Exotic Sounds in the Melodic Shaping of George Crumb’s Middle Period Works

Annotation
The establishment of the integral serialism in Europe (and partly in America) during the 1950s set the fundamentals not only for a new way of thinking, but also for the development of many alternative compositional methods, mainly from those who chose not to follow the serial organisation of their musical parameters. It is a fact that in many cases, focus was put on various eastern traditions, in order to differentiate their artistic language from the European and American serialism. For Europe and America, incorporating exotic elements in a native composer’s language is not a totally innovative characteristic which came up after the 1950s. More specifically, eastern sonorities have been used by numerous earlier significant composers, such as Debussy, Mahler and Verdi (during the late nineteenth and early twentieth centuries), or even earlier, by Mozart (during Classicism). Since the 1920s, Henry Cowell and his contemporaries paved the way forward to further exploration of instruments’ timbral potential, incorporating many elements from various non-western cultures. A few years later, many composers established their style by introducing exotic folk modes, extending the timbre of the musical instruments or, occasionally, by using original non-western instruments. For instance, in the majority of George Crumb’s works, non-western elements have been used to organise the music material and to shape the melodic lines, according to the philosophy of the culture the above elements originate from. The opening of the “Vox Balaenae” trio and the second movement of the “Black Angels” String Quartet (titled as “Vocalise” and “Sounds of Bones and Flutes” respectively) can be characterised as typical and representative examples for the incorporation of non-western folk modes in George Crumb’s melodic writing. Extended instrumental techniques are often applied in order to “orchestrate” the mostly modal monophonic lines. In addition, the two “Makrokosmos” cycles for piano, “Ancient Voices of Children” for voices and ensemble, and the “Star-Child” for voices, percussion and large orchestra, reflect Crumb’s identical melodic shaping, based not only on exotic music material, but also on various eastern philosophic theories, such as the archetypal circular illustration of the universe according to cultures based on Hinduism and Buddhism (Mandala).

In summary, this paper will examine the melodic language of George Crumb’s middle period works and will emphasise on the organisation of the music material, while focusing on both pitch and timbre. Finally, fundamental compositional issues will be explored such as 1) the functional use of extended instrumental techniques and their crucial role in George Crumb’s melodic writing, 2) the organisation and incorporation of exotic modes and philosophical theories in a Western compositional framework.

Keywords: melodic shaping, melodic language, pitch, timbre, non-western elements, George Crumb.

After Romanticism
Without a doubt, the twentieth century was characterised by intense exploration of innovative compositional techniques, aiming to a determinate differentiation from the past. The exploration of new methods for shaping a melodic line had always been the focus of interest for the post-Schönberg composers’ generations in Europe and the USA. Starting from the dodecaphony and the integral serialism, the construction process of melodic motives determinatively affected the development of new works. Once the traditional tonal relationships between notes and chords were vitiated, the context and the identifiability of an independent motive takes a fundamental role and it usually characterises the work itself, the composer and, sometimes, the whole artistic movement the particular piece represents. In 1950s, many fundamental compositional principles of the Baroque and the Classical period reappear and numerous composers aimed to a new perfect match between the form and the context of each work. In order to achieve an ‘absolute’ piece of art, there was a sort of rejection of any personalised element which possibly referred to the composer himself. Hence, composers focused on the invention of techniques which would be able to produce new structures, away from any personal or not pure musical element. At this point, it should be underlined that serialism, however supported or criticised, contributed to the creation of other, alternative styles, which attempted to break through this established compositional tradition.

