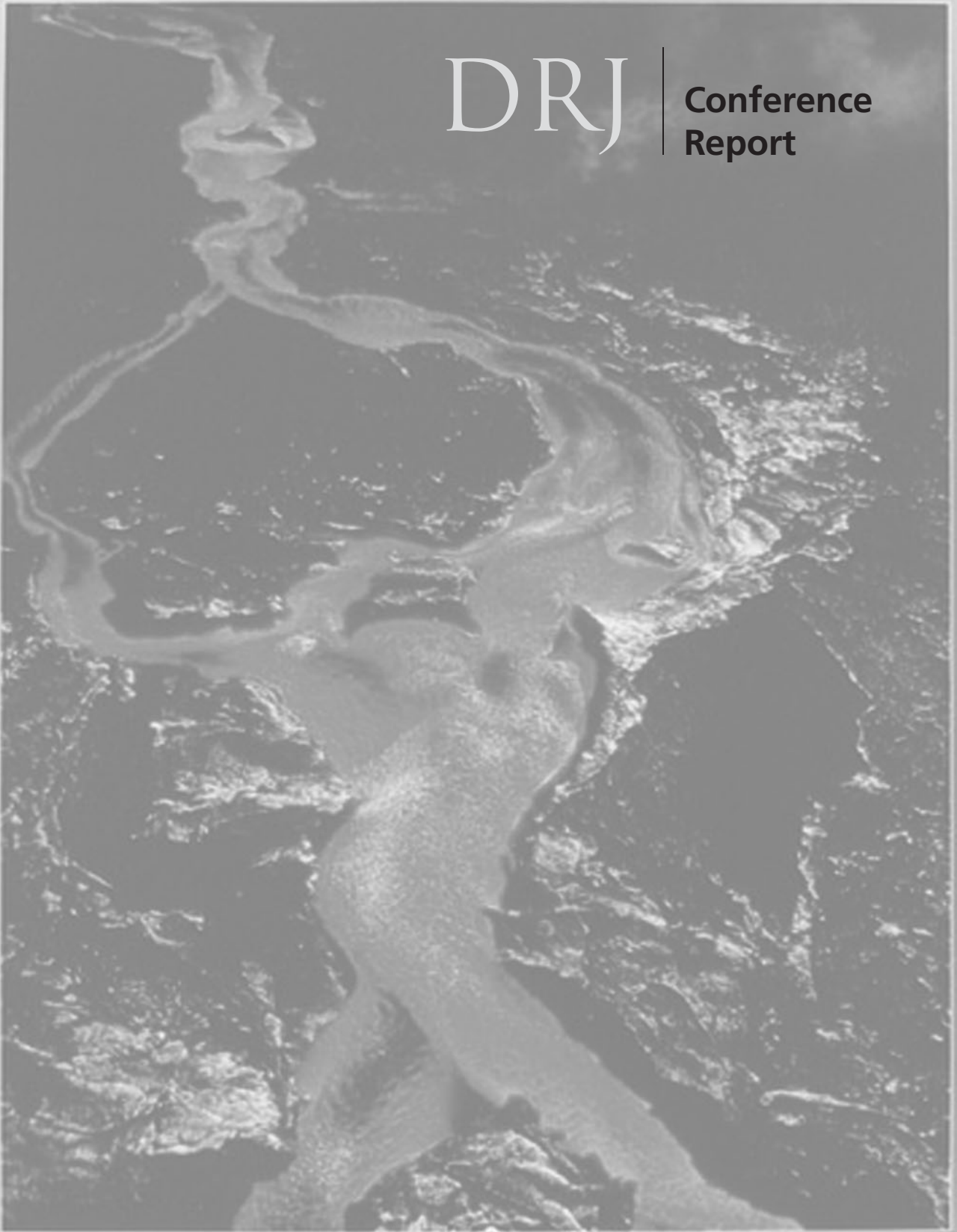


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Conference
Report



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K A T I A K R A F T

Kinesthetic Empathy: Concepts and Contexts, University of Manchester, England, April 22–23, 2010

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The conference Kinesthetic Empathy: Concepts and Contexts, held at University of Manchester, England, on April 22–23, 2010, mapped new academic territory by presenting kinesthetic empathy as a pivotal concept that provides innovative insights on intersubjective communication and on spectators' engagement with a wide range of cultural and creative practices. The event convened researchers and practitioners from neuroscience, dance, film, music, and contemporary embodied practices, involved with kinesthesia, empathy, and kinesthetic empathy as objects of inquiry. The conference was concerned with interrogation into notions of affect, presence, embodiment, and the senses; was influenced by the re-examination of phenomenology, and involved a currently widespread interest in neuroscientific investigation (notably in the "mirror neuron" system). The conference was organized by the Watching Dance: Kinesthetic Empathy project, funded in the UK from 2008–2011 by the Arts and Humanities Research Council (see also Reason and Reynolds, 2010).

