

An Introduction to the Symbolic Dimension of Music: A Composer's Perspective

Katia Mary Tiutiunnik

Universiti Teknologi Mara (UiTM), Shah Alam, Malaysia

Research Affiliate, Sydney Conservatorium of Music, The University of Sydney, Australia

Abstract

As a composer, it has always been my intention to produce music which can be listened to, analysed and appreciated for its own sake, without reference to any extra-musical material. However, I have always been acutely aware of the extent to which my compositional process has evolved as a direct result of my engagement with extra-musical forms, both as a scholar and a composer. It is my interpretation of these extra-musical forms which both inspires, and finds symbolic expression in, the musical structures and processes contained in my compositions. On one level, these structures and processes function solely as musical entities, and, as such they can be analysed in purely musical terms – without reference to anything external to my compositions. However, when these entities are examined in relation to the extra-musical forms which influenced their creation, a new dimension of my music is revealed: its symbolic dimension. In this article, I outline the theoretical stances adopted throughout my own analyses of both my compositions and the external subject matter which prompted their creation, drawing upon the writings of Jean Jacques Nattiez (Nattiez, 1990), Carl Gustav Jung (Jung, 1956), and others. In the course of the discussion, various definitions of the “symbol” and their implications are explored and some of the key symbolic motifs in my compositions are examined.

Keywords *composition, musical symbolism, musical semiology, music analysis, Islamic music, Arab music.*

Defining the symbol

The essence of a musical work is at once its genesis, its organisation, and the way it is perceived.

–Jean-Jacques Nattiez (Nattiez, 1990, p.ix)

Since it is the symbolic dimension of my music that is introduced in this article, it is necessary that the term *symbol*, as opposed to *sign*, is defined.¹

One of the theoretical stances adopted throughout my research, as both a composer and scholar – currently based in Shah Alam, Malaysia – is that of musical semiology, developed by Jean-Jacques Nattiez (Nattiez, 1990). Musical semiology, like all theories of semiology, is based on a definition of the *sign* (Nattiez, 1990, p. 3). In his writings,

Nattiez draws upon the arguments of Gilles-Gaston Granger and Charles Sanders Peirce, who define the sign as anything which is related to a second thing, its *object*, in such a way as to bring a third thing, its *interpretant*, into relation to the same object, which in turn brings a fourth into relation to that same object, and so forth, ad infinitum (Nattiez, 1990, pp 5-6). This argument can be graphically represented in the following diagram, which is based on a model developed by Granger (Nattiez, 1990, p. 6).

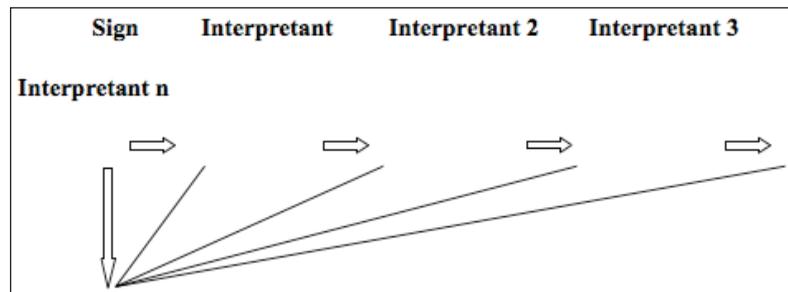


Figure 1 Model Developed by Grainger

Object

In order to ground this argument in the concrete, one could consider the word “sadness”. For every reader familiar with the English language, this word is instantly “comprehended.” However, when one attempts to explain its content, a series of new signs occur: “unhappiness”, “melancholy”, “grief”, and so forth, ad infinitum. Each of these *signs* varies from one reader to the next according to the life experiences of each.² Similarly, if we consider the word “beautiful”, a series of new signs occur: “pleasing”, “pretty”, “harmonious” and so forth. These *signs* are interpreted differently by each reader, depending on their lived experience. Hence, it could be stated that a *sign* is a fragment of experience, which refers to another fragment of experience, which in turn refers to another fragment of experience...and so on, *ad infinitum* (Nattiez, 1990, p. 8). From a discussion resembling the preceding, Nattiez extracts a brief definition of the term sign: a sign, or a collection of *signs*, to which an infinite complex of interpretants is linked, can be called a symbolic form (Nattiez, 1990, p. 8).

However, I believe that the significance of the term “symbol” and hence, of “symbolic form”, cannot be equated so easily with that of the “sign.” Carl Gustav Jung, whose writings significantly influenced my compositional process, also held this belief:

A symbol is an indefinite expression with many meanings, pointing to something not easily defined and therefore not fully known. But the sign always has a fixed meaning, because it is a conventional abbreviation for, or a commonly accepted indication of, something known. The symbol therefore has a large number of analogous variants...(Jung, 1956, p. 124)

Jung's belief that signs, as opposed to symbols, always have fixed meanings, seems to conflict with Granger's, Nattiez's and Peirce's thesis that the sign is linked to an infinite constellation of interpretants (see above). It is not my intention, in this article, to reconcile these seemingly opposed points of view. However, I do believe that the infinite constellation of interpretants, which, according to Nattiez, emanates from each word, does not preclude a commonality of verbal signification, easily understood by members of the same linguistic group. It is my conviction that this is the case, no matter how different the lived experiences of each member of a linguistic group may be.

