

## AHRC ICT Methods Network Workshop

# REAL-TIME COLLABORATIVE ART MAKING

VISUALIZATION RESEARCH UNIT, UNIVERSITY OF CENTRAL ENGLAND, 20 JULY 2007

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### Introduction

On July 20th, the [Visualization Research Unit](#) (VRU) hosted a Methods Network sponsored workshop at the historic Margaret Street site of the Department of Art at the University of Central England in Birmingham. The VRU specialises in developing and applying technologies in the Visual and Performing Arts as part of its work in the Department of Art and collaborates with a wide range of researchers in the arts and computer science. This workshop focused on both of the Unit's main aims, exploring technologies that can be adapted for use in the arts and networking technologies being developed for use in the blurred area between the visual and performing arts. The workshop also extended the VRU's work with [e-Science in the Visual Arts](#), and attracted a number of contributors to our initial workshops on this subject in November 2006.

The workshop was the culmination of a research process begun some time before, with work developed in the previous three months and worked on during a week-long intensive by the Research Team. The programme included a presentation on e-Science in the Arts, an AccessGrid link up with the National e-Science Centre in Edinburgh, and the presentation and discussion of the creative work of the team. The two main projects presented were Gregory Sporton's Collaborative Drawing through movement (research done with dancer Carla Wright), and the collaborative work devised by Matt Gough, Jonathan Green, Keir Williams and Suzanne Grubham.

The initial idea for this structure for the workshop emerged from a previous series of events held by the VRU, which included presentations about the issues surrounding the use of network technology in arts practice as well as practical demonstrations. From this emerged a small group who suggested that some collaborative working along the lines and principles expressed at the earlier workshops might shed some light on the practical methodological issues for art-making through technology that could be developed through the process of producing something interesting by way of exhibition/performance work. Amongst the biggest issues the team identified for creative participants working with technology was the need to experience creative art-making through the technologies as a way of assessing their potential and legitimacy as art-making materials. Additionally, the emergence of new forms for creative work and how to deal with impact of those is significant for guiding developments in digitised, online art practice. Some interest was also shown in the use of technologies that could engage with computers differently from the keyboard/mouse/screen relationship. The workshop was structured to keep these at the forefront, and encourage the development of the questions and issues that will support emerging practice in the future.

### Development process

This first component of the workshop was a week long 'development' period in which material to be presented on the final workshop day would be created. The team met some time prior to this to establish our ideas about how we might work together, culminating in the decision to split the group into two parts that covered each focused on a single issue. This meant that Gregory Sporton and Carla Wright would work on the adapted technologies area, with Matt Gough, Jonathan Green, Keir Williams and Suzanne Grubham taking on the complex task of determining what we meant by the term 'collaborative networks' and developing a method for presenting our ideas about this area. In the lead-in to the workshop week, the team contributed to a Wiki as a means to test out ideas and post images that collaborators thought might

be of interest. This also included looking at [CODA](#), the on-line collaborative tool developed by Jonathan Green in his research work as part of the Unit. The process (and many indications about the results) of this development period were recorded by Matt Gough in his 'quodlibet' blog posts and in [Mike Priddy's photographs](#) on Flickr. However, some general principles about the nature of this work became immediately apparent.

The first is the tendency to create equipment rich environments, often for the production of simple work or the exploration of simple ideas. Having agreed initial concepts and sized up the time available to them, much of the first day was spent determining what would be possible in such a short space of time. In addition, new relationships also needed to be developed, an important theme to the work that resulted. As Gough points out, 'there is no sharing of equipment, only the products of the performance. The technical setup could be both reduced and increased in complexity', thus identifying a key component of this style of work: scale determines opportunity, and in intense, short periods, the scale of the set up is a crucial decision that determines what can be done and explored.

