COMPOSITIONAL TECHNIQUES OF *MEDIASI UKIRAN – TENUNAN VIII* FOR STRING QUARTET: A STUDY OF *ARABESQUE IV*

Tazul Izan Tajuddin[1] and Md Jais Ismail[2]

Abstract

This study focuses on a contemporary art work called *Mediasi Ukiran – Tenunan VIII* for String Quartet composed by Tazul Izan Tajuddin. The researcher highlights the concept of Islamic art, technique in the content, technique in the form, and the meaning of an 'arabesque'. Compositional techniques were discussed in terms of: (1) pattern-based technique; (2) weaving as the concept of combining pitch and rhythm; and (3) a non-pitch-based concept of sound. The discussion includes the concept of geometrical design, which is reflected in the compositional structure. The weaving concept used in the music piece regards pitch and rhythm, and the concept of sound integrates pitches and non-pitches in the work. There are two main sources of contemporary art music in this study, which are Indo-Malay in ethnic essence and Islamic architectural and geometrical art. *Mediasi Ukiran – Tenunan VIII* is written for classical instruments specifically for a string quartet. The work highlights the beauty of sound, composition, organization of musical elements, and the uniqueness of the music structure. Notation are arranged from combinations of Eastern and Western ideas jointly creating a rather rarely appearing effect.

Keywords

Compositional techniques, Contemporary music, String quartet, Arabesque, Islamic art

INTRODUCTION

The most basic and complex fundamental principle and concept of Islamic art is the artistic expression of 'tawhid' (Hassan & Tohid, 2017). According to Al-Faruqi (1992), tawhid (an Arabic word) is derived from the word for 'one', 'unique', or 'peerless' (wahid); it is a concept implying oneness and utter transcendence of God.

This artistic expression emerged together with the birth of Islam. The concept is important because this is where the concept of abstraction in Islamic art was probably born (Shalem, 2012). Al-Faruqi (2013) mentioned that tawhid precludes any confusion or absorption of the divine in non-divine. She continues by saying Islam rejects the representation of the divine with figures from nature and the creation of any form of religious image. For the Muslim artist, the beauty and significance of art is not an aesthetic portrayal of humanity or human attributes, or that of the truth of nature, but the transcendence sought through the creation of the beautiful to stimulate in the viewer or listener an intuition of, or an insight into, the nature of God (Allah) and of man's relation to Him. In the simplest terms, it means that the creation of art in Islamic art must reflect God in the concept of abstraction.

According to Al-Faruqi (1985), the Islamic message of tawhid permeated both 'content' and the 'form' of Islamic art. First, regarding content, it can be demonstrated that any Islamic art is primarily an abstract art. She continues by saying that since Allah is 'outside or the 'other' of the natural world, no creature (anything represented) from nature could stand for Him. In the visual arts (for example), there is a disregard for and even an avoidance of the representation of humans, animals, or objects of nature (Cox, 2011; Dissanayake, 2015). Instead, the artist concentrates on geometric design and

---

[1] Tazul Tajuddin is a Malaysian composer, a Fulbright Visiting Scholar at Harvard University and King's College London UK, currently Professor in Composition at the Conservatory of Music, UiTM. More information can be obtained via email: tazulizan@uitm.edu.my.

[2] Md Jais bin Ismail is the corresponding author for this article. He is leading the Music Education and Music Business Department of the Conservatory of Music, College of Creative Arts, Universiti Teknologi MARA (UiTM) in Shah Alam, Selangor, Malaysia. More information can be obtained via email: mdjais@uitm.edu.my.

Tazul Izan Tajuddin and Md Jais Ismail. 2023. Compositional Techniques of Mediasi Ukiran – Tenunan Viii for String Quartet: A Study Of Arabesque IV. *AEMR*, 12: 43-56.
DOI: 10.30819/aemr.12-4

elaborates calligraphy as heavily stylized and denaturalized figures from the plant world. When the Muslim artist makes use of motifs from the animal world, they are constrained and re-formed by him in such a way that even they express the dominant idea of Islamic civilization: that God is infinite, totally transcendent, and inexpressible in natural terms.

Those are ideas for which no presentation is possible. Therefore, they impart no knowledge about reality (experience); they also prevent the free union of the faculties, which gives rise to the beautiful; and they prevent the formation and stabilization of taste.

Technique in the Content of Islamic Art

In the content of Islamic art, the transformation of this concept was achieved using three artistic devices (Al-Faruqi, 1975):

1) Stylization (which turns an identifiable figure into a denaturalized, or non-representational, figure).
2) Non-individuation (it is about colour; in musical terms, this means that no specific individual note or pitch must be stressed. All series of notes, for example, are used in the pieces as a contribution towards the total sound rather than as individual notes. Also, the usage of clusters, changing the sound by using techniques such as harmonics, breathy tone or whistle tone, changing dynamics, density, and so on to change the colour).
3) Repetitions of units and items in design, emphasized using geometry and symmetry.

Al-Faruqi argued that Islamic artists were unconcerned with the problems of depth, perspective, and space that concerned their contemporaries in the Western world. The Islamic artist had little interest in depicting or expressing nature. There are two levels of content in Islamic art: one with a small initial 'c' that is involved with the obvious, surface *content*, and another with a capital letter 'C' that, through its representation of the ostensible motifs, figures, characters, or events, seeks to reveal a deeper message or *content*. The existence of this concept is a characteristic of Islamic art. This is what we call background and foreground *content* (Lamya, 1998).