For example, to an English speaking victim of child abuse, the word "abuse" would generate a different constellation of interpretants than it would for an English speaker who has led a relatively pain free existence. However, despite the differences in their lived experience and the ensuing difference in the constellation of interpretants generated by the same word, both of these individuals would agree on some common signification of the word "abuse." If this were not the case, verbal communication would be impossible (even if it is, at times, fraught with misunderstandings).

However, in the realm of music, unlike that of language, the commonality of verbal signification does not exist: the emotions it evokes, the meanings that it takes on, are multiple and diverse, making music polysemic (Nattiez, 1990, p. 8). These emotions and meanings are objects of interpretations which are never fixed (Nattiez, 1990, p8). Rather, they vary according to the personal experience, education and perceptive faculties of each listener (Nattiez, 1990, p. 8). Indeed, the Islamic luminary Abu Hamīd al-Ghazālī, believed that certain people had little or no ability to perceive, let alone interpret, music:

...perception requires something that is perceived, as well as the capacity for perception...so, he whose capacity for perception is deficient cannot conceive of deriving pleasure from it (music)...the arrival of the musical sound to ears is perceived by a secret sense in the heart, and he who lacks that sense must ultimately be deprived of its pleasure...(Al-Ghazali, Abu Hamid 1058-1111, 1907, p. 156)³

Hence, the expression "symbolic form", as it applies to music, must be taken in its most general sense—as designating music's capacity (with all other symbolic forms) to give rise to a complex and infinite web of interpretants (Nattiez, 1990, pp 5–8).

The definition of music as a symbolic form gives rise to some complex issues, one of which regards the affective component of a symbol. On this subject, Nattiez cites Paulus, who states that:

...what joins them, (the symbol and the symbolised), what determines that one evokes the other, is the common pool of affective reactions that they provoke, a common pool which may derive from innate psychism, from cultural customs, or finally from individual experiences and associations (Nattiez, 1990, p. 36).

The notion of analogy is crucial here. On this matter, Nattiez again cites Paulus, who claims that:

...the symbol can be degraded, or be refined, into a sign, as soon as the affective component which engendered it is obliterated. The symbol then remains only as a pure substitute, stripped of all resemblance—whether perceptive or affective—to the object (Nattiez, 1990, pp 36–37).

As an illustration, one could consider the following example: The Persians had the custom of leading a dog to the bedside of a dying man, who would then give it a morsel to eat (Jung, 1956, p. 238). Jung has claimed that, according to Creuzer, this rite symbolised the appearance of the dog-star at the highest point of the solstice (Jung, 1956, p238). Hence, the bringing in of the dog has a compensatory meaning, death being made equal to the sun at its highest point (Jung, 1956, p. 238).

Analogously, in ancient Mesopotamia, a rite of sacred sexual intercourse, known as *hieros gamos*, was performed annually by the high priestesses and kings for over two thousand years, to assure fertility and prosperity to the land and its people (Jung, 1956, 238). In *hieros gamos*, the high priestess was seen as the personification of the goddess Inanna (whose counterparts include the Semitic Ishtar and Greek Aphrodite) (Penglase, 1994, pp 165, 178). The king, her partner in the rite, was revered as the incarnation of Inanna's lover, Dumuzi, (the Semitic Tammuz, whose Greek counterparts were Adonis⁴ and the Trojan shepherd Anchises) (Penglase, 1994, pp 165, 178). This act of sacred sexual intercourse was originally intended to symbolise the “marriage” between the “storehouse” (personified by the goddess Inanna) and the “harvest” (personified by her lover Dumuzi) (Jacobsen, 1976, p. 5). The analogy embodied in this rite now becomes clear: the bestowing of prosperity and fertility to the land is symbolised by the union of the storehouse with the harvest.

In both of these examples, it was the analogy embedded in the rite, which gave it its affective dimension in the culture wherein it was practised.⁵ It is this affective dimension which, according to Jung, gives symbols—and, hence, symbolic rites—their numen—or power (Jung, 1956, p. 232):

The symbol works by suggestion; that is to say, it carries conviction and at the same time expresses the content of that conviction. It is able to do this because of the numen... (Jung, 1956, p. 232)

According to Jung, when a symbol loses its affective dimension it also loses its numinous quality (Jung, 1956, p. 232). This results in its becoming, to use the words of Paulus, “degraded into a sign” (see above). Jung illustrates this loss of affective dimension by citing the example of a religious ritual, which no longer exerts any power on its practitioners and/or participants (Jung, 1956, p. 232):

There is no longer a living power behind it. The much-vaunted “childlikeness” of faith only makes sense when the feeling behind the experience is still alive...(Jung, 1956, p. 232)

The affective dimension of the symbol is crucial for music, since the expressive component of a composition appeals to the concept of the symbol (Nattiez, 1990, p.

