Composing *Heart Sutra* – A Phenomenological Approach

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Abstract

In this paper I intend to use ideas of phenomenology applied to the musical experience, as conceived by Schütz (1976), Smith (1979), Clifton (1983) and Ferrara (1984) to describe the process of composition of the piece *Heart Sutra*. Because phenomenology recognises the essential role of perception, experience and the subjectivity of the knower in the process of knowledge, it can offer an appropriate theoretical framework to describe the process of composition. The three levels proposed by Ferrara for the musical analysis – syntactical, semantic and ontological – offered the basic structure to organize the different levels of meaning and information I am working with.

To describe the syntactic aspects of the piece I will use concepts proposed by Denis Smalley – spectromorphology – and Trevor Wishart for the description of the materials, structure and spatial design. For the description of the semantic aspects, I will introduce the text used in the composition and describe its general structure and meanings. For the ontological aspects I will introduce the discussion of the concept of space using references both from contemporary physics and Buddhism. This piece is the result of my research about space in music and here I intend to explain why the text was chosen and the way in which it relates to the conception of space which is emerging from my research work.

In the conclusion, I intend to highlight which aspects of phenomenology are useful for the description of the compositional process and how they could also be used by other composers in the description of their compositional experience.

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Introduction

The objective of this paper is, first, to give an introduction and short explanation about what phenomenology is, then to give a brief contextualisation about the specific field of phenomenology of music. Finally, I intend to explain how I am using this approach in my research as a tool to describe the process of composition of the piece *Heart Sutra*.

The idea of using phenomenology as an approach for the description of my creative process came from the awareness of its possibilities to offer a theoretical framework for the reflection about my practice as a composer. In my PhD research I intended to work both with the theoretical and practical aspects of composition. Because phenomenology recognises the essential role of perception, experience and the subjectivity of the knower in the constitution of knowledge, it seemed to be a suitable option to make the link between my theoretical research, my practical work and my experience as composer.

Many approaches to analysis, musicology and composition tacitly give more emphasis to the theoretical aspects of music and its visual representations, rather than to the music as lived experience. Accordingly, great part of the analytical and musicological literature is focussed in the analysis of scores, formal analysis or the description of technical compositional procedures. Phenomenological approaches try to rescue the primary musical experience as the main concern of musical reflection, and conceive music primarily as an aural experience.

As Batstone states:

'the ear often may be unreliable but it is performing work which we are only just beginning to understand. [...] Musical phenomenology [...] should teach us to understand musical artworks as aural phenomena, that is, it should help us to hear them more meaningfully.' (Batstone 1969, p. 110)

Phenomenology

As a philosophical trend, phenomenology has been discussed by many philosophers and there is not a simple definition or consensus among them about what phenomenology is. The foundation of phenomenology is attributed to Edmund Husserl (1859-1938), and it has different nuances, like the pure phenomenology of Husserl, the existent phenomenology of Heidegger, the existentialism of Sartre and the bodily phenomenology of Merleau-Ponty (see Smith 1979, p. 27). Phenomenology is a relatively complex area of study, and, as such, has developed its specific vocabulary and conceptual frame. In spite of the importance of the discussion of the key concepts of phenomenology – like intentionality, eidetic reduction or presentification – or the understanding of the different branches of phenomenological thought, it is essential to try to catch the attitude of the phenomenologists towards knowledge. As Clifton states:

'it is possible to think and write phenomenologically without getting bogged down in questions of method. [...] the better part of wisdom lies precisely in communicating a phenomenological attitude.' (Clifton 1983, p. vii)

Keeping this in mind, I will discuss four points which are essential to understand the phenomenological attitude: description rather than explanation; the concept of phenomenon; the role of perception and the role of experience.

As Clifton points out, phenomenology is primarily concerned with description. In the more general context, it tries to describe the way how knowledge is

constituted and how it relates with reality, including the role of cognitive processes like memory and perception. In a more specific musical context, description relates to the processes involved in musical perception and the description of music as perceived by the listener. Description is important, among other reasons, because it is a way of sharing experiences with others and, therefore, as an attempt of reaching a deeper understanding of the musical experience (Clifton 1983, p. 6).

Phenomenologists give a broad definition of phenomenon. Clifton defines it as 'anything that appears to consciousness, or more simply, anything of which one is conscious' (Clifton 1983, p. 19) giving as examples anger, green Martian, square root of minus one and melody. Anything, which appears to the consciousness, can be object of phenomenological reflection: ideas, material entities, emotions, perceptions and experiences.

In phenomenological thought, knowledge is not conceived as an activity purely intellectual and detached from the senses. Phenomenology tries to describe how we perceive things and the role of sensorial perception – what we see, listen, feel, smell, taste – in the constitution of knowledge. As Clifton states,

> 'phenomenological description accepts [...] the interconnectedness of knowledge and perception' (Clifton 1983, p. 15).

