



DEATH OF THE COMPOSER? MAKING MEANINGS FROM MUSICAL PERFORMANCE

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The view of art music composers as central to musical meaning making is hard to reconcile with what we know of the compositional process. I explore this question by examining the working of the imagination, reviewing debates on artists as the source of meaning in their art, and through a study of meaning making by audiences from pieces I composed. I propose a neurological model of meaning making from music in which meaning arises from listener perceptions of music as an analogy for human experience. Meanings may subsequently be expressed verbally due to the contrasting functioning of the brain hemispheres.

Death of the composer? Making meanings from musical performance

Introduction

In his famous 1977 text, published over 40 years ago, Roland Barthes declared the author dead, but in the sphere of music, composers have largely remained central to views of ‘authorial’ creation and the primary location of meaning-making. My aim here is to propose a view of the role of the composer in the making of meanings from music which takes account of modern evidence on the functioning of the imagination and the processes by which humans make meanings from all experiences, including those of listening to music.

Listeners to music commonly describe a sense of meaningful communication, and often define this sense in words. Yet it is hard to reconcile this with what we know of the processes by which composers imagine music, and this calls into question any direct connection between the meanings defined by listeners and the composers’ intentions. The evidence from composers is that they think in music, rather than seeking to communicate verbally definable meanings. For instance, Roger Sessions writes that: ‘[...] for the composer, notes, chords, melodic intervals - all musical materials - are far more real, far more expressive, than words’.¹ Similarly, Mahler is quoted as saying that: ‘A musician’s nature can hardly be expressed in words’.² I have reviewed elsewhere statements by other composers on their imaginative processes and have found them to be consistent with the view that composers imagine in music, rather than in words or extra-musical meanings.³

My argument is that this discrepancy - between verbal meaning-making by listeners and the imaginative processes involved in composition - is best explained in terms of the psychological and neurological processes which underlie the perception of music. I describe how the operation of the human mind can lead people to experience music as meaningful, and then to express this sense of meaning verbally. The composer is not irrelevant to this process, but plays a more limited role than sometimes supposed.

I shall begin the discussion of this subject by examining two other matters. The first concerns how the imagination works, since the view taken on this must affect how the role of the composer in making meanings from music is seen.

The second concerns the extensive debates which have taken place on the authorship of the meanings that are perceived in art. These have focussed on whether or not the meanings perceived can be reliably connected to the intentions of the artist. It could be argued that these debates are not relevant to music since they have mainly concerned meaning-making in the context of literary art. However, they have been too extensive to ignore, and have, at times, included discussion of music.

I then analyse two examples of meaning-making arising from pieces of music which I composed. I conclude with a review of the modern research on the mental processes of music perception, and show both why listeners may sense music as meaningful and why they may attempt to express this sense verbally.

1. Musical imagination and meaning

Any discussion of this question should begin with a view of how the imagination works and the implications of this for the extent to which composers have the intention to communicate meanings. Several authors have previously described how the imagination relies on a subconscious dialogue between many influences rather than a more conscious process. My aim here is to show that this view is supported by modern research, and to look at its implications

for the question of the authorship of artistic meanings. In one example of such a description, Deleuze and Guattari characterise writing in terms which reflect a subconscious process drawing on a multitude of influences. As they explain:

To write is perhaps to bring this assemblage of the unconscious to the light of day, to select the whispering voices, to gather the tribes and secret idioms from which I extract something I call my Self.⁴

Similarly, the mathematician Henri Poincaré describes how ideas arose from his subconscious:

Ideas rose in crowds; I felt them collide until pairs interlocked, so to speak, making a stable combination Among the great numbers of combinations [...] only certain ones are harmonious, and, consequently, are at once useful and beautiful [...]. Only this disorder itself permits unexpected combination.⁵

The two concepts reflected in these quotations are that ideas arise from the interaction of a multitude of influences, and that they arise from the subconscious. In the next two sections I show that this view is supported by studies of the psychology of the imaginative process.

1.1 The dialogue

The idea of the dialogue from which creative ideas arise comes from the work of Mikhail Bakhtin (1981), an analyst of novels and a cultural theorist. He introduced the term ‘dialogic’ to characterise the multi-referential character of novels that results from the interactions between the people depicted, their modes of speech and behaviour, and the worlds of experience that each brings to the novel.

It is a small step from examining the way characters interact in a novel, as Bakhtin does, to the study of the interaction of influences within the mind. As a result, Bakhtin’s terminology has been used to characterise the functioning of the imagination by, among others, Fernyhough (2016), Fontaine and Hunter (2006), Glazner (2001), and Shepherd (2001). In their book *The Dialogic Self*, psychologists Hermans and Kempen (1993) link Bakhtin’s writing on the novel to the working of the human mind. They argue that human behaviour is founded on intensive interaction or dialogue, beginning with the mother-infant relationship, and that this interaction is a universally experienced aspect of human behaviour. They see a person’s identity not as something separate from other people but as part of a dialogic self.

The implication of this view is that musical ideas and understandings arise from each person’s distinct set of experiences resulting from their contact, direct or indirect, with other people. Bakhtin calls this range of experience the heteroglossia⁶, while Barthes re-characterises it as an ‘immense dictionary’ upon which we all draw in imagining or seeking to understand.⁷ Ideas, whether in music or any other field, result from dialogues between these many influences.

It follows that musical ideas and understandings, or indeed any other artistic ideas, have complexity embedded in them, a complexity resulting not only from the wide range of influences but also from their multiplication through dialogue. As Rancière explains: ‘What the artist does is to weave together a new sensory fabric by wresting percepts and affects from the perceptions and affections that made up the fabric of ordinary experience’.⁸ Music produced through such an imaginative process must, it follows, be of a complexity which renders it unamenable to being summarised.

1.2 A subconscious dialogue

The evidence from modern studies in psychology and neurology is that the dialogue from which ideas arise takes place largely in the subconscious mind. The effect of this is that ideas arise as if from nowhere, as reflected in Poincaré's account. Wiggins comments that descriptions of musical composition often show that '[...] an idea appears in consciousness without warning, and without any indication of whence it came'.⁹ The title of Wiggins' paper is *The Mind's Chorus*, and he argues that there is a constant churning of our subconscious thoughts from which ideas occasionally pop into our conscious minds. As he writes:

[...] non-conscious creativity is happening all the time as a result of ongoing anticipation in all sensory (and other) modalities. When conditions are right, this essential survival mechanism is not so much *exapted* for creativity, but gives rise to creativity as a side effect.¹⁰

This argument is supported by the work of Fernyhough, a psychologist who analysed the mental activity of a sample of people at the moments when they were listening to their internal voices. The hypothesis in his book, *The Voices Within*, is that people think in a form of dialogic inner speech. He describes how young children talk to themselves as they play, discussing what they are doing. As we grow, this talk becomes internalised, forming an inner dialogue. His research findings show that this voice is dialogic, that is, it consists of a person having a dialogue with themselves.¹¹ He argues that '[...] the mysteries of inner speech become more comprehensible when we recognise that it has the properties of a dialogue'.¹²

Further evidence to support the view that ideas emerge from subconscious thinking is presented by neurologists Kounios and Beeman, who found that '[...] the aha moment [when we have an idea] occurs when an idea that's already slightly activated in the right hemisphere [of the brain] - but is still unconscious - suddenly emerges into awareness as an insight'.¹³ New ideas occur to people when subconsciously-developed ideas appear in the conscious mind.¹⁴

Bailes and Bishop, in their review of the relevant literature, propose a link between these processes of subconscious rumination and the internal dialogue between influences, suggesting their conjunction as the source of ideas in composition. They write that: 'While inspiration may strike as a seemingly complete idea, it is likely to be based on the unconscious amalgamation of assimilated musical experience'.¹⁵

The relevance to my argument of this view of how musical ideas originate is that it suggests that the person who imagines music through the act of composition may be no better qualified to explain its meaning than any other person. As Plato writes, poets: '[...] say many fine things, but do not understand the meaning of them'.¹⁶ A composer, or performer, may or may not form a view of what a piece of music means to them after they have imagined it but, if my argument is accepted, their understanding is not necessarily any more authoritative than another person's sense of the meaning of the same piece. Like Plato's poets, a composing musician is not capable of being fully aware of how, or from what sources or stimuli, their musical ideas arose.