37). It is my belief that music can and does have a “numinous” quality because of its affective dimension as a symbolic form. One only has to consider the many roles and affiliations of music in western society, as discussed by Edward Said:

...the roles played by music in Western society are extraordinarily varied, and far exceed the antiseptic, cloistered, academic, professional aloofness it seems to have been accorded. Think of the affiliation between music and social privilege; or between music and religious veneration—and the idea will be clear enough (Said, 1991, p. xii).

The definition of music as a symbolic form necessitates a definition of *meaning*. Since, as stated above, the meaning of music cannot be limited to any verbal signification, I have chosen to adopt the following general definition of meaning, derived from the writings of Nattiez: the meaning of an object of any kind is the constellation of interpretants drawn from the lived experience (intellectual, artistic, religious, emotional etc) of the object’s user—the “producer” or “receiver” in a given context (Nattiez, 1990, p. 10).

In western art music, the “producers” of musical compositions are the composers, and the “receivers” are, in the case of unperformed music, the readers of the score. In the case of performed music, the “receivers”, in the first instance, are the performers, who interpret the score and subsequently become “producers” of the musical result. This musical result is then “received” by the audience, who may in turn become “producers” of press reviews, critical evaluations, articles etc.

It should be emphasised that the roles of “producer” and “receiver” are not mutually exclusive. In many situations, “producers” may become “receivers” of their own symbolic forms, as in the case of composers who listen to, read and/or perform their own works. Indeed, the very act of composing often involves making decisions from the position of “receiver”. This occurs when, for example, composers, in isolation, decide to alter their works after reading, reflecting upon and/or listening to them. Also, during the compositional process, many composers engage with musical and/or extra-musical sources from the standpoint of a “receiver”, in order to derive inspiration and/or ideas. Furthermore, composers may be prompted to revise their own compositions as a consequence of critical feedback they receive from readers and listeners of their music. In this case, the reception and interpretation of critical feedback—itsself a symbolic form of a verbal nature—generates a creative activity, the result of which is a new, musical, symbolic form.

The three dimensions of symbolic forms

Symbolic forms⁶ in western art music result from a process of creation on the part of the composer (Nattiez, 1990, pp 11–12). This act of creation, which may be described or reconstituted, is referred to by Nattiez as the *poietic dimension*.⁷ “Receivers”, when confronted with a symbolic form – in this case, a musical composition – assign many meanings to it (Nattiez, 1990, p. 12). This is termed the *esthetic dimension* (Nattiez, 1990, p. 12). Between the *poietic* and *esthetic* there exists *trace*, accessible to the five

senses, which embodies the symbolic form (Nattiez, 1990, p. 12). In the case of music the original *trace* would be the score, and subsequent traces would be performances and/or recordings of the composition.⁸

It should be emphasised that receivers, when confronted with symbolic forms, are not the recipients of meanings transmitted by the producer. Rather, they construct meaning in the course of an active perceptual process (Nattiez, 1990, p. 12). In other words, a musical composition is not an intermediary in a process of communication that transmits the meaning intended by the composer to an audience (Nattiez, 1990, p. 17). Rather, a musical work is the product of the *poietic* process—and is also a point of departure for the *esthesis* process, in which a message is reconstructed (Nattiez, 1990, pp 12, 16–17).

To illustrate, ‘Ali ‘Abdul Amīr, in his review of the world premiere of my symphonic poem *Noor* (1998) for violin and orchestra⁹, stated that:

The drums began to depict destiny, while the violin symbolised the capacity for steadfast confrontation, by means of patience, struggle and the spirit which cannot be broken. It (the composition) is an intelligent metaphor for the journey of Queen Noor, and, especially, the great agony she suffered with the passing away of the late great King Hussein bin Talāl (Amīr, ‘Abdul ‘Ali, September 25 1999, p. 58)

I finished composing *Noor* approximately three months before King Hussein of Jordan died. Hence, it could never have been my conscious intention to compose musical symbolic forms referring to “the great agony she (Queen Noor) suffered with the passing away of the late great King Hussien bin Talāl.” Obviously, from the *esthesis* position, ‘Ali ‘Abdul Amīr constructed meanings which he assigned to the symbolic forms in *Noor*, in the course of an active process of perception. However, Amīr’s interpretation of *Noor* is both valid and intelligible, given the nature of the musical structures and processes in *Noor* and their intended symbolic function. This is the case even though it was not my intention to refer specifically to Queen Noor’s grief over the death of Hussein, *Noor*.

