

much more. Since there are many organs in Europe, especially Portugal with its long tradition of historical organs, why is there no experimentation in contemporary music?

Keywords: Pipe organ; Extended techniques; Contemporary music; Notation

## Towards a non-computercentric performance: An augmented e-guitar proposal

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Due to the potential of gestural, parametric, and interactive control of the computer as a sound medium, various interfaces have been created that externalize software and give it a more useful instrumental form for the performers, namely keyboards, pads, pedals, etc. (Bongers 2000). In the practice of an augmented instrument, herein the electric guitar, the need of gestural independence while using a computer is multiplied since most of the time the hands are playing the instrument, and the performer is focused on the musical discourse.

Several obstacles occur in performances that integrate a DAW (in this case Ableton live) and electric guitar (Berweck 2012), specifically in adjusting the live mix and the levels of certain effects. Given the closed nature of many sets and effects, these, once configured, are difficult to modify during live performance (Lähdeoja and Navarret 2010). Technical issues increase when the performer tries to control all the parameters of the augmentation with the feet, since they lack the sensitivity of the hands. In addition, the hands already have an integrated gesture because of the performer's embodied knowledge (Portovedo 2020).

To achieve this desired flexibility and expressivity, both in improvisation and in the interpretation of contemporary music for electric guitar and electronic media, a midi keyboard has been converted into a new interface adapted to the electric guitar, which allows a more organic control of the parameters. In the interface, one part is handled with the feet and another part is integrated into the guitar. In this way, processes such as live looping, change of set, or

sequencing of pre-recorded material are controlled with the feet, and other more delicate controls, such as adjusting levels on tracks and effects, with the hand, using the knobs installed on the guitar. This presentation provides a theoretical framework for the intervention and flexibility of electronic devices (Diegert and Artacho 2018), applying a design perspective based on performance needs, trying to explain and extrapolate the process to provide DIY (Do-It-Yourself) information for building similar devices based on the same underlying principles. For example, to increase and modify the augmented e-guitar device, the functionalities designed for other performers (pianists, DJs, or electronic musicians) are used, employing its circuits in a modular way, and spatially relocating the components. Part of the interest of the process is its relationship to a cultural perspective of reuse, the customization of components adapted to specific needs and the simplification of the technical / technological process (Keller, Schiavoni, and Lazzarini 2019). Finally, three reflections will address the issues that constitute the central axes of the project. The first analyses the factors that determine the instrumental specificity of an electronic device. The second addresses performance with the computer and an augmented instrument on stage, and how to prevent the computer from becoming the performer's focus of attention. Finally, a brief digression on the Do It Yourself counterculture (McKay 2017) and its ability to generate social value in the field of electronic music creation and augmented instruments is proposed.

Keywords: Augmented instruments; Embodied knowledge; Do-It-Yourself; Computer music

## **The 'Reconstructive Memory' as a model of a compositional process and the interlocking technique**

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This lecture discusses how the mnemonic system and more specifically 'reconstructive memory' (Bartlett, 1932) can be a radical model of the compositional process.