Technique in the Form of Islamic Art

There are two techniques in the form of Islamic art, according to Al-Faruqi:

1) Non-developmental: the works of art are not evolved one after another in a seemingly inexorable and unbreakable chain, which leads to a climactic moment and a decisive conclusion. For example, in paintings, there is no focal point to which all minor elements of the picture point and subordinate themselves. In other words, the result of the work most of the time *flows* and *floats* in its effects, visually or aurally. The other character of this technique is flashes and sparks of moments in the work of art. For example, according to Al-Faruqi, the Qur'an (that archetype of Islamic literary excellence that is the only miracle produced by God for His Prophet Muhammad (SAAS) also gains its reputation from its flashes of brilliance rather than from its logically evolving presentation of materials. For this reason, it is possible to start to read at any place in the Qur'an or, for that matter, in any other truly Islamic literary creation. One may read as many or as few *ayahs* (sentences in the Qur'an) or *surahs* (passages) as desired, for each unit in the series is an independent item without an irrevocable, individuated position in the whole. The beauty of the creation lies not in its logically progressive thought but in the sparks of genius that flash for a moment in each successive partition. This non-developmental element in Islamic art is expressed through repetition and symmetry. These help to establish the integration, evolution, and the feeling of never-ending patterns, expressing the infinite.
2) Conjunct and disjunct arabesque structures. The structural characteristics of Islamic art are not confined to a rejection of development but also involve the elaboration of a new structural entity, which is called 'arabesque'.

The Meaning of Arabesque

Arabesque is a French word, meaning a stylized and intertwined motif developed from the spiralling vines with leaves and tendrils (Tajuddin, 2002). The literal translation would be 'Arabic ornamentation'. It has been known since Hellenistic art and, in classical times, was used to decorate pilasters and friezes. It was once again used on a larger scale during the Italian Early Renaissance, thus gaining entrance to later periods in Western art. Another meaning of Arabesque in Islamic art, which is closest to my principle and concept, is arabesque as the elaboration of a new structural entity; it is called *tawriq* (foliation) in Arabic. It is also usually described as a complicated organization of geometric figures, calligraphy, and/or stylized elements from the plant and, less often, animal worlds.

Here, Lamya Al-Faruqi also argues that most definitions in encyclopaedias and dictionaries do not get beyond these facts to determine for the reader what the essence of this aesthetic contribution of Islamic culture is. She continues that putting their attention on the motifs used instead of the structure to which those elements conform seems to be a basic and common mistake. In Islamic art, Arabesque has two types (according to Al-Faruqi):

1) Conjunct ('muttasil' from 'wasala' meaning 'to connect')
2) Disjunct ('munfasil' from 'fasala' meaning 'to divide into sections')

A conjunct arabesque resembles a continuum (Nor, 2003; Loumer, 2014). It occurs in an unlimited, never-ending succession that expresses artistically those religious and philosophical ideas that are implanted in the typical artist who grows under the influence of Islamic culture. Al-Faruqi (1985: 25) confirmed that the artist was thus establishing the impression of an 'infinite pattern', an aesthetic expression of the Islamic notion of 'tawhid'. Or better, the artist further emphasizes this impression of infinity as he provides to the perceptive viewer (or listener) a microcosmic intuition of the macrocosm found and fully known only in the Transcendent.

The disjunct arabesque is a series of self-contained units, each complete in itself. Each component is loosely interwoven with those other units around it in such a way as to produce a larger pattern in which each small unit is but a single element. According to Al-Faruqi, "These units and their repetition conform to the culture's rejection of development as a mode of organization. With their countless visual, aural, and thought centres – any of which may provide the starting or ending point for the spectator – they aesthetically give expression to that infiniteness, that limitlessness, which characterizes the Islamic view of transcendence."

The arabesque of Islamic infinite patterns is not simply a series of conjunct or disjunct units; it is in addition a more or less intricate, multi-levelled organization of the various divisions within the design into what might be called 'successive combination'. The abstract or stylized motifs, for example, are combined, on the first level, to produce a composite unit or 'Module'. This module, in turn, is combined with the repetitions of itself or other modules into a still larger pattern. An extensive or very complicated design could encompass many more complex, successive combinations. This infinite pattern has two other characteristics: small, intricate movement; and a periodic 'launch' at the end of an arabesque unit.

These patterns move the eye, the ear, and the mind with a proliferation of minute details. These minuscule movements attract the trained viewer or listener at any one of their many centres or points of aesthetic departure and draw him/her persistently to new areas. Up or down, in or out, to right or to left, or perhaps in several directions at once, the eye, the ear, and the mind are caught up in the aesthetic movement. As each arabesque pattern is grasped and understood, the spectator feels a launch of his spirit with this success and moves to the next pattern. This launch or 'dafqah' (outpouring), as it is called in poetic terminology, comes at the end of each section or pattern of arabesque.

In the words of Al-Faruqi (1985: 30):

> "Movement seems to increase as the spectator is caught up in the aesthetic activity and he encounters the many bifurcations in unfolding of the arabesques. This increased momentum is produced in part by technical means. For example, the artist can increase the proximity, the complexity, the interrelation, as well as actual numbers of his arabesque components. Equally, the movement is increased within the spectator himself. He grasps, with the eye or ear or touch or mind, the first pattern. Then he makes the jump to another similar or a larger, more inclusive pattern. Each time he progresses to a new point in the visual, architectural or literary arabesque, he grasps with greater certainty the special character, the unique quality of that design and is therefore enabled to progress in his investigation with ever-increasing speed. This movement continues from figure to figure, from panel to panel, from verse to verse, from musical phrase to musical phrase, until the edge of the plate or the last note of a musical performance catapults his imagination off in yet another dafqah of aesthetic resolution […] the artist painted one pattern, then another and still another. He was stopped at the extremities of his work of art by external limitations, and not because he had finished his expression of infinity […]."

Finally, she added:

> Islamic art took motifs and new materials for its efforts from whatever sources that were available […] then molded them to conform with the unique categories of consciousness, and the underlying spirit.

In the next section, the application of the concept of Islamic ('*arabesque*') technique in structure and sound organization is discussed.

THE STUDY OF *ARABESQUE IV*

The technique in Islamic art mentioned above has been an inspiration to all Muslim artists around the world. It has been used from generation to generation with some variations of cultural and geographical inflexion. Without exception, my works are also inspired and influenced by this technique. It suits the expression of religio-philosophical views in the Muslim world. I am not attempting to explain the whole process of composition or making an attempt to explain the meaning or sound exhaustively. In the discussion, I will place the concept of 'sound' in the context of the compositional structure and sound organization.

