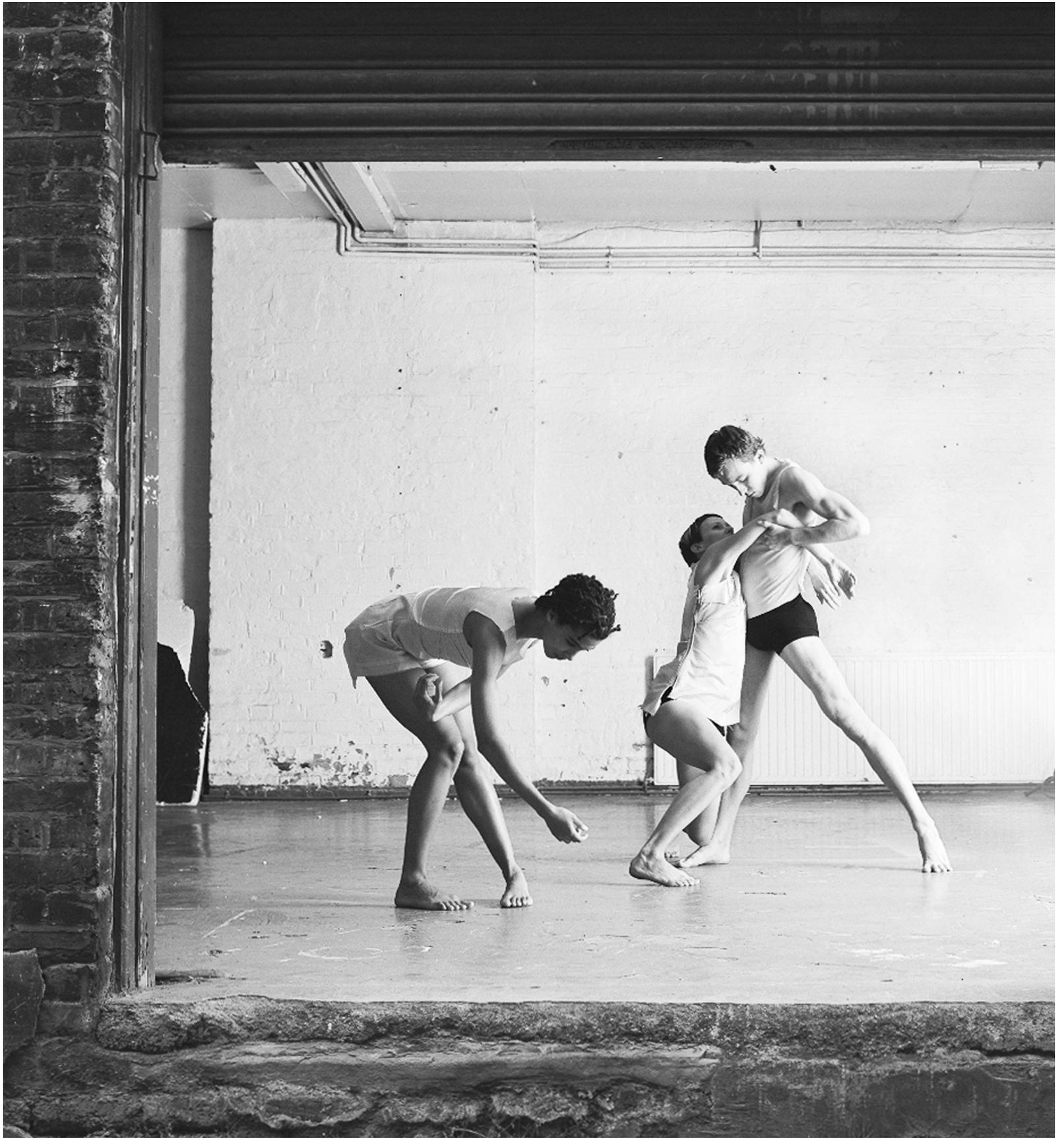# Arts and Science Research Fellowships

Arts Council England and Arts and Humanities Research Board

Guest Editors: Bronac Ferran, James Leach and Tony White

Building an appropriate set of support structures for art and science collaborations can be a slow process: As with all such cultural developments a conjunction of good design combined with responsiveness in the policy arena is needed. This section explores both aspects of this jointly managed program. The section also features reports from nine of the fellows and their scientific collaborators, in which they reflect on their reasons for undertaking the research, how they found their collaborators and host institutions, their initial goals and how things worked out. They also describe both joint and individual outputs of the research and how they might like to take things forward.

