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Music and Movement in Dialogue: Exploring Gesture in Soundpainting
Le dialogue de la musique et du mouvement : exploration de la gestuelle du soundpainting

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Résumé de l'article

En utilisant le « soundpainting » comme étude de cas, nous interrogeons les façons dont les musiciens et les danseurs créent et contribuent au dialogue entre les arts. Une proposition pratique et analytique est fournie par des entretiens avec le « soundpainter » Walter Thompso n, mettant à défi les conceptions sur la création de dialogues musique-danse au sein de ce langage de gestes créateur.

Music and Movement in Dialogue: Exploring Gesture in Soundpainting

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If music is language at all, it is a language of gesture
(Cone 1974, 164).
Gesture adds something crucial to communication
(Zbikowski 2011, 83).
I am a composer *who utilizes the Soundpainting language as a tool to realize the work*
(Thompson 2010).

Exploring how music and movement can enter into a dialogue in a performance piece is a complex issue because of the many ways in which the aural and visual-movement arts can be used, and the many ways in which they are discussed. Recognizing that audio-visual relationships cannot simply be categorized according to their similarity and difference, I examine a particular creative process called Soundpainting in order to show how gesture can unfold in music-movement works. My study takes as its point of departure an extensive questionnaire that I submitted in 2010 to the creator of the art of Soundpainting, Walter Thompson (b. 1952).

Although Soundpainting may be used with any art form, three attributes make it highly relevant to reflections on how music and movement might work together in dialogue: first, its emphasis on live creativity, using extemporization, followed by guided adaptation in performance; second, its focus on building a shared creative language among different media; and third, its recognition of the meaningful parallels which exist between sonic and visual elements.

Introduction to Soundpainting

Thompson provides the following definition:

> Soundpainting is a multidisciplinary live composing sign language. It comprises more than 1200 gestures that are signed by the live composer—known as the Soundpainter. [It] indicates specific material and chance material to be performed. The Soundpainter, standing in front of the group (usually), signs a phrase to the group [and] then composes with the responses (Thompson 2010).[1]

The performing group may, in Thompson's words, "comprise anyone" and include musicians, dancers or any other artists—both professional or amateur. Thompson explains that he has developed a "comprehensive sign language for creating live composition from structured improvisation" (Thompson 2010). In other words, the Soundpainter acts as a catalyst for creation, in a process that is not restricted to representation, prior structural models or formal requirements. In Soundpainting, musicians and dancers are directed through a variety of gesture types in an interactive and collaborative manner; in some performances the audience is part of the performance. The active combination of different media is central to this process. At the heart of Soundpainting lies a hypothesis that performers *across disciplines* are able to, and should, create a dialogue.

How does Thompson execute his creative act? First, a key element is that the composition occurs in real time, placing each performer on an equal playing field. The Soundpainter indicates what s/he will create in the moment of the performance by using a series of coded gestures to request particular elements to be performed by the group. An appendix accompanies this article, defining and illustrating some of the basic gestures. Most important, Soundpainting relies on what is offered on the spot by the ensemble as a basis for ongoing change and development. It is possible to use notation as part of the performance (as I explain below), but this is used only as a stimulus and is invariably modified by the Soundpainter.

[1] All quotations in the text from Walter Thompson are drawn from the questionnaire written by me and completed by him in December 2010, unless otherwise stated. The aim was to gather Thompson's views on the relationship between musicians, dancers and movement artists within Soundpainting. Moreover, the questions tackled whether Soundpainting is a language, how the language is structured and to what extent the Soundpainter holds overall-control: in other words, whether the work is a composition composed by him or a guided-improvisation. This lengthy questionnaire (12 pages issued, 21 pages returned) was structured according to the following subheadings: Background, Creative Contexts, Aims and Experiences, Improvisation, The Development of the Language, Real-Time Composing, Gestural Language, Specific Gestures, Ownership and Ensemble Dialogue. Publication of this questionnaire is forthcoming at http://www.soundpainting.com; an interview I conducted with Walter Thompson, recorded on 25th June 2011 at the Union des Musiciens de Jazz, 19 rue des Frigos, 75013 Paris, is forthcoming at, http://www.youtube.com/user/climbersax

Second, in creating music and dance in real time, because the members of the ensemble are not able to see and hear everything they become dependent on the Soundpainter to communicate across the group. The Soundpainter directs materials, edits them and facilitates an artistic dialogue. There are, nonetheless, two sides (at least) to the conversation, each contributing directions or responses. The process relies on the interdependency of the parties involved: as Thompson puts it, "this way of composing is very much the same as having a conversation with another person, you speak [or gesture], you listen [or watch], you respond" (Thompson 2010). Interestingly, Thompson's response to probing questions about the performance process underlines his control over the group. He identifies his role as the leader, as well as a type of negotiator, as he is never able to completely direct what the group offers on the spot. The gesturing leader at the front of an improvising group becomes the eyes and ears of, and for, everyone.