There are two sound categories: (i) external abstract sound (explainable) – composed and organized sounds and (ii) internal abstract sound (mysterious/unexplainable) – as in the pre-compositional state in the context of spirituality and as hearing the sound as the final result (the act of listening). What is being discussed next is the first category, which is the structure and sound organization of the composition as representative of the compositional process. In this chapter, the composer explains how some of the ideals discussed are integrated in the piece *Mediasi Ukiran – Tenunan VIII* for string quartet, structurally, technically, and in the sound organization.

The title *Mediasi Ukiran – Tenunan VIII* is in Malay, reflecting the influence of my cultural background. It means Mediation of Ornament, after a book by Oleg Grabar (a scholar in Islamic art). The subtitle, Tenunan, is a Malay word meaning weave. It is the 8th piece in my Tenunan cycle and an extension of the Arabesque cycle exploring visual patterns in Islamic art as well as batik and textile patterns, particularly from Malaysia and Indonesia (Tajuddin et al. 2021).

The concept of the piece is basically using the idea of tiling in Islamic art and batik patterns in the structuring of the work by creating a lot of small sections. These small sections are placed next to one another to create tiling, like in Islamic art, as we can see in the example here [example 1, Islamic architecture picture (Figure 1) Friday Mosque in Berat, Afghanistan, the blocks of patterns placed next to each other]. The concept of tiling is also in this batik design from Indonesia, for example, in this illustration here [Figure 2, batik pattern from Indonesia, the small patterns placed next to each other]. This pattern is the basic concept in the structure of this work. These visual images have become an inspiration. In order to make this idea work, I used a compositional technique that I call 'pattern-based structure'. One example of another composer who used patterns in his works is Morton Feldman. Another composer who used architecture as a part of compositional technique is Iannis Xenakis.

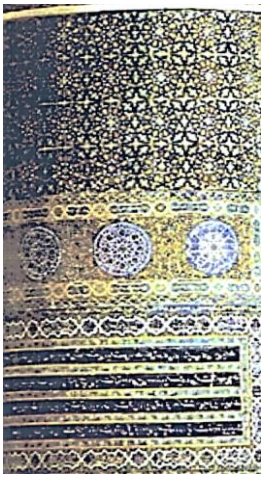

Figure 1: Islamic architecture picture Friday Mosque in Berat, Afghanistan.

Figure 2: Batik pattern from Indonesia.

MATERIAL (TECHNIQUE I)

Mediasi Ukiran – Tenunan VIII for string quartet is one of the pieces in a cycle of study pieces related to the visual aspects of abstract patterns, both regular and irregular. The piece is conceived around the concept and principles of Islamic art. The design, patterns, calligraphy, and structure are related to the geometry of Islamic art, and the relationships between these visual aspects are translated into 'external abstract sound'. Metaphorically, the piece is conceived as a 'landscape of sound', changing constantly within the structural grid of bars or time signatures.

The idea of abstract sound here has more complex inflexion and is more related to sonority, meaning that the sound is not associated with any traditional (especially Western) concept of harmony. As Lewis Rowell said, "(in the West) we respond to the sounds and structures we call 'music' because of what thought to be our natural affinity for certain specified shapes, numbers, and ratios – not, as in the Indian (as well as old Hindu-Javanese Malay) worldview, by receiving the direct flow of sound and emotion in the form of immaterial, vital substance". He continues, "(in the West), like that of the Ancient Greeks, (sound) was held together by a harmonic principle, passion for numbers and precise standards of measurement for sound; passion that is notably absent from the Indian (old Hindu-Malay) literature of musical acoustics". Xenakis (1992: 1–55) wrote: "Lack of understanding of ancient music […] is doubtless caused by the blindness resulting from the growth of polyphony […]". Thus, the effort to feel a 'harmonic' language that is much more refined and complex than that of the diatonic scales in octaves is perhaps beyond the usual ability of a Western music, even though the music in our own day (20th/21st century) may have been able to liberate it partly from the overwhelming dominance of diatonic thinking. The only exceptions are the music of the Far East, which has always remained in close contact with musical practices and dealing with living music and has been able to look for a harmony other than the tonal harmony with twelve semitones.

In Islamic art, the idea of non-individuation in the artistic and technical devices is more related to colour (in the pattern design as sound organization, intensity, and register) than character. Even if there were characters, they would be secondary (as *content* not *Content*). It is more about the blocks of sounds and note clusters moving high or low according to the limits of registers. One block of sounds and clusters is integrated, *woven*, and connected to another block of sound to create density and intensity. Sometimes the attack (sfz), dynamics, playing techniques, and organization of patterns create the colour and add to the sound effects. Scelsi said, "Sound lives and moves: it oscillates in space, it vibrates and quivers like plasma, it is filled with depth and breadth. This inner vibration of sound is made audible by clusters, trills, tremolos, glissandos, by various articulations, by contrasts in the 'grain' such as rough or smooth, but above all by that rapid and broad vibrato widening the pitch's trail from linear ray into a large beam" (Abram, 2021). As Xenakis (1992) proposes, "A world of sound masses, vast groups of sound events, clouds and galaxies governed by new characteristics

such as density, degree of order, and rate of change […]". It is similar to the sound of computer music or 'musique concrète'. Nowadays, computer music software and new technology could make any sound unrecognizable from its original source, transforming it and making it 'abstract'.

In this study, rather than using the computer, the composer used traditional instruments to produce *new* sounds (as abstract sounds). This results in conventional (traditional) instruments producing unconventional sounds. Where the concept of sound is a total phenomenon, as in gamelan music, the structure and sound organization are subordinate to the whole sound. The sound itself (either creating or listening) is subordinate to the concept of a transcendental, infinite.

The materials in the piece are derived from the sources of the Islamic geometrical patterns and cultural influences, such as textile patterns derived from Malaysian and Indonesian *batik*. *Tenunan* is a Malay word meaning weave. Even though technically batik is not woven, the weaving happens in the notation, in the process of composing and sound organization of one sound to another (one note to another).