1.3 Implication

The process of the musical imagination, then, is complex and partly non-conscious in its operation, which has the implication that interpretations or understandings of music are not amenable either to interrogation or to agreement. The subconscious, and therefore inexplicable, nature of the imaginative process (it cannot be fully explained) combined with the complexity of the influences which have been in dialogue, means that it would be a mistake to ask a composer what they mean by their music; they mean the music.

This view has been stated by earlier writers on the arts, but it is now backed by evidence from modern studies in psychology and neurology. It is nevertheless important to set it out since much of the debate on the interpretation of art, summarised next, has centred on the question of whether we should seek the meaning of the art in the artist's intentions.

2. Who makes artistic meanings? Debates on authorship

2.1 Musical meanings

While any discussion of the making of meanings from music must take account of the process of the imagination, it must also allow for the nature of musical communication. One sense of the term 'meaning' concerns the designation of one thing by another. A word or an image may designate an object by representing it. Music lacks a clear sense of representational or symbolic meaning, since there is no stable system for interpreting musical sounds in other terms.

On the other hand, music can have experiential meaning, since listeners feel it to be meaningful. However, according to Schütz, it is: '[...] grasped monothetically [...]'.¹⁷ One experiences music complete, and therefore: '[...] it will "take as much time" to reconstitute the work in recollection as to experience it for the first time'.¹⁸ As Merleau-Ponty puts it:

Once the performance has come to an end, we cannot do anything in our intellectual analyses of the music but refer back to the moment of the experience.¹⁹

The result of this must be that the process of making meanings from music is carried out separately by each listener, and that each may therefore reach a different conclusion. This is confirmed by, Delis, Fleer, and Kerr, who found in their study that: '[...] there is no guarantee that one person's designated interpretation of a musical passage will be like another's'.²⁰

It would therefore be misleading to attribute directly to a communicator, such as a composer or performer, any sense of meaning felt from the experience of music. This, along with the view I put forward above about how the musical imagination operates, forms the background to my discussion of the debates on artistic authorship and the attribution of meaning-making from art.

2.2 The intentional fallacy and the death of the author

The focus of these debates has been on whether or not the artist who made the art should be the point of reference in interpreting it. The implicit assumption made by proponents of this view is that artists intend to communicate definable meanings through their art; this is a proposition whose validity I would question, at least for music.

The term 'intentional fallacy' comes from Wimsatt and Beardsley's paper, in which they challenge the idea that the author should be looked to as the source of the meaning of their art. They write:

We argued that the design or intention of the author is neither available nor desirable as a standard for judging the success of a work of literary art [...]²¹

There are two separate points here: one of availability and the other of desirability. The first is that the intentions of the author concerning the meaning or interpretation of their work are not available to us. This could mean either that the author had an intended meaning but did not specify it (and may now be dead and unavailable for clarification) or, alternatively, that authors are intrinsically unable to give a full and definitive account of their intentions, including the intended meanings of their works. I read their argument along the latter lines, although they are not entirely explicit about this. I do so because they give examples of poets describing how poetry would suddenly occur to them, as verse rather than as expressions of meanings. They quote A.E. Houseman as saying that '[...] there would flow into my mind, with sudden and

unaccountable emotion, sometimes a line or two of verse, sometimes a whole stanza [...].²² Wimsatt and Beardsley's view appears to be that poets think in poetry, not in *a priori* meanings which they then express in verse. I read this as supporting the argument that artists are unable to explain fully where their ideas come from, and so cannot give us a complete and definitive account of what their art means.

Empirical evidence corroborating this view is presented by Marsh and Vollmer, who studied the creative processes of twenty-five artists. Their subjects' descriptions of their creative processes led them to conclude that art is 'essentially polyphonic', that is, it has an inherent complexity of meaning.²³ The art resists definitive interpretation due to the complex nature of artists' imaginative processes. For Marsh and Vollmer, this 'polyphonic' quality calls into question the idea that artists have readily-definable intentions.

Wimsatt and Beardsley's second point is that it would, in any case, be undesirable to base judgements about artworks on statements by artists of their intentions. They argue that if a poem succeeds in communicating what it was that the poet intended, then there would be no need to refer to the poet; and if it does not succeed in this way, there would be no point in referring to them anyway, since their communicative capacity appears to be deficient.²⁴

Much of the debate on intentionalism has focussed on this second issue. My argument is that this is not the key point concerning the sense of meaningful communication through music. If artists do not intend to communicate definable meanings through their art, and I would certainly argue that musicians do not, then there would be no point referring to any such alleged intentions, whether-or-not that might be desirable. That does not mean that interpretations of music should not be made. That is a separate matter.

