# ON DISPLACEMENTS 1B: TIME, TYCHISM, SPACE, AND EMBODIMENT

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#### ABSTRACT

This paper situates the musical work *Displacements 1b* in musical and philosophical framings operative in those discourses and relevant to the thematics of the conference. Particular attention is paid to C.S. Peirce's concept of tychism and the perception of musical time, and on the impact of spatialization of live, acoustic instruments on meaning in musical works. This document is submitted as bridge between the technical and aesthetic aspects of the conference.

#### 1. INTRODUCTION

"We necessarily express ourselves by means of words and we usually think in terms of space. That is to say, language requires us to establish between our ideas the same sharp and precise distinctions, the same discontinuity, as between material objects. This assimilation of thought to things is useful in practical life and necessary in most of the sciences. But it may be asked whether the insurmountable difficulties presented by philosophical problems do not arise from placing side by side in space phenomena which do not occupy space, and whether, but merely getting rid of the clumsy symbols round which we are fighting, we might not bring the fight to an end."

- Henri Bergson *Time and Free Will*, authors preface

"Music is based on temporal succession and requires alertness of memory. Consequently music is a chronologic art, as painting is a spatial art."

StravinskyPoetics of Music

Displacements 1b is the first in a series of works, which will use spatialization to interrogate the role of embodiment in musical performance. The term embodiment refers to the manner in which the performer's physical self is the source of the sonic component of music, the spatial and temporal location of musical action and decision-making, and (in many contexts and for many people), the figure or emblem of music itself. The work involves the projection (or diffusion) of the live

sound of the performers through an array of speakers, and the movement of performers on the stage or in the performance space. These devices are used to literally alienate the performance from the performer, and in doing so call attention to these basic elements of the grammar of performance.

The work also uses rhythmic devices such as open pulse textures and quasi-improvisatory, aleatoric notation, techniques which are of long standing interest in my music. A dynamic rhythmic character emerges from the juxtaposition of strongly pulse driven metered material with freer, 'open-pulse' material. My notation gives performers choice in the timing of passages, the alignment of events, and the order of phrases. Performers are thus involved in musical decision making generally more associated with composition than performance. Aesthetically and technically, I have found these approaches to generate rich and expressive textures, and result in exciting performance environments in which performers are not merely agents of compositional will, but are equal partners is musicking. I will suggest later that the term 'tychism,' though somewhat antique, is an appropriate term for this dynamic approach, superior to other terms such as aleatory or improvisation.

## 2. SPATIALIZATION

In *Displacements 1b* music (or perhaps musicking itself) is spatialized along two different axes, with the performers themselves moving and secondary sources (or 'ghosts') of the audio signals of the instruments also moving through an emitter array and audio spatialization software. These traces or ghost sources perform alongside the physically present ensemble while at the same moment setting themselves apart, in that they exist without a concrete association with a perceived physical source. This is achieved in real-time via VRSonic's Vibestation<sup>TM</sup>, with an iPhone application triggering the movement of sources along predefined splines.

I have described this ghosting as an alienation of sound and performer. I use the term 'alienation' here carefully and positively, in that is it only through such an alienation from our assumptions about seemingly common place actions like musical performance that we can remind our selves of the basic elements of the grammar of performance which have been effaced or downplayed. The mediation of technology enables this physical dislocation. My goal in the work is to decouple and recouple the sound of the performers with the performers' location, and by doing so to remind the listener of the ontological group effort that is musicking. This dislocation can and perhaps should be thought of as a kind of disembodiment.

The term embodiment refers to the manner in which the performer's physical self is the source of the sonic component of music, the spatial and temporal location of musical action and decision-making, and (in many contexts and for many people), the figure or emblem of music itself. In the tradition of Western art music, there is a tendency to minimize the body, be it through standardized concert attire, the suppression of dance responses, or the penetration of acousmatic projection and the mechanical, electronic and digital sound files into quotidian life. We can lose sight of the body, which is present at the start of the musical chain. Ironically, though technology that spatializes and disembodies music is omnipresent (and which disembodies our experience of music every day), finding technology that can do this with the subtlety and nuance expected of music is rather hard to do.

## 3. TEMPORAL ORGANIZATION

In this work as in many of my pieces, the performers are afforded a degree of freedom greater than is typical in a classical score. There are extended passages with no shared pulse stream and using Lutoslawskian frame notation and other 'open score' notations. This approach resonates with the above consideration of the performer as a nexus of performative behaviors. My motivation in using these techniques is in part to produce musical interesting textures and events but even more so to produce a kind of music making in which performers and composers are partners, rather than agents bound to a composer's will.

In Western art music, certain kinds of practice are emphasized, in particular a hierarchical notion of accuracy, in which a primary pulse is, literally, the measure of all other temporal relationships in a particular piece. The Stravinsky quote at the opening of this writing foregrounds the power of temporality in music but doesn't interrogate how this chronologic rule is brought into being by music and (especially) by performers. For Stravinsky, the score is a machine, you do what you're told and something good will come of it, especially if you're playing something by Stravinsky.