Metaphorically, in the piece, the feeling of floating is like being in a state of constant flux, either static, or chaotic. The flux, fluctuation, or floating is an unstable state. What comes next is unpredictable. It is towards spiritual transcendentalism, spiritual dimensions. Flying sensations are a state of floating. The piece starts with an aggressive vertical attack (chord with a short attack and mainly pizzicato on strings). This resembles the word 'kebyar' as in 'Balinese Gamelan Gong Kebyar', which means to flare up suddenly or to burst open. 'Byar' is actually a tutti sforzando of the bronze-keyed metallophones, spanning the complete register of a typical gamelan. In the piece, the multiple motifs resemble the concept of many motifs in batik patterns. A lot of intricate elements coexist and weave together to create and form harmonious relations.

In pieces such as *Tenunan* and *Tenunan II*, they started with a lot of small motifs of sound gradually changing in time within the bar or time signature grids. This construction is also used in the *Mediasi Ukiran – Tenunan VIII*. This is the basic material for the piece. The nature of the chosen material is not as important as how the material is put together. As Al-Faruqi (1985: 26) said, "The uniqueness of the Muslim artist then is revealed not so much in what motifs he chooses, but in the way he alters those motifs and, even crucially, in the way he joins them in his design. It is here that essential character of the arabesque is therefore primarily a matter of the structure of art".

All *Tenunan* pieces from *I* to *VIII* are organized using a series of seven tone clusters derived from the word 'tenunan' itself (Figure 3).

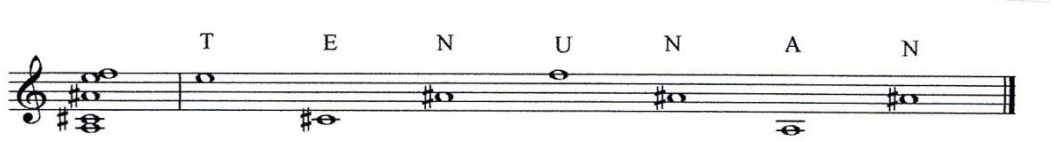

Figure 3: Series of tone clusters.

The series of note clusters is distributed throughout each unit of bar/time signature grids (Figure 4).

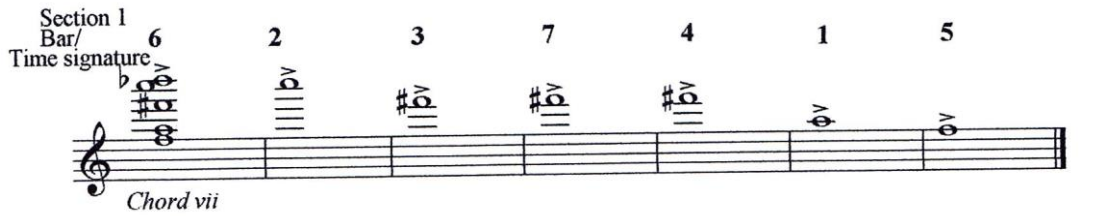

Figure 4: Chord and tone distribution in Section 1.

In ***Tenunan*** piece, there are seven chord iterations from section I to VII and seven chord iterations from section VIII to XIV (Figure 5).

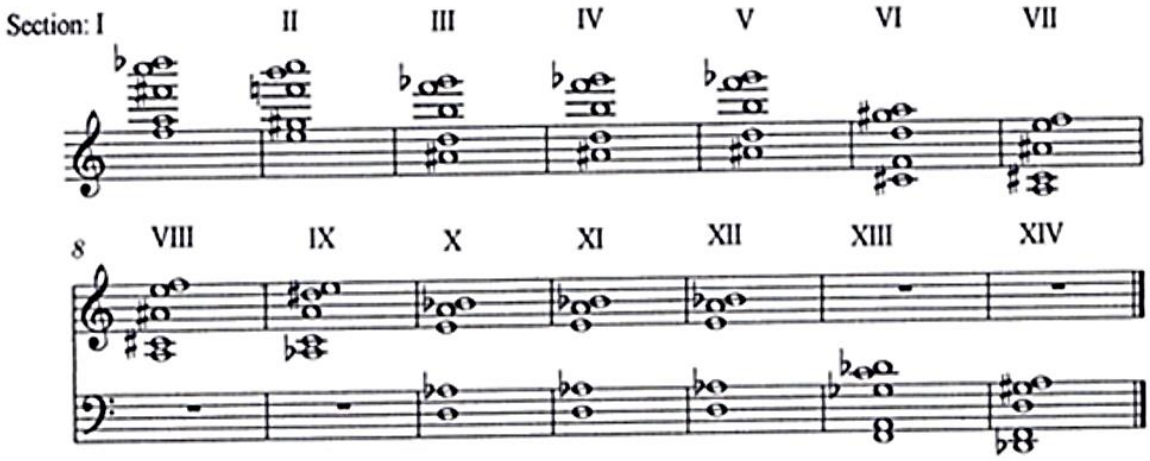

Figure 5: Chord iteration.

STRUCTURE (TECHNIQUE II)

After constructing the basic material, a sketch of the pre-determined structure is created. It is like preparing a canvas or the skeleton of the piece. The purpose of this is (a) to get a spatiotemporal perspective, (b) to 'visualize' the sound, (c) to feel vaguely how the piece would go, and (d) to express and project the *internal sound images* within the structural grid. Then, from the beginning of the compositional process to the end, the structure eventually becomes the background and the sound becomes the foreground. The structure becomes secondary when the sound becomes primary (*content* subordinate to the *Content*). Within the process of composition, sound is created within the structural grid by selecting and shaping the materials.
The structure is divided into small units. These small units are connected (conjunct) to each other to create a continuum in an unlimited, never-ending succession that expresses artistically those religio-philosophical ideas in Islamic art.

