CALLIGRAPHIC ANIMATION AS VISUAL MUSIC: A GENEALOGY OF ISLAMIC SYNCHRONIZATION OF SIGHT AND SOUND

M. Javad Khajavi (Volda University College)

INTRODUCTION

In the early decades of the twentieth century, some European avant-garde artists and filmmakers started using the newly-invented filmic medium to create abstract films that one could describe as "visual music." Originally inspired by the endeavors of such modern artists as Wassily Kandinsky (1866–1944), Paul Klee (1879–1940), Piet Mondrian (1872–1944), and Henri Valensi (1883–1960) among others, these artists and filmmakers considered music a model for their artistic creation. They animated abstract shapes, patterns, and colors that were analogous to the dynamic rhythm, tempo, tone color, and non-objectivity of music. Artists and avant-garde filmmakers such as Oskar Fischinger (1900–1967), Viking Eggeling (1880–1925), Hans Richter (1888–1976), and others created films that aspired to the abstract structure of music. Working in a time-based medium, their films, as Brougher et al. suggest, added a new dimension, namely duration, to the endeavors of the early twentieth century modern painters, and created a direct correlation between visuals (sight) and music (sound).¹

In a similar fashion, over the past few decades there has been attempts in parts of Islamic world to create visual music pieces in the form of animations and performances. While these animations and performances are similar to other forms of visual music in that they establish a correlation between sight and sound, many of them are unique in their approach to creating such a correlation and in the type of visual images they use. In fact, some of these artworks have been created using Islamic calligraphy (which is defined here as any calligraphy written in Arabic script) as their main visual resource.²

Although such animations and performances may be perceived as direct continuation of the earlier European abstract visual music animations, I contend that their primary genealogy line should be sought elsewhere. This proposition does not completely deny any influence of European avant-garde visual music animated pieces on such calligraphic animations. However, it suggests that these animated films should be viewed and understood in a broader context. Although the influence of European and American visual music films on such calligraphic animations and artworks cannot be denied, the decision to draw upon the art of Islamic calligraphy to create visual music pieces has deeper cultural and historical reasons. In fact, it can be claimed that such artworks are largely inspired by the putative musical analogies that have been used to describe Islamic calligraphy since the early centuries of Islamic civilization. My objective in this paper, therefore, is to draw a new genealogy line for visual music calligraphic animations (and time-based artworks in general) all the way back to the relatively widespread comparisons between Islamic calligraphy and music that existed for centuries.

Thus, I start this article, by exploring the references made to musical analogies used in describing Islamic calligraphy throughout Islamic civilization. Then, I review some calligraphic artworks (particularly in the contemporary context) that establish a correlation between sight and sound. Arguing that these calligraphic artworks are clearly inspired by musical analogies used in describing Islamic calligraphy, I show the diversity of artists' approaches to drawing upon such analogies. Finally, I complete the genealogy line by contextualizing visual music calligraphic animations within such a broad historic-cultural background.

THE SIGHT OF SOUND

Synesthetic analogies have been sporadically used in describing Islamic calligraphy throughout history, at least since the early centuries of Islam. In such instances, writers and calligraphers have typically emphasized that the appreciation of Islamic calligraphy occurs not only through the eyes, but also through hearing, smell, touch, and even by the heart or soul.³ Among these synesthetic comparisons, musical analogies are relatively more common and extensively used. Comparisons between different aspects of Islamic calligraphy and aspects of music can be found in the writings and sayings of Muslim philosophers, calligraphers, and poets from different centuries. For example, the thinker, philosopher, and influential intellectual of the tenth century, Abū Hayyān Al-Tawhīdī (923– 1023), found affinities between calligraphy and music in the technical details employed in the preparation of the tools and instruments, and the strict conventions governing the structure and education of both art forms.⁴ On a more metaphorical level, Mir Ali of Herat (d. 1544 CE), a sixteenth century calligrapher, compared his stature to that of a musical instrument that had been bent like a harp as a result of a lifetime of calligraphic exercises.⁵