Introduction of non-western elements into contemporary composition: An innovative idea?
From the end of the nineteenth century, America appears to be a newly colonised country which tried to establish its contemporary artistic voice worldwide. Thus, America proved to be able to give the chance to many native (and later non-native) composers to develop new styles, often not linked to any of the European traditions or stereotypes. In the early 1920s, there was a significant movement of American composers to the local universities. Thus, the contemporary compositional approach comes across the liberal arts, such as Mathematics, Astronomy and 

Philosophy. The wisdom which characterises the liberal arts affected fundamentally the compositional thinking and created new needs which brought new artistic approaches. Many of those approaches often focus on philosophical theories coming from various non-contemporary European cultures, such as Ancient Greece, Ancient Rome, India and the countries of the Far East. At this point, the question if the incorporation of elements from non-western traditions is actually a phenomenon of the 20th century or one of earlier eras, would presumably arise. Masterpieces such as Mozart’s “Alta Turca”, Rimsky Korsakov’s “Scheherazade”, Verdi’s “Aida” and “Madame Butterfly” and many others, suggest that Eastern tradition has always been attracting composers’ interest in terms of extending their language by creating alternative melodic and harmonic sonorities.

For contemporary American music, Charles Ives can be considered as one of the initiators of a composers’ generation which attempted to explore multiple parameters for writing music, such as tonality, bi-tonality, atonality, microtonality, aleatoric counterpoint and unconventional orchestration. After the Second World War, the so-called Emerging American Composers Generation including Henry Cowell, John Cage and later Morton Feldman, LaMonte Young and George Crumb, extended Ives’ thinking to multiple directions and perspectives, setting new philosophical backgrounds on structuring a music work. Thus, various elements of numerous non-western cultures, often become points of inspiration in terms of creating previously unheard sounds for, what is called, American “concert music”.

From 1965 to the present, ethnic sources have been the spine of George Crumb’s compositional language. Crumb’s inspirations can initially be found in the languages of the first ‘colourists’ such as Gustav Mahler, Claude Debussy, Maurice Ravel and Béla Bartók. Strongly referring to cultures such as Indian, Chinese, Native American and others, his writing often creates a historical and geographical sonic universe, occupied and governed by humans. At this point, it should be underlined that Crumb’s human-based artistic approach is not only alternative, but also diametrically opposed to the ones which formed the European (and later American) serialism, as mentioned above. Depending on the historical era and the geographical location, the restless human attempt to explain the universe, either by mythological or by scientific perspectives, is the core of Crumb’s compositional concern and his music often appears to be an inextricable part of this mental process.

Modality, extended instrumental techniques, use of traditional instruments and symbolism/mythologism can be considered as three keys, which form George Crumb’s idiomorphic compositional style.

**Modality in melodic shaping**

Modality has been used by contemporary composers in order to enrich their melodic and harmonic palette with exotic sounds and to personalise their compositional style. As Crumb focuses through his works on various cultures from India and the Far East, modality has been one of the most significant characteristics of his melodic writing. According to the composer’s own words, he believes in the power of the chromatic scale, which includes a variety of musical idioms such as tonality, atonality and non-microtonal modality. As long as the chromatic scale includes the whole tonal system (Circle of Fifths) and a significant part of the modal system (non-microtonal modes), it constitutes a flexible pitch reservoir which can be easily adjusted to every composer’s aesthetic and stylistic needs. The “Black Angels” String Quartet (1970) and the “Vox Balaenae” Trio (1971) are two of the most remarkable examples from Crumb’s middle period works to highlight how various non-European traditions and their philosophical ideas contributed to the composer’s melodic writing.

As a quasi-programmatic work, the “Black Angels” quartet highlights many points of our “troubled contemporary world”, including the recent to the work’s year of composition, Vietnam war. The melodic material of

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3 As mentioned by Griffiths (1978).
the second part of the “Departure” movement (Sounds of Bones and Flutes) is based on a gradually unfolding, seven-note mode, which consists of the intervallic ratios illustrated by the figure below:

![Semitones](image1)

**Figure 1. “Sounds of Bones and Flutes”**

At this point, it should be highlighted that Crumb initially uses the pentatonic elements which the above mode consists of. Later on he lets the remaining pitches appear, extending the initial pentatonic atmosphere by alternating the tonal balance, which was generated at the very beginning.