PATTERN-BASED TECHNIQUE USING TIME SIGNATURE

In *Tenunan*, there are 14 small sections. There are a certain number of bars/time signatures assigned to each section. These number of bars/time signatures are disjunct, a series of self-contained units, each complete in itself. Each component is interwoven with those other units to create larger patterns. The 14 small sections and the bar/time signature grid sequences are organized like this:

Time signature:

I: 6/32 / 2/8 / 3/8 / 7/32 / 4/8 / 1/4 / 5/32 //

II: 2/32 / 3/16 / 7/32 / 4/16 / 1/16 / 5/16 / 6/16 //

III: 3/32 / 7/32 / 4/32 / 1/32 / 5/32 / 6/32 / 2/16 // etc.

Pattern:

I: 6, 2, 3, 7, 4, 1, **5**,

II: 2, 3, 7, 4, 1, **5**, 6,

III: 3, 7, 4, 1, **5**, 6, 2,

IV: 7, 4, 1, **5**, 6, 2, 3,

V: 4, 1, **5**, 6, 2, 3, 7,

VI: 1, **5**, 6, 2, 3, 7, 4,

VII: **5**, 6, 2, 3, 7, 4, 1,

Symmetry

VIII: 6, 2, 3, 7, 4, 1, **5**,

IX: 2, 3, 7, 4, 1, **5**, 6,

X: 3, 7, 4, 1, **5**, 6, 2,

XI: 7, 4, 1, **5**, 6, 2, 3,

XII: 4, 1, **5**, 6, 2, 3, 7,

XIII: 1, **5**, 6, 2, 3, 7, 4,

XIV: **5**, 6, 2, 3, 7, 4, 1,

In *Tenunan II*, the patterns are retrograded:

Time signature: **I:** 1/4 /4/4 /7/4 /3/4 /2/4 /6/4 /5/4 //

II: 4 /7 /3 /2 /6 /5 /1 //

III: 7 /3 /2 /6 /5 /1 /4 // etc.

Pattern: **I:** 1, 4, 7, 3, 2, 6, **5**,

II: 4, 7, 3, 2, 6, **5**, 1,

III: 7, 3, 2, 6, **5**, 1, 4,

The technique above has become a structural characteristic of all *Tenunan* works since 1999 and is also used in *Mediasi Ukiran – Tenunan VIII* (Tajuddin et al. 2021). It is used for structuring the work by creating a lot of small sections, like patterns in Islamic art and Indonesian or Malaysian batik and textile designs.

In *Mediasi Ukiran – Tenunan VIII*, the pattern-based technique starts by using a series of numbers from 1 to 7 and a set of notes as a starting point.

1. The set of numbers is used:

- To create small sections (or patterns, Figure 6) and bars. Using the numbers 1 to 7, a note value is added to them. For example, in this work, the choice is to use crotchet. This note value (crotchet) is assigned to the set of numbers. So, bars of different lengths are created. This group of bars will be the first section. The next section is created by using the same bars explained above by re-ordering the sequence of the bar; for example, in this work, the bar with one crotchet note will move to the back of the sequence. [diagram no. 3, the number sequence: 1,4,7,3,2,6,5 becomes 4,7,3,2,6,5,1].

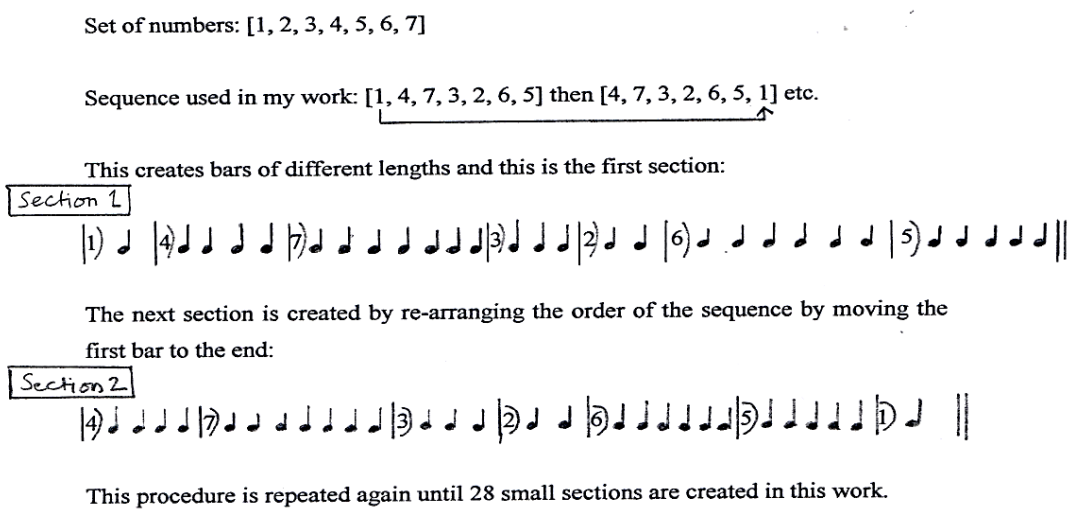

Figure 6: Pattern-based technique.

- This procedure is repeated again and again until, in this work, there are 28 of these small sections created. This provided a basic template to create and shape the sound. The sections could be extended indefinitely or generated further by repeating the procedure again and again (and this reflects the traditional Islamic pattern of repeating towards infinity).

2. The set of notes:

- The notes are also used as compositional material by organizing them within the template created above. The choice of notes, rhythm, and distribution is up to the composer. In this work, a septuplet is chosen in bar 1. The choice of notes and distribution are as in this example (bar 1 in Figure 7).