Musical analogies have been more extensively employed by contemporary writers and scholars of Islamic calligraphy. They refer to various qualities of the art form, including its abstract nature and inner rhythm. For example, in their book The Splendour of Islamic Calligraphy, Khatibi and Sijelmassi draw several analogies between calligraphy and music. They emphasize the feeling of movement and rhythm invoked by a page of calligraphy or a script's order and geometric proportion.⁶ Likewise, in her extensive writings on Islamic calligraphy, Schimmel occasionally returns to the idea of comparing calligraphy and music. For example, she compares "the regularly posited knots" in a style of calligraphy known as foliated *Kufīc*⁷ to rhyme in certain Persian poems. In this way, she compares the visual structure of calligraphy to the musicality of poetry, and underscores that both of these visual and aural qualities emerged out of the same artistic vision.8 In another part of her writings, she directly refers to calligraphy as having musical qualities. She polemicizes: "Good calligraphy certainly has a musical quality, whether the stiff letters of an early $tir\bar{a}z^9$ inscription ... or the lines of *nasta'līq*¹⁰ that seem to dance to the inner rhythm of a Persian poem."11 The use of musical analogies to describe Islamic calligraphy can also be found in the writings of contemporary scholars from other fields of study. In his book, Choreophobia: Solo Improvised Dance in the Iranian World, Shay investigates the similarities between Persian calligraphy and Iranian solo improvised dance. Highlighting the affinities between the two art forms of the Persianate world, he sporadically uses musical analogies to refer to certain aspects of the art of calligraphy.¹²

THE SIGHT OF SOUND IN THE VISUAL ARTS

Musical analogies have proved to be influential among calligraphers and artists, specifically in the context of contemporary artistic explorations of Islamic calligraphy. Phrases such as "Music for the eyes," "Harmony of letters," "Singing words," etc. are frequently found in the titles of calligraphic exhibitions or of individual works of calligraphy and neo-calligraphy.¹³ Unsurprisingly, many contemporary calligraphers and artists are the main advocates of such musical analogies. In fact, some calligraphers refer to the musical qualities of specific scripts (i.e., styles of calligraphy, such as *nasta'līq*, *thuluth*, or *shikastih*)¹⁴ or to the specific practices or categories of calligraphic works (such as *Sīyāh-mashq*).¹⁵ For example, the Iranian calligrapher and artist, Jalil Rasouli (b. 1947), refers to calligraphy synesthetically, saying: "there is a kind of music in calligraphy that is heard by the eyes; the artists should have realized this and should be able to well-exploit calligraphy's musical gestures."¹⁶ Such comments and expositions reveal how profoundly the musical analogies have influenced artists and calligraphers, and consequently their artistic creations.

Some contemporary artists, such as Ahmed Moustafa (b. 1943) and Babak Rashvand (b. 1980) among others, have gone further than this and have created calligraphic paintings that suggest a relation to music through their titles. Moustafa, an Egyptian artist and scholar of Islamic calligraphy, has painted several canvases of neo-calligraphic work that present musical analogies. In two of his paintings, the Scriptorial Fugue (1976) and the Blue Fugue (1982), Moustafa emphasizes the relationship between Islamic calligraphy and music, not only through the titles of his works, but also by means of their compositions. The works interweave the visual rhythm created by the repetition of similar letters with the sounds of the letters of the word "Allah" (which is one of the many names of God in Arabic). Such repetition of the letters of the name of God reminds us of the ritual of *dhikr* that is performed by many Muslims. Dhikr is a devotional act performed by many Muslims in which the different names of God, religious phrases, or short prayers are repeatedly recited silently or aloud as a way of remembering the will of God and achieving peace of mind. In Moustafa's calligraphic paintings in question, the visual renditions of the letters of the word "Allah" appear to visually echo and resonate with the rhythmic sound of the repetitive recitations that are expected in the act of *dhikr*.