The arguments put forward by Wimsatt and Beardsley are closely paralleled by those of Barthes and Derrida on artistic authorship. Barthes objects to the attempt to seek meaning through trying to understand the author's intentions and, instead, asserts that a text is open to any reader to interpret as they see fit. He argues that:

[...] a text is made of multiple writings, drawn from many cultures and entering into mutual relations in dialogue, parody, contestation, but there is one place where this multiplicity is focused, and that place is the reader, not, as was hitherto said, the author.²⁵

This is the same argument as that put forward in Section 1, namely that the creative act results from a dialogue between a wide variety of influences and stimuli. Meanings, rather than being communicated in a focussed way by the author, must therefore be distilled separately and uniquely by each individual reader.

Derrida's argument is, similarly, that texts must simply be taken as they are, without reference to the author. He writes:

Wandering the streets he [the text] doesn't even know who he is, [...] He repeats the same thing every time he is questioned on the street corner, but he can no longer repeat his origin.²⁶

All we have is the written text which, as with any other art, is unable to explain itself, leaving interpretation to the reader.

2.3 Opposition and qualifications

The counter-arguments are, on the one hand, that the creation of art is an intentional act and we therefore cannot dismiss the concept of the author's intentions, and, on the other hand, that people will always seek to interpret art and so there must be some standard for judging interpretations. For example, Rebellato argues that '[...] to eliminate intentionality *tout court*

from texts would not merely strip away ‘intended meaning’ but pretty well *any* kind of meaning [...].²⁷ Hirsch, similarly, considers that we should refer to the author in judging competing interpretations, and writes that:

For once the author had been ruthlessly banished as the determiner of his text’s meaning, it very gradually appeared that no adequate principle existed for judging the validity of an interpretation.²⁸

Gaut and Livingston present the closely connected argument that, since artists intend to create art, their intentions must be important to the attempt to understand it, making it necessary to construct: ‘[...] the artwork as the product of the artist’s actions’.²⁹

All these writers are concerned to be able to relate the nature of the art to the intentions of the artist in creating it. In the case of Hirsch, his concern is to be able to judge interpretations, and in the case of Gaut and Livingstone the concern is to define the artist as the producer of the art, and therefore as a person who should be referred to in interpreting it. My argument is that, while accepting the artist as the originator of the art, it would be wrong to equate this originating act with the intention to communicate something definable and open to agreement or, as a Hirsch puts it, conveying ‘real’ meanings that enable audiences, in Gaut and Livingston’s phrase, to interpret the art ‘correctly’.³⁰ I shall argue below that meaning from art is made entirely by the audience, and so art can neither have a real nor a correct meaning. Artists certainly aim to offer experiences, in that they hope audiences will respond to their art, and to that extent I agree with these writers that the artist is far from irrelevant in making sense from the artistic experience. However, an experience is, by definition, felt separately and uniquely by each audience member. The intention to create an experience is therefore not the same as the intention to communicate meanings, whether semantic or experiential, which are either susceptible to widespread agreement or sufficiently robust to form the basis of value judgements.

Several authors argue that, even so, we cannot dismiss the artist when we seek to understand the art which they helped to create; their arguments point to a more nuanced view of the relationship between artists and the meanings made from their art. Levinson, for example, draws a distinction between the semantic and categorical intentions of an artist. He defines the latter as intentions ‘[...] that govern not what a work is to mean but how it is to be conceived, approached, classified on a fundamental level’.³¹ His view is that artists do have categorical intentions.

In his book on this subject, Livingston argues that artists have intentions concerning the character of each piece, and that these guide their work. On musical composition, he writes:

[...] once a musician is settled on the plan of composing a musical work, this intention initiates thinking about how to bring this about, and when the time comes, helps bring closure to these compositional efforts.³²

Livingston’s argument appears to be that composers need to have intentions concerning the character of their music, not just the intention to write pieces which fall within a given generic category, in order to be able to judge their progress on a piece and decide the moment of its completion. While this is clearly true, the composer may decide that a piece is complete simply when they feel it to be so, rather than having any more defined intentions concerning its character. Also, the character of a piece may emerge through their exploration of the musical ideas which occur to them. They may find that these ideas lead to the emergence of a piece with a character which pleases them, and then go on to try to create a piece with this character. This, I suggest, is quite different from having the intention to communicate definable meanings, or to create art of a character imagined consciously at or near the start.