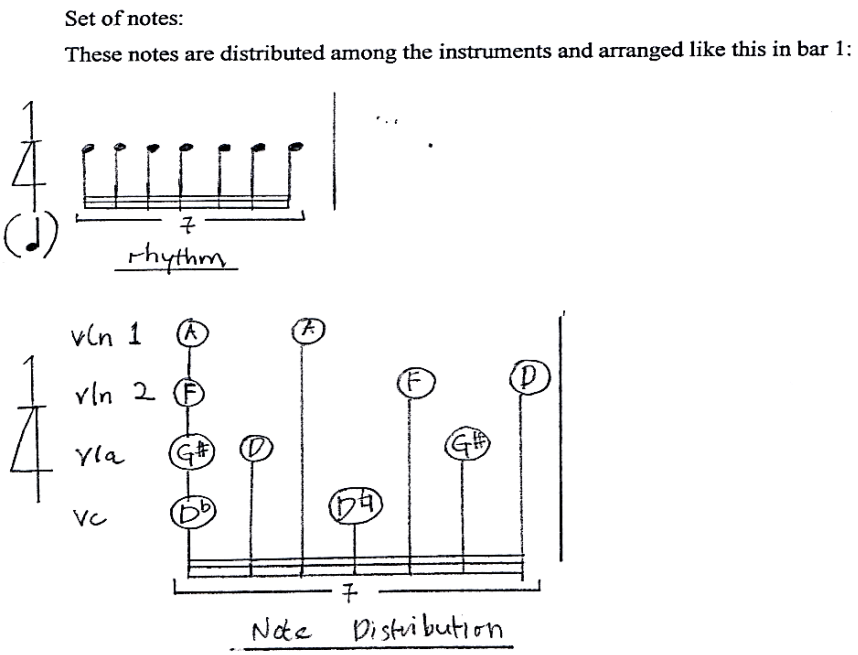

Figure 7: Note/tone distribution.

- [Figure 7, example bar 1]. These are basic procedures of pattern-based technique composer used in this work.

The result using this technique in the structuring of the work is summarized here [Figure 8, overall structure: show the 28 small sections].

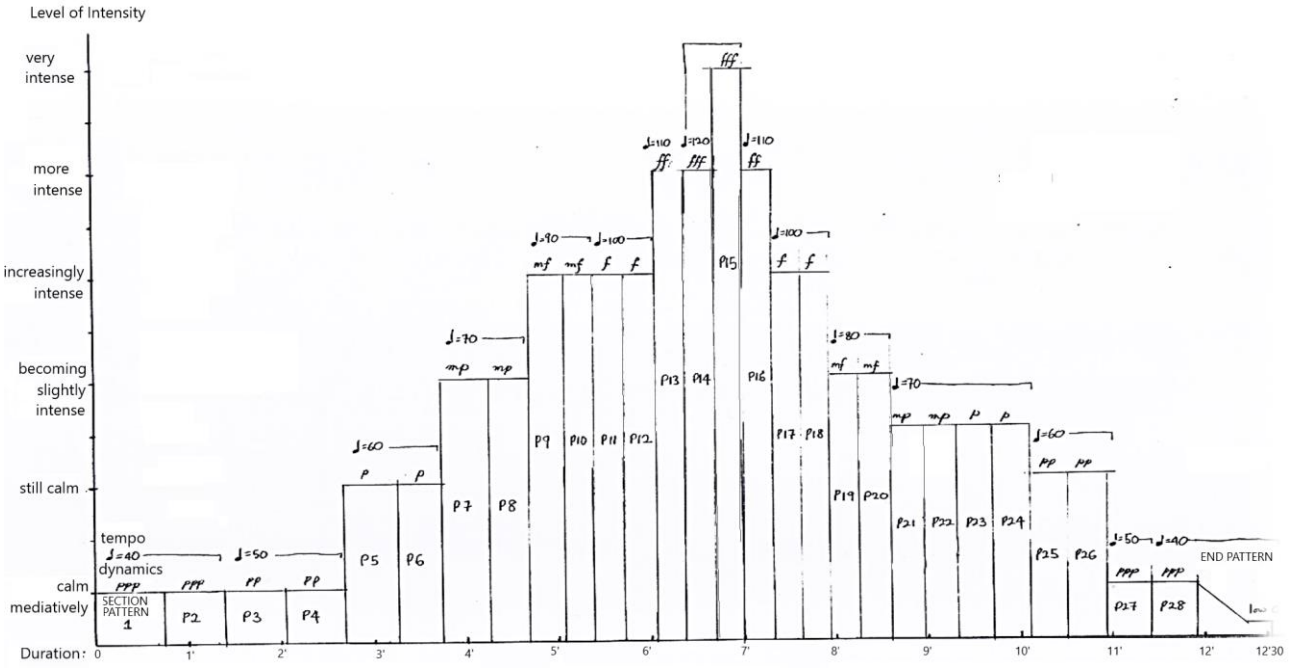

Figure 8: Summary of overall structure.

REPETITION/TIME PROPORTION/PULSE

Repetition does not mean that some passages are repeated again and again. What is constantly repeated is only the structure (repetition/iteration of bars/time signatures), which is hidden behind the changing sound patterns.

The proportional time comes from the division of time signature. As every single unit of time signature has its own time, the time is divided according to its value and proportion. This creates an unexpected, irregular pulse/beat. Each piece has its own pulse. In *Tenunan* and *Tenunan II*, the pulse occurs almost on the first beat of every unit of bar/time signature grid. Each section contains seven units of bar/time signature grid. A chord vertical attack occurs on every first bar/time signature of each section. On each of the other bar/time signature grids (the other six bars in the section), a note vertical attack occurs (see Figures 9 and 10).

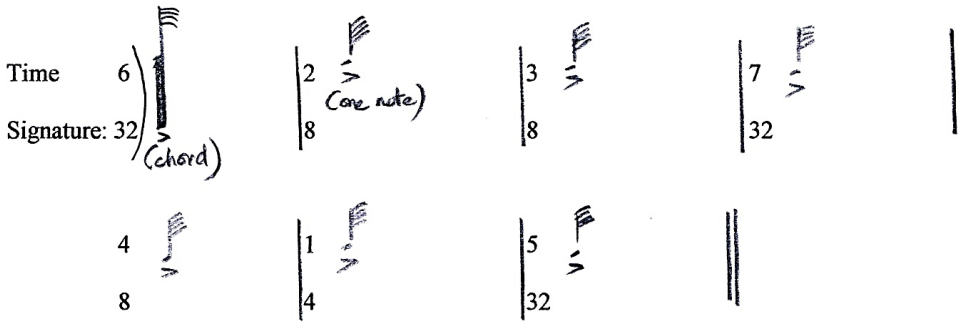

Figure 9: Chord vertical attack in *Tenunan* piece.