Other artists draw comparisons between calligraphy and music in their works by creating visual metaphors. The Iranian artist, Abdollah Kiaie (b. 1954), created such a visual metaphor in a work of neo-calligraphic art. In this work named *Sans Titre* ("Untitled" in French) (2015.), Kiaie superimposed lines of beautiful and undulating *nasta'līq* over a page of musical notation. Written in light and dark blue, the calligraphic forms, letters, and words dance over the staff lines of the musical notation, while the red rhomboid dots (i.e., diacritical points used to identify letters that share the same base-form in Arabic script) playfully and willfully blend with the musical notation symbols. Similarly, Nja Mahdoui (b. 1937), a Tunisian artist, offers another visual metaphor that evokes a correlation between calligraphy and music. Mahdoui, who usually writes in a pseudo-script devoid of any semantic meaning, used the vellum of a North African drum as his canvas for writing calligraphy. The artwork entitled *The Drums Silence* (1997) metaphorically suggests a relationship between calligraphy and music.

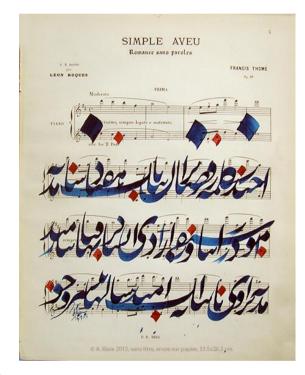


Figure 1: Abdollah Kiaie, Sans Titre (2015), ink on paper, 33.5 x 26.3 cm. (Courtesy of the artist.)

Some of the visual characteristics and qualities of Islamic calligraphy certainly paved the way for musical analogies. Apart from the abstract nature of calligraphy, which is usually considered similar to the purity of absolute music, the visual rhythm and movement invoked by many pieces of traditional calligraphy and neo-calligraphy is the reason for many of the analogies between the two art forms.¹⁷ Khatibi and Sijelmassi point to the rhythmic movement that a page of calligraphy invokes and state that there is a relationship between calligraphy and music, "a relationship which, while not precisely homologous in kinetic terms, reveals something in common, for both arts share a dynamic which separates logic from its rationality and its rhetoric."¹⁸ The rhythmic movement inherent in many pages of calligraphy convinces Shabout that Arabic letters should be considered "instruments to create visual music":

The Arabic script can be a dance of ascending verticals, descending curves, and temperate horizontals, beautifully choreographed to achieve a measured balance between the static individual form and its rhythmic movement. Great variability in form can be achieved through the effective interplay of letters and words. They can be compacted into a dense area or drawn out to great lengths; they can be angular or curved; and they can be small or large.¹⁹

In these few lines, Shabout explains the entire repertoire of possibilities that calligraphers inscribing in Arabic script possess to create dynamic and rhythmic compositions. In traditional calligraphy, rhythm and movement are first and foremost invoked by the shape of the calligraphic forms and strokes, which one can call the choreography of the line. This is the result of the movement of the reed pen (or the hand of the calligrapher) as the traces of its motion are registered in ink over the page. Although most of the scripts in Islamic calligraphy suggest a sense of movement (specifically because the letters literally and physically connect to each other in order to construct a word in Arabic writing), such a feeling is experienced more vividly in the so-called cursive scripts, in which the strokes are more dynamic, more curved, and are rendered more spontaneously.

Rhythmic movement is also created by the regular or largely irregular repetition of similar strokes. In general, two kinds of strokes are visible in the forms of letters and words in Arabic script, namely, straight strokes and curved strokes. Calligraphers usually try to balance out these different types of strokes throughout the lines and over the page. Moreover, skillful calligraphers also try to arrange these straight and curved strokes in such a way that the whole composition suggests a rhythmic flow and movement. Traditional calligraphers may also play with the negative spaces between letters and words, creating visual pauses or rhythmic pulses over the horizontal enfoldment of the piece. Neocalligraphers sometimes fill these negative spaces in with different colors to emphasize or disrupt the flow and rhythm, adding to the dynamism of the page.

In considering the visual rhythm and movement that flow over a page of calligraphy or a piece of neo-calligraphy, we should bear in mind that these shapes (which are in fact letters) are actually connected to sounds. Calligraphers are well-aware of this fact and seek to engender a delicate balance between the visual rhythm of the page and the aural cadence of the content. This is particularly evident in those pieces of calligraphy that are renditions of poetry. For example, writing a verse of a poem that uses consonance as a poetic device — i.e., the repetition of letters with similar sounds to create an aural rhythm — the calligrapher may visually follow the aural rhythm of the poem by rearranging the composition, placing letters with similar shapes in line with each other. In such pieces of calligraphy, as Schimmel notes, "the music of the verse and the music of the line are harmoniously blended."²⁰ Among contemporary artists who practice calligraphy in new and innovative ways, Bahram Hanafi (b. 1966) is someone whose calligraphic paintings blend the dance of the line with the rhythm of music and poetry. Hanafi works on large canvases and makes calligraphic-like gestures over the canvas in fast and spontaneous motions. He murmurs a piece of music or a song to himself as he works, allowing the rhythm and tempo of the music to indirectly influence the movements of his hands and thus the dance of his calligraphic lines on the canvas.