2.4 Interim conclusion

Summarising the foregoing, there are three reasons for doubting whether a composer should be regarded as the key point of reference when trying to develop an understanding, or define a meaning, of their music.

1. They imagine in music, and music cannot be encapsulated in words.
2. As with any other artist, their ideas arise from a complex dialogue provoked by many influences. Any verbal summary will fail adequately to reflect this inherent complexity and ambiguity.
3. Musical ideas appear to arise from subconscious thought. As a result, a composer – or, for that matter, a performer - will never be fully able to give an adequate account of them. Any explanations they do offer will amount to no more than their own personal response to the music and, accordingly, will be neither better nor worse than the response of anyone else.

As a result, while a composer will clearly have a subjective sense of whether a piece feels right and meaningful to them as they work, they are unlikely to define, even to themselves, any explicit sense of meaning. Wolff, in her review of this question, concludes that the meaning can therefore: ‘[...] subsequently be subject to redefinition and fixing by all future readers [...]’.³³

The case for arguing that we should refer to the composer’s intentions in seeking to explain the meaning of any piece of music is therefore a weak one. However, the dismissal of the composer as irrelevant to the interpretation of the music they have composed appears to be going too far in the light of the arguments by Levinson and Livingston that the artists may have intentions concerning the form (category) and the character of the art they are creating, even if they realise what these intentions are only as they work on a piece and find that its form and emerging character satisfy them.

3. Two experiments in musical meaning-making

Before reporting on my own experiments, it is worth noting a study of a similar nature carried out by Downey in the 1890s. She asked listeners to record their impressions of six pieces of music, without being given the titles or other prompting information.³⁴ The listeners wrote contrasting and often detailed interpretations of the pieces. These findings – of contrasted and detailed responses - were replicated in a study I conducted based on two of my own compositions. In this study, I was additionally able to compare the audience’s understandings with my compositional thoughts, insofar as I am aware of them.

In the case of *Muted and Changing Voices*,³⁵ I initially intended simply to compose using ideas suggested to me by the performers I was working with, but the result of doing so was a draft piece which I experienced as embodying a process of muted and gradual change. On rehearsing this, the performers began to describe a sense of themselves concentrating in isolation from one another. This had not previously occurred to me. They also said the piece felt like a prelude, and suggested ideas for a contrasting middle section followed by a return to the opening material. This provoked me to think of a middle section in which, following the sense of separation the players had described, they would seem to reach out to one another through initially short musical gestures which grew in length and intensity.

In the second case, *Dark Solstice*,³⁶ I needed to write a piece for a concert of ‘winter’ music taking place one December, and chose the title before thinking of musical ideas. I then imagined a three-note motif, DEC, and felt that this and the implied harmony in seconds could be used both in slow music to provoke a sense of still-chill, and then one of storm through its

use for fast music. While I had these intentions, I did not keep them clearly in mind when composing. Instead, I followed through the possibilities of the opening motif and harmony, thinking that, by doing so, the music would provoke the feelings I had imagined.

In both cases I clearly had some intentions concerning the character of the musical experience for audiences, but my working process was principally one of exploring musical ideas.

The composition of *Muted and Changing Voices* was driven mainly by the exploration of musical and conceptual ideas suggested by the performers, although, thanks to the feedback from the performers, I had a partially-formed intention concerning the middle section before embarking upon it. I did have intentions for how *Dark Solstice* might be experienced, but did not follow these through in composing, instead following the musical material where it seemed to lead.

