

Attuning: A Social and Technical Study of Artist–Programmer Collaborations

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Abstract. This paper presents findings from a grounded theory study of the social and technical roles of programmers in art-technology collaborations. Combined with a review of the roles of technology with respect to helping artists engage with the computing medium, we show that programmers can play several roles in such collaborations, both supportive of and obstructive to the requirements of artists, beyond merely ‘doing the programming’. Of central importance is the process of ‘attuning’ between the actors and artefacts involved, and this can show us ways of making programming systems more comprehensible to artists.

1. Background

1.1 How We Think About Interactive Art

From a technological perspective, computer-mediated interactive art involves a computer system with some form of input from the audience-participant, some form of output to the audience-participant, and, most interestingly from a programming perspective, some form of processing in between. However, interactive art is in practice quite a complex field, involving various creators, producers and audiences, not just a set of computational artefacts with an ‘optimal’ configuration. When we think about any of the entities situated within these art systems [5], we should not lose sight of that very situatedness.

1.2 How We Think About Programming

The authors adopt the view that any reasonable definition of programming (for example, that programming is a specification of a computation [3], or that programming is taking actions with the objective of creating an application that serves some function for the user [22]) can describe all uses of a computer. There is no particular ontologi-