My music could be described as 'indeterminate,' a rather inelegant term of our art, a negative definition which has the positive attribute of calling attention to the fact that that not all elements of a given work (i.e.: the tradition 'composerly' features like notes, and the rhythmic disposition of the notes) are as fixed as one generally finds in concert music. Some of these features will be left open to the decisions of musicians in the moment of performance. My notation gives performers choice in the timing of passages, the alignment of events, and the order of phrases. Performers are thus involved in musical decision making generally more associated with composition than performance. Some passages in the work exhibit traditional metric and temporal organization, referred to in the score as 'shared pulse.' In open pulse textures, pulse is not shared between the musicians; individuals organize the sequence of events through cuing. The effect is a free flowing, un-metered but rhythmic texture.

In the work, these open textures are at odds with the necessity of a rigid clock time for the live processing. Each ghost source is on an independent clock, thus giving us 4 distinct temporary strata, each managed by human action.

A variety of terms already in use come close to capturing this temporal ebb and flow, but all have drawbacks. "Indeterminate" is a bit inelegant and imprecise; much is still determined by the composer. It has implications of abandonment, rather than mutuality. Similarly, aleatory, used most often to describe the works of Cage, is problematic. The term became known to European composers through lectures by acoustician Werner Meyer-Eppler at Darmstadt International Summer Courses for New Music in the beginning of the 1950s. According to his definition, "a process is said to be aleatoric ... if its course is determined in general but depends on chance in detail" (Meyer-Eppler 1957, 55). This emphasizes a lack of human agency, when the impact of the technics is actually exactly the opposite, a surfeit of agency. 'Open' would seem a more attractive term, though its use in literary theory would emphasize the impact of these structures on the 'meaning' of the work, which is not really the focus of the techniques. Ludism has picked up associations with 'game pieces' and so perhaps misses the extent to which cases. 'Improvisation', though it captures the character of real time decision making, tends to minimized the channeling of decision-making through very precise and detailed techniques of notation is at this point stylistically or genre bound

I find the term 'tychism' as a somewhat antique but highly appropriate word to describe this aspect of musical performance. Tychism is a concept developed by C.S. Peirce to describe the emergence of order from chance events.

"In an article published in The Monist for January, 1891, I endeavored to show what ideas ought to form the warp of a system of philosophy, and particularly emphasized that of absolute chance. In the number of April, 1892, I argued further in favor of that way of thinking, which it will be convenient to christen tychism (from {tyché}, chance)."

('The Law of Mind', CP 6.102, 1892)

Peirce's friend and colleague William James perhaps articulated his friend's idea more succinctly, calling tychism "Peirce's suggestion [that] order results from chance-coming." My hope is that these techniques will make overt the dynamics of performance which are always in play, but are sometimes masked behind the edifice of precision and accuracy, and remind us that we are, composers, performers and listeners, all partners in the drawing of order out of chaos, chronos out of aion.

### 4. SOME CONSEQUENCES

For a work of chamber music like *Displacements 1b*, a consideration of this basic grammar of performance must look at what it is to play together. The version of *Displacements* performed at the conference underscores the relationship of space in this equation through shifting positions of performers on the stage. Performers pair and related to one another musically, but here these traditional counterpoints and accompaniments are amplified by a choreography of positions, sometimes supporting, sometimes undermining the pairings made by the notes on the page and in the air. The work also underscores the relationship of space in this equation through shifting positions of performers on the stage, and the production

of secondary sources for the sound of those instruments, in effect producing 'ghost' versions of the instruments. These traces perform with the physical ensemble, while at the same moment are set apart, in that they exist without a concrete association with a perceived physical source.

The explicit problematization of the unity of performance and performer is at the core; patterns in those embodiments support amplify the formal structure the work articulate in the other, more traditionally musical elements of the work.

Tychism, as a philosophical concept forces to the surface issues of identity, meaning, and job-descriptions. Collectivity; a performance, and even a work, is the product of the actions of many individuals. My point in advocating for the usage of this term is not to imply that my work requires a new language for description, but rather that there is a tychastic element to all musical expressions, and that the development of a language to describe them is of use.

Similarly, the de-situating and re-situation of sonic production in the body of the performers through the use of spatializing technology forces the fact of human agency in forgetting that music is a product of human action and agency. We can forget music is fundamentally humanistic in the abstract and interpersonal in practice. Much in our world makes us behave as if and perhaps feel that music objectified, commodified and generic, when at its best, most nuanced, it is distinct, personal and human.

This interest in the relationship between music with identifiable, locatable sources and those without emerges from personal, compositional and pedagogical observations on the manner in which acousmatic projection and the mechanical, electronic and digital sound files have fully penetrated everyday life. This is in many ways a powerfully positive influence on musical culture, but there is an associated risk of losing sight of music as a product of human action and agency. For me music is fundamentally humanistic in the abstract and interpersonal in practice. In tonight's work, technology and artifice are used to call attention to the human performance of music – performers and the music they make are repeatedly alienated and reunited, a metaphor, perhaps the ways in which our quotidian experience of music (especially in the heavily mediated, postcommidification realm of recordings, radio and the internet) moves again and again from generic and transactional to the distinct and the personal.