For more information about the program, please see: <www.ahrc.ac.uk/apply/research/arts_science_research_fellowships.asp>.

Creating a Program of Support for Art and Science Collaborations

The Arts Council England/Arts and Humanities Research Board Arts and Science Research Fellowships program was very much designed as a response to a particular set of circumstances that emerged at the levels of both policy and practice in Europe in the early 21st century. The report "Imagination and Understanding," published by the Council of Science and Technology (CST) in the United Kingdom [1], declared that the divisions in education and research between the arts, humanities and science were anachronistic and detrimental to the future of Britain's economy. At a European level, the "Lisbon Agenda" (or "Lisbon Strategy"), an action plan that aimed to make the European Union "the most dynamic and competitive knowledge economy in the world by 2010," had been launched in 2000 and also stressed the importance of investment in research and development and in exploring the potential of new technologies as drivers of growth. The CST report also recommended that the U.K.'s then recently established Arts and Humanities Research Board should become a full research council, the AHRC, which was launched in April 2005.

Arts Council England approached what was still the AHRB in 2001 to suggest the possibility of a joint program. It became clear that the conjunction of interests of both organizations—in using public funding to support research and development in the interests of "new knowledge" and innovation—would be an ideal ground for the introduction of a new scheme for connecting art and science and would itself privilege openness and knowledge sharing across disciplines.

For the Arts Council, a primary aim of the scheme was to try to place the artist "in the driver's seat" relative to previous support programs for art-and-science collaborations. These had arguably been under-resourced, particularly in the level of funding available to artists for research and development purposes.

The ambition was to create optimum conditions for the realization of innovative outcomes. The steps taken toward this end included supporting the individual artist's time and space within a scientific research context and more clearly framing the role of the university in such research. The program was able to utilize research frameworks developed by the AHRB, for example, outlining the collaborative research proposal at the outset alongside a clearly defined research context, research questions and methodology. An additional mapping exercise was introduced into the application process in order to also survey the diversity of institutional and project-specific approaches to copyright and ownership.

PROCESS OF ASSESSMENT

In the summer of 2003, 16 projects were selected from 85 applications for the first round of this new program. The process of shortlisting involved the assessment of each proposal by at least three peer reviewers, drawn from across arts and science disciplines. The judging panel included a historian of science as well as a media arts specialist and a science/music expert. The chair was Marilyn Strathern, a social anthropologist, whose studies in interdisciplinarity, especially the articulation of relationships between creativity and issues of ownership, had been particularly impressive at the Arts Council–organized Collaboration & Ownership in

Section Frontispiece. Random Dance, detail from *AtaXia*, June 2004, a dance production resulting from Random Dance's choreographer and director Wayne McGregor's research Fellowship with a team of cognitive scientists and neuroscientists. (Photo: Ravi Deepres)

the Digital Economy (CODE) conference [2] in 2001, one of the formative events leading to the establishment of the program.

The successful projects were wide ranging in relation to both arts and science disciplines. A total of £535,558 was allocated, with an average of £32,000 made available for each project for a period of up to 18 months [3].

BACKGROUND

A critical driver of the program's establishment was the observation that artists exploring new-media technologies and other technological and scientifically related processes during the 1990s had been limited in their results and in the quality of their expression by the lack of appropriate support structures. Arts funding programs were often premised on the production of "end activities" such as exhibitions or performances; where research and development opportunities existed, they offered small-scale levels of funding and (as James Leach sets out in his article in this special section [4]) were not designed to support collaborative agendas. While the Arts Council had initiated programs during the 1990s—such as the New Collaborations Fund (which ran from 1991 to 1995), the Combined Arts Projects (1995–1999) and the Media Arts Projects Fund—that provided seed money to stimulate artistic experimentation using new-media tools or to work within interdisciplinary contexts, there was a lack of any sustained support structures for artists who wished to take their experimental ideas into deeper and more open-ended research territories. Spaces offering longer-term opportunities for collaborative, interdisciplinary research hardly existed in the U.K. These gaps in funding structures had also been identified internationally in reports such as "Pathways to Innovation" [5]. Scientists based within computer science labs in England, including Ernest Edmonds, then at Loughborough, and Steven Benford at Nottingham University, were beginning to bring artists into their labs to carry out joint research and development with scientists in areas of collaborative innovation. However, the funds available for the artists' contributions were very small (in relation to expenses), while the overall funding available from science research funding sources was extremely high relative to arts budgets. Increasingly, the Arts Council was being asked to "top up" the funding available for the involvement of artists in large-scale infrastructural science research projects, and this was again one of the overriding factors that encouraged us to seek to establish a joint program with a research council, to encourage parity of opportunity for those creative practitioners whose work was clearly regarded as valuable across disciplinary boundaries.

