

Spectral Music

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Introduction

Through the articles of this issue as well as those in an upcoming issue dedicated to the aesthetics and music of spectral composers (*Contemporary Music Review*, Vol. 19, Pt. 3), I hope to provide a broad overview of spectral music: its historic roots, composers, aesthetics and techniques. The musical school referred to as 'Spectral Music' was begun in France in the early seventies by Tristan Murail and Gérard Grisey and has become one of the most important schools of composition in contemporary music. Its composers now cover three compositional generations and a large variety of styles. They write for all types of instrumental groupings and often take advantage of new technological possibilities for enriching their musical palettes. The musical approach is profoundly different from both structuralist (post-serial) approaches and hybrid (neo-romantic or postmodern) aesthetics; however, the pieces remain intimately linked to the interpretive tradition of Western instrumental music. While tape pieces have been written by some 'spectral' composers, their goal is not electro-acoustic music, but rather a new type of instrumental music with different sounds, textures and evolutions.

The spectral movement has been centered in Paris and, as a result, much of the material written about it is in French. I hope that these two issues will provide English readers who have not been previously exposed to the ideas of this movement with a coherent introduction while still enlarging the knowledge of those already familiar with the music.

As with all schools of composition, spectral music has defined itself slowly — over the last 25 years — and therefore most of the material

written about it has focused in isolation upon one or another of the composers, without trying to trace the outline of a broader movement. While individual authors in these two issues will still speak in personal terms about specific subjects, the variety and juxtaposition of their views, along with the recurring themes and ideas, should allow the reader to form an image of the overall trend.

What is spectral music?

As with any purely musical classification, it is not really possible for a textual definition to clearly define a musical context. Only through extended familiarity not just with a type of music, but also with its milieu, can one hope to develop meaningful categories that are more than mere simplified labels. As will be seen, not all of the contributors completely share my definition of spectral music, and some have even felt the need to create new subcategories. It is my hope that the totality of these two issues will serve the reader as a means of approaching a more accurate definition than an introduction can offer.

The term spectral music was coined by Hugues Dufourt. However, the most pertinent remark for understanding its meaning was made by Tristan Murail when he referred to spectral composition as an attitude towards music and composition, rather than a set of techniques. This attitude takes on broad aesthetic consequences instead of specific stylistic ones. Thus spectral composers may have vastly different styles and some might even prefer to reject the label. However, what these composers share is a central belief that music is ultimately sound evolving in time. Viewing music in this way, as a special case of the general phenomenon of sound, facilitates these composers' use of the available knowledge in the fields of acoustics and psychoacoustics within their music. They can refine their understanding of what sound is, how it may be controlled and what, ultimately, a listener will be able to perceive. This information, when applied musically, provides powerful new compositional tools. Musical works, as a result, may be conceived much more closely to the manner in which they will ultimately be perceived than would otherwise be possible. Sounds and musical colors (timbres) can be sculpted in time to produce musical effects. The panoply of methods and techniques needed to create these effects and to manipulate sound in this way are, however, secondary. They are simply the means of achieving a sonic end and not a discourse with intellectual pretensions in their its right.

Combining and manipulating spectral materials in the same abstract ways in which intervallic materials are treated (without taking into account the precise nature of these materials and a listener's perceptual

capacities) does not yield music that I would classify as spectral. Spectral composers may, in fact, choose points of departure or make use of materials that are not directly related to sonic phenomena. The manner in which a spectral composer treats and develops his or her material will, however, constantly take into consideration the sonic entity that is being generated.

A score created by a composer with this spectral attitude serves simply as a means of communicating the composer's sonic intentions to the musicians. The score is not the actual musical work and any notational or other innovations that may be present in spectral scores are attempts to express the composer's intent more clearly with regards to the final realization; the actual piece of music *is* the sonic result or at least would be in an ideal performance. Thus, since neither the technical manipulations used to generate and manipulate the musical material, nor the procedural means of notating the score is central or indispensable to spectral composition (these aspects are in fact in constant mutation), we must instead return to Murail's observation that, in fact, spectral music is neither about techniques nor styles but, at its core, is simply a question of attitude.

Readers may still be convinced that I have avoided defining spectral music, by discussing what the music is not, rather than what it is. The affirmations that I might make (that the music has made color into a central element of the musical discourse, often elevating it to the level of the principal narrative thread; that orchestral fusion is often a main feature of its surface texture, so that individual voices are subsumed in the richness of the overall texture and color; that the basic sonic image is often sonorous and resonant giving the music a sort of acoustic glow that comes from the coherence — in the domain of frequencies — of the different constituent pitches; and even that this music simply sounds profoundly different from other musics) are all both true and false. While examples can support every one of these assertions, counter-examples could certainly be found. These issues will treat composers whose music is too diverse for any kind of blanket assertion to be true. The only true constant for all these composers is that they consider music to ultimately *be* sound and see composition as the sculpting in time of those sounds that a listener will hear. All other shared attributes might change with time, but this attitude towards music and musical perception is the true hallmark of a spectral composer.