Scope, Questions and Method

Exploring this creative process enhances our understanding of spontaneous inter-art dialogue. I want to suggest that rigorous gestural analysis may be applied to real-time creative practice. I will demonstrate that, to some extent, Soundpainting draws on conceptual integration networks, as developed in music by Lawrence Zbikowski, which can be used to explain the combination of different media via metaphor and cross domain mapping (Zbikowski 1997, 193–225).

The gestures employed in Soundpainting are active and reactive: they propagate an understanding in the performer that warrants a response. Analysts have noted the importance of patterns in gestural languages. For example, Zbikowski emphasizes that gestures are inherent to communication, because, as Robert Hatten and Naomi Cummings write, they have "significance" (Hatten online) and create "patterning" (Cummings 2000, 138). In Soundpainting, the meaning of each gesture results from its place in the signed phrase (a phrase is a combination of gestures signed one after the other to make a meaningful request of the performers). Repetitions and variations are used to establish a dialogue between the sonic and visual media. Moreover, the participants are aware that repeating and varying gestures constructs meaning. A gestural act produced by the body (either as a direction by the Soundpainter or a response by the performers) is a representation of the performer's interpretation of what is heard/seen and is understood. The Soundpainter is situated most of the time in the line of sight of every performer (unless a dancer, for example, is asked to "use the whole space")[2] and the act of mediation is enacted in Thompson's compositional role.

How is a dialogue formed between a silent gesturing artist and an ensemble of musicians, dancers, and so on? What types of gestures (physical, meaning-bearing movements) are used and how are they understood? Thompson has established a "syntax," which refers to the order in which the gestures are signed, within which he has specific categories of gestures (Thompson 2010). Gestures in Soundpainting serve specific roles: "function" and "sculpting." "Function" gestures are sound/movement producing gestures that might be understood as quantitative because they can be counted and ordered, producing precision in their use and interpretation. These "function" gestures refer to something specific: "whole group" (illustrated in the appendix) notes that the entire ensemble is to perform. Alone, "function" gestures can identify who is to perform and when, but they do not detail what content is to be performed, and must be used alongside other gestures in order to make a meaningful phrase.

"Sculpting" gestures offer much more freedom for the Soundpainting ensemble: these gestures enable a performer-performer dialogue. Such gestures are qualitative: they facilitate sound/movement, though the gestures themselves do not produce sound (Jensenius et al 2010, 12–35). They are expressive gestures which request material from the group, asking performers to modify what is given, and thus fostering creativity in the moment. As Thompson notes, "they indicate **what** content is to be performed and **how** to perform it" (Thompson 2010). Both gesture types map movement and music. And all of these gestures require the specific "Soundpainting syntax": this "syntax," as Thompson calls it, is the order in which the signs are to be issued. The signs are always produced in the following order: **who**, **what**, **how** and **when**. The type of signs produced in this syntactical sequence will be selected form the two large categories of gesture. For example, if a Soundpainter wants everyone to play a sustained tone quietly, s/he would sign the following phrase: "whole group," "long tone," "volume fader," "play." The place of these gestures in the larger categories of the language is as follows: "whole group" (this is a "function" gesture, it identifies the who will respond), "long tone" (this is a "sculpting" gesture, it identifies what content to perform, though exactly which pitch is played is of the performers choosing), "volume fader" (the Soundpainter can choose whether to request a volume using another "sculpting" gesture to indicate how the material should be performed—this fader acts like a volume bottom on a stereo system), and "play" (this is a "function" gesture, it informs the players when to start and stop performing content). As Thompson notes, the signs will "always be co-dependent [as] they need each other in order to create a complete phrase" (Ibid.).

[2] Gestures from the Soundpainting language are placed in quotation marks.

Language and Metaphor

This system of signs may be understood as language-like because it has a consistent structure that requires signs to be sequentially ordered according to who, what, how, and when. "Who" must be signed first to distinguish between performers in the group; "what" must be signed second to determine what content is to be performed; and "when" should always be signed last as this instigates performer contribution. Signs are issued with the Soundpainter standing up with bent knees—the bent knees symbolize preparation and inform the group to "get ready" (Ibid.). "When" gestures are signed in an imaginary "box" in front of the Soundpainter: when the Soundpainter leans into the "box" the performers react to the signs. "How" the material is to be performed is an optional part of the language: the Soundpainter can choose whether to indicate volume and tempo. How content should be played can be imposed, but there is the opportunity to leave some aspects entirely up to the performer. When "how" is determined, it must be signed before "when," to ensure that it is applied to content.