Geometric proportion is another quality of calligraphy that appears to lie behind many musical analogies. Order and proportion are two characteristics of music that have been the center of interest for musicologists, visual artists, and philosophers alike. Since ancient Greece, it has been known for musical consonances to be based on simple mathematical ratios. This discovery, which is usually attributed to Pythagoras, deeply influenced Greek philosophy and theories of beauty in late Antiquity. At least since Plato, musical proportion has been considered the eminent source of beauty.²¹ Such a belief was transferred to early Islamic philosophy, mainly through Plato's Timaeus, and clearly left a deep imprint on the visual arts of the Islamic world, including the art of penmanship.²² Therefore, proportioning has become a pillar and a rule in the art of calligraphy since the early centuries of Islam. In *The Rise of Islamic Calligraphy*, Alain George shows that the rules of proportion governed the architecture of most pages of *Kufic* calligraphy from the time of the Umayyad caliphates (660–750 CE). He also reconfirms that the rules of proportion play a significant role in the proportioned scripts that are known to have been codified by Ibn Muqla' (885/6–940 CE) in the early tenth century.²³

The scholars of Islamic calligraphy, Moustafa and Sperl, go further than this in their study of the proportioned scripts. They illustrate that, in these scripts, the proportion of

the letters and the rules that govern the proportional relationship between them are designed according to musical ratios.²⁴ Proportioning remains part of the education and practice of calligraphers in traditional Islamic calligraphy. A good calligrapher writes letters and words in perfect proportion, ensuring that any visible form on a page of calligraphy is a visual consonance, and therefore harmonious for the eyes. Ahmad Moustafa, the artist and scholar whose artwork and scholarship have been noted above, spent eleven years researching the rules of proportion and the philosophy behind it. As previously noted, he produced one of the first comprehensive studies on the influence of musical ratios on the geometry of Islamic calligraphy, together with Sperl. His research on the topic left an imprint on his own artistic practice. The geometrical proportion of the script and its relation to Islamic philosophical, religious, and scientific thoughts are sources of inspiration for Moustafa's artistic explorations. Islamic calligraphy, and particularly its proportioned scripts, are like music for him in that they are both manifestations of universal mathematical laws that use abstract vocabularies. He therefore believes that both calligraphy and music can have spiritual effects on the viewer.²⁵

SIGHT AND SOUND IN TIME-BASED ARTS

Pythagoras' discovery of musical ratios and its impact on Greek philosophy also had another dimension. In addition to musicology and the arts, musical ratios and proportion entered such diverse fields as astronomy, human anatomy, medicine, and theology.²⁶ The discovery of musical ratios created a worldview in which the entire universe is in harmonious mathematical proportion. In the Timaeus, Plato declares that the Divine craftsman has shaped the universe by placing each small part into a proportion."²⁷ From this standpoint, everything in the universe is in perfect mathematical proportion and follows musical ratios, the celestial spheres, the human anatomy, and even the human soul. Such a belief was rapidly absorbed by early Muslim philosophers, particularly as several verses of the *Qur'an* emphasize that the universe is not a random chaos. For example, *Sura* (i.e., chapter) 25, verse 2 reads: "He to whom belongs the dominion of the heavens and the

earth and who [...] has not had a partner in dominion and has created each thing and determined it with [precise] determination."²⁸

Moreover, the Greek philosophers were mindful of the significance and power of music and harmony on emotions and the human soul. Plato believed that music, the art of harmonious proportion, can bring order to the soul and attune it to its original state. Likewise, for Muslim philosophers such as Al-Kindi (801–873 CE) and a secret society of philosophers known as the Brethren of Purity (*Ikhwān Al-safā* in Arabic), who were active in Basra (situated in today's Iraq) during the eighth or ninth century, musical arts can impact the soul largely because they possess harmony and proportion.²⁹ According to these philosophers, visual arts are capable of affecting the human soul provided that they are based on the knowledge of proportion, and for them one of the most perfect of these visual arts was the art of penmanship.