One of the preoccupations of both groups was the distribution of resources, and this determined both the technologies employed and the fashion of their use. For Sporton & Wright, this came in the development of an intelligent space. Much of the focus of this group in the development period was based on how to make the space responsive by the enhancement with technology. Given the physical component of the work, the flexibility of the space in responding and recording movement determined how the process progressed. From initially working only with Wright as the dancer, with Sporton manipulating the technology, the artists found themselves more drawn into a situation where these roles were both interchangeable and shared. By experimenting with the technology it was clear that dancing together created a more interesting live result, as well as demanding more from the contribution of the technology.

In both cases the groups chose to apply the jargon and conventions of technology to the human component. This was partly as an experiment in expression, and partly as a means to encourage the portability of concepts. This develops a stronger connection (and encourages less distinction) between components that might be thought of as having separate properties, and yet will be expected in collaboration to augment an artistic process.

One of the realities of both groups in preparation was the realisation that it was not possible to replicate results from one day to the next or from one iteration to the next. This is because of the cumulative effect of the responses of people and technology, and augmented by the learning process that emerges from each experience of trying to squeeze creative responses for ourselves and the environment we have created. There was also a sensation reported by both groups of the process asserting itself in the space, and that individual contributions were best understood as going along with a process that we had ourselves set in train.

## **The Workshop**

### *e-Science and the Visual Arts*

The workshop began with Gregory Sporton's summary of the position of e-Science in the Visual Arts, incorporating the results of the November workshops. Sporton discussed the neglected potential of e-Science in creative practice, given its position as the transforming technology of the age. He suggested this was often cited as a cost or training issue, when in fact it might derive from a lack of information about the possibilities of disseminating and creating work through networked technologies. The original workshops had been set up to address questions about infrastructure, support and issues for the arts community in accessing and utilising the technology. By defining e-Science practice, and pointing out that in itself it was neutral about subject matter and existed as a way to treat data, Sporton invited the workshop to see the network as the interactivity of creative intentions. Because of the nature of the network, the mode of production for art through it was dispositionally different, with less emphasis on finished work and

more on the possibilities for reformulating data sources for different purposes. Sporton discussed the e-Science work environment for artists as a fusion of the technical and creative, with a view to the development of further services and opportunities for artists to initiate and create work. He discussed some of the feedback from artists about their concerns with e-Science and technological processes in the arts in general, noting that technology sometimes seemed so remote to artists that it appeared as a form of magic. In particular, the workshop would attempt to deal with some of these concerns, specifically the matter of individual contribution and the loss of the sensual processes in art by the use of technology. The possibilities of collaboration in real time was suggested a new craft practice for the digital generations that are now entering higher education and the craft world of art.

### *And, With & Through*

The second session was an ambitious link-up with the National e-Science Centre in Edinburgh via AccessGrid, including colleagues at the University of Manchester Visualization Group. Despite some initial technical problems, Gregory Sporton introduced the work he had been developing with Carla Wright as a means of providing an example of the shifting processes available for artists using technology. The point of this was to address the methodological issues surrounding digital technology and performance, and how this fits within the structures and conventions of methods and research methodologies. Sporton distinguished between practical interaction with network technologies and methods for research, making further distinctions about the application of methodology. For Sporton, the complexity of e-Science processes is that at various times they require the researcher to move between scientific and artistic methodologies, with often the final result encouraging an analysis of the type often found in the Humanities. The complexity of this situation often appears to lead to the conflation of intellectual or artistic paradigms that are incommensurable with one another, further problematizing a difficult to understand working, creating and reflecting environment. To clarify for the researcher this problem, he posited a structure to tackle 'method', as 'And, With or Through', offering examples of the VRU's work as a means to illustrate the distinction between different kinds of creative practice with technology. The structure is comparatively simple; technology in creative practice is either additional to, dependent on or assimilated into the work. These examples can be seen in the presentation, which includes links to video showing the practices.

