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Exploring methodological issues around the design of music information systems

This paper will consider and explore the significance around choosing methodologies for the development of music information systems, attempting to foreground and make explicit the often implicit: how beliefs and philosophical contexts influence system design through the choice of a methodology. My explorations focus on the interdisciplinary and technology-mediated subject areas of music information systems development, including system design and data structures. However, it highlights issues that are key to many interdisciplinary areas between science and music.

In 1997 Mourad stated that we need a post-modern acceptance of fragmented but self-organising areas of knowledge, in which "particular foundations would emerge in the course of the inquiry rather than be predetermined in the form of discipline-bound theories, methods, and schools of thought." (Mourad 1997) In 2005 I wrote that I saw music technology "as an interdisciplinary subject, which amongst other interdisciplinary subjects emerging in the last couple of decades (such as neuroscience, biochemistry, and biomedical engineering) could be seen to (...) be still struggling to come to terms with the different methodologies of its own user community" (Boehm, 2005), be that within the development of system, the interdisciplinary research enquiries around music perception or the more pragmatic areas of choosing "REF-able research" in the more practice-based activities of this subject area.

Avison and Fitzgerald have highlighted in 2006 how any methodology is always based on some "philosophical" view, otherwise it is merely a method, like a recipe." (Avison 1995:10). Too often we ignore this philosophical context. Often the conceptual frameworks exist only implicitly, unmentioned. However, there is a growing acceptance that the explicit making of the surrounding philosophy can only improve our understanding of how we develop research enquiries for specific contexts, including systems development. (see Avison 1995:420) System developments thus always will be based on "a set of rationales and underlying philosophy that supports, justifies and makes coherent such a recommendation for a particular context." (Avison 2006:568)

The paper will start exploring these issues with a look at the methodologies of interdisciplinary - as well as mono-disciplinary - research enquiries, the methodological cultures of the relevant disciplines, the differences of knowledge acquisition, knowledge transfer and knowledge presentation between the sciences and the arts - specifically reflecting on music theoretical approaches vs computer science ones - and it will elaborate in this context the debate surrounding the perceived dichotomy between empirical approaches and constructivist ones.

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References

- Avison, D.E. and Fitzgerald, G. (1995, 2006). *Information Systems Development: Methodologies, Techniques and Tools*. McGrawHill, London.
- Boehm, C. (2005), 'Music Technology in Higher Education', *The Idea of Education*, ed. by Tom Claes. Inter-Disciplinary Press, Vol. 12. 2005.
- Mourad, R.P., Jr (1997), 'Postmodern Interdisciplinarity', *The Review of Higher Education*, 20: 2, pp. 113–40.