The influence of harmony on the emotions and the soul was an ideal that was also embraced by Sufism. Sufism, which can generally be understood as Islamic mysticism, advocates transcendence and spiritual union with God.³⁰ As Nasr puts it, Sufism in its very essence is "a way that provides access to the silence hidden at the centre of man's being."31 As he elaborates, this silence can be heard when people stop listening to the noise of the mundane external world and start to pay attention to their inner existence. The Sufis and mystics described this inner silence as a spiritual music, which is harmonious and proportionate. This spiritual music clearly cannot be heard by the ears, but rather by the heart and soul. Some Sufi groups believed that certain types of music can act as a catalyst by which the soul of the Sufi becomes detached from the material world, seeks transcendence, and hears that spiritual music. This is the inner silence that is nothing other than the music of Divine presence.³² Hence, listening and dancing to music for the purpose of transcendence is one of the rituals performed by Sufis. This is known as Sema' (which literally means listening in Arabic), and is a way of remembrance and transcendence. As Nasr asserts, music for the Sufi (and specifically the music of the nay [reed flute in Persian]) is considered the sonoral manifestation of that spiritual music, or silence, that Sufis can find at the center of their being.³³ Therefore, listening to it prepares the soul of the Sufi for its spiritual journey and reminds it of its ultimate sanctuary, namely, spiritual union with the Divine. As the prominent poet Rūmī (1207–1273 CE) suggested, the reed flute reveals the secret of Divine love and casts the fire of love into the souls of human beings.³⁴ Considering the fact that the reed flute is made of the same material as the reed pen of calligraphy, in the minds of Sufis and many mystics, calligraphy does essentially the same.³⁵ As the music of the reed flute is the sonoral embodiment of spiritual music, so Islamic calligraphy is considered the visual crystallization of the same spiritual message, which calls people towards their inner existence and ultimately towards God. Schimmel succinctly explains:

Like the flute it is hollow [...] and is filled with sweetness when conveying the words of love. Both tell the secrets that are in man's mind: the pen puts them on paper in undulating lines, and the flute expresses them in undulating strains of notes.³⁶

The comparison between the calligraphy of the reed pen and the music of the reed flute frequently appears in the poetry of the regions that were influenced by Sufism (Iran, Turkey, India, etc.). Moreover, such imagery has influenced contemporary artistic explorations with Islamic calligraphy. For example, an article by Ünlüer and Özcan explains their process of developing an interactive art piece.³⁷ For this interactive piece, they designed a graphic user interface (GUI) with which the audience can interact by means of hand gestures. These gestures are then interpreted in real-time by the computer into both calligraphic strokes and simultaneous musical gestures, which are mapped onto the scales of the reed flute. Experiencing their interactive art piece, it would be difficult for one not to be reminded of the Sufi belief in the similarities between the music of the reed flute and the calligraphy of the reed pen. Indeed, to justify their aesthetic decision to juxtapose the calligraphic strokes and the specific scales of the flute, Ünlüer and Özcan refer to the similarity between the calligraphy of the reed pen and the music of the reed flute.³⁸

The Iranian artist Parastou Frouhar (b. 1962) reflects upon the same Sufi analogy, and creates a link between the music of the reed flute and the dance of the reed pen. In a performance entitled *Body Letter* (2014), Frouhar collaborated with the dancer Ziya Azazi (b. 1969). In their performance that took place in Toledo, Spain, Frouhar filled the floor and the walls of the room with human-sized, illegible, and undulating lines of calligraphy, creating a rhythmic choreography of strokes on which the dancer, Ziya Azazi, performed a Sufi-inspired Sema' dance. In this performance, the Sufi-inspired dance was apparently not only inspired by the music of the reed flute, but also by the dance of the reed pen. This resonates with the belief that the two do essentially the same thing.

