



## OVERVIEW

THIS RESEARCH CLUSTER AIMED TO BRING NEW SPATIAL IDEAS INTO DESIGN AND TO DEVELOP A CROSS-DISCIPLINARY COMMUNITY OF DESIGNERS AND EXPERTS IN ASPECTS OF SPATIALITY FROM OTHER DISCIPLINES. THE NOTION OF SPACE, AND ITS APPLICATIONS IN BOTH ART AND SCIENCE, EXTENDS FAR BEYOND THE TWO- AND THREE-DIMENSIONAL PROPERTIES OF EUCLIDEAN SPACE WHICH HAVE ALWAYS BEEN – AND REMAIN – IMPORTANT FOR PRODUCT DESIGN AND GRAPHIC DESIGN, FOR EXAMPLE. THERE ARE NOW NEW AND EXCITING WAYS OF THINKING SPATIALLY ABOUT COGNITION, OF UNDERSTANDING SPATIAL METAPHOR IN LANGUAGE, OF EXPLORING INFORMATION SPATIALLY (CYBERSPACE), OF VISUALIZING DESIGN SPACE, OF REASONING WITH QUALITATIVE SPATIAL RELATIONS (ALONGSIDE, NEAR, PART-OF, ETC), OF FORMALIZING AESTHETIC KNOWLEDGE, OF UNDERSTANDING ARCHITECTURE, OF USING SPACE IN ART, OF DEALING WITH SPATIAL INFORMATