

## Dance Engaging Science



### Introduction

In this project, researchers from several AHSS and STEM disciplines and exponents from the performing arts industries met to examine dance and to learn from each other's methods as well as explore ways to express and capture (embodied) knowledge. They developed joint research projects and documented their experiences in publications and a "statement of principles" to address education, policymakers and the public.

### Keywords

Dance, embodied knowledge, performance, choreography, dramaturgy, philosophy, anthropology, psychology, neurosciences, cognitive science, dance medicine, architecture, biomechanics

### Discussion

Dance Engaging Science aimed to survey the current state of the field of interdisciplinary dance-science research and to lay the foundations for future interdisciplinary research in which dance itself plays a greater constitutive role (project website I). It was funded by Volkswagen Foundation and embedded in a larger endeavour called 'motion-bank'.<sup>1</sup>

A working group of 20 people from the fields of dance, performance, choreography, dramaturgy, philosophy, anthropology, architecture, psychology, neurosciences, cognitive science, dance medicine, and biomechanics met in three co-creation workshops to discuss choreography, forms of expression in dance, aesthetics, movement perceptions and creativity. The social and cultural implications of dance were also recurring topics in the discussions (Jung 2013, p. 3).

Prior to the first meeting, all participants were provided with a reader of articles, as well as a document on "Questions from Practice" derived from interviews with practitioner experts. "The goal was to stimulate discussion about how such questions are comprehended by those who are not experts in dance, but are specialists in other research domains with a vested research interest in dance and to consider the potential of converted [sic] these questions into interesting collaborative research proposals" (deLahunta 2012, p. 2). By the end of the first meeting, a shared sense of purpose was established. Five research topics were identified<sup>2</sup> and group members signed up for those topics they were interested in pursuing.

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<sup>1</sup> Motion bank is a project of the Forsythe Company providing a broad context for research into choreographic practice. The main focus in that time was on the creation of online digital scores in collaboration with guest choreographers to be made publicly available online (project website II).

<sup>2</sup> Attention, Tasks, Acoustics/Musicality, Expertise, Memory & Learning



**Through their common human experience, dancers and scientists both know a great deal about how the mind works [...]. However, they come to know, think about and express these things differently through their distinct embodied experiences and practices of research. The Dance Engaging Science project carefully navigates these differences, generating promising research and seeking to increase its validity and value beyond the domain of science while foregrounding the interface of different domains of knowledge and interests.**

Vass-Rhee 2013, p. 5-6

To address questions which cannot be communicated by verbal language alone, the second meeting started with two movement body-based experiences for the whole workgroup, followed by a conversation “which was stimulated by a more nuanced understanding of the complexities of practice and the nature of practice-based concepts and questions” (deLahunta 2012, p. 4). Furthermore, the workshop aimed at exploring new research methodologies, and at further identifying tractable projects on “challenges the study of dance presents science” (deLahunta 2012, p. 5). In the course of the working group’s discussions, an additional goal emerged: to develop a “Statement of Principles” synthesising the perspectives of the working group and to be used to inform education, policy makers and the public.

These aims were further pursued in the third meeting, resulting in 11 collaborative research project proposals, the presentation of a “Statement of Principles” at a congress on dance (Düsseldorf, 6-8 June 2013) and several joint publications. Beyond the scope of the project, members of the working group met in a follow-up workshop in 2015 (workshop website) to share project outcomes and discuss future ideas, such as enhancing publication and dissemination strategies, expanding the research network, initiating co-teaching by artists, scholars and scientists, and developing strategies for future funding.

This project demonstrates the range of supportive preconditions needed for successful AH(SS) and STEM integration. However, even with such support in place, there are institutional barriers to such collaborations. The facilitator of the workshops also describes “a practical systemic problem that occurs when scientists and artists try to work together on equal collaborative terms. Without the institutional affiliations that are normal for scientists and scholars, artists often find themselves unable to participate in funding applications that require such connections be in place [...] e.g. Kate Stevens was not able to involve Freya Vass-Rhee without an institutional affiliation in her ARC Linkage application” (deLahunta 2012, p. 7).

To sum up, this case study illustrates the integration of STEM and AHSS disciplines into research about arts: the arts as creators of new knowledge served



not only as a means, but were – at least to some extent<sup>3</sup> – examined as research topic per se. STEM disciplines were invited to help to translate the ‘language’ of dance into formats that allow the knowledge inherent in a choreography to be documented. The question-led collaboration and collective experimentation of different (disciplinary) methods led to increased mutual understanding and the formulation of joint research projects.



**New forms of collaborative research involving artists, scientists and scholars take time to evolve. Some time without expectations of specific research output is required. This allows participants to develop forms of communication (languages) that allow everyone eventually to feel they meet on the same level. Dance Engaging Science gave the Workgroup and others participating the chance to collectively explore these tensions.**

deLahunta 2012, p. 7

## Further Resources

- [Dance Engaging Science project website](#)
- [Motion Bank project website](#)
- [Follow-up workshop website](#)
- deLahunta, Scott (2012) Interim Report: Off the Beaten Path (Meeting 1-3). Dance Engaging Science (DeS) Interdisciplinary Research Workshops. Reference Nr. 1/84 930, 25 November 2012
- Jung, Christian (2013). [Kunst trifft Wissenschaft: Das Tanztheaterprojekt «Dance Engaging Science»](#) [PDF link].
- Vass-Rhee, Freya (2013): Promising research, questioning education: The Dance Engaging Science Workshops. In: Edith Boxberger & Gabriele Wittmann (eds): pARTnering documentation: approaching dance. heritage. culture. 3rd Dance Education Biennale, Munich: ePodium Verlag, p. 50-53.

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<sup>3</sup> «... the discussions were marked, as Kate Stevens noted, by “tensions” related to two concerns: the search for questions of mutual interest and the desire to find a “middle ground” where dance could be studied for dance’s sake itself.” (Vass 2013, p. 51)