Dee Reynolds's welcome address opened with the image of the goddess of Pele. It was a poignant moment, given the effect of the Icelandic volcano, Eyjafjallajökull, on the conference. The image of Pele, a Hawaiian volcano and fire goddess known for her powerful energy in dance and her lightning, provided a poetic connection between nature, dance, science, creativity, imagination, and the travel dilemmas caused by the volcanic ash cloud. The conference went ahead despite these difficulties, with a few program substitutions, presentations *in absentia*, and general resourcefulness and good will.

Four interdisciplinary panels, entitled "Audiences," "Kinesthetic Experience and Embodied Practices," "Creative Practices," and "Looking and Listening," included presentations by artists, academic scholars, and researchers. Invited speakers on the panels were photographer Chris Nash, filmmaker Rachel Davies, and film director Alex Reuben, who gave a practitioner's perspective on kinesthetic empathy. Each day began with movement workshops, and further workshops were interspersed throughout the two days. The workshops provided an application of the content of the presentations and allowed for exploratory investigation into the processes often associated with mirror neurons. For example, Bonnie Meekums's workshop used a range of movement exercises to explore embodied experience of mutual recognition and intersubjectivity. Embodiment accessed through visualization, imagination, intention, and touch was examined, and indeed, one of the delegates said, "The ability to actually explore some of the ideas at the conference with my body was most useful for my dance practice." In addition to the presentation and workshop program, a double performance bill was scheduled for the first evening, aptly entitled *KINESTECH: Dancing Across Media*. Featured were Bridget Fiske's *Red Rain*, a solo performance presenting interrelationships between the live body, and interactive and visual media, and Melanie Clarke's *Both of View*, an improvised collaboration between a dancer/choreographer and a percussionist/composer. Throughout the duration of the conference, a Multimedia Gallery featured an interactive installation by Becky Edmunds and Gill Clarke, called *Stones and Bones*, which was shown on three televisions in the Gallery, with a further version of the work being displayed on iPods in the main breakout area, giving the viewer an alternative way of seeing a moving

body on a screen that could be held in one's hand. The conference also attracted twenty-seven poster presentations, giving people the opportunity to present their research in a format that is familiar to the scientific community but innovative for those in humanities. The posters brought together research in neuroscience, movement practices, and dance exploring the concept of kinesthetic empathy, and included titles such as "The Mover Witness Exchange: Interdisciplinary Pedagogy and Communication Tool" (also translated into a movement workshop in Professor Emilyn Claid's absence) by Eila Goldhahn, which used an Authentic Movement method in experiencing links between embodied experience and articulate knowledge. "Bending Bodies, Acrobatic Feats, and Kinesthetic Empathy in the Human Brain," by Emily Cross, reported on an investigation into whether the observer recruited the mirror system when watching actions that the observer could not repeat with his or her own body. Liesbeth Wildschut presented her work "Moving Whilst Watching: Manifestations of Kinesthetic Empathy," which detailed research into a strategy used by a choreographer to explore whether the audience needs to be seated at a close proximity to the performer to induce a "feeling of being one body."

In her keynote address, Susan Foster traced a brief history of kinesthetic empathy and looked at the origin and development of the two terms from which the phrase is composed—kinesthesia and empathy. She discussed how meanings of the terms have changed according to changing conceptions of the body. Foster provoked thought about how our understanding of these concepts is historically implicated and continually evolving, most recently through the ways in which we are exploring technologically informed, layered identities and the idea of "networked bodies."

Christian Keysers gave an overview of selected neuroscientific research on mirror neurons, which included video clips in which a macaque monkey's "mirror neurons" could be heard firing (which was an electronic zap similar to the sound of radio interference). Keysers critiqued what he called a "hamburger model" of the brain, which "unhealthily" separates perception, thinking, action, and sensations, and proposed a more integrative and complex model that considered the more "juicy" parts of perceptual processes, namely thinking and interpretation, that occur when you watch dance or listen to music. Keysers also talked about the complexities of how we interpret emotion from the movements of another, which invited parallels with how we view the dancing body.

Alain Berthoz questioned whether mirror neurons are the answer to every way we interpret the behavior and actions of another, and talked about perception as active and multisensory. He presented the differences in definition, from the neurophysiological perspective, of the terms sympathy and empathy. He stressed the spatial aspects of perception in relation to kinesthetic empathy, and how empathy includes a physical rotation into the others' point of view, or a shift of one's spatial reference frame, in contrast to a "sympathetic" mirroring of the other person. Berthoz also touched on some of the challenges in understanding human motion, such as using the stabilization of the head and the gaze as reference points, rather than the center of the body.

One theme across several presentations, including Keysers' keynote address, was that kinesthetic empathy is intermodal and not only concerned with visual perception, though much of the literature focuses on vision. Glenna Batson's movement workshop, for example, asked participants to separate movement and language, which highlighted how difficult this is, showing the inter-relationship of language and our kinesthetic experience. Kelina Gotman's presentation, about the nature and quality of care in prison settings, illustrated how space and the environment impact on empathetic experience, and highlighted personal and ethical implications of empathizing with another. Tal-Chen Rabinowitch (on behalf of collaborators Ian Cross and Pamela Burnard) and Stephanie Jordan both signaled further considerations of how music impacts on social interaction and dance appreciation, thus highlighting aural perception as another aspect of kinesthetic empathy. Sue Hawksley's poster presentation and movement workshop, about the use of touch in dance movement therapy, likewise raised questions about tactility and its role.