Phenomenology can also be understood as a philosophy of the lived experience. Knowledge is not conceived as an objective activity, in the sense of being detached from the subject and his or her experience.

> 'Perceiving, imagining, remembering, and dreaming' says Clifton, 'are [...] "modalities of experience", none of which are more "in" or "out" than any other. I see, hear, and touch objects because I am in the world, and have eyes, ears, and a body.' (Clifton 1983, p. 8)

Phenomenology and Music

Musical phenomenology intends to be a comprehensive approach to music, which discusses aspects neglected by the more technically-oriented approaches – like the experience of music, emotion, meaning or the subjectivity of the individuals involved in the musical activity. Musical phenomenology has been conceived as an approach to musical analysis, a criticism to traditional musicology and also a description of the musical experience, especially from the point of view of the reception. It also tries to explain in which sense music is meaningful, and discusses how it can be understood as a meaningful instance, in comparison with spoken and written language (Schütz 1976, pp. 23-25). In particular, musical phenomenology discusses the relationship between what is written in the score – when the music is written – and what is actually heard or perceived by the listener (Batstone 1969).

Because it is a philosophical attitude rather than a strict analytical method, it is possible to use phenomenology to describe the experience of the performer, the composer and the listener. Here I intend to use phenomenology as a tool to describe my own process of composition.

I conceived two ways of applying phenomenology to my research. The first one is the attitude towards the materials and the process of composition. In spite of having used different kinds of systematic processing to transform the recorded sounds, the selection of the materials used have always been made taking in consideration their aural properties and compositional possibilities. The second way to use phenomenology in my research is the use of the three levels of meaning proposed by Lawrence Ferrara to describe the process of composition and the many levels of meaning I worked with.

a) Attitude towards the Material

This attitude can be better explained by an example. I used four kinds of spectral transformation – averaging, freezing, gate & hold, dronemaker – to process the sounds of the piano – chords and long notes. I created a section in Logic Audio in which the vertical dimension represented the names of the original files – track names – and in the horizontal dimension – using markers – I put the three transformations I made for each file using different settings of each of the plug ins. As a result I had a catalogue showing the twelve variations of each original file. With the material organised, I could listen to the different files individually and select those which sounded more interesting and which suggested some kind of structure or musical development.

During the process of composition, I have always been listening, in both objective and subjective ways, to the resulting sounds, trying to allow the music develop for itself. This is a very subjective and personal perception. During the process of composition, sometimes I felt as if the composition wanted to develop by itself in a specific direction, being myself, as composer, someone who helps it to develop in its own way, as if it had its own life as an organism in development.

b) The Three Levels Proposed by Lawrence Ferrara

The three levels proposed by Ferrara are: syntactical, semantic and ontological. The syntactical level is related to the technical description of the work: structure, form, number of sections, materials used, kinds of processing used, anything which can be described only in musical terms. The semantic level is related to the meaning of text and/or words present in the piece, and, also, to any extra-musical references suggested either by the text or the title of the composition. The ontological level is related 'the perspective of world in which it was written' (Ferrara 1984, p. 357).

Heart Sutra – Ontological Level

On the ontological level, the idea of composing *Heart Sutra* emerged from my research about space. Space has been studied by different fields of knowledge, having started as an essentially speculative discussion in philosophy in Greek times. Space has also been a topic of study in geometry, and eventually became one of the most controversial themes in physics, challenging scientists who tried to understand its nature both in theoretical and experimental ways. I already knew that a number of authors were trying to make parallels between Eastern and Western thought, looking for similarities between the view of world which emerged from contemporary physics – especially relativity and quantum mechanics – and the religious and philosophical Eastern traditions. Being a student of Buddhism, I already knew the Heart Sutra and its references to the theory of emptiness. I decided to work on this text on because I thought it would be interesting to suggest, on the conceptual level, these parallels between Eastern and Western thought. The perspective, from which I understand the possibility of using the similarities of these two different traditions – science and Buddhism –, is described by Cabezon as the complementarity mode:

> 'Complementarity as a mode of engagement operates [...] according to a structuralist logic that uses the perceived differences between Buddhism and science to construct them as the binary parts of the greater whole. [...] whether the difference is identified principally in terms of content, of method, or of goal, the perceived problem – diagnosed in terms of the overemphasizing of one of the two elements – is overcome by a balance that is achieved when the two parts are brought together harmoniously.' (Cabezon 2004, p. 50)

Heart Sutra – Semantic Level

The Heart Sutra, also known as Heart of Wisdom Sutra, is included in the so-called Perfection of Wisdom Literature, or Prajnaparamita, the principal genre among many collections of distinctly Mahayana Buddhist texts. The Prajnaparamita sutras flourished in different countries – including China, Japan, Korea, Vietnam and Tibet – and became an important topic of studies in the monastic colleges of Buddhism. This is how Gyatso, the Fourteenth Dalai Lama, comments these texts:

> 'The Heart Sutra is part of the Perfection of Wisdom literature, which is composed of distinctly Mahayana texts [...]. These Mahayana texts form the core of the "second turn of the Wheel of Dharma". The Mahayana teachings are rooted on the sermons that the Buddha taught primarily at Vulture Peak. Whereas the teachings of the first turning emphasize suffering and its cessation, the teachings of the second turning emphasize emptiness.' (Gyatso: 2005, p. 41)

The text can be divided in four parts: the opening, the main discourse, the mantra of the perfection of wisdom and the conclusion. For the composition of *Heart Sutra* I used the three first parts, in the translation of Edward Conze (1974). Here I highlight some of the aspects of the text which were important for the composition:

Opening:

The context in which the discourse is pronounced is described in third person, starting with the traditional formula *Thus have I heard one time...*

This part of the text is narrative and clearly religious in character, mentioning Buddhist ideas, concepts and characters: Monks, Bodhisattvas, the Lord, Avalokiteshvaro, Sariputra, Deep Splendour.

Characters: the Lord (the Buddha), Avalokiteshvaro (the Buddha of Compassion), assembly of monks, Sariputra.

Sariputra makes a question: *How should a son or daughter ... Perfection of Wisdom?*

The main discourse:

The doctrine of emptiness is exposed, as an answer to Sariputra's question, starting with *Form is emptiness...*, and finishing with *... and non-attainment*.

This part of the text is philosophical and metaphysical in character. Essentially it makes statements about the emptiness of all things: form, feelings, perceptions, impulses and consciousness.

One interesting aspect of this sutra is that among the things which are declared empty it is included the most important doctrines of Buddhism – the four noble truths, the eightfold path and the idea of attainment – all of them central to the Buddhist philosophy and practice: No old age and death ... no cognition, no attainment and non-attainment.

The mantra of the Perfection of Wisdom:

Gone, gone, gone beyond, gone altogether beyond.

Imperative in character: an order to go beyond everything, essentially an order to transcend all the appearances and ordinary experiences and attain a superior state of consciousness.

Conclusion:

Praise of the teaching, return to the narrative and the religious context. This part has not been used in the composition.

Heart Sutra – Syntactical Level

Heart Sutra is a fixed-media electroacoustic composition based in the transformation of recorded sounds. Because I intended to work with recorded text, since the beginning I decided to work with different voices, and to explore the potentialities of the

voice as material for electroacoustic composition. The materials used were:

Seven different voices speaking the text with different intonations.

Sounds of the piano – long low tones, octaves, major and diminished chords.

Sound of the sculptures created by the artist Derek Shiel.

The main software I used to put all the sounds together was Logic Audio, I have also used Paul's Extreme Sound Stretch and Michael Norris' Spectral Tools, both freeware softwares. I used extensively TC Electronics reverb unit TC 4000 to create most of the reverberation used throughout the piece. Here I make some comments about specific points explored in each part of the piece:

1. On the vulture peak:

Surrogacy of materials related to wind and birds, both in terms of spatial motion and aural resemblance.

The narration distributed between two main voices, one male and one female, coming from different directions. The spatial design of the voices is not realistic, they are treated as disembodied voices.

Some key words of the texts are emphasized, with volume, reverberation, changes in spatial position and pauses in the speech after them, in an attempt to translate their content in sound, suggesting images and perceptions which could be associated to them, rather than their conceptual content:

On the vulture peak
Monks and Bodhisattvas
Deep Splendour
Avalokiteshvaro
Perfection of Wisdom
Empty
Being

The use of a child voice for the question of Sariputra is metaphorical, to suggest innocence.

The basic idea behind this section is to be a free composition, an imaginary or surreal landscape suggested by the only physical spatial reference present in the text: On the Vulture Peak

For this part the integral text has been used.

2. Form is emptiness

The main idea here is the use of different of reverberant spaces as 'colours'. Different reverberations were recorded for the different voices, and used simultaneously and in sequence to create a changing virtual space.

The main male voice which starts the section is the voice of the Buddha answering the question. This voice was placed most of the time behind the listener as a metaphor for an internal voice, rather than something which comes from external sources. The other voices come from different directions, to suggest the flow of thoughts and perceptions which can happen when one practices meditation. The voices don't move while speaking, but the same voices change their positions throughout the piece.

The non-vocal sounds move while develop, sometimes evoking the surrogacy of birds and wind of the first part, but more often sustaining pitched sounds (drones), in a reference to Eastern modal music.

The sub-sections were defined according to the structure of the text. At each new section something new is introduced, either new kinds of processing, different placements of the voices or different kinds of reverberation. Many parts of the text were eliminated, as it was too long. I tried to keep the essential meaning of the text, focussing on the philosophical content, rather than in the religious aspects.