At this point, Sporton and Wright shared the work they had developed with the audiences across the AccessGrid set up. Using a straightforward and inexpensive whiteboard technology named 'e-Beam', they demonstrated the possibilities for its creative use. 'e-Beam' and similar technologies allow for interesting reinterpretations of artistic practice. In this particular case, the focus was on drawing, using either the touch pen on a Cintiq drawing screen, or a series of networked tablet computers. Instead of using the e-Beam in a conventional way by drawing across a screen or background, Wright had turned the sensors through 90 degrees, allowing her to draw in the air. This, instead of the position of the pen against the surface, Wright was able to use the pen against the air, creating perfect curves and shapes using choreographed movement. When combined with a second dancer, this created live action drawing in separate colours. The dancers showed the kinds of experiments they had been involved with in the course of the previous week, with a developing control over the results.

Sporton's final point in this session was about methodology, as opposed to Method. Sporton suggested there remains a great deal of confusion about methodology in creative practice and the relative value in being able to analyse it. Referring back to his earlier comments on this subject, he suggested that whilst the scientific method tests a hypothesis, humanities research positions the researcher to assert a proposition, and the subsequent discussion is about whether this is an acceptable treatment of the evidence. In creative practice, where the emphasis is not merely on originality as an artist but sometimes on originality in iterative processes, identifying a methodology seems to have the features of the humanities without the benefits of being able to question the validity of the proposition. The creative process appears to get talked about a great deal because of a similarity to a methodological practice, but in reality it represents the artist's unique response to a specific set of circumstances, and repeatability (as in Science) or validation (as in the Humanities) seems hardly the point.

Finally in this session, using the e-Beam's server software, a number of tablet computers were linked together to allow a number of people to collaborate on-line to draw.

### *ditdahbit*

The afternoon was set aside for the presentation of 'ditdahbit', a collaborative work generated by Matthew Ough, Jonathan Green, Keir Williams and Suzanne Grubham. Based in the gallery at Margaret Street, a hort stills & sound presentation is available from the Methods Network site and the Collaborative Art-Making website. This performance was followed by a discussion with the artists and the spectators that is also available there. This was a very rich and interesting discussion that reflected a broad spectrum of views about working in this fashion. Whilst there was much interest in the content and the artistic intentions of the work, the main theme of the discussion was issues that arise through collaboration with technology, and the impact of co-location and network function as part of the creative process. The authorship issue and its impact within a distributed structure gave rise to much discussion about how collaboration takes place in networked environments. The device of replaying recordings from previous iterations of the performance also introduced the time dynamic into the work. The complexities of this relationship between authorship and distribution turned out to be amongst the most interesting aspects of the work. The artists respected the autonomy of their collaborators whilst working with them on their own, seemingly disconnected, tasks, that turned out to be driving the motivations for them to contribute further to the work. This is a complex work within a rich system of meaning and significance, stimulated by the physical replication of the network in work-flow and presentation, and set off a number of interesting parallel discussions as well as the one located on the site.

There are further links to materials developed since the performance available from the Methods Network [activity pages](#) and the [Collaborative-Art Making site](#). Further discussion can be found at the [Let's Talk about Collaborative Art Making](#) discussion on the Digital Arts & Humanities website.

## **Conclusion**

The issues that impact on the use of technology in the arts were well illustrated in this kind of workshop. The limitations and opportunities of technology for creativity are different from those whose traditional scope is known and whose exploration has taken place over long time periods. What the workshop demonstrated was the possibility of using technology to take a fresh look at long standing and well known practice, and to explore the characteristics of the technology as basis for developing new kinds of artwork. The drawing workshop translocated simple and inexpensive whiteboard technology into networked performance, using the creative rehearsal process as a means of discovering its limitations and applications. 'ditdahbit' explored the structures of technologies, and replicated them as the kind of sense-making exercise that Internet users create every day. Relating these examples to the existing world of practice in the visual arts indicates how the technologies may change the orientation of practice away from the individual and towards communities that can work with and reformulate the data that is made available to them. It becomes important to extend to a community of practice the opportunity to see technology as a creative stimulus, and to indicate how the interaction with computers need not be screen based or feel remote, and can engage the artist's senses as well.

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