Noor also contains melodic and harmonic structures, which, from the *poietic* standpoint, were intended to symbolise mystical states such as “enlightenment” and “illumination”. Furthermore, throughout *Noor* there are musical structures and processes which depend on numbers to which I have ascribed symbolic meanings. These structures and processes have recognisable aural consequences, which can be perceived in the *esthesis* dimension (which, strictly speaking, constitutes the listening to music in real time)(Nattiez, 1990, p. 154). However, the symbolic meanings I attributed to these structures and processes from the *poietic* position, may not be discernible in the aural realm. It is up to the audience to construct a constellation of interpretants, using the music as a point of departure.

In the following diagram, the process by which meaning is actively assigned to a symbolic form from an *esthesis* position, is illustrated by the arrow pointing to the right (if the arrow was pointing to the left, it would imply the transmission and passive reception of meaning) (Nattiez, 1990, p. 17).

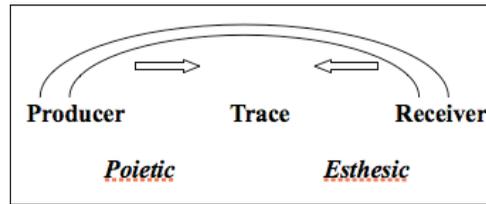


Figure 2 Process of Assigning Meaning to a Symbolic Form

In the case of unperformed western art music, the process of actively assigning meaning to a symbolic form resulting from a creative act may be diagrammatically represented as follows (Nattiez, 1990, p. 17):

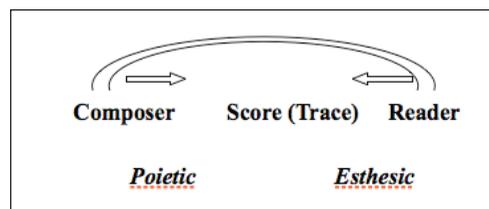


Figure 3 Process of Assigning Meaning to a Score

When a performance of a composition takes place, the diagram is modified in the following way (Nattiez, 1990, p. 73):

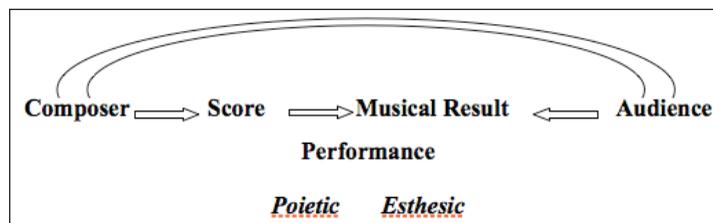


Figure 4 Process of Assigning Meaning to a Musical Performance

The compositional process

The line joining producers/composers to readers/audience in each of the above diagrams signifies that these roles are not mutually exclusive. As stated above, composers often interpret their own works from an *esthetic* position, as in the case of composers who routinely perform and/or listen to their own compositions. Furthermore, composers often assume *esthetic* positions to their past works in order to draw inspiration and/or ideas for future compositions. For example, the late Franco Donatoni, with whom I completed postgraduate studies, frequently used pitch cells from existing compositions to generate new works.¹⁰

Moreover, composers may *esthetically* engage with extra-musical sources, and/or the music of other composers both before and after a work has been commenced. These musical and/or extra musical sources may not only provide the composer with inspiration and/or ideas for the new work—they may also be intentionally referred to in the new work’s symbolic dimension.

In this article, the term “compositional process” refers not only to the *poietic* dimension—in which meanings are assigned to musical symbols as the composition is given material form. Its significance is also intended to encompass a composer’s engagement (as an analyst, composer, listener, reader, researcher, spectator etc) with musical and/or extra-musical sources influencing their music.

Symbolism in my music

Since, by definition, symbolic forms give rise to infinite constellations of interpretants (see above), an infinite chain of symbols emanates from each of the musical symbols discussed in this article. Musical symbols refer to other symbols (musical and/or extra-musical), which in turn refer to other symbols ... ad infinitum. In the following, a selection of the different types of musical symbolism encountered in my thesis is discussed. In a subsequent article, musical symbols derived specifically from Middle Eastern music theory and practice are examined, though some of these are also mentioned in this chapter.

Extrinsic symbolism

Each of the musical symbols discussed in this article is *extrinsic or extroversive* in nature.¹¹ This signifies that, in addition to referring *intrinsically* to musical events in the composition itself, the symbol is intended to refer to material external to the work.¹² The symbols can refer directly to extra-musical symbolic forms (e.g. myths, religious symbols, literature, colours, architecture, emotional or spiritual states etc). Alternatively, they can refer to musical forms which are symbolically associated with extra-musical material (eg Arab modes or *maqāmāt*, Jewish lamentations, Greek melodies, particular instruments).