Another theme of musical analogy can particularly be found in the writings on traditional Middle-Eastern music. Musicologists and musicians have never shied away from drawing comparisons between the different aspects of Islamic calligraphy and the features of a particular form or genre of music. Such comparisons are sometimes drawn for explanatory purposes and probably serve as visual explanations of abstract musical concepts.³⁹ Nevertheless, they reveal a tendency to consider the aesthetic affinities between the two art forms. For example, During and Mirabdolbaghi explain various similarities between the art of Islamic penmanship (with a specific focus on Iranian calligraphy) and Persian classical (modal) music.⁴⁰ They observe similarities between the sharpness of the contours in Islamic calligraphy and the clarity of phrases in Persian classical music. They also see an aesthetic relationship between the curves, upstrokes, down-strokes, and elongations in calligraphy and the rises, falls, and silences of the *gūsheh* in Persian modal music.⁴¹ Similar comparisons have been made by other authors, sometimes with far-fetched justifications and arguments. For example, Meydani argues that a page of *sīyah-mashq* is similar to a piece of Persian modal music because both are some sort of an improvisation. She obstinately and at times bafflingly tries to persuade us that Persian music has a great deal in common with Iranian calligraphy, so that "listening to one reminds us of the other." 42

Although many such comparisons and arguments may sound forced, vague, and at times uncanny, they have been embraced by musicians and composers. For example, Majid Kiani (b. 1941), the Iranian musician and santur player, reflected on these comparisons in one of his musical performances.⁴³ Kiani, who has a personal interest in the relationship between Persian music and other forms of Persian art, performed a piece of music at a concert in Tehran, Iran that was inspired by a page of Iranian calligraphy.⁴⁴ Musicians have also demonstrated an interest in collaborative performances with calligraphers, in which a calligrapher produces one or more pieces of calligraphy accompanied by a live musical performance. In such performances, the music and calligraphy usually respond to each other as they both unfold over time. In a similar way to a ballet, in which the movement of the dancer adds an emotional impulse to the rhythm of music, these performances aim at creating an interaction between the two art forms. An example of such a performance is the co-performance of the Iranian artist and calligrapher Ahmad Ariamanesh (b. 1968) with an Iranian musician. Entitled *Concert of the Line* (2013), the performance showcased the process of creating a work of neo-calligraphy as it was supplemented by a live musical performance.⁴⁵

While these kinds of collaborative performances have become more popular in recent years, the possibility of creating audio-visual interactions by means of such time-based media as animation and film has opened up an entire new vein of artistic opportunities for interactions between calligraphy and music. Clearly inspired by the musical analogies used in describing Islamic calligraphy, a few artists have already embraced the medium of animation to create calligraphic visual music pieces. One example of this is a short animated film entitled *The Third Script* (2017).⁴⁶



Figure 2: Mohammad Javad Khajavi, The Third Script (2017), animated short film. (Courtesy of the artist).

Seemingly a continuation of artworks that address musical analogies, this experimental animated short portrays calligraphic forms that dance to the rhythm of santur music. Calligraphic forms are the only visual elements in this film, yet they are largely used in an abstract way. They barely convey any semantic meaning, which one would expect of calligraphy (which is in fact the written representation of language). The animated film places considerable emphasis on the visual qualities of Islamic calligraphy, encouraging the viewer to focus on the abstract nature of the calligraphic forms, their kinesthetic forms, their dynamic structure, and their inner rhythms, rather than on any semantic content that they may convey. Although viewers who can read the language will attempt to read the calligraphic forms and letters that appear in the animation at some point, they understand that most of what is being written on the screen does not have any linguistic meaning. They therefore stop reading for most of the animation and rather start enjoying the dancelike movements of the calligraphic forms, as they unfold on the screen in synchronization with the music. For the non-readers of the language, the calligraphic forms represented are obviously nothing more than abstract shapes that are dancing to the rhythm of the music. Artworks such as these shift the viewers' focus from the semantic content of calligraphy to the visual qualities of its abstract forms. Meanwhile, they also remind us of the influence of musical analogies (which are used in describing Islamic calligraphy) on contemporary calligraphic art.