I gave questionnaires to the audience at performances of these pieces, asking them to describe their interpretations of the musical experiences they evoked. They did not appear to find this difficult, despite being placed in this artificial situation. I asked the audience of *Muted and Changing Voices* to make story interpretations of the piece. Some examples are:

- [A] person can't find their way out of a labyrinth, getting stuck climbing up rocks. ... Reaches the top of the cliff. Sunlight BRIGHT. Lifts off and FLIES like a bird riding/surfing. Flying dragons chase. Escapes - flying over fields and villages.
- [A] quiet early morning ballet class. Bodies reaching and waking as they stretch, but not quite together. [On] The change things became more unified, melodic and fluid ... but there was only so long that could be maintained before the destabilisation became unavoidable.
- A day in the countryside. Rain drops in the morning - light breeze becomes a wind playing with high branches in the trees. Evening comes, but the river is undisturbed.
- The effort of relationships - suspense - "something" is going to happen - but it takes a lot of communication to get there... Finally: harmony - ease - acceptance of differences. Then the occasional "rocks in the road" of a long relationship.

I asked the audience of *Dark Solstice* to describe what the piece meant personally to them. Some examples are:

- A rather overcast foggy day but things needed to be done so with energy and determination a young man roused himself and fairly cheerfully, but stolidly, went about his tasks.
- The lead up to the shortest day, Christmas and New Year energy in the middle, the drawn-out continued dark days of the end of 'winter'.
- Life goes on, not unhappily and fairly stoically.
- Winter's bleakness and crackle. Cold isolation – warm company.

These and the other responses share three characteristics:

1. They differ greatly in detail from one another.
2. They differ in detail from the experiences I had intended, insofar as I had such intentions.
3. They do follow the general profiles of the pieces as I had imagined them.

The audience of *Dark Solstice* did not perceive my initially imagined affects, but rather interpreted the piece in other ways, reflecting quietness and then vigorous activity. This may be the result of the fact that I did not follow through my imagined affects when composing. Be that as it may, these performances were clearly not just cases of a composer communicating meanings through performers to audiences. A more complex explanation is required, covering the mental processes of the composer, performers, and listeners, all of whom contributed to the way in which the music was perceived as meaningful.

4. Mirrors and hemispheres: the neurology of meaning-making from music

An explanation of why and how we perceive music as meaningful, even though it does not symbolise a reality external to itself, can be found in studies of the operation of human mental processes. These processes underlie both our sense of meaning in music, and why we may express this sense verbally. If a composer or performer either senses, or states, a meaning attributable to the music they help create, I suggest that such meanings are made by the same process as those made by any other listeners.

4.1 Mirrors in the mind. Perception by analogy

In the 1990s, the human brain was found to contain mirror neurons, which are stimulated in similar ways by parallel experiences. The same sets of neurons are stimulated when a person is, for instance, either physically hurt or insulted, or when the hurt or insult is observed or imagined. Gallese, who was one of the team who discovered mirror neurons, and Goldman argue that they are the basis of the human ability to simulate the thoughts of others (1988), and therefore the source of empathy.³⁷

Another function of mirror neurons, in the view of Molnar-Szakacs and Overy, results from their: '[...] representation of that signal [from an external stimulus] in the perceiver's own brain'.³⁸ Their argument is that, as well as the ability to interpret and predict the behaviour of others, mirror neurons enable us to interpret our own experiences, to represent and predict, and so help us to '[...] communicate meaning and human affect'.³⁹ They play a crucial role in enabling us to respond to music by re-presenting (representing) the experience to ourselves, particularly since they are especially sensitive to auditory stimuli.⁴⁰

Music, as a result, can communicate a sense of human expression through the feeling of empathetic engagement with the physical gestures of other people, whether we are making music with others, attending a performance, or listening to recorded music. As Molnar-Szakacs, Green Assuied, and Overy write:

Without any reliance on language, an individual can express their emotional state through sound, and another individual can immediately comprehend and interpret this sound signal, based on their own motor, emotional, and musical experiences.⁴¹

This function of mirror neurons in empathetic communication is complemented, in particular for music, by the way they enable us to perceive one experience as similar or analogous to another. We can perceive emotional communication through music due to the way its shape and character parallel human experience, even though the music itself does not literally contain the emotions perceived.