The opening of the “Vox Balaenae” Trio (Voice of the Whale for amplified flute, Violoncello and Piano) brings the listener/researcher closer to Crumb’s modal melodic language and shows more clearly the links with Eastern and Oriental traditions which, as mentioned above, often characterise the composer’s aesthetic and philosophical approach. The melodic phrases of the first part of the trio (titled as “Vocalise”) are shaped according to an eight-note mode which follows the intervallic order illustrated at the figure below. At this point, one should notice that the mode consists of two parts, where the same intervallic ratios appear, first in consecutive pairs and then separately, in ascending order (2-1-2-1, 1-1-2-2):

![Semitones](image2)

**Figure 2. “Vox Balaenae”. Vocalise**

Finally, it should be mentioned that this mode coincides with the minor-blues scale and at the same time, the melodic outcome is totally different from this musical idiom. Such a similarity can be found at the traditional polyphonic songs of Epirus (Northern Greece) which are based on the pentatonic scale, but aesthetically and functionally far away from the songs of Asian cultures. Here, one should underline the multi-cultural nature of a mode, which is able to frame diametrically different musical styles, depending on the time-period, location and the social group, to which they refer.

**Original non-western instruments and extended techniques**

It is widely well-known that George Crumb appears to be one of the most sophisticated inventors of new timbres. His melodic writing is often enriched by either introducing original non-western musical instruments or by applying variable extended playing techniques to the western instruments. In any case, the instrumental writing can be characterised as imaginary and very sophisticated for both the western and the exotic musical instruments. This specific way of timbral manipulation creates even stronger links to the Eastern traditional elements which are used by Crumb to base the main idea of his works on. The “Night of the Four Moons” quartet (1969) and the “Lux Aeterna” quintet (1971) are two remarkable examples of introducing original instruments from the specific cultures each of the above works refers to. In both works Crumb uses the traditional instruments (the banjo and the sitar respectively) in a sophisticated way, implying each work’s geographical and cultural inspiration point. At a first glance, however similar the compositional process of the two works looks like, there are fundamental differences in regard to the use of the Eastern and Western, mostly to the way they are combined together and interact to each other. At the “Night of the Four Moons” quartet, Crumb creates distant but audible timbral links between his personal melodic writing and the African-American culture. Sounds of Crumb’s home country have notably affected his music experiences and later inspirations. Here, the banjo is used in a totally unconventional way, comparing with its original sounds and techniques from the African-American tradition. The performer is asked to play in an absolutely “western way”, just like a European orchestral plucked or pizzicato-played bowed instrument.

12 As mentioned in Steintz (1978).
On the contrary, in the “Lux Aeterna” quintet, Crumb incorporates original Indian sonorities inside an absolutely secular western concept. Hence, Crumb creates a clear intersection point between the Western Sacred and the Hindustani traditional music, setting up, as written on the score, a meditative atmosphere.

Apart from the introduction of traditional instruments, most of George Crumb’s middle period works consist of melodic lines which are formed by the so-called, archegonal sonorities, produced by applying a variety of extended techniques on the acoustic musical instruments. Within Crumb’s middle period works, extended techniques are used to “orchestrate” a monophononic (melodic) line and play a substantial role for the texture development. For the “Sounds of Bones and Flutes”, a movement of “Black Angels”, the four modal, as described above, melodic gestures are coloured by an archetype flute sound, which is created by applying the Con Legno Tratt technique. The harmonic background of this movement mostly consists of, as mentioned in the movement’s title, bone sounds, which are produced by a combination of different timbres: Con Legno Battuto, Pizzicato, Glissando on Pizzicato, Whisperings and Tongue-clicking:

![Figure 3. “Sounds of Bones and Flutes” timbres](image)

In the opening of “Vox Balaenae”, Crumb illustrates the whale song by alternating the ordinary flute timbre with the human voice. More specifically, the techniques used in the “Vocalise” movement are:

![Figure 4. “Vox Balaenae”. Opening timbres](image)

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17 As mentioned in Clark (1978).
At this point, it should be noticed that the sound human voice is often a powerful tool for George Crumb to shape his symbolic, archetype melodic gestures. For example, in both the composer's masterpieces "Ancient Voices of Children", and the "Madrigals" (all books), a variety of "infant's sounds" (often mentioned as "bubbling") is used in order to stylise the melodic lines according to the general symbolic concept of each particular work.