Most of the musical symbols encountered in my compositions were intentional—that is, symbolic meaning was assigned to them from a *poietic* position, while the music was being composed. However, a small number of the musical symbols encountered in my compositions were not consciously intended to have any *extrinsic* symbolic significance in the *poietic* dimension. Rather, after the completion of the work, I subsequently ascribed extra-musical symbolic functions to them from an esthetic position.¹³ This process inspired me to create symbolic forms in subsequent compositions, to which analogous *extrinsic* meanings were assigned, in the *poietic* dimension. Hence, my *esthetic* engagement with my own compositions played a significant role in my compositional process.

Levels of poietic and esthetic engagement

Each of the musical symbols encountered in my compositions can be placed in one or more of the following four categories:

Levels	Category 1	Category 2	Category 3	Category 4
Esthetic	Perceptible	Perceptible	Imperceptible	Imperceptible
Poietic	Intentional	Unintentional	Intentional	Intentional
Esthetic	Intelligible	Intelligible	Intelligible	Unintelligible

Where these symbols are located on the above table, on the *esthetic* level, will depend greatly on the lived experience (intellectual, artistic, cultural, etc), as well as the innate sensitivity of the individual *esthetically* engaged with my compositions. For example, to a musical individual, who happens to have considerable knowledge of the Arab *ethos*, the extra-musical symbolism I have associated with the Arab modes or *maqāmāt* in my music may be both perceptible and intelligible. This is especially true if there is some assistance by way of evocative titles and programme notes.¹⁴ However, it is likely that even a very unmusical, unschooled individual would comprehend, with the aid of programme notes, that a complete harmonic transformation, after seven distinct stages, could symbolise the Prophet Muhammad's spiritual transformation after his ascent through the seven heavens.

It is my belief that even a listener possessing both prodigious musical talent and an extensive knowledge of symbolism, would be unable to independently apprehend the mirror inversions and recurring dyads in my music, as being in any way connected to number symbolism. However, to the same musician, the numerical axes of inversion used to generate these mirror inversions (and their resultant dyads) may become intelligible upon a close reading of the score—that is, an analysis of the neutral level.¹⁵ Then, with the aid of verbal prompting, these processes may become perceptible, and their extrinsic symbolic dimension intelligible, in the *esthetic* dimension.

Number symbolism

The symbolism of numbers has pre-occupied numerous contemporary musical traditions, including that of the Second Viennese School, as well as Bartók and Messiaen (Hsu, 1996, p. 92). For instance, Messiaen believed that three and five were both numbers of divinity (Hsu, 1996, p. 92). This belief was also held by medieval theologians (Hsu, 1996, p. 92).

The earliest known development of an extensive number symbolism took place in ancient Babylon (Hopper, 1938, p. 12). The Babylonians were the first to conceive the idea of ascribing a numerical value to each sign in their syllabary, so that every name was capable of numerical expression (Contenau, 1954, p. 166). (This system of number symbolism, known as *isopsephia*, was perfected by the Greeks and Romans, who were in possession of an alphabetical script in which some of the letters were actually used as numerals (Contenau, 1954, pp 166–167). This system reached its pinnacle with the Rabbis

in the Cabbala, who knew it by the name of *gematria* (Contenau, 1954, pp 166–167).

Moreover, in Babylon, a number was not merely a sign; rather, it had a numinous quality, which gave it the affective dimension common to all symbols (see above):

...a *number* was a very different thing from a *figure*. Just as in ancient times, and, above all, in Egypt, the name had a magic power, and ceremonial words formed an irresistible incantation, so here, the number possesses an active force, the number is a symbol, and its properties are sacred attributes (Contenau, 1954, pp 166–167).

In number symbolism numbers do not merely express quantities but are idea-forces, each with a unique character and numinous quality (Hayes, 1994, p. 113). In the mystical traditions of ancient Greece and the Near East, various numbers were seen as having several different acknowledged facets, some of which embodied geometrical or mathematical themes, others of which carried with them wider symbolic connotations (Hayes, 1994, p. 113). For example, in the ancient Near East, the number seven was considered to be the most important number, and it is still retained as the most significant number of the Islamic world (McLain, 1981, p. 81).

Furthermore, the number seven is central to the motif of “rebirth and regeneration at the eighth stage” (after a journey through seven stages and death). This motif found symbolic expression in both Mesopotamian mythology and architecture (Hopper, 1938, pp 12, 17–19):

...These 7 steps symbolise the ascent to heaven, and a happy fate is promised to the person who ascends to their summit (Hopper, 1938, p. 12).

The motif of “rebirth and regeneration at the eighth stage” is also encountered in numerous other religious traditions (Hayes, 1994, p113). For instance, in the Christian tradition, the “Passion” of Jesus Christ begins on Palm Sunday and ends, after exactly seven days have elapsed, with Christ’s resurrection on Easter Sunday (Hayes, 1994, p. 113). In Islam, this motif is encountered in the story of Muhammad’s ascent through the seven heavens followed by his spiritual death and rebirth in the eighth (Armstrong, 1991, pp 138–142).