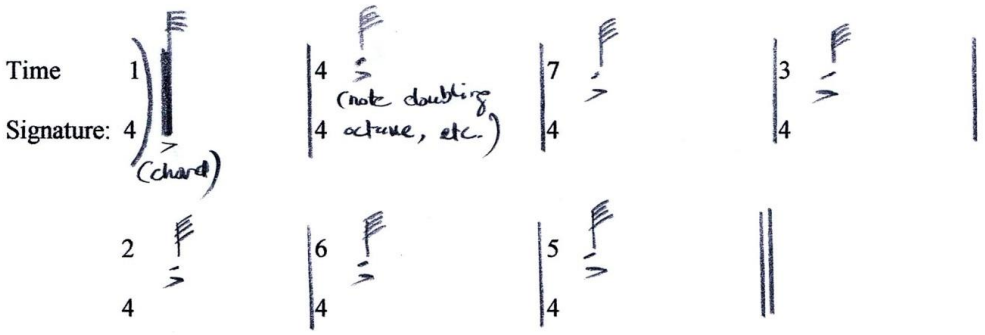

Figure 10: Chord vertical attack in *Tenunan II* piece.

Tempo is normally expressed in quaver units. This is to get better control of the pattern and design of the sound and also to get different proportions and subdivisions of note values in each bar/time signature. It is also to provide a multi-layered subdivision in organizing the pattern/sound. This follows what Al-Faruqi (1985: 28) said:

> "…it is in additional more or less intricate, multi-levelled organization of the various divisions within the design…."

They also occur in *Mediasi Ukiran – Tenunan VIII.*

SOUND (TECHNIQUE III)

THE CONCEPT OF SOUND/STYLE

The design, patterns, calligraphy, and architecture of the Alhambra (Figure 3) are related to the geometry of Islamic art, and the relationships between these visual aspects are translated into (external) abstract sound. These abstraction, as in Western abstract art, is exemplified by the random patterns in Jackson Pollock's painting 'Number 13A, Arabesque' (1948) as an example. The striking metallic sonorities of the gamelan and the woven and printed patterns of textiles (specifically 'corak' (pattern) batik in Southeast Asia, 'corak' is pattern in Malay) create further inflexion towards *localized* inspirations. These cultural and geographical inflexions would be denaturalized, and it would follow what Al-Faruqi said (1985:26), "Actually the artist imbibed with the Islamic worldview will find compatibility with a great variety of motifs from the world around him. He needs only to denaturalize them to make them fit his purpose". It can also be called *localization*.

PATTERN/SOUND ORGANIZATION

The sound should be perceived as one, not as individual lines. In this work, each bar is intricately woven using pitches and rhythm distributed between the instruments. It is like tiles being placed next to each other but the sound is played continuously and should be perceived as one, as one sees the whole woven pattern in batik designs or Islamic architecture [Figure 2, batik pattern].

This concept is also the way we perceive gamelan music (all instruments playing intricate lines together). Another example could be Baroque music, such as Bach. There is a question of sound related to tuning that is non-equal. In this work, the solution is that the focus is not on the exact pitch, interval, or melodic frame but on the sound, textures, and sonority with the combination of 'accidental' micro-interval effects produced from string extended techniques. This is where the composers used the second compositional technique, which we call 'non-pitch-based composition'. Some contemporary composers that have explored this include Helmut Lachenmann and Salvatore Sciarrino (Kaltenecker, 2001; Giacco, 2001).

Throughout the entire work, there is no pitch or note played normally, except for the last note of the work (the open C on the cello at the end of the work). We could hear some 'blurred' and 'decorated' pitches at times, but they are not played normally. The piece is constructed around seven series of

note clusters, which are distributed throughout the 28 small sections (patterns) of the piece. These small patterns are connected to each other like broken, fragmented tiles being placed together (as in the *disjunct* and *conjunct* arabesque structures). Metaphorically, as Ciro G. Scotto said about Roger Reynolds' music, "A particularly interesting feature of such patterns is their fragmentation. Although fragmented, the terrain as a whole is still unified, since bits and pieces of differing patterns form larger mosaics […] to pursue such fragmented and dislocated terrain as the guiding image for a musical landscape […] formal and structural features were inspired by an extra-musical source […] the topological patterns dramatically reflect the deep ecological forces that continually reshape the earth's surface". The sound pattern is organized within the bar or time signature grid. From one unit bar or time signature grid to another, there are connecting note/s (around note F).

The techniques above created textural or weaving (tenunan) work; therefore, the title *Tenunan*: all elements composed, from the notes, playing techniques, dynamics, tempo, and overall balance, are interwoven to make a piece of woven sonority or 'Sound Fabric'. Mediating these compositional materials using ornamentations in the playing technique in this string quartet explains the title, The Mediation of Ornament.

NON-PITCH-BASED TECHNIQUE (SOUND)