During the second variation of "Vox Balaenae", titled "Proterozoic", sitar's melodic and harmonic sonorities are generated by unifying the timbres of the violoncello and the piano. In particular, George Crumb asks the Violoncello performer to perform the melodic phrases using the left-hand pizzicato technique while playing a tremolo-sustained pitch on the lowest string (B, by scordatura).

For the melodic shaping, an octatonic scale is used consisting of the intervallic rations shown in the figure below:

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Figure 5. "Proterozoic". Octatonic scale
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In the background, the pianist performs a pizzicato of the same low B and after the sound appears, the piano string is buzzed by a metallic staple, generating a harmonic background similar to the characteristic drone, which is produced by the Sitar's sympathetic strings. At this point, it should be mentioned that many of Crumb's melodies are inspired by sounds which are described as "drones" (Songs, Drones and Refrains of Death). Here, Crumb introduces one of his most perceptive and sophisticated methods to approach an exotic sound. The figure below shows how the timbres are combined together to generate a sonic environment, which refers to the tradition of India:

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Figure 6. "Vox Balaenae". Sitar timbre
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**Symbolism**

George Crumb appears to be a composer absolutely familiar with the mythology of various cultures, such as Ancient Greek, the Norwegian, the Indian and others. Myths are often points of departure to generate a symbolic musical framework. The textures often consist of melodic lines which interact with each other creating sort of meta-counterpoint with variable cultural and philosophical extensions. Crumb's symbolism includes many references to masterpieces by previous composers. Consistently, there appears to be the com-

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19 As mentioned in Adamenko (2007).
poser’s intuitive need to refer to the tonal past\textsuperscript{22}. At the end of the “Vocalise”, the opening movement of the “Vox Balaenae” Trio, Crumb paraphrases the “Also Sprach Zarathustra” (1896) characteristic opening phrase, using human voice (inside the flute) for the melody, ordinary piano sound for the chordal material and piano stopped-notes for the timpani rhythmic motive\textsuperscript{23}. In “Black Angels”, there are clear references to Schubert [Death and the Maiden (1824)], Saint-Sæns [Dance Macabre (1874)] and John Dowland [Pavana Lacrimae (1604)]\textsuperscript{24}. The incorporation of tonal elements, not only in Crumb’s music but in many other contemporary composers’ works, undoubtedly shows the insuperable artistic heritage of the Tonal era\textsuperscript{25}.

Apart from the mythological elements and the references to the past, numerous sacred-music elements can very often be found in Crumb’s secondary titles. “God Music” (from “Black Angels”), Dance of the Sacred life-circle (from “Ancient Voices of Children”) and Musica Humana/Musica Mundana (from “Star-Child”) are three of the most representative examples, where the religious elements dominate the specific parts of each work, setting this “cultural rules” for the generation and the elaboration of the melodic, harmonic and timbral music material. In the “Black Angels” string quartet, the significant according to the Bible numbers seven and thirteen are used not only as religious symbols but also as numeric parameters for the structure of every work’s movement:

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{Black-Angels-Numerological-Elements.png}
\caption{“Black Angels” numerology 7–13}
\end{figure}


\textsuperscript{23} As shown in \textit{Vox Balaenae} (1973).

\textsuperscript{24} As shown in \textit{Black Angels} (1971).