Davies notes this resulting: '[...] experience of resemblance between music and the realm of human emotion'⁴² and describes this view as: 'appearance emotionalism' since the music has the appearance of emotional expression.⁴³ He describes the alternative position as

‘hypothetical emotionalism’, in which we imagine that the music ‘[...] presents a narrative or drama about a persona who experiences [...]’.⁴⁴ He criticises that view, writing:

For myself, the experience is one of hearing the music as possessing the appearances of emotion, while regarding it as neither alive nor haunted by a persona.⁴⁵

This idea is examined in detail by Jackendorff and Lerhahl, who conclude that music itself contains no emotions, but rather it enables listeners to construct their own sense of the emotion and drama from the listening experience.⁴⁶ The idea of music as analogous to, and therefore as capable of provoking, a sense of human emotion, is also examined by Zbikowski. He reviews a wide range of research on the drawing of analogies between musical experiences and other domains, and concludes that:

[...] the ability to draw complex analogies is a basic and characteristic feature of human intelligence. Inasmuch as music is a product of human intelligence, it stands to reason that analogical thought would play a role in musical understanding.⁴⁷

As Overy and Molnar-Szakacs write in another paper: ‘[...] the human mirror neuron system allows for corepresentation and sharing of musical experience between agent and listener’.⁴⁸ They consider that this makes possible the ability to: ‘[...] share a narrative of call and response, synchronisation, prediction, interruption, and imitation’.⁴⁹

It is important to note that the view that mirror neurons are the basis of how we perceive analogies has been challenged by a number of writers, particularly Gregory Hickok. Hickok reviews a wide range of research on mirror neurons, and questions whether the observation of the firing of the same neurons whether an action is performed or only observed does actually demonstrate that these neurons are the means by which the action can be understood.⁵⁰

Hickok goes on to query the wider claims made for mirror neurons. He quotes a meta-analysis of 120 studies led by Binder (2009) showing that the brain regions active during understanding are located exclusively in areas of the brain which, unlike mirror neurons, are not involved in motor-sensory functions.⁵¹ He proposes an alternative explanation of analogy and understanding based on the comparison of new stimuli registered in the motor-sensory areas of the brain with the memory of previous experience stored elsewhere in the brain.⁵²

This may be a more convincing explanation of analogy perception than the view that it relies only on a limited number of mirror neurons. Whichever explanation is accepted, it remains the case that the human ability to develop understandings through the perception of analogies is central to music perception. Music can therefore provoke a sense of emotional expression by analogy, without itself containing the expression or representing the emotion. This, it would seem, is the means by which music can be experienced as meaningful communication.

4.2 Music of the hemispheres

The question, then, is why do listeners often express this sense of emotional or affective meaning in verbal terms? This process has long been observed, for instance by the Roman poet Horace who describes two stages of human perception, writing that:

For nature has so formed us that we feel inwardly any changes in our fortunes [...] it is only afterwards that she expresses these feelings in us by means of the tongue.⁵³

Horace’s description anticipates the findings of modern neurologists concerning the way experiences are felt and subsequently explained verbally, and their explanation of this process in terms of the contrasting functioning of the two hemispheres of the brain.

It is important to begin any discussion of the subject of brain hemispheres by noting that it has been bedevilled by myths and disproven theories. However, there is now an accumulation of evidence to support the view that the two hemispheres, while specialising only to a limited extent in performing different functions, do differ significantly in their modes of operation.

There is evidence from many studies based on brain scans that music and speech are, to some extent, reliant on parts of opposite hemispheres. These findings are summarised in comprehensive books by Patel and Thompson. Patel notes that phoneme (or word source) perception is more centred in the left hemisphere whereas pitch perception and perception of melodic contour are more centred in the right.⁵⁴ He concludes that: 'In summary, hemispheric asymmetries for speech and music perception certainly exist, but are more subtle than generally appreciated'.⁵⁵ Thompson presents a similar summary.⁵⁶

However, there is evidence of a more marked contrast between the forms of perception within the two hemispheres. Many studies of this subject are summarised in articles by Gazzaniga,⁵⁷ He reports, for instance, on experiments in which the participants were asked to explain images shown just to the left eye, controlled by the right hemisphere, or just to the right eye (left hemisphere). They gave answers which showed that: '[...] the left hemisphere seeks explanations for why events occur [...]', including possible explanations for images shown only to the left eye/right hemisphere.⁵⁸

Gazzaniga also describes how humans perceive experiences in a more literal and complete way in the right hemisphere but that, due to the way the left hemisphere seeks explanations for experiences, we then construct explanatory accounts.⁵⁹ Gazzaniga was involved in a 1995 study led by Metcalfe which found that the right hemisphere was superior in terms of accuracy of memory, but the left tended to generalise by encoding interpolations and interpretations as well as actual memories.⁶⁰ He also contributed to study led by Wolford which found that humans, due the operation of the left hemisphere, try to identify patterns and explanations even when there are none in the information they receive.⁶¹

The implication is that we perceive music more holistically in the right hemisphere, whereas the interpretative perception dominant in the left hemisphere leads us to analyse and summarise the musical experience. As Thompson explains, the left and right hemispheres specialise in these: '[...] analytic and holistic activities [...]' respectively.⁶² Bever and Chiarello draw the same conclusion from their study of people listening to music, that: '[...] the left hemisphere is dominant for analytical processing and the right for holistic processing'.⁶³

These studies all point towards the conclusion that music is experienced in a complete and non-interpretative sense in the right hemisphere. The music may be experienced as analogous to a sequence of human experiences or emotional states. The left hemisphere then seeks to make sense of this musical experience. There may then be a tendency to express in words the sense that has been made, due to language functions being biased towards the left hemisphere. As Koelsch writes in his comprehensive book on *Brain and Music*:

[...] although music seems semantically less specific than language, music can be more specific when it conveys information about [...] sensations that are problematic to express in words because music can operate *prior* to the reconfiguration of feelings and sensations into words.⁶⁴

This reads to me as a re-expression of the view that we experience music holistically in the right hemisphere. On the basis of the studies quoted above, the reconfiguration into words of the musical experience is the result of the left hemisphere's attempts to interpret that holistic musical experience. The implication is that, when listeners seek to interpret or summarise (left hemisphere) the experience of the music, they will each apply their unique combination of

personal experience and way of seeing the world. Therefore, all such interpretations of pieces of music are individual constructions.

The listener, far from being a passive recipient of a composer's 'message', is an active agent who constructs their own sense of meaning from the music. As Jacques Rancière argues in his book *The Emancipated Spectator*, the spectator or listener is actively involved, rather than being a passive observer of a spectacle. Describing the person doing the experiencing, he writes: 'She observes, selects, compares, interprets. She links what she has seen to a host of things that she has seen on other stages, in other kinds of place. She composes her own poem with the elements of the poem before her'.⁶⁵

This points towards a model of the process of meaning-making in music which, as suggested by Timmers⁶⁶, requires the involvement of a variety of different people. I would describe their roles as follows:

1. A composer imagines musical ideas. They may find ideas that please them and then go on to write the piece. Alternatively, they may first develop a sense of the music they wish to create and then find that musical ideas come to them which they hope will provoke this same sense in listeners.
2. Performers re-imagine the music, and their imaginings, while guided by a general desire for fidelity to the work, may or may not be close to those of the composer.
3. Audiences experience the music, and actively interpret it. The experience will vary from person to person, but there is likely to be a degree of family resemblance between any meanings sensed by different audience members and by the composer and performers.
4. Audience members may then make verbal interpretations of the musical experience to explain it to themselves or others. There is likely to be greater diversity between these verbal interpretations than among the pre-verbal experiences that prompt them.

The composer, performers, and audience all have agency in this model of the creation of musical meaning. My argument, from this, is that the composer is neither the sole author of, nor the unique authority on, the meaning of the music, but is an important participant in a process which may start with them but frequently develops in ways that they could never fully anticipate.

Conclusion

My final conclusion is that there are fundamental problems with the argument that the composer of a piece of music, or any other creative artist within their medium, should be taken as the central or pre-eminent reference point for interpretation. This is for two reasons:

- The imagination operates in a way which makes it questionable to attribute intended meanings to the composer. The complexity of the origins of musical ideas makes them unamenable to explanation, and the subconscious nature of the imaginative processes results in an inability on the part of composers or performers to make more than personal statements as to their music's meaning.
- The process of musical meaning-making is a personal one, rooted in the operation of mirror neurons, with music perceived as an analogy for human experiences. Verbalised 'meanings' may then be constructed by the left hemisphere from the more complex and holistic musical perceptions of the right. However, such meanings are constructed separately by each person.

Therefore, *pace* Roland Barthes, the composer, in the sense of musical 'author', is not dead (i.e. irrelevant). However, their role in the making of meanings from music is that of just one

among several contributors. They may have a certain chronological primacy (their action comes first in the chain of creation, transmission and reception) but this does not necessarily equate to their having a privileged status as meaning-makers in comparison to performers or audiences.

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