In my music, the motif of “rebirth and regeneration at the eighth stage” finds expression in myriad symbolic forms—all of them intentional. For instance, the third movement of my string quartet, *Night Journey*, incorporates seven aurally distinct stages, followed by an eighth stage, wherein the musical texture becomes perceptibly more transparent, while harmonies previously generated by inversional axes are replaced by octaves and fifths. This musical transformation, which was intended to symbolise rebirth and regeneration at the eighth stage is a perceptible musical symbolic form inspired by number symbolism.

Number symbolism also plays a central role in my use of numerical inversional axes to generate mirror forms and recurring series of dyadic harmonies, in many of my compositions. The following analysis of the opening of my string quartet *Night Journey*, illustrates this process.

Figure 5 *Night Journey* for string quartet, mm1-2

Using a system derived from the writings of Alan Forte and others, I assign a number to each note, beginning with 0 for C, 1 for C#, 2 for D and so on. The number 12 is equivalent to 0, as octave register is not relevant in this system. In the dyads formed by the superimposition of the melody on its mirror image inversion around the axis of 7, it can be seen that the notes add up to 7, or 19—the latter being equivalent to 7 (since 12 in this system is equated with 0).

A specific numerical inversive axis always generates the same series of dyads. This is because each pair in the series generated by the superimposition of a melody onto its mirror must always add up to the number of the inversive axis—in this case, 7. This remains the case no matter what number is chosen as an inversive axis, as illustrated in the following passage from Noor, in which the inversive axis of 12, or 0, is implemented.

Figure 6 . *Noor* for violin soloist and orchestra, mm50-51

The use of a determined numerical axis as a means of integrating number symbolism into the compositional process has specific aural ramifications in the *esthetic* dimension: each numerical axis generates mirror inversions at a specific transposition, as well as a specific series of dyadic harmonies. These mirror inversions may be played

in parallel motion with the original melodies, as they are in the two examples cited above. Alternatively, the original melodies and their mirror inversions may be played at different speeds and rhythms, as part of a heterophonic texture. This is exemplified in the following passage from *Night Journey*.

The image shows a musical score for measures 240-241 of *Night Journey*. It consists of four staves. The top two staves are in the treble clef: the first is labeled 'Prime Form' and the second 'Inversion (axis of 7)'. The bottom two staves are in the bass clef: the third is labeled 'Prime Form' and the fourth 'Inversion'. The score includes dynamic markings such as *mf*, *ff*, and *p*. There are also performance instructions like 'tr' (trill) and 'trb' (trill/bow). The piece is in 4/4 time, and the key signature has one flat.

Figure 7 *Night Journey*, mm240-241

The mirror forms can also appear separately, as part of a solo passage, as in the following excerpt from my trombone piece *Mahdoom*.

The image shows a musical score for measures 1-2 of *Mahdoom* for trombone solo. It is written in bass clef with a 7/8 time signature. The melody consists of a series of notes with slurs and accents, starting on a low register and moving upwards.

Figure 8 *Mahdoom* for trombone solo, mm1-2, opening of principal melody

The image shows a musical score for measure 14 of *Mahdoom*. It is written in bass clef and features an inversion of the melody around the axis of 12. The notes are marked with accents and slurs. Below the staff, there are bracketed intervals labeled '5', '7', and '4', indicating the intervallic structure of the inverted melody. The dynamic marking is *f*.

Figure 9 *Mahdoom*, m14, inversion of melody around the axis of 12

There are numerous other possibilities, many of which are encountered in my compositions. In each case, the numerical axis, in determining the transpositional level of the mirror forms as well as the resultant series of dyads, produces discernible aural results. However, the number symbolism associated with the numerical axis, (and, hence, with the resulting series of dyads), is not readily comprehensible on the *esthetic* level. It is only likely to become both intelligible and perceptible upon a close reading of the score.

A further example of number symbolism in my compositions is encountered in my use of rhythmic patterns inspired by *iqā'āt* (Arab rhythmic modes), based on numbers to which symbolic meanings have been assigned. These will be explored in a subsequent article devoted to the influence of the Arab music tradition on my compositional process.

The numinous

Fundamental to all religions is a unique experience of confrontation with a power not of this world (Jacobsen, 1976, p. 3). This confrontation has been called “numinous” by Rudolph Otto, who analysed it as the experience of a *mysterium tremendum et fascinans*, a confrontation transcending the boundaries of normality, which defies expression. Terrifying and irresistibly attractive at the same time, it induces unconditional devotion (Jacobsen, 1976, p. 3). Religion may be defined as the positive human response to this confrontation, as expressed in thought (myth and theology) and action (cult and worship) (Jacobsen, 1976, p. 3).