In 1999 the Arts Council joined the Wellcome Trust and four other funding agencies [6] in the establishment of the Sciart Consortium [7], which provided funding support as well as opportunities for (a) a successful if temporary marketing construct for the nascent field of practice and (b) the beginnings of a public dialogue and enhanced critical debate across disciplinary borders addressing questions related to quality, audiences and venues for this hybrid work. While the Sciart Consortium came into existence in response to the increasing desire for interdisciplinary support structures, it became clear to the Arts Council by 2000 that the resources available for the research and development aspect of the Sciart program were inadequate. In doing such work and in attempting to make it truly collaborative, artists were often seriously disadvantaged economically relative to their scientific collaborators, who often had full-time posts within research institutions.

In laying the ground with the AHRC for the Arts and Science Research Fellowships program, we researched international developments in Japan [8] and Canada, where the Canada Council was establishing its own research fellowships program [9]. One significant difference between the Canada Council's vision and our own was that the U.K. scheme allowed international practitioners to apply to work within U.K. labs. Indeed, three awards in the first round did go to artists who had been working outside the U.K. Their contribution to the overall scheme has been extremely valuable, and this kind of opportunity for international exchange seems worth keeping in mind when considering how different agencies might take these initiatives forward.

Another critical point is that the decision to establish a "learning network" among the first-round awardees (and their collaborators) has been one of the most successful and notewor-

thy elements of the scheme so far. The bringing of social anthropology skills into the discussions has been transformative in allowing the art-and-science debates to proceed beyond over-simplified exchanges on process into more hard-edged territories where difference, as the common denominator of all the projects, has been allowed to surface and to give texture and rationale to the conversations. The emphasis has also been on promoting openness and sharing of ideas, in keeping with the values of both the support agencies, which are publicly funded and have a strong commitment to making knowledge accessible and useful by means of exchange.

The argument for the ongoing support of such a program is strong, and is bolstered by the documentation of what has been learnt so far, both within the separate projects and across the scheme as a whole. In the articles that follow, we learn more about how co–guest editor and social anthropologist James Leach approached his role as attached observer, a project that began with the question, "Where does value lie in the transaction across disciplines?" [10] We also read of how a selection of the artists and scientists involved in the program realized value in relation to their particular projects. In an intriguing essay, Scott deLahunta folds into this account his own experience of acting as a catalyst and facilitator for one of the projects—and offers some highly personal and inspiring thoughts about the importance of empathy and other human factors in the interchange between disciplines and across specialist boundaries.

Bronac Ferran
Special Section Co–Guest Editor
Director of Interdisciplinary Arts
Interdisciplinary Arts Department
Arts Council England
United Kingdom
E-mail: <bronac.ferran@artscouncil.org.uk>.

References and Notes

1. "Imagination and Understanding," Council for Science and Technology, London, 2001. Archived at <www.cst.gov.uk/cst/reports>.

2. Collaboration and Ownership in the Digital Economy (CODE) Conference, King's College, Cambridge, U.K., April 2001. The CODE Conference archive is at: <www.artscouncil.org.uk/aboutus/project_detail.php?sid=6&id=37&page=2>.

3. The 16 fellowships awarded in 2003 in fact ranged in scale from £23,657 to £36,294.

4. James Leach, "Extending Contexts, Making Possibilities: An Introduction to Evaluating the Projects," *Leonardo* **39**, No. 5, 447–451 (2006).

5. Michael Century, Montreal: McGill University, 1999. Archived at: <www.nextcentury.ca/PI/PImain.html>.

6. The National Endowment for Science, Technology and the Arts (NESTA), Calouste Gulbenkian Foundation, the Scottish Arts Council and the British Council.

7. The Sciart Consortium site is archived at: <www.sciart.org/site>. The current Sciart program web site is at: <www.wellcome.ac.uk/node2530.html>.

8. See Ernest Edmonds, "The Interaction of Art and Technology in Japan: A Department of Trade and Industry International Technology Service Mission," 1998. Archived at: <research.it.uts.edu.au/creative/eae/documents/JapanMission.pdf>.

9. This is a jointly funded Artists-in-Residence for Research (AIRes) program initiated by the Canada Council for the Arts and the National Research Council Canada (NRC).

10. See <www.nomadit.co.uk/~dnc>.