Although signs have a defined meaning, they are not entirely prescriptive. Like verbal language, which can be tailored to generate a personal style and tone, Soundpainting encourages individual contributions from the performers. Most notably, individual contributions are fostered by using "sculpting" gestures: these are gestures which search for material without determining exactly what is to be performed. For example, the Soundpainter might start a performance by searching for a sound which is not of the painter's choosing by signing "point to point": the Soundpainter points at individual performers requesting them to play anything of their choosing as long as they are being pointed at. Each time the performer is pointed at he or she must offer new material. Once the material is offered the Soundpainter can either stop it, or negotiate with the performer to alter and develop the content.

Thompson has acknowledged that at first he had not realized the signing structure had become so refined. During 1974–1997 the structure was used but without name. It was at 1997 residency at Woodstock that Thompson and Sarah Weaver classified this syntax more precisely as:

- **Who**: "whole group" (appendix), "brass" or "dancer" – these "function" gestures can be very specific and relate to individuals.
- **What**: "long tone" (appendix) or "point to point" (appendix) – these "sculpting" gestures specify content, and although it is possible to request something specific (e.g. middle C), if "long tone" is signed without a note name, there is a choice left for the performer, as to which tone they play. What also uses "function" gestures to ask performers to "continue" or for the Soundpainter to denote "this is," in order to identify the performed material, for example, as a "memory."
- **How**: (optional) "volume fader" or "tempo fader" – these "sculpting" gestures impose and change how loud or fast the performers should play.
- **When**: "play" [appendix], "stop", or "fade in/out" – these "functional" gestures control when performers contribute.

The labeling of gestures seems all-important in establishing their communicative process. The "iconic" status afforded these gestures by Thompson establishes them as signs with direct reference to artistic elements. They are gestures that represent the sound produced through our metaphorical understanding of music as a spatial and temporal art form. By classifying them as "iconic" (Thompson 2010), Thompson recognizes an inherent reference to everyday language accompanying gestures. Examples of signs created to relate to everyday activities include the following: "volume fader," which is based on a studio reference to amplifier faders in that they can be pushed up and down in a straight line by the fingers; and "play," which is taken from bowling. The release of the ball is equated to the start of the gesture response, the point at which the performer must react to the Soundpainter's request. Other, more advanced, gestures correlate to everyday functions: the turning of a key in a lock by a single hand equates to the musical "key" and so allows the Soundpainter to request modulations and specific tonal regions.

Soundpainting emphasizes the problematic lexicon musicians and dancers share in that its language is often insufficient, contradictory or metaphorical. The term Soundpainting itself, for example, is perplexing and demonstrates the metaphorical basis of the gestures as well as the mapping between the audio and visual elements which is integral to this creative process: a gesture is a silent movement, which bears meaning, but is only realized when someone responds by interpreting it in sound and/or movement. Figure 1 illustrates how a dialogue is formed between the Soundpainter and performer: it represents the reciprocal nature of Soundpainting in the reliance of Soundpainter on the ensemble and vice versa.

This model combines the many aspects of communication detailed by Jensenius et al, after Zhao and McNeil, in a collaborative study of interpreting music through bodily engagement (Jensenius et al 2010, 14). They identify three dimensions that offer a useful frame to reassess the gesture types used in Soundpainting. First, gesture is a type of non-verbal communication, as also exposed by Lidov: "[a] true gesture is a precise non-verbal articulation" (Lidov 2006, 30). Second, as Soundpainting sets up a system of gesture

which is classified, taught, assessed and reproduced by all Soundpainters, there is a level of "control" (Jensenius et al 2010, 14). Finally, at the core of each gesture there is a "metaphor" (Ibid.).

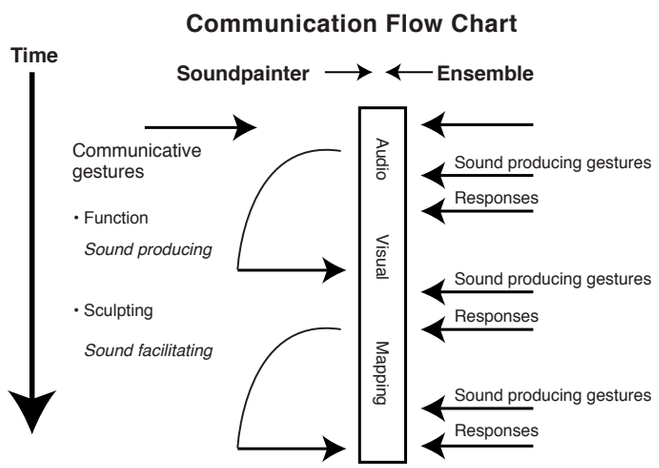
An interesting problem arises because of the audio-visual mapping in Soundpainting: gesture name and performed content are not always transparent as gestures can have different meanings in different art forms. Gesture names derive from music, but they are intended to apply across the arts. A Soundpainter may request a "long tone" (see appendix), which in name refers to a sound; the response from a dancer, however, may be a movement. These parameters can therefore be understood metaphorically; performers are actively required to seek equivalences between media.

The gesture analyst Steve Larson highlights similar problems in interpreting musical gesture: to understand "melody as a 'gesture' is to conceptualize music in terms of physical motion" (Larson 2006, 61). Thompson's compositional approach is predicated on meaningful relationships between the audio and visual, mapping sound onto movement and vice versa. Rachel Duerden, in reference to dance, asserts that gesture "function[s] in a way akin to metaphor" (Duerden 2007, 73). The interpretative process through which performers must travel in order to respond to Thompson's metaphorical gestures encourages them to explore this audio-visual mapping. Moreover, in charting the cognitive dimension of gesture, Zbikowski considers whether musical gestures must be metaphorical (Zbikowski 2010). If one thing can be said by means of another, as a metaphor, mapping between the audio and visual shaping of the piece is possible.

The creation of music-movement works in the moment through Soundpainting requires recognition of the metaphors which are innate within the creative language. Two conceptual metaphor categories are highly pertinent to music-dance exploration in Soundpainting: *conduit* and *spatial* metaphors (Minors 2012). A conduit metaphor conceptualizes communication as a physical transfer, while spatial metaphors rely on physical experience. Thompson's perception of his real time creative act corresponds to these categories of metaphor because the Soundpainter requests material, to which a performer responds, and the Soundpainter must respond in turn to create the work. A transfer of ideas between performers is encouraged by the Soundpainter in signing performers to "relate to" one another in a way of their choosing. The spatial metaphor is used in signing pitch and volume via height, as well as by using a defined space, the box, to compose within.

Thompson referred to a "road map" in the questionnaire, and the journey on which he will put up no "road block." The ensemble and the Soundpainter work together on an unknown journey, without an awareness of how long it will be,

Figure 1: Soundpainting communication flow chart



exactly what form it will assume or what interactions will occur en route. The lack of road blocks allows the performer a certain liberty to contribute to the creative act without worrying about going off-track. The liberty that is afforded each performer further emphasizes the distinctive Soundpainting approach, which, as noted, accepts diversity and creates in the moment while recognizing no mistakes as long as the Soundpainter uses the established Soundpainting syntax.

Dialogue Generative Gestures

Many of the Soundpainting gestures can be described as conduit metaphors. For example, "relate to" (which is a "sculpting" gesture) asks selected performers to relate, in a manner of their choice, to another specific performer. Requesting a group of performers to "synchronize" with an individual, as noted above, asks performers to search the content performed by the individual, and then to seek to copy or emulate an attribute of what is happening via their own performance. During *Soundpainting Passion Play* (2010), created by Thompson and based on *Passion Play* by Sarah Ruhl, Thompson signed for the "rest of the group" in order to "synchronize" with a soloist. The result was that all actors and musicians repeated the same text in rhythmic unison. It is notable that not every artistic element is matched: in this instance, the rhythmic pattern was taken as the source for synchronization rather than pitch or intonation (Thompson 2010b, 00.53–01.19). Unless a specific relational parameter is signed, the performer will have to "search around to find another performer with whom to synchronize" (Thompson 2006, 35). These gestures show that musicians and dancers can produce a meaningful exchange in real-time because they are asked to share material across the sonic and visual domains. Soundpainting encourages a dialogue between artists, intending to "elicit performer-performer communication" (Thompson 2010), but the form of that dialogue requires personal choice.

The spatial metaphor is relevant in Soundpainting due to physical gesture. For example, the gesture "shapeline" asks the performers to read the Soundpainter's body as a graphic score or as dance notation. The movements which s/he produces are then responded to by the ensemble. Thompson's experience shows that musicians usually respond in a complementary way, utilizing metaphor: the height of the arms is usually mapped onto pitch, while the space around the Soundpainter often relates to volume. Moreover, should the Soundpainter move, the speed of the steps is equated with tempo, and the weight of the steps correlated to articulation. It became clear that although the Soundpainting language is multidisciplinary—intended to be read by any art form—the performers' disciplines affect their responses, as actors were much more likely to offer a contradictory response. An actor's responses may well compete for attention and contrast to those of the Soundpainter.

In an artist residency, culminating with a Soundpainting concert at Roehampton University in 2008 (Thompson 2008), Thompson used "shapeline" on three different occasions. First, when gesturing as though he were holding a weight in front of his stomach, the group (comprising mostly musicians plus two dancers and two actors) responded with mid-range pitch material, using fairly loud dynamics, clearly equating dynamics with muscle intensity. Second, when asked to use the voice to respond to the "shapeline" gesture, Thompson's partial shrug movement in the shoulders resulted in a questioning, pitch-ascending response from the group which had a similar pitch contour to speech. Third, a dancer, sitting on the front of two long semi-circular rows, related volume changes to the amount of space she used, while pitch changes produced a side-to-side movement.

At this stage in the research, seeking evidence that performers are able to construct a dialogue in Soundpainting, and identifying the types of responses that performers offer, has provided insight into why these gestures are so strongly considered to be "iconic" by Thompson, and into the ways in which they are rooted in metaphor. Further research, however, across a number of ensembles would be required to establish exactly how and why certain responses occur (Thompson 2006, 6.05–6.35).

Contexts: Using Signed Systems to Generate Musical Performance

Soundpainting is not the only sign system used to create music, though it is distinct because it can be used for interdisciplinary performance. In its name, Soundpainting uses a visual art form as an analogy for how the performance is constructed. It proposes a crossing of the senses that is appropriate to its multimodal emphasis.

Walter Thompson first began signing in 1974, while leading his first ensemble of musicians and dancers as saxophone player and conductor. As a composer working with written notation, Thompson had asked musicians to improvise on material he had specified in the score, though realizing that their improvisation had little connection to his notation, he "tried signing several performers (musicians) to play a long tone—I pointed at a few people, made an iconic gesture for a long tone and signaled them to play it, and they did" (Thompson 2010). The gesture Thompson signed for "long tone" was immediately grasped by the ensemble. He had raised his hands in front of his chest, and joining his thumb and index fingers, had stretched out a line in front of him by moving the right and left hands apart. The immediate reaction of Thompson's ensemble is revealed in his labeling of them as iconic gestures.

Thompson's creation of codified signs to guide live performance can be compared with two other musicians who developed their own set of signs in the 1970s: Frank Zappa (1940–1993) and Lawrence D. «Butch» Morris (b. 1947). Though each musician has a different set of principles, it is important to place Soundpainting in context, as it reveals a shared understanding that a visual gestural system can produce a work. The comparison highlights that Soundpainting is distinct because of its emphasis on audio-visual dialogue between musicians and movement artists.

Zappa used "hand signals" to direct his band, "to give them cues to create sound effects [and] sometimes these cues are extended to the audience" (Zappa 1973). He demonstrated this approach on Australian TV in 1973: using signed directions, he requested audience participation. In this instance, Zappa directs sections of the audience to applaud and directs the volume of their applause (Ibid.). Zappa generated signs to indicate certain sound effects. Three examples that are clearly visible on many of Zappa's videos include the raising of the middle finger pointing upwards to indicate a high-pitched sound to be produced vocally or instrumentally; a clenched fist held upward and then dropped, to indicate that the band should play a low group of notes on their instruments; and an open cupped hand which moves up and down in arch shapes to indicate pitch bending, with an upward movement correlated to a higher pitch and vice versa.[3]

Zappa situates himself as composer, by directing what content is to be performed. Paul Carr and Robert J Hand, interpret Zappa's use of signs as a way to cross genres, by using a variety of instrumentalists from different backgrounds, and to generate virtuosity (Carr and Hand 2008). What can be

[3] A selection of interview extracts and live performances in which Zappa uses signs is available at, Frank Zappa, «Zappa Performance», http://www.youtube.com/watch?v=8_ApXjLB00o (last accessed 14 May 2011).

created via Zappa's hand signals goes beyond what he can compose on the page, by the ability to incorporate complex sound effects at a spontaneous moment of his choosing. In this way, his signs supplement his pre-composed music. Like Thompson, who states that the Soundpainter is the composer, Zappa claimed: "Music comes from composers – not musicians. Composers think it up; musicians perform it" (Zappa 1989, 176). This further emphasizes Zappa's role as the leader. Thompson recognizes that he stands in a similar position and holds some of the responsibilities of a conductor, though he identifies a different process: "Conductors and composers collaborate to make a work… the Soundpainter does the same thing in the moment" (Thompson 2010). The ability to impose content and to be spontaneous are distinctions Thompson makes between Soundpainting and conducting, the latter of which is restricted to the interpretation of pre-composed music.

According to interviews with his band members, Zappa was very clear about how his signs were to be performed: he would induct his performers to the meaning of the signs during rehearsals, so that in performance he could apply them when he felt it was necessary. But importantly, this sets up a further distinctive feature of Soundpainting, because the Soundpainter responds in the moment to whatever the ensemble offers. In using what the performers offer, Thompson constructs a liberal creative dialogue. I use the word "dialogue" carefully to indicate the freedom of the performer—the Soundpainter does not prescribe an exact response to all his/her signs. There are gestures which direct precise responses: for example, it is possible to sign exact pitches, chords and rhythms. Many signs, however, are used to provide guidance to the performers: using "sculpting" gestures to iterate what content is to be performed, for example, a style of music can be requested, such as "minimalism" (Thompson 2006 and 2009). In using the "sculpting" gesture "pointillism," a style of music is denoted where the performers are asked to use their understanding of this style to produce content which is comparable to the techniques of "pointillism." The parameters of that style are not made explicit: it is left to the performer to recognize the style being requested and to re-create some attribute of it.

Butch Morris offers perhaps the closest parallel to Soundpainting of another creative sign system. Morris works with a conductor's baton (as Zappa sometimes did) and creates an "elaborate system of visual cues" in a process that he calls conduction (Cassin online). His philosophy resonates well with Thompson's, not least because as well as leading, in the manner of a conductor, he becomes a vehicle through which energy and creativity is transmitted and transferred. The signs he uses have specific meanings, to which he carefully introduces his ensemble. Like Zappa the signs are used to shape and alter the content which is being performed. The ways in which the signs are used are not restricted to a specific syntax in the manner of Soundpainting. There are some interesting differences: Thompson does not use a baton as the gestures require both hands, and sometimes the body. Morris perceives his creative act as a structured improvisation, in contrast to Thompson, who considers his approach to be composition. Though Thompson allows extemporization, he stresses that it is the Soundpainter's role to edit and control the offerings of the performers. Morris works with jazz musicians: his codified signs are specific to this musical context. Like Zappa, he allows improvisation in the manner of jazz, or free improvisation, and may then use signs to adapt the performance. Soundpainting in contrast, does not adapt improvisation which is performed according to other conventions. Rather the signs have to be iterated in a full phrase before performance begins, ensuring that the Soundpainter has imposed his/her authority by selecting what content is to be performed, in what manner, and when.[4] Soundpainting developed in a similar context and is still in a certain sense used by jazz musicians,[5] but Soundpainting has expanded within and beyond this musical genre, notably by its application to dance, visual art and acting.

Gesture and Syntax

How is Soundpainting an act of composition? Unlike notated composition, Thompson claims to compose in real time. The Soundpainter's gestures allow him or her to adapt what is being offered by the ensemble in the moment, as well as to predetermine some material. Though improvisation is a contributing factor, the leadership of the Soundpainter subtly alters the nature of this creative method. For example, the Soundpainter might ask performers to "change" the material they are performing without stipulating how this change is to occur, or the painter might refine this request by asking the performer to change the rhythm, alter the dynamics or adapt the tempo. The Soundpainter can choose to impose material by signing precise pitches and rhythms, or s/he can choose to request chance material by using "sculpting" gestures which suggest a style without defining exactly how it should be performed. Because the performers draw on their individual backgrounds in their responses, the Soundpainter is able to draw out the diverse

[4] For more information on Morris and Conduction see, Morris, «Conduction», http://www.conduction.us/main.html. Morris's jazz connections are introduced in Alex Stewart (2004), «Contemporary New York City Big Bands: Composition, Arranging and Individuality in Orchestral Jazz», *Ethnomusicology* 48/2, p. 169–202.

[5] Soundpainting workshops are held regularly by Jazz organisations, including the Union des Musiciens de Jazz, «Master-class Soundpainting 25–27 June 2011», http://www.umj-asso.com/news.php?id=66 (last accessed 12 June 2011).

nature of the ensemble in performance. The Soundpainter then listens to what is offered before choosing to impose any changes. In contrast to improvisation and composition (and to Zappa's approach), Thompson eliminates the notion of error from his creative vocabulary in order that "creativity is never stifled" (Thompson 2010). Furthermore, Thompson neither restricts his ensemble to a notated piece, nor does he allow complete free improvisation. Though created in real time, Soundpainters maintain the ability to modify all parameters of the performance from the volume and tempo, to the rate of thematic development, instrumental combinations, imitation, and articulation, to name a few.

In attempting to compose the work, Thompson explores ways to structure it by reusing material ("memory 1" [appendix]), developing material ("develop"), distributing what one performer offers across the ensemble ("relate to"/ "synchronize") and incorporating pre-composed material ("palette"/"palette punch"). "Memory" allows the Soundpainter to repeat material and use it in different parts of the texture at any point within the performance. For example, if the Soundpainter hears/sees something which s/he wishes to reuse, s/he must indicate that the material being performed, "this", is "memory 1". There can be many different memories which allow different ideas to be repeated. "Palettes" however, are short pre-composed pieces which can be newly composed or extracts taken from another work. Shorter preconceived ideas are also used ("palette punch"). The "palettes" may be scored and integrated into the work at any point (when the palettes will be played, by whom, and how often, is not prescribed in advance). A "palette punch" might be a single word, a short physical movement, a melody or chord sequence, or a phrase combining dance gesture and sound. A "palette" may be of any length, taking a section of a pre-composed work or a short motive.

Thompson notes that the only opportunity for the performers to use free improvisation would be if the following gestures were signed as the phrase "whole group," "improvise" and "organically develop": in other words, play what, when and how you choose (Thompson 2010). The Soundpainter and performer respond to each other in a mutually understood language. Responses to the signs are not wholly predetermined (it depends on the level of detail provided by the gesture): mediation and guidance are central to this process.

Conclusion

The Soundpainting language offers a way to communicate across the arts in the moment, but like all art-related languages, its lexicon has limitations and irregularities. Soundpainting aims to be an audio-visual experience for all performers, regardless of their artistic discipline. The language is constructed so as "not [to be] discipline specific" (Thompson 2010), though, the discipline of the practitioner often informs how s/he interprets the gestures. This is particularly relevant when a performer is directed to seek equivalences across music and movement, as might be requested with the "synchronize" sign.

The signing of coded gestures, using silent movements, delivers meaning to the performers. The gesture surely requires a response, which issues the performers' interpretations of the combination of gestures signed by the Soundpainter, and so begins a dialogue between Soundpainter and performers. It is left to the Soundpainter to foster performer-performer dialogues via the dialogue generative gestures which are at the heart of the Soundpainting method.

Moreover, the crossing of the audio-visual sensory domains is akin to a dialogue, because all parties contribute to its delivery and interpretation: this exchange between Soundpainter and ensemble is central to Soundpainting. This multi-way process offers creative artists, working across disciplines, a method to foster an inter-art dialogue not otherwise available in current pre-composed or free improvisatory methods.

Soundpainting is a creative meta-language, able to speak across the arts. Thompson has utilized the overlap between traditional notions of composition and improvisation to establish a way to create and edit music-movement dialogue in real time. Thompson puts into practice a number of the issues which gesture analysts (including Larson) have identified. The signs he creates are best referred to as gestures because they bear meaning, and also because they provoke offerings which themselves bear meaning in return from the performers. The performers' offerings bear meaning as the other performers can use their performed content as a basis to start a dialogue. As Thompson sums up, the Soundpainter is "[t]he instigator for communication among an ensemble" as well as "a catalyst for creation and mediator for artistic dialogue" (Thompson 2010).

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Appendix: 10 basic Soundpainting gestures

Syntax	Gesture Category	Gesture Shape	Notes
Who	Function	Whole Group   Rest of the Group	«Rest of the group» can only be signed once someone is carrying out an activity.
		 Group (plus number)	This sign is followed by an indication of number; if it is used there is always more than one group.
What	Sculpting	 Long Tone	The arms move outwards from the middle. The body represents register (high-low).

Syntax	Gesture Category	Gesture Shape	Notes
What (cont'd)	Sculpting (cont'd)	Pitch Down   Pitch Up	These gestures are made by moving the hands forward for each in tone.
		 Point to Point	Selects individual performers.
		 Memory 1	First, flat arm line in front of the body to note «this is», then «memory»: helps structure a piece, compose the music.
What	Function	 Play	Moving forward, as though bowling.

Photos: Matthew Richings

REFERENCES

BUTCH, Morris (n.d.). "Conduction," http://www.conduction.us/main.html (accessed July 2011).