CONCLUDING REMARKS

Although comparisons between Islamic calligraphy and music have been made throughout the history of Islamic civilization, these have become omnipresent in our time.⁴⁷ As I discussed in this paper, various themes of musical analogies have been used by poets, philosophers, writers, calligraphers, and artists to describe Islamic calligraphy. While many such analogies are nothing more than exciting metaphoric comparisons, their effect on contemporary calligraphic art is undeniable. As this article has demonstrated, comparisons between various aspects of Islamic calligraphy and those of music have left a mark on calligraphic art, particularly in the contemporary context. Various artists — whether calligraphers, neo-calligraphers, musicians, filmmakers, or media artists — have drawn upon such musical analogies to create a correlation between sight and sound, calligraphy and music. Many of these contemporary artworks, which are influenced by or reflect upon such musical analogies, can clearly be described as "visual music," following the broadest definition of the term.

With the advent of new forms of art and especially the increasing availability of timebased media, some artists who are experimenting with Islamic calligraphy are now also seeking new ways of engaging with musical analogy through the creation of audio-visual interactions. As I argued in this paper, animations that establish a relationship between the sights of undulating calligraphic forms and the sound of music should also be read and understood as pieces of visual music. Although such calligraphic animations are clearly inspired by earlier abstract European or American visual music films, we should also seek their genealogy in the earlier centuries of Islamic civilization.

Given the rising interest in experimenting with Islamic calligraphy in innovative ways, together with the accessibility of new modes of artistic expression, we can expect to see an increase in films, animations, and time-based artworks that explore calligraphy from this perspective. While, individual calligraphic animations has received attention from the side of festivals and scholars, little effort has been made to understand and analyze them within the right context. As a consequence, there are noticeable misunderstanding and misconceptions about calligraphic animations among both scholars and the general public. It is the aim of articles like this to shed light on some of these misconceptions. While the influence of musical analogies on existing calligraphic animation may still not be extensive, it is sufficient to justify further examination of this growing mode of experimental filmmaking from this perspective.

^{1.} Kerry Brougher et al., Visual Music: Synaesthesia in Art and Music since 1900 (New York: Thames & Hudson, 2005).

^{2.} The term "Islamic calligraphy" as many scholars have pointed out is a problematic term. It should be emphasized that the term applies not only to calligraphy written for religious purposes, but rather to any sort of calligraphy written in Arabic script. In fact, instead of using the term "Islamic calligraphy," we can employ the term "Arabic calligraphy." Nevertheless, since Arabic script is used for writing many other languages such as Ottoman Turkish, Persian, Urdu, Malay, etc. it is preferred in this article to use the term "Islamic calligraphy as proposed by Sheila S. Blair, *Islamic Calligraphy* (Edinburgh: Edinburgh: University Press, 2006).

^{3.} David J. Roxburgh, "The Eye Is Favored for Seeing the Writing's Form: On the Sensual and the Sensuous in Islamic Calligraphy," *Muqarnas* 25.1 (2008): 281.

^{4.} Annemarie Schimmel, Calligraphy and Islamic Culture (London: I.B. Tauris, 1990), 120.

^{5.} Ibid.

^{6.} Abdelkebir Khatibi and Mohammed Sijelmassi, *The Splendour of Islamic Calligraphy* (London: Thames & Hudson, 1995).

^{7.} Foliated *Kufīc* is a style of calligraphy in which parts of letters seem to be transformed into plants, and interweave like tendrils. See G. Fehervari, "Art and Architecture," in *The Cambridge History of Islam*, ed. P. M. Holt, Ann K. S. Lambton, and Bernard Lewis (New York: Cambridge University Press, 1970).

^{8.} Schimmel, Calligraphy and Islamic Culture, 10.

^{9.} *Tirāz* was a textile band on which calligraphy is inscribed, usually on the upper sleeves of a robe or a turban.

^{10.} *Nastalīq* is one of the many styles of writing (known as scripts) in the Islamic calligraphy. It is the predominant script in the Persianate world.

^{11.} Schimmel, Calligraphy and Islamic Culture, 120.

^{12.} Anthony Shay, *Choreophobia: Solo Improvised Dance in the Iranian World* (Costa Mesa, CaA: Mazda Publications, 1999).

