/j.1600-0730.2008.00949.x

[12] G. Kress, "Against arbitrariness: The social production of the sign as a foundational issue in critical discourse analysis," *Discourse Soc.*, vol. 4, no. 2, pp. 169–191, 1993. doi: 10.1177/0957926593004002003

[13] M. Van Manen, "Phenomenological pedagogy and the question of meaning," *Phenomenol. Educ. discourse*, pp. 41–68, 1997. Available at: Google Scholar.

[14] S. Oliva, "Eco and Berio between Music and Open Work," *Riv. Estet.*, no. 76, pp. 146–161, 2021. doi: 10.4000/estetica.7709

[15] N. Abdel Halim, "Conceptual Typography Between form Significance and Persuasion," *J. Des. Sci. Appl. Arts*, vol. 1, no. 2, pp. 108–119, 2020. doi: 10.21608/jdsaa.2020.28532.1015

[16] Y.-H. Hubert Tsai, L.-K. Huang, and R. Salakhutdinov, "Learning robust visual-semantic embeddings," in *Proceedings of the IEEE International conference on Computer Vision*, 2017, pp. 3571–3580. Available at: openaccess.thecvf.com

[17] P. Li and L. Gleitman, "Turning the tables: Language and spatial reasoning," *Cognition*, vol. 83, no. 3, pp. 265–294, 2002. doi: 10.1016/S0010-0277(02)00009-4

[18] L. Prager, "Introduction. Reshaping tribal identities in the contemporary Arab world: politics,(self-) representation, and the construction of Bedouin history," *Nomad. People.*, pp. 10–15, 2014. doi: 10.3197/np.2014.180202

[19] H. Satzinger, "Syllabic and Alphabetic Script, or the Egyptian Origin of the Alphabet," *Syllabic Alph. Script, or Egypt. Orig. Alph.*, pp. 1000–1012, 2002. Available at: www.torrossa.com

[20] T. Olive and J.-M. Passerault, "The visuospatial dimension of writing," *Writ. Commun.*, vol. 29, no. 3, pp. 326–344, 2012. doi: 10.1177/0741088312451111

[21] J. A. Vanegas, V. Beltrán, H. J. Escalante, and F. A. González, "Transductive non-linear semantic embedding for multi-class classification," *Pattern Recognit. Lett.*, vol. 128, pp. 370–377, 2019. doi: 10.1016/j.patrec.2019.09.009

[22] W. M. K. Shaw, "The Islam in Islamic art history: secularism and public discourse," *J. Art Hist.*, no. 6, p. 1, 2012. Available at: Journal of Art Historiography

[23] H. Dreyfuss, "Visual communication: A study of symbols," *SAE Trans.*, pp. 364–370, 1970. doi: 10.4271/700103

[24] C. Moussavi-Aghdam, "Art History,'National Art'and Iranian Intellectuals in the 1960s," *Br. J. Middle East. Stud.*, vol. 41, no. 1, pp. 132–150, 2014. doi: 10.1080/13530194.2014.878511

[25] Z. Karadag, "Euclidean Exploration of Geometry in Islamic Art," in *Transdisciplinarity in Mathematics Education*, Springer, 2018, pp. 3–24. doi: 10.1007/978-3-319-63624-5_1

[26] G. Sonesson, "The concept of text in cultural semiotics," *Σημειωτκή-Sign Syst. Stud.*, vol. 26, no. 1, pp. 83–114, 1998. doi: 10.12697/SSS.1998.26.04

[27] C. Corradi, "Text, context and individual meaning: Rethinking life stories in a hermeneutic framework," *Discourse Soc.*, vol. 2, no. 1, pp. 105–118, 1991. doi: 10.1177/0957926591002001006

[28] R. Patel, S. Pilato, and D. Roy, "Beyond Linear Syntax: An Image-Oriented Communication Aid.," *Assist. Technol. Outcomes Benefits*, vol. 1, no. 1, pp. 57–66, 2004. Available at: eric.ed.

[29] Y. Li, "Calligraphy Education in Teaching Chinese as a Second Language," *Palgrave Handb. Chinese Lang. Stud.*, pp. 1–29, 2020. doi: 10.1007/978-981-13-6844-8_8-1

[30] M. J. Khajavi, "Kinesthetic Behaviors," in *Arabic Script in Motion*, Springer, 2019, pp. 39–79. doi: 10.1007/978-3-030-12649-0_3