World Academy of Science, Engineering and Technology International Journal of Electrical and Computer Engineering Vol:16, No:12, 2022

Digital Musical Organology: The Audio Games: The Question of "A-Musicological" Interfaces

Authors: Hervé Zénouda

Abstract : This article seeks to shed light on an emerging creative field: "Audio games," at the crossroads between video games and computer music. Indeed, many applications, which propose entertaining audio-visual experiences with the objective of musical creation, are available today for different supports (game consoles, computers, cell phones). The originality of this field is the use of the gameplay of video games applied to music composition. Thus, composing music using interfaces but also cognitive logics that we qualify as "a-musicological" seem to us particularly interesting from the perspective of musical digital organology. This field raises questions about the representation of sound and musical structures and develops new instrumental gestures and strategies of musical composition. We will try in this article to define the characteristics of this field by highlighting some historical milestones (abstract cinema, game theory in music, actions, and graphic scores) as well as the novelties brought by digital technologies.

Keywords: audio-games, video games, computer generated music, gameplay, interactivity, synesthesia, sound interfaces, relationships image/sound, audiovisual music

Conference Title: ICCMST 2022: International Conference on Computer Music and Sound Technology

Conference Location : Cairo, Egypt **Conference Dates :** December 15-16, 2022