Since the numinous transcends this world, it also transcends description, as all descriptive terms are based upon worldly experience (Jacobsen, 1976, p. 3). At best, it may be possible to evoke the human confrontation with the “other” by means of analogy, exploiting the suggestive powers of normal earthly experiences which may serve as metaphors for the numinous (Jacobsen, 1976, p. 3). This was illustrated in the examples of the Persian custom of bringing in a dog at the time of death and Mesopotamian rite of *hieros gamos*.

It has been my intention to evoke the numinous by means of musical symbols referring to myths, motifs, rituals and iconographic symbols. These extra-musical symbolic forms have their own numinosity, by virtue of their affective dimensions as symbols.

The collective unconscious

...it was manifestly not a question of inherited ideas, but of an inborn disposition to produce parallel thought-formations, or rather of identical psychic structures common to all men, which I later called the archetypes of the collective unconscious...(Jung, 1956, p. 158).

The term “collective unconscious”, as used by Carl Gustav Jung, does not refer to some external amalgamation of archaic images that humans are able to “tap into”, in some mystical sense (Clarke, 1992, p. 122). Rather, in Jungian psychology, the

collective unconscious refers to an inherited disposition to have certain ideas and images (Clarke, 1992, p. 122). These ideas and images are universal symbols, or archetypes, which occur in varied forms worldwide (Jung, 1956, p. 177).

Jung has claimed that these archetypes have a compensatory and curative function, such as has always pertained to myth (Clarke, 1992, p. 420). For example, consider the motif of the “solar figure”, who emerges victorious after the “night sea journey” during which he/she is ensconced in a womb-like vessel (Clarke, 1992, p. 212). This motif, encountered in numerous religious traditions, is interpreted by Jung to be a compensatory symbol emanating from the unfulfilled longing to re-enter the mother’s womb, attain rebirth and become immortal like the sun (Clarke, 1992, p. 212).

Another example of a universal symbol is the city, which, according to Jung, is a maternal symbol resembling “a woman who harbours the inhabitants within herself like children”(Clarke, 1992, p. 208). The compensatory, curative function of this symbol becomes evident when the city appears in place of the natural mother: infantile attachment to the mother is debilitating for an adult, whereas attachment to the city fosters civic virtues and encourages a productive existence (Clarke, 1992, p. 213).

According to Jung, archetypes are able to exert this curative and compensatory power as a result of their numinous quality as symbolic forms:

It is able to do this because of the numen, the specific energy stored up in the archetype. Experience of the archetype is not only impressive, it seizes and possesses the whole personality and is productive of faith (Jung, 1956, p. 232).

Many of the symbolic forms in my music were inspired not only by the extra-musical symbols they were intended to refer to, but also by my *esthetic* engagement with Jung’s interpretative writings on these symbols. Moreover, it was Jung’s emphasis on the numinous dimension of symbols (see above) which proved to be central to my compositional process.

Endnotes

- ¹ This article uses source material from my Ph.D. thesis, which was completed in 2002 and published in 2009. See: Tiutiunnik, Katia. (2009). *The Symbolic Dimension: An Exploration of the Compositional Process*. Saarbrücken: LAP Lambert Academic Publishing.
- ² This example is modeled on the one regarding the word ‘happiness’ provided by Nattiez (Nattiez, 1990, p7).
- ³ All translations from Arabic to English by Katia Tuitiunnik
- ⁴ The name “Adonis” came about as a result of the Greeks’ misunderstanding of the Semitic “Adon”, which means “Lord” and was one Dumuzi’s titles (Penglase, 1994, pp165, 178).
- ⁵ For a discussion on the affective dimension of the sacred marriage rite in ancient Mesopotamia, see: Jacobsen, Thorkild. (1970). *Mesopotamian Gods and Pantheons*. In *Toward the Image of Tammuz and Other Essays on Mesopotamian History and Culture*, edited by William L Moran. Harvard Semitic Series, vol 21. Cambridge: Harvard University Press. p29 For Jung’s interpretation of the Persian ritual involving the bringing in of the dog at the time of death, see: Jung, Carl Gustav. (1956). *Symbols of Transformation: An Analysis of the Prelude to an Episode of Schizophrenia*. Vol 5, *Collected Works*. 2nd ed. Translated by R Hull. London: Routledge & Kegan Paul, p238.
- ⁶ In this article, the terms symbolic form and symbol are used interchangeably and should be understood as having the same meaning (Nattiez, 1990, p37).