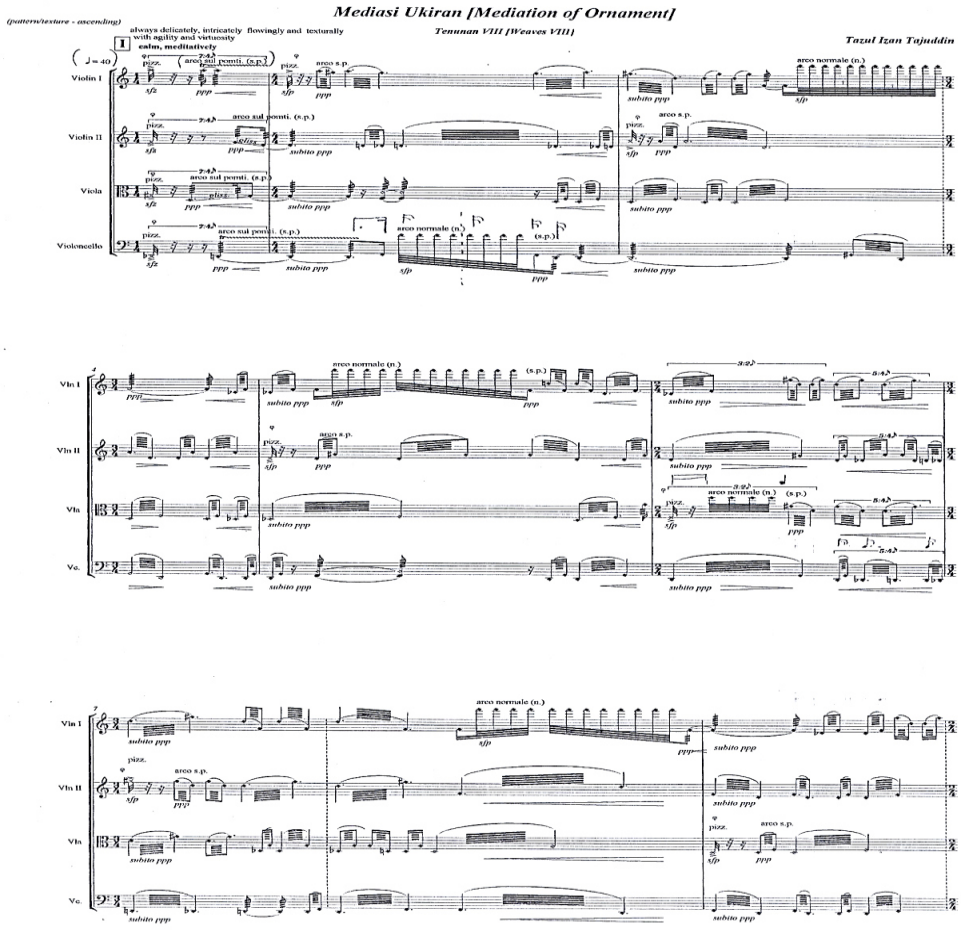

Figure 11: Score example.

Non-pitch-based technique is to resolve the question of tuning, the piece focuses not on the exact pitch, interval, or melodic frame but instead on the sound, textures, and sonority. This has become a sound characteristic of the piece in the *Tenunan* cycle. The technique is to change the character of each note by playing each note with extended techniques and ornamentation to change the sound. The actual pitch has become secondary. After the procedures above, then:

Each note is given a string playing technique: the overall sound in this work is based on harmonics, where the notes are 'blurred' and played in a non-normal way, for example, artificial harmonics and touching lightly on the string as if to play a harmonic, creating a 'dirty' sound in between noise and harmonic sounds. The other characteristic of the sound is the pizzicati percussive gestures. The result of the sound is as in this music example [music example 1 (track 1) (score example in Figure 11).

CONCLUSION

There are two main sources of inspiration for the work in general: one is the Indo-Malay culture, and the other is Islamic architectural and geometrical art. *Mediasi Ukiran – Tenunan VIII* are written for Western classical instruments, though the concepts of sound, composition (organization of materials), and notation are made from combinations of Eastern and Western ideas, therefore creating an unconventional effect.

As a conclusion, the ideas proposed in this study are:

- Using numbers as a basis for composition
- Using non-exact pitches
- Using extended techniques
- Be inspired to write music with cross-cultural references, or music that links contemporary language and techniques to their own background.

Therefore, no matter what background one has, the composer could use these elements to create his or her own voice, mediating from one culture to another, and in my case, from the East to the West and vice versa; composing without borders.

REFERENCES

Abram, O. 2021. Timbre-based composition, multiple perspectives and ambiguity in Rebecca Saunders' compositional style. *Tempo*, *75*(297): 20-34.

Al Faruqi, L. I. 1975. Muwashshaḥ: a Vocal Form in Islamic Culture. *Ethnomusicology*: 1-29.

Al-Faruqi, Lois Lamya'. 1985. *Islam and Art*. Islamabad: National Hijra Council.

Al-Faruqi, I. R. 1992. *Al Tawhid: its Implications on Thought and Life* (No. 4). Herndon: International Institute of Islamic Thought.

Al-Faruqi, I. R. 2013. *The Arts of Islamic Civilization*. *Vol. 24*. Herndon: International Institute of Islamic Thought.

Cox, C. 2011. Beyond representation and signification: Toward a sonic materialism. *Journal of visual culture*, *10*(2): 145-161.

Dissanayake, E. 2015. *What is Art for?* Seattle: University of Washington Press.

Giacco, G. 2001. *La notion de "figure" chez Salvatore Sciarrino*. Paris: Editions L'Harmattan.

Hassan, N. A., Amin, P., & Tohid, S. 2017. The concept of Tawhid in visual artworks. *International Conference on Studies in Arts, Humanities and Social Sciences, Bali, January 31–February 1*. Unpubl. ms.

Kaltenecker, M. 2001. *Avec Helmut Lachenmann*. Paris: Van Dieren.

Kearney, R. 1996. *The continental philosophy reader*. Hove: Psychology Press.

Loumer, S. H. 2014. Quranic themes and reflections in Islamic art and architecture. *Trends in Life Sciences*, *3*: 471-481.

Nor, M. A. M. 2003. Arabesques and Curvilinear Perimeters in the Aesthetics of Maritime-Malay Dances. *Yearbook for Traditional Music*, *35*: 179-182.

Shalem, A. 2012. What do we mean when we say Islamic Art? An urgent plea for a critical re-writing of the history of the arts of the Islam. *Journal of Art Historiography*, *6*.

Tajuddin, T. I. 2002. *Music compositions with commentary: a study of Arabesque*. Doctoral dissertation, University of Sussex. Unpubl. ms.

Tajuddin, T. I., Naili, R., & Ismail, M. J. 2021. Tracing art music compositions and composers in Malaysia. *International Journal of Innovation, Creativity and Change, 15*(10): 542-560.

Xenakis, I. 1992. *Formalized Music: Thought and Mathematics in Music*. Revised edition. Stuvesant: Pendragon Press.