WiiMote's chuck Supercolliders.

How and why the laptop orchestra chooses its tools.

Background and Motivation of the research topic / Introduction

The most commonly used definition of a 'Laptop Orchestra' would be a collective of instruments (typically digital) manned by individual performers (Trueman, Wang, Perry). Although this might not sound too dissimilar from the contemporary classical orchestra, the laptop orchestra has arguably surpassed the classical orchestra's range of models and styles which I aim to argue within this paper.

Laptop Orchestras tend to experience large format changes and development with regards to; performers, instrument, controllers and sound sources. My motivation in this paper is to look critically at the key differences seen in laptop orchestra creation. Focusing primarily on the choice of software (used to create the instruments), hardware (to control said instruments) and most importantly how they might effects the compositional and performative outcome both intentionally and un-intentionally.

Critical Review of Key Sources

A noticeable trend found within academic writings on laptop orchestra creation is their focus on practical issues. Authors will provide case studies on their laptop orchestras, noting the choice of software and hardware alongside any technical issues that arise. However, these authors often skip over a theoretical analysis as to why they are choosing these practical options. For example I will be looking into the consequences of using open source software over paid, self-made hardware over ready-made alternatives.

Research Questions:

Chapter 1:

The instruments used in Laptop Orchestras are typically code based and created by a laptop performer/ creator. "Instruments can reflect individual and cultural values" (Trueman, 2012). When performers are constructing their own instrument that involve dynamic mapping layers, does this allow them to have a constant flux of intention through a single instrument. The digital instrument can be fundamentally changed with a few lines of code.

Chapter 2:

Laptop Orchestra's have a tendency to use non-conventional controller systems. I am keen to research and critique the choice of design and implementation of the performative controllers; does the controller unconsciously effect the music we produce? might a simple change in hardware critically alter the outcome of a an orchestras practice?

Proposed Methods of Research

To start my research I have read papers from laptop orchestra creators. Although often technical these studies serve as evidence on the process surrounding the evolution and construction of the laptop orchestra. Along side these case studies I will be reading outsiders perspectives (authors not directly involved in a laptop orchestra) on the evolution of the laptop orchestra and the issues/ benefits that might arise.

Lastly I want to reach out to other fields for analysis and understanding of the post-human theory, controller design both in it's practical and theoretic form and lastly more scientifically directed papers on the use of computer software, networking and the general technologies often used in laptop orchestras.

Your proposed essay structure

750 words - Introduction/ Lit Review (Defining the Laptop Orchestra in the term of my paper, Giving a summery of its evolution, Listing the research focus I will follow in the paper)

1000 words - Section 1 (How do software choices effect the laptop orchestra?)

1000 words - Section 2 (How do hardware choices effect the laptop orchestra?)

1000 words - Section 3 (How might performance be change depending on the software and hardware. But also how might performance dictate the choice in both hardware and software?)

750 words - Conclusion

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