- ⁷ The terms esthetic and poietic are derived from the Greek verbs “to perceive” and “to make” respectively (Nattiez, 1990, pp11-12).
- ⁸ One could argue that the process of creation ends with the score and that the process of interpretation begins with the performers, who interpret the composition. However, the performers are also creators of a musical result. Because a performance represents one of many possible renditions of the score, while, on the contrary, the score is fixed, it is preferable, to regard the score as material trace for the purposes of analysis (Nattiez, 1990, pp11-12).
- ⁹ This premiere took place in front of “al Khasnah”, (the Treasury House) in Petra, Jordan, as part of the 28th General Assembly of the International Music Council (UNESCO). The concert in which it was included was the first ever to take place at the archaeological site of the ancient city of Petra.
- ¹⁰ Personal communication with Franco Donatoni, Italy, 1993-1995.
- ¹¹ Extroversive semios is a term invented and used by Jakobsen to describe music’s capacity to refer to things extraneous to the composition. Jakobsen also invented the term introversive semios, which refers to music’s capacity to refer to past and/or future musical events within the composition (Nattiez, 1990, p111).
- ¹² For a discussion on music’s capacity for extrinsic symbolisation, see Nattiez, Jean-Jacques. (1990). *Music and Discourse: Toward a Semiology of Music*. Translated by Carolyn Abbate. New Jersey: Princeton University Press. pp118-129.
- ¹³ It is not my intention to imply that the ascribing of extrinsic symbolic meaning in the poietic dimension precludes the ascribing of different extrinsic meaning, to the same symbol, in the esthetic dimension. This can, and does, happen constantly.
- ¹⁴ For example, in his article on the world premier performance of my string quartet, *Night Journey*, the Russian musicologist, Alexander Epishin, wrote that the programmatic titles of each of movements confirmed the listeners’ impressions. See: Epishin, Alexander. (May, 2002). *Belyaev ‘Fridays’...and Music from Australia*. *Klassika: St. Petersburg Journal of Culture and Art*. pp39-41
- ¹⁵ Nattiez defines the analysis of the “neutral level” as the analysis of the material trace, or score, of the composition (Nattiez, 1990, p12).

References

- Amīr, A. A. (25 September 1999). Jordanians illuminate the night of Petra.... *Ar –Rai*.
- Armstrong, (1991). *Muhammad: A Western attempt to understand Islam*. London: Victor Gollanz.
- Clarke, J. (1992). *In search of Jung*. London: Routledge Press.
- Contenau, G. (1954). *Everyday life in Babylon and Assyria*. London: Edward Arnold.
- Al-Ghazālī Abu Hamīd. (1907). *Iḥyā’ ‘ulūm ad-dīn*. Al-Qāhirah: Dar ahyai al-kutub al-Arbayat.
- Hayes, M. (1994). *The infinite harmony: Musical structures in science and theology*. London: Weidenfield and Nicolson.
- Hopper, V. F. (1938). *Medieval number symbolism: Its sources, meaning and influence on thought and expression*. New York: Colombia University Press.
- Hsu, M. (1996). *Olivier Messiaen: The Musical Mediator*. London: Associated University Press.
- Jacobsen, T. (1976). *The treasures of darkness: A History of Mesopotamian Religion*. New Haven: Yale University Press.
- Jacobsen, T. (1970). Mesopotamian Gods and Pantheons. In *Toward the Image of Tammuz and Other Essays on Mesopotamian History and Culture*, William L Moran (ed.). *Harvard Semitic Series*, Vol 21. Cambridge: Harvard University Press.
- Jung, C. G. (1956). *Symbols of transformation: An analysis of the prelude to an episode of schizophrenia*. Vol 5, *Collected Works*. Second Edition. Translated by R Hull. London: Routledge & Kegan Paul.
- Mclain, E. G. (1981). *Meditations through the Quran: tonal images in an oral culture*. Maine: Nicolas Hays Inc.

- Nattiez, J. J. (1990). *Music and discourse: Toward a semiology of music*. Translated by Carolyn Abbate. New Jersey: Princeton University Press.
- Penglase, C. (1994). *Greek myths and Mesopotamia: Parallels and influence in the homeric Hymns and Hesiod*. London: Routledge.
- Said, E. W. (1991). *Musical Elaborations*. London: Chatto & Windus.
- Tiutiunnik, K. (2009). *The Symbolic dimension: An exploration of the compositional process*. Saarbrücken: LAP Lambert Academic Publishing.

Biography

Katia Tiutiunnik is an Honorary Research Affiliate at the Sydney Conservatorium of Music, the University of Sydney and a Senior Lecturer in composition and viola at the Faculty of Music, UiTM, Shah Alam. Her music has been performed in Australia, Brazil, Bulgaria, Canada, China, Germany, Italy, Jordan, Russia, Serbia, the UK and the USA. Tiutiunnik has lectured in Australia, Italy, Malaysia, Russia and the United States. She was visiting scholar at Columbia University, New York and Visiting Fellow at the Australian National University, where she earned her Ph.D (2003). Tiutiunnik holds the highest Italian postgraduate title available in composition, from the Accademia Nazionale di Santa Cecilia, Rome, and a B.MUS from Sydney Conservatorium, where she was awarded all three of their composition prizes. Tiutiunnik's compositions have been published in Italy and the USA, and broadcast in Australia, Bulgaria, Jordan, Russia and the USA.

Email: katia_tiutiunnik@salam.uitm.edu.my