Matthias Sperling - On the experience of working as an artist on scientific research

This talk was given on 27 May 2016 at Siobhan Davies Studios (London) as part of the event *Taking apart togetherness: the art and science of being a group*, in which my collaborators Guido Orgs, Daniel Richardson and I each reflected back on our 18-month science research collaboration *Synchronous movement cooperation and the performing arts*, funded by the ESRC (Economic and Social Research Council). Alongside the reflections below, I also read aloud the score for *Group Study (2015)*, the choreographic work that I created for and through this research collaboration, accompanied by video documentation of performances of the work.

Reflecting on my role as an artist in this scientific research:

Why am I interested in working with/on science, as an artist?

I have an interest in the relationship between body and mind as a subject of investigation in my choreographic practice, so I'm interested in the ways that people in other disciplines, including science, are investigating and articulating that relationship. I'm also interested in approaching choreography as a knowledge-generating activity, so I'm interested in the experiment of participating in the particular practice of scientific knowledge-production with my artistic practice and seeing what I learn from that.

What interests me about synchronous movement of groups?

I look at any group movement, any group choreography, in terms of a negotiation between the individual and the collective, so I'm particularly interested in the political dimension of the way that a group choreography embodies a practice of being in relationship with others.

I'm always interested in asking what it means to make choreography that remains conscious of the performer as a *person* with agency, with a mind, with decision-making capacity, so I'm very interested in seeing decision-making happening in performance, and I'm most interested in working with synchronous movement of a group as something that emerges from a process of joint decision-making.

These interests directly informed the specific choreographic approach that this research has taken to synchronous movement, which is different from a more conventional understanding of synchrony in dance as the simultaneous repetition of a series of pre-decided movements. I think this less conventional approach adds something to this scientific research because it's actually a more naturalistic form of group behaviour, one in which decision-making and negotiation are always ongoing in the unfolding of relations within a group.

What was challenging about this project for me as an artist?

It was a constant challenge to keep up with understanding the specific requirements of the framework of this scientific research at each stage of the activity, and to figure out how to practice my practice within that.

An important support to me in addressing those challenges was Guido Orgs who, as an interdisciplinary practitioner of both dance and cognitive science, could act as a go between or translator whenever I had questions or doubts.

It was a challenge to develop choreographic materials that would remain precisely within the parameters of a particular experiment. And because the measurements taken by the wristbands [Empatica wristbands, measuring real time physiological signals] were such an important part of the experiments, it was a challenge to design choreographic material that could be detected by the wristbands as much as it could be detected by a viewing audience - it entailed choreographing in two directions at once.

At points, it was challenging to wonder: what if I don't like the conclusions that the experiment arrives at? It was also challenging to realise that I have very little sense of how any results that we produce might be interpreted and used once they are published.

When did I feel that my artistic knowledge was deeper/exceeded questions and answers asked and provided by the scientists?

I'd generally say both always and never, but there are a few things that I can say more precisely. From experience, I'm attuned to anticipating how people are likely to feel when they participate in a workshop like this, or watch a performance like this and, particularly if they haven't experienced something like it before, I'm attuned to anticipating what things might help them to have an openness to those experiences. So I was conscious of how the presence or absence of those factors might influence the outcomes of our experiments.

For example, in our first experiment (which took the form of a participatory workshop for people the majority of whom had no previous dance experience and also didn't know each other), I was conscious of how I could support the participants to feel disinhibited while maintaining the rigour of the activity, and how that might affect their ability to develop a social liking of one another. I n our second experiment (which took the form of a performance, in which 10 experienced professional artists performed *Group Study* for audiences, many of whom had no previous experiences of seeing this genre of dance) I was conscious (but perhaps still not conscious enough) of the importance of how a work is framed or contextualised for an audience, how the lenses through which a person sees a work plays a significant part in determining what they see and whether they have an appreciation of it. By that, I mean simply that, when an audience member brings a particular expectation with them about what a dance performance looks like and then those expectations aren't met, this will clearly impact substantially on their experience of the work.

It's also, of course, very significant to reflect on how the relationship between the work and the audience is affected by the fact that, in the context of our performance experiment, the audience was actually paid to be there, as participants in a psychology experiment.

Something more general but that feels important is that, now that I'm observing the challenging process of writing up these experiments into the short and highly structured form of scientific papers, I am thinking about how much I value the capacity that artistic works have to retain a degree of complexity, and how difficult it is to capture that in a scientific paper, which needs to tell a clear and unambiguous story based on measurements that take a very particular sample of information from a complex phenomenon. I admire the precision, concreteness and the specificity of the scientific story, and I definitely don't think that telling that particular story is without value, but I wish for it to include more of the complexity and ambiguity of the artistic information.

To what extent do I think that my work within this scientific project did/could produce good art?

I do think that I produced a good artistic study or a work in progress, but not a finished artwork (hence my choice to call it *Group Study*), and I also think that the appreciation of this work-inprogress is very context dependent - it has to be seen as artistic work in dialogue with the context a scientific experiment, in order for its qualities to be visible. It is dependent on the affinity of the context to the strengths that the work has. Those strengths would grow and develop further, given more time for creative process (which was very limited because of the high cost of working with 10 performers).

What I would be most interested in developing further is the way that *Group Study* reflects back on the scientific context and uses it as an artistic material, and to make that a more explicit part of the subject of the choreographic work.