Several presentations continued with Foster's suggestion in her keynote address regarding investigating bodily interactions with digital technologies and how kinesthetic empathy might apply to digital contexts. For instance, Rachel Davies showed material from her work *The Light Garden*, in which interactive installation appeared to transport child and adult audience members into another world—one that puts play at the center, via these technologies. Nicola Shaughnessy's presentation and her work with autistic children similarly showed an enrichment of the children's lives by creating an "under the sea" environment where the children could interact and extend their notions of body experience beyond the "normal everyday world." Frédéric Bevilacqua presented his work with interactive dance installations, *Double Skin/Double Mind* and *If/Then Installed*, which showed a number of people spontaneously and willingly experimenting and dancing with a digital partner, which was displayed on a video screen and was partially dependent on the "live" person's motion. Even the virtual presentations, by Brian Knoth, Greg Corness, and Thecla Shiphorst who could not attend the conference, challenged notions of presence and the increasing possibilities for interacting with people across the world, appearing as if in two places at once.

Attendees were left with many intriguing and difficult questions to take with them and inspire their future work. Many questions from delegates in the concluding open space session and subsequently posted online pointed to where the research on kinesthetic empathy is heading and where there are gaps that need to be further addressed. There were questions that were specific to dance and dance practices, such as, How can neuroscientists further develop their work with dancers, and vice versa, to extend the work in both fields? Can information about "mirror neurons" be applied to dance and other forms of physical training? If so, in what ways might we translate and apply complex conclusions from experimental methodologies in neuroscience to dance practice, for example, in teaching and learning? How do we do this in a way that enhances dance practice and complements knowledge already gained by practitioners? Questions regarding other performance contexts, specifically music, were also raised: Can musical or auditory gestures convey the same effect as dance gestures? What is the role of the mirror neuron system in musical communication and music audiences' responses? What might we further learn from those that are blind or deaf related to mirror neuron activation that will expand on our understandings of music and dance perceptions? Further questions related to the therapeutic use of dance: How might the intersubjective therapist–mover relationship be studied neuroscientifically, such as in the case of patients with depression? How might the conclusions being drawn from neuroscience impact on the quality of people's emotional lives? More open philosophical questions were brought up as well: What are the ways that a person can be empathetic in various contexts, such as at work, as a participant in a neuroscientific study, as a performer, as an audience member, and so on? How can we continue to do justice to the complexities of embodiment with our research, practice, and art, particularly as related to the concept of kinesthetic empathy? What more do we have to learn in continuing interdisciplinary exchanges, such as crossing media studies with psychology or dance studies with cognitive science? What are the hybrid perspectives that are coming out of interdisciplinary exchanges? What are we gaining, and what might we be losing? What is the future of kinesthetic empathy? These are only some, among a myriad, of questions that were raised at and by the conference.

Dancers, choreographers, movement therapists, psychologists, neuroscientists, academics, musicians, filmmakers, and those in many other disciplines had a physical place and time to converge on the same issue that they were passionate about—kinesthetic empathy—and this to them was what was most enriching. One of the delegates said, "As a choreographer, dancer, and dance studies scholar, I greatly valued the chance to speak with a neuroscientist and directly address questions I have with these complex ideas." The one-to-one exchanges over lunch and coffee, in the corridor and around the poster presentations, proved valuable for many.

Several publications, online and off, have extended and will continue to extend the discourse on the concept of kinesthetic empathy. The *Watching Dance* project is hosting a Web site to document the

conference and encourage further discussion: <http://www.watchingdance.ning.com>. Here, anyone, regardless of attendance, can view conference events and watch video files of the keynotes, panel presentations, some movement workshops, and interviews with delegates, and can contribute by adding comments to the discussion forum. The site also contains photographs of posters and lists members who have joined the group. It provides a virtual platform to view the conference as well as a discussion arena for people who were present to stay in touch, for those who could not attend due to the ash cloud, and also for new members. Conference abstracts are posted on the main project site: <http://www.watchingdance.org>. Publications include an edited volume on kinesthetic empathy (Reason and Reynolds, forthcoming) and two journal Special Issues: one of *Participations: Journal of Audience & Reception Studies* (2010) on the topic of screen dance audiences, and one electronic issue of *Dance Research*: “Dance and Neuroscience: New Partnerships” (2011).

The interdisciplinary nature of the event laid the groundwork for an exciting path for the future; it endorsed an atmosphere of shared interests amongst the delegates, whatever background they came from. It is hoped that the conference created further potential for collaboration. Above all, the conference provided a springboard for people to take research forward in their different disciplines in new ways that will be more fully informed by kinesthetic empathy.

Photo credit: Katia Krafft, <http://www.uhh.hawaii.edu/~csav>.

Works Cited

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