How to use these two issues

The structure of these two issues is different from that of usual journal issues and requires a brief explanation. I have tried to create a useful

progression of articles, so that, while individual articles may be read separately, the effect of the two volumes will provide a coherent approach to the breadth of the spectral movement. The division between the two issues is in some sense arbitrary, but serves the purpose of allowing more musical discussions to be freed from the burden of the historical or technical diversions, which form the necessary preamble to a meaningful discussion of the music. It additionally permits those important discussions to be presented in a more organized and less repetitive manner.

The first of the two issues is dedicated to the history and techniques of the spectral movement, it begins with an article by Julian Anderson which presents an overview of the spectral movement, from its forebears through its evolutions. Horia Suranu expands this perspective with an article concerning the developments by Romanian composers of a music which shares many aspects with the spectral music defined above and has received little discussion in English-language journals. Steve McAdams and Daniel Pressnitzer then place the acoustic and psychoacoustic ideas of the spectral movement in a scientific context, which confirms some of spectral music's empirically derived notions while refuting others. The last of major article of this first issue looks at an associated issue: technology. Eric Daubresse and Gérard Assayag trace the influence that technological developments have had on spectral composers as well as the role of spectral composers in guiding those developments. Their article then looks in some detail at four pieces, realized at IRCAM, by four different composers, that are revealing, both as to the composers' use of technology within the context of instrumental music and as to the creation of the electronic or electro-acoustic portions of pieces for mixed formations.

What will be noticeable in all of these articles as well as those of the second issue, especially for those acquainted with the existing literature in French, is the lack of lengthy details in the explanations of spectral techniques and calculations. While I believe that anyone truly interested in this music must understand something of these calculations, I feel that the larger picture of musical and aesthetic motivations can often become lost in the minutiae of frequency calculations and conversions. Thus, rather than have each contributor to treat the problem piece-meal, I have provided two technical appendices. The first is a guide to the basic concepts, ideas and techniques of spectral music. In this appendix, I have tried to provide concise definitions of the concepts and techniques most often used by spectral composers, including their calculational aspects. This section gathers together many of these different aspects into one location for easy reference when consulting any of the articles in either issue or, more generally, for those desiring a more precise knowledge of how these techniques are used. This appendix is complemented by a

second one which provides didactic, analytical examples of various techniques, described in the first appendix, taken from works by spectral composers. These examples are often self-explanatory and I have tried to minimize the textual commentary.

A third appendix is a bibliography for these issues and for spectral music in general. Rather than print the often overlapping individual bibliographies that accompanied each article (almost all of the articles referred back to many of the same sources, the majority of which are in French and require some minimal annotations for English-speaking readers), an overall bibliography has been compiled for the two issues with some annotations concerning the commonly cited sources and subsections for the sources relating to only one of the articles.

The second issue is dedicated to the aesthetics and music of the spectral movement. It begins with very short prefatory articles, by the eminent composers Gérard Grisey, Tristan Murail and Jonathan Harvey. These short essays focus on general trends without the distractions inherent to a longer, more detailed text. Grisey and Murail, as the founders of the spectral movement, have a unique perspective concerning its historical evolution and future directions. Jonathan Harvey's article is important precisely because he is not a part of the movement, but has been an interested observer since its very beginnings. His article addresses the importance of the spectral ideas to composers who have no interest in, or desire to embrace, the details of spectral music, but who nonetheless must confront their implications (albeit within the contexts of their own musical worlds).

An article by Claudy Malherbe offers a unique perspective — tracing the parallels that exist between the impressionist movement in painting and the spectral movement in music, in spite of the century that separates them chronologically. The next group of articles are more strictly musicological and are more detailed, referring at some length to specific composers and specific pieces. The two progenitors of the movement Murail and Grisey are the subjects of the articles by Claude Ledoux and Pierre-Albert Castenet, respectively. These articles trace the aesthetic origins and evolutions of these two central figures. Damien Pousset's article discusses the diversification of the movement as it moves down to new generations of composers and becomes less personally identified with Murail and Grisey. He even goes so far as to suggest the emergence of a 'post-spectral' movement. (For me, however, this is simply a question of how narrowly one defines the term spectral.)

Relevant portions of the bibliography are also printed in the second issue.