

*Editorial by Ernest Edmonds*

## Research on and from within Creative Practice

One view of art-making is that it is fundamentally a research process. Each art object, performance or realized concept is sometimes seen as an experiment from which the artist learns and from which new ideas and goals emerge. In some ways, then, it is possible to see a compatibility among art, science and technology practices. Obviously, much of the content of this journal has always consisted of reports on active collaborations across these areas. However, it is also clear that the kind of evaluation or proof used in these three areas can be quite different. In fact, there is much that each can still learn from the others.

In technological research, particularly in the area of interaction design, there has been an increasing interest in experience, a concern in fact not unlike some of the research questions of artists. In interactive art, the artwork exists only in the context of audience behavior. We need to understand the experiences of the audience in considering both their reflection on the artwork and the interaction design that must be a key component of such work.

An important development in research methods relevant to our field has been the emergence of practice-based research. The first U.K. polytechnic was formed in London in 1880. When the concept was employed in the significant expansion of such institutions in the U.K. in 1968, the goal was to add a service element to the mainstream of higher education. The polytechnics were expected to teach and develop knowledge with an emphasis on value in practice. Higher education was no longer to be seen as the center of new understanding, of knowledge that described the world, but as the center of new ways of doing things, of knowledge that improved our ability to act in the world. That emphasis encouraged a new look at research around making—for example, the making of an artwork—with less concern for traditional subject boundaries.

When the U.K.'s Council for National Academic Awards (CNAA) drew up its regulations for the higher degrees to be awarded from the new polytechnics, they included a critical clause: "The written thesis may be supplemented by material in other than written form." This enabled students to include artifacts, or

the records of artifacts, as integral parts of their Ph.D. submissions. Practice-based Ph.D.s today are most simply identified by the inclusion of such artifacts within the submission.

The crucial point is that in certain disciplines, knowledge can be advanced by means of practice. The idea has developed that research students, for example, could take as the subject of research the practice of their own disciplines. The research program would consist of a continual reflection upon that practice and on the resulting informing of practice. The examination would be based upon both the results of the practice and on a thesis presenting reflections upon the process undertaken. Thus, artifacts would form part of the candidate's submission for the degree. The practice-based Ph.D. can be understood within the traditional context of the purely written Ph.D. without any major revolution in education being required. We need more universities to ensure that their rules include statements such as the CNAA's.

These developments have created a rich and exciting space in which more and more artists and collaborative teams are conducting practice-based research, particularly in the areas of interest to Leonardo. In our new initiative, the Transactions section of the journal, we are publishing refereed papers on a fast track to dissemination of key new results, ideas and developments in practice. Of very special interest are research reports that draw upon or develop these newer research approaches. The first set of Transactions papers arose in the context of a symposium held in Sydney in 2006: "Engage: Interaction, Art and Audience Experience." These papers come from a context in which collaborative practice-based studies are the norm. Art, science and technology are informing one another through this work in a way that matches the very first aspirations of *Leonardo*, successfully employing methods from one discipline to enlighten another.

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