Space and Spatialization in Contemporary Music: History and Analysis Ideas and Implementations

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SPACE AND SPATIALIZATION
IN CONTEMPORARY MUSIC:
HISTORY AND ANALYSIS,
IDEAS AND IMPLEMENTATIONS

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Faculty of Music
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ABSTRACT

This dissertation presents the history of space in the musical thought of the 20th-century (from Kurth to Clifton, from Varèse to Xenakis) and outlines the development of spatialization in the theory and practice of contemporary music (after 1950). The text emphasizes perceptual and temporal aspects of musical spatiality, thus reflecting the close connection of space and time in human experience. A new definition of spatialization draws from Ingarden's notion of the musical work; a new typology of spatial designs embraces music for different acoustic environments, movements of performers and audiences, various positions of musicians in space, etc. The study of spatialization includes a survey of the writings of many composers (e.g. Ives, Boulez, Stockhausen, Cage) and an examination of their compositions. The final part of the dissertation presents three approaches to spatialization: Brant's simultaneity of sound layers, Xenakis's movement of sound, and Schafer's music of ritual and soundscape.

RÉSUMÉ

Cette thèse présente l'histoire de l'espace dans la pensée musicale du vingtième siècle (de Kurth à Clifton, de Varèse à Xenakis) et retrace le développement de la spatialisation dans la théorie et la pratique de la musique contemporaine (après 1950). Le texte souligne les aspects perceptuels et temporels de la spatialisation musicale, reflétant ainsi le lien étroit entre temps et espace dans l'expérience humaine. Une nouvelle définition de la spatialisation tire son origine de la notion de l'oeuvre musicale d'Ingarden; une nouvelle typologie des plans spatiaux prend en considération des musiques pour différents environnements acoustiques, diverses positions des musiciens dans l'espace de même que le mouvement de ceux-ci et des auditeurs, etc. L'étude de la spatialisation inclut un survol des écrits de plusieurs compositeurs (Ives, Stockhausen, Boulez et Cage, par exemple) de même qu'un examen de leurs oeuvres. La dernière partie de la thèse présente trois approches compositionnelles de la spatialisation: la simultanéité de strates sonores chez Brant, le mouvement du son chez Xenakis et la musique du rituel et l'écologie sonore chez Schafer.
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Since in the word "musicology," music is followed by logos, I would like to follow my expression of gratefulness to the composers with thanks for those who have assisted me in finding words for my thoughts and who have helped me to think in the first place: my advisers. My interest in spatial topics took shape under the guidance of Prof. Zofia Helman (my M.A. adviser, the director of the Institute of Musicology, University of Warsaw) whose wide knowledge of musicological literature (e.g. Kurth, Zuckerkandl) and friendly encouragement influenced my early efforts. However, most of the research has been conducted and the dissertation written in Montreal, under the supervision of two distinguished scholars. Prof. Bo Alphonce agreed to share in my explorations of vast realms of "space" and music; he allowed me to set up my own objectives and follow an individual schedule. Yet, he made sure that the scope of the project remained comprehensive and that I would not bypass important figures (e.g. Clifton, Varèse). As the Chair of the Department of Theory, he
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I gathered insights into the psychoacoustic and electroacoustic aspects of spatialization during my studies at the Faculty of Sound Recording, F. Chopin Academy of Music, Warsaw, Poland (with Prof. Krzysztof Szlifirski, my M.A. adviser, and Profs. Andrzej Rakowski, Nikodem Wolk-Lanielewski, and Lech Dudzik). My awareness of, and interest in, Ingarden’s aesthetics (Chapter IV) dates back to my studies with Prof. Zofia Lissa and Prof. Zofia Helman at the Institute of Musicology of the University of Warsaw (1976-1986), to whom I am thankful for stimulating my intellectual curiosity which led me to become a musicologist rather than a sound recording engineer.

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Excerpts from the following four compositions are used by permission of European American Music Distributors Corporation, sole U.S. and Canadian agent for Universal Editions, London and Universal Editions, Vienna: Béla Bartók, Music for Strings, Percussion and Celeste (© 1937 Universal Edition, Vienna; copyright renewed),


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