^{13.} Neo-calligraphy is a term suggested by Hamdi Keshmirshekan to describe different kinds of approaches towards Arabic/Islamic calligraphic forms that are distinct from classical Islamic calligraphy, which traditionally follows set rules and conventions. See *Contemporary Iranian Art: New Perspectives* (London: Saqi, 2013).

^{14.} Tuluth and shikastih are two styles (scripts) of calligraphy used in the Islamic world.

15. *Sīyah-mashq* refers to the calligraphic practice sheets that are usually fully covered with writing. Such calligraphic exercises later developed into a whole category of calligraphic artworks of collectible value.

16. Kaveh Teymouri, Rāz-I Naqqāshī-Khat: Nigāhī Bi Āsār-I Jalil Rasouli [The Secret of Naqqashi-Khatt: An Overview of the Works of Jalil Rasouli] (Tehran: Aban, 2012), 227.

17. It is important to note that Arabic script is not a hieroglyphic system of writing, and thus, the Arabic alphabet is abstract in its nature.

18. Khatibi and Sijelmassi, The Splendour of Islamic Calligraphy, 49.

19. Nada M. Shabout, Modern Arab Art: Formation of Arab Aesthetics (Gainesville: University Press of Florida, 2007), 66, 67.

20. Schimmel, Calligraphy and Islamic Culture, 76.

21. Peter Vergo, That Divine Order: Music and the Visual Arts from Antiquity to the Eighteenth Century (Phaidon: London, 2005).

22. Alain George, The Rise of Islamic Calligraphy (London: Saqi, 2010).

23. Ibid.

24. Ahmed Moustafa and Stefan Sperl, *The Cosmic Script: Sacred Geometry and the Science of Arabic Penmanship*, vol. 1 (London: Thames and Hudson, 2014).

25. Ibid.

26. Vergo, That Divine Order: Music and the Visual Arts from Antiquity to the Eighteenth Century.

27. George, The Rise of Islamic Calligraphy, 103.

28. Qur'an 25 (Surah al-Furqan), https://quran.com/25.

29. George, The Rise of Islamic Calligraphy.

30. Ladan Akbarnia and Francesca Leoni, *Light of the Sufis: The Mystical Arts of Islam* (Houston: Museum of Fine Arts, Houston, 2010), 1.

31. Seyyed Hossein Nasr, Islamic Art and Spirituality (Albany: SUNY Press, 1987), 164.

32. Ibid.

33. Ibid., 21.

34. Seyed Ghahreman Safavi and Simon Weightman, Rūmī's Mystical Design (Albany: SUNY Press, 2009).

35. Besides a few exception, the reed pen is the main equipment of inscribing in Islamic calligraphy.

36. Schimmel, Calligraphy and Islamic Culture, 190.

37. Adviye Ayça Ünlüer and Oğuzhan Özcan, "Sound and Silence in the Line: Re-Reading Turkish Islamic Calligraphy for Interactive Media Design," *Leonardo* 43.5 (2010).

38. Ibid., 453.

39. Owen Wright, "The Sight of Sound," Muqarnas 21 (2004).

40. Jean During, Zia Mirabdolbaghi, and Dariush Safvat, *The Art of Persian Music* (Washington, DC.: Mage Publishers, 1991).

41. In Persian modal music, $G\bar{u}sheh$ are central melodies that usually span only four or five tones, and serve as a model for improvisation.

42. Mahdiye Meydani, Irtibāt-I Khushnivīsī Va Mūsīqīy-I Irani [the Relationship between Persian Calligraphy and Iranian Traditional Music] (Tehran: Shelak, 2008), 9.

43. Santur is a stringed musical instrument of Persian/Iranian origin.

44. The performance was part of a series of research-based concerts and was titled: Farhangestan Honar, *Calligraphy and Music: the 16th Research-based Concert of Iranian Art and Music* (19 Febuary 2015), Iran.

45. Khaneh Honarmandane, Concert of the Line (23 January 2013), Iran.

46. Mohammad Javad Khajavi, The Third Script (2017), Singapore, animated short film.

47. One clear reason for this relative abundance of musical analogies used in describing Islamic calligraphy could be that such musical analogies or comparisons between calligraphy and music have not been recorded in the past, or have faded away throughout centuries.