

Prolegomena to a comprehensive Theory of Gesture — The Kinesics Analysis in the Investigation of Emotion Expression in Music Performance

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Resumo-abstract: The main contribution of this paper aims to discuss body language within musical performance, and to contribute to a theory of Gesture as a practice within musical performance. Based on a point-light technique approach, empirical evidence has shown that the abstract movement of the point lights (resulting from the video recording of a series of facial movements while experienced singers expressed different emotions in singing performance) had sufficient dynamic information to be recognised by an audience according to the emotional intention performed by the singer. It seems, then, that performers, conscious or unconsciously, use physical gestures associated with emotional states and other expressive issues as a basis for shaping musical expression. Ultimately, it is possible to consider that bodily movements may function as indicators of expressive intentions of the performer and, when linked to important music structures, may also be seen as given musical expression to emotional states presented through the music.

Keywords: Music; Emotion; Performance; Gesture; Kinesics

Fundamentação Teórica- Theoretical Background

Empirical research in musical performance (Clynes, 1980; Clarke, 1985; Gabrielsson, 1994, 1995; Scherer, 1995; Gabrielsson and Juslin, 1996; Salgado, 2000; Juslin and Laukka, 2000; Juslin, 2001; Cox, 2001; Davidson, 2001) has revealed that musical creativity concerned with the expression of emotional meaning presents gestures (vocal and kinetic) that can be considered as the parallel of structures between two sets of processes: musical processes and processes of affective states. It has long been stated, but it seems nowadays better understood and confirmed by empirical evidence, that there is an inherent homology of organisation and dynamics between the sounds of music and the movements and, even, dynamics of our affective life and the patterns of movement “whose general

characteristics are similar to bodily movement symptomatic of human emotions, moods or feelings” (Shove and Repp, 1995, p.58).

Davidson studies (1991, 1993), based in Gibson's (1979) ecological approach of perception, demonstrated that the body movements made by performers while playing contribute to the expressivity of the performance as judged by the audience. Davidson's demonstration seems to be mainly concerned with the detection of bodily movements as indicators of expressive intentions significantly linked to important music structural features provided in a notated score. Meanwhile, there are other authors, like Shaffer (1992:265), for instance, who claim that performers, conscious or unconsciously, seem to use physical gestures associated with emotional states as a basis for shaping musical expression. Ultimately, it is possible to consider and experimentally to confirm that bodily

movements functioning as indicators of expressive intentions linked to important music structures can also be seen as physical gestures given musical expression to emotional states presented through the music.

In a previous study Salgado & Wing (2002), found evidence showing quantitative and measurable differences between different facial emotions, when intentionally expressed by experienced singers during their singing-musical performances. Based on these assumptions and in the point-light technique of Bassili's work (1978) Salgado (2002) has investigated how and if the abstract movement of the point lights (resulting from the video recording of a series of facial movements while experienced singers expressed different emotions in singing performance - while having some reflectors markers hanging on special muscles, anatomically chosen for the effect) showed sufficient dynamic information to be recognized by an audience according to the emotional intention performed by the singer.

Objetivos-Aims

This paper aims to discuss body language within musical performance, and to contribute to a Theory of the Gesture as a practice within musical performance. And so, to be able to implicate and include the investigation of the expression of emotion in music performance within a more general investigation of the emotion communication in mankind as it is done, for instance, in Birdwhistell (1954) Kinesics Analysis, or in Hall's non-linguistic(1963) System for Notation of Proxemic Behaviour).

Método-Method

To contribute to a Semiotics Theory of Music Performance, through the development of a Theory of the Gesture as a practice within musical performance, and through a semiological review of the empirical evidence of emotional expression in music performance (singing).

Resultados-Results

The analytical results of this investigation, together with the amount of evidence from empirical research exposed above, will allow the constitution of a new performative semiological model as a basis for a better understanding and a better classification of the different levels of perception and awareness of the empirical evidence of emotional expression in music performance (singing).

Conclusões-Conclusions

The investigation taken, nowadays, on the subject of body movement expressiveness, and the evidence revealed through the latest empirical research in Music Performance on this matter (some of which it has been presented above surely not in an exhaustive way) allow us to take into consideration some of these meaningful elements and to try to understand better the role of the gesture within the expressive communication of musical meaning.

The investigation in the field of body movement expressiveness has been using lately such specific and subtle techniques (i.e., the point-light technique of Bassili's (1978) which has been used by Davidson's (1991) and Salgado's (2002) music performance empirical research) that it was able to reveal some major evidence in the field of Gesture communication. One of these

relevant empirical findings brought to light by the empirical research in music performance revealed that even the “abstract” register of an expressive body movement (conveying, for instance, a determined emotional meaning) has in itself enough dynamic information to be recognized by an audience as the expression of that specific emotional content.

A possible explanation for this human ability to interpret such “abstract” registers of the expressive gesture could be, according to Churchland (1995), that we are biologically attuned to categorize nuances far beyond those for which we have labels in our language. In fact, Churchland (1995, p.84-91) has shown that some neural networks can “learn” quite subtle discriminations even without “knowing” what is they are discriminating.