\textsuperscript{25} As mentioned in Froom (1994).
Symbolism reaches its peak by Crumb’s optical scores which are mostly used in his “Makrokosmos I & II” cycles of piano pieces. Figure 8 shows a list of titles and symbols in the two volumes:

![Makrokosmos - Symbolic Scores](image)

Figure 8. “Makrokosmos” symbols

Optical scores are used not to cause further (and probably meaningless) difficulties to the performer, but they illustrate both the structure and the expressive mood of each part, aiming to help the performer determine the fundamental principles of Crumb’s symbolic language. Musicologist Edward Strickland mentions that “Schematic notation supports the composition. A cyclic score must sound cyclically, like a spinning wheel.” Symbolic notation aims to a perfect balance between the ear and the eye and compiles the composer’s multidimensional approach regarding the aesthetic, the philosophy, the selection of text, the compositional language and the form.

Finally, occasional theatrical elements are used to support the main ideas of specific works or sections. Both in “Vox Balaenae” and the “Lux Aeterna”, the performers are masked in order to represent the powers of nature. Furthermore, in “Crucifixus” piece of “Makrokosmos I”, the pianist shouts out the word “Christe!” while playing on the two extreme ends of the piano in order to create an image of Crucified Christ; in the final bar of “Vox Balaenae”, the pianist has to perform the last gesture without producing any sound on the piano, letting the audience have the impression that an echo of that specific melodic gesture is still fading out.

In conclusion, melody for George Crumb is not a simple succession of tonal pitches, arranged on a specific timeline, but a set of sound events which are put in front of a strong geographical, cultural and philosophic background. Melodic shaping, which follows all the principles presented and analysed in this paper, is mainly a multi-cultural tool of expression with many symbolic extensions which very often turn the performance into a ritual. Crumb’s audience is almost never restricted inside “academic” compositional limits but usually experiences the local music tradition of various cultures, through the aesthetic directions the composer each time chooses to follow.

Bibliography


26 As shown in Strickland (1991).
27 As shown in Steinitz (1978).
28 As shown in Adamenko (1993).
29 As shown in Adamenko (2007).
Egzotiniai skambesiai George'o Crumbo vidurinio laikotarpio kūrinių melodikoje

Santrauka

Totalinio serializmo įsigalėjimas Europoje (ir iš dalies Amerikoje) XX amžiaus 6-ajame dešimtmetyje atvėrė kelius ne tik naujam mąstymo būdu, bet ir daugeliui alternatyvių komponavimo metodų – ypatingai, kurių nesaisto serijinis muzikos parametrų organizavimo principas. Daugelio atvejų kompozitoriai, siekdami atriboti savo muzikos kalbą nuo europietiško ir amerikietiško serializmo įtakų, sėmėsi įkvėpimo iš įvairių rytietiškų tradicijų. Egzotinių elementų įtraukimas į kompozitorių „gimtąjį“ muzikinę kalbą XX a. 6-jojo dešimtmėčio Europoje ar Amerikoje neparalyžiavosi visiškai naujų dalykų. Rytietyšką skambesę savo kūriniuose pasitelkė daugelis žymų kompozitoriai, išskyrusite, kaip Debussy, Mahleris ar Verdi (XIX a. pabaigoje–XX a. pradžioje), o dar anksčiau – Mozartas (klasicizmo epochoje). Nuo XX a. 3-ijojo dešimtmėčio Henry Cowellas ir jo amžiinkeliai, i savo priemonių arsenalą įtraukę daugybę nevakarietiškos kultūros elementų, paruošė dirvą tolesnėms instrumentų tembrinių galimybių paieškoms. Šiek tiek vėliau dauguma kompozitoriai ėmė formuoti savo stilį pasitelkdamai egzotinių kūrų laudies dermes, pėsčiomis muzikos instrumentų tembrines galimybes, o kartais ir naudodami nevakarietiškos kilmės instrumentus.


Straipsnyje nagrinėjama George'o Crumbo vidurinio laikotarpio kūrinių melodika ir muzikinės medžiagos sudarymo būdai akcentuojant garsų aukštį bei tembrą. Taip pat aptartos sie fundamentalius komponavimo klausimai:
- išplėstinių instrumentinių technikų funkcija ir nevadintos George'o Crumbo melodijoje;
- egzotinių dermių ir filosofinių teorijų įtraukimas į vakarietišką komponavimo sistemą.