3. Gone, gone beyond:

For the last part of the piece I decided to explore only voices and reverberation.

Conceptually I intended to restrict the material to explore to the biggest extent their possibilities.

Here I explore the internal space of the voices through extreme time stretching.

The words *Gone, gone, gone beyond, gone altogether beyond* were recorded with different intonations: screams, spoken voice, whisper, as well as with transitions between these main kinds of intonation.

The character of this section changes gradually: starting from very intense – the voices expressing fear, despair, affliction – through quieter states, finishing in a very calm mood.

The idea behind this section is dissolution. Essentially, the idea of emptiness says that all things are empty of intrinsic nature and impermanent. It means that all of them are impermanent and change. Here I try to translate this idea in sound. The intensity of strong emotions dissolve into quieter and whispering voices. Low frequency and full-range sounds dissolve into high-pitched sounds. Technically, I make the transitions through the selection of the sounds according to their spectral content and also through the use of filtering.

Gesture, Texture and Space in Heart Sutra

Denis Smalley defines the pair of concepts gesture and texture as

> 'two fundamental structuring strategies associated with multi-level focus and the experience of the temporal unfolding of structure' (Smalley 1986, p. 81).

During the process of composition of *Heart Sutra* I have always been aware of this conceptualisation, trying to perceive in which sense the sounds I was working with could be classified as gestures or textures, how I could work with them to better explore their potentialities and how the processing of the sounds changed their features in terms of being more textural or gestural. Here Smalley describes in more detail the behaviour of gestural and textural sounds:

> 'Where gesture is interventionist, texture is laissez-faire; where gesture is occupied with growth and progress, texture is rapt in contemplation; where gesture presses forward, texture marks time; where gesture is carried by external shape, texture turns to internal activity; where gesture encourages high-level focus, texture encourages lower-level focus.' (Smalley 1986, p. 81)

As one of the results of the reflection about my practice, I noticed that these features are very fluid, and depending on the kind of processing using for a sound – time-stretching, reverberation, equalization – its volume, spatial position and motion, the feature of being more textural or more gestural can change dramatically. I felt this was an interesting aspect to explore, and I tried to play with these distinctions, making the same sounds behave at different times as textures and gestures.

During the composition of *Heart Sutra* I was also trying to compose a piece which could be in some meaningful sense called a piece of spatial music. On the conceptual level I worked with a text which makes reference to the idea of emptiness. On the musical level I tried to explore four aspects which can be qualified as spatial.

The first one is the attempt to create an imaginary landscape in the first part. Here I worked with what Smalley defined as third order surrogacy, in which

> 'a gesture is inferred or imagined in the music. The nature of the spectromorphology makes us unsure about the reality of either the source or the cause, or both' (Smalley 1997, p. 112).

With the motion and the transformation operated in the sounds I tried to recall images of birds and winds to describe the vulture peak.

The second aspect can be described by the expression reverberation as colour.

Here artificial reverberant spaces are used in a non-referential way, meaning that different spaces can occur at the same time or in sequence, not trying to simulate a realistic setting, but to create an experience of virtual changing spaces.

The third aspect I tried to explore were the possibilities of quadraphonic sound. Because in this system it is possible to work with rear speakers, I tried to compose a piece which explores extensively the sounds coming from behind the listener, enveloping sound and a paradigm which is not front-oriented.

One last aspect could perhaps be characterised as spatial in a metaphorical sense. In its mood, temporal flow and pace, *Heart Sutra* evokes the experience of an internal space, the space of one's mind while in the state of meditation. Different voices and sounds coming from various directions, sometimes disappearing, sometimes appearing again, and sometimes going forever in a sense resemble the thoughts which come and go in the mind while one starts to observe the flow of the thoughts while in the state of meditation.

Conclusions

Phenomenology tries to rescue dimensions of the musical experience which were lost in the process of knowledge. For me it offered the conceptual framework to describe my experience as a composer, allowing me to describe and comment different aspects of my experience which emerged from the process of creation of the piece *Heart Sutra*.

Phenomenology is not against any kind compositional technique in which technical devices are the basis of the work – like serialism, algorithmic composition, spectral music or different kinds of sound processing. The phenomenological attitude tries to keep in mind the aural results of the different procedures, using the ear as the main guide for the compositional activities. Keeping in mind this attitude, I tried to compose something which sounded interesting for the ear, in spite of the ontological and semantic aspects I was dealing with during the composition of *Heart Sutra*.

I hope I have been able to demonstrate with my report that phenomenology can be useful in different fields of musical activity, to describe the musical experience from the point of view of the interpreter, the composer or the listener. Because it is an approach which welcomes different kinds of experience, perceptions and ideas, it can be compatible with different theories, which can be used to describe different aspects of the work or of the process under description.

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