Another possible explanation would be to consider that gestural dynamics and shaping can be expressed through many different senses, all of which share the characteristics of continuity through time (Hatten:L2:5). And so, “intermodality” could be another reasonable key to understand the perception and processing of the meaning expressed through a “abstract” register of a specific expressive gesture. In fact, we should seek to understand these “abstract sublimations” as a kind of emergence whereby the gesture maintains its characteristic potency while gaining a factor of generalization or type-formation. This generalization seems able to convey information about the gesturer and/or the expressive content conveyed intentionally, or not, through it. Salgado’s (2002) empirical research revealed that, when a singer performed the emotion of fear, for instance in the passage where the child cries for help, frightened by the presence of the King (=death) in Schubert famous song “Erlkonig”, the

content of that emotion appeared clearly expressed vocally as well as facially, evidencing that inter-modality between aural and visual signals in communicating gesturally is plausible. Beyond the limits of structured music notation, or even beyond the limits of the multi-channeled music performance, it seems that the performer and the perceiver seek instinctively the artistically conceived e-motion, which is very often nothing else but our immediate interpretation of motion.

In his lectures on Musical Gesture, Hatten (1999:L1:1) has considered gesture “as movement that is marked for its significance, whether by or for the agent or the interpreter.”

Of course Gesture, intentional or not, could be seen as Hatten (1999:L2:5) suggests, as “movement interpretable as a sign”, or as Lidov (1993) puts it “as movement that is marked as meaningful”. But on the other hand, we should also consider that though interpretable as a sign, gesture should be not seen as a term of a process of communication, in the sense a word or a concept use to be considered.

Gesture should not be seen as a replica, i.e., a mechanic duplicate of a word, as another re-presentation of the Same (meaning, in this case). Gesture should not be conceived to (re)present meaning the same way the word-sign (re)presents it. According to Oléron (1952, p.47-81), Gesture should be seen as a process anterior to re-presentation and having a direct participation in the action of re-presenting something as well as in the reality itself. Gesture should be seen as an activity “happening” before the message is presented and the meaning constituted. So, within a process of communication, Gesture has a practical character and, though it can be seen as a message inside a pre-established group, it seems to be, in fact, the process of elaborating

the message itself and the work that precedes the constitution of the meaning.

So, the gesture seems to work as a demonstration process, indicative of an action existing previously to the idea or consciousness of the relationship sign/meaning. Previous to the sign and all the problematic of meaning (and the connected significant structure), it is possible to conceive a practice of designation (of indexicality), a Gesture that indicates, that shows, not with the purpose of meaning (intention to signify something) but to approach (in-globing) within a same space the subject, the object and the practice, avoiding this way the typical west world dichotomy of spirit/body, idea/word, sign/meaning. (Kristeva:75:Pratiques et Langages Gestuels: Marcel Didier et Larousse: Tr. Manuela Torres:75:Ed. Vega).

In this sense, Gesture should be understood as a process which includes the subject-the object-and the practice itself within a same empty relationship (i.e. the elements of this relationship are not conceivable separately). This relationship is one of an indexical type, but in no way of a significant type. It only would be able to become significant "afterwards", it is to say: within a new relationship - the one concerning the word/sign and its significant structures.

So, if we consider the gesture:

- i) irreducible to the sign and preceding it, and
- ii) constitutive of the meaning and designative of the reality,

we will be able to understand its relevance as practical element within the process of the expressive communication in music performance.

Music, performed music, is before anything else body movement, body-in-movement. To play music, it is to be able to produce sound through

expressive body movements which will "in-form" the sonorous material with the "quality" (Firstness), the "intentionality" (dynamics) (Secondness), the "symbolism" (Thirdness) of the gesture that precedes it, following the classification of Peirce's categories. Of course, these categories will only apply to the "afterwards" of the elaborated sign, and not to the Gesture itself. A pointing finger, for instance, is culturally marked for indexicality (a practice of designation with no purpose of meaning, as it was clarify above). Even if it has its relevant "meaning" marked culturally, other features of the gesture remain dependant of the constitution of the meaning through the elaboration of the significant structures of the sign (i.e., emotional state of the gesturer, intentionally conveying power, etc).

To conclude this theoretical considerations on a guise of prolegomena thoughts to a comprehensive theory of gesture, three majors presuppositions should be taken:

A) A theory of Gesture should take into consideration this "beforeness" quality of the gesture and try to approach its practice as relational and transgressive to the verbal structure, bringing an openness as well as an extension to the system of the sign (which is posterior to it but through which we are able to think the gestural practice).

B) This Theory of Gesture should take into consideration that gestures share certain characteristics, being, according to Hatten (1995:L2:5-6):

- a. analog, as opposed to digital or discrete,
- b. hence, continuous in a productive sense of continuity (...)
- c. having articulate shape,
- d. possessing hierarchical potential

- e. characterized by a significant envelope (pre- and post-movement can substantially affect the quality of the gesture),
- f. being contextually constrained and enriched, and
- g. typically foregrounded. (...)
- h. being beyond precise notation or exact reproducibility, but
- i. amenable to type-token relationships via cognitive categorization or even conceptualization, and thus,
- j. potentially systematic to the extent of being organized oppositionally by type, as in gestural “languages” or ritual movements,
- k. Posture should be considered as gesture “under a fermata”. (...) The posture reverberates with the resonance of the implied gesture of an agent.

C) Finally, a Theory of Gesture, should choose a methodology dealing with the communicative aspects of the learned and structured behavior of the body in movement (as within Birdwhistell’s (1954) Kinesics Analysis), aware of how gestures are organized as a “pre-code” system within the process of communication (as within Hall’s non-linguistic(1963) System for Notation of Proxemic Behaviour), and aware of the dangers of importing linguistic models to analyze gestural communication.

Subáreas de Conhecimento-Other Subjects

A Mente e a Percepção musical;
A Mente e a Produção musical;
Artes Musicais, Lingüística, Semiótica e Cognição.

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