CARR, Paul and HAND, Richard J. (2008). "'Twist'n frugg in an arrogant gesture': Frank Zappa and the musical-theatrical gesture," *Popular Musicology Online*, http://www.popular-musicology-online.com/issues/05/carr.html (last accessed 14 May 2011).

CASSIN, Alessandro (n.d.). "An interview with Butch Morris," http://lacan.com/frameXII7.htm (accessed 14 May 2011).

CONE, Edward T. (1974). *The Composer's Voice*, Berkeley, The University of California Press.

CUMMINGS, Naomi (2000). *The Sonic Self: Musical Subjectivity and Signification*, Bloomington, Indiana University Press.

DUERDEN, Rachel (2007). "Dancing in the Imagined Space of Music," *Dance Research*, 25/1, p. 73-83.

HATTEN, Robert (n.d.). "Lecture 1: Toward a Characterization of Gesture in Music: An Introduction to the Issues," *Musical Gesture*, http://www.chass.utoronto.ca/epc/srb/cyber/hat1.html (accessed 7 June 2011).

HUMPHREY, Doris (1959). *The Art of Making Dances*, Barbara POLLACK (ed.), London, Dance Books.

JENSENIUS, Alexander Refsum, WANDERLEY, Marcello M., GODØY, Rolf Inge and LEMAN, Marc (2010). "Musical Gestures: Concepts and Methods in Research," in, *Musical Gestures: Sound, Movement, and Meaning*, Rolf Inge GODØY and Marc LEMAN (eds.), New York, Routledge, p. 12-35.

LARSON, Steve (2006). "Musical Gestures and Musical Forces: Evidence from Music-Theoretical Misunderstandings," in *Music and Gesture*, Anthony GRITTEN and Elaine KING (eds.), Aldershot, Ashgate, p. 61-74.

LIDOV, David (2006). "Emotive Gestures in Music and its Contraries," in *Music and Gesture*, Anthony GRITTEN and Elaine KING (eds.), Aldershot, Ashgate, p. 24-44.

MINORS, Helen Julia (forthcoming 2012). "In Collaboration : toward a gestural analysis of music and dance," in *Bewegungen zwischen Hören und Sehen - Musik, Tanz, Theater, Performance und Film*, Stephanie SCHROEDTER (ed.), Bayreuth, Forschingsinstitut für Musiktheater des Universität.

STEWART, Alex (2004). "Contemporary New York City Big Bands: Composition, Arranging and Individuality in Orchestral Jazz," *Ethnomusicology*, 48/2, p. 169-202.

THOMPSON, Walter (2006). *Soundpainting: The Art of Live Composition, Workbook 1* [with DVD], New York, Walter Thompson Orchestra.

THOMPSON, Walter (2008). *Soundpainting Residency*, Michael CHANAN (filmed), Helen Julia MINORS (produced), Centre for Interdisciplinary Music Research, Roehampton University, London.

THOMPSON, Walter (2009). *Soundpainting; The Art of Live Composition, Workbook 2* [with DVD], New York, Walter Thompson Orchestra.

THOMPSON, Walter (2009b). "Walter Thompson Interview: 9 July 2009)," *Taran's Free Jazz Hour*, http://taransfreejazzhour.com/podcast/walter-thompson-interview-11-july-09.html (accessed 10 March 2011).

THOMPSON, Walter (2010). "Questionnaire: Written and Conducted by Helen Julia MINORS," Kingston University, London.

THOMPSON, Walter (2010b). *Soundpainting Passion Play*, Walter Thompson Orchestra 4 May 2010 Irondale Centre, Brooklyn, New York, available at http://www.youtube.com/watch?v=-cMpxV0jVZQ (accessed 7 June 2011).

ZAPPA, Frank (1973). *Adelaide Tonight*, Interview with Frank Zappa, NWS, Channel Nine, Australia 4 July, http://www.youtube.com/watch?v=sTel7GtLck4 (last accessed 14 May 2011). A number of Zappa interviews are available at "Tonight," http://wn.com/Tonight

ZAPPA, Frank (1989). *The Real Frank Zappa Book*. New York, Poseidon.

ZBIKOWSKI, Lawrence (1997). "Conceptual Models and Cross-Domain Mapping: New Perspectives on Theories of Music and Hierarchy," *Journal of Music Theory* 41/2, p. 193–225.

ZBIKOWSKI, Lawrence (2011). "Musical Gesture and Musical Grammar: A Cognitive Approach," in *New Perspectives on Music and Gesture*, Anthony GRITTEN and Elaine KING (eds.), Farnham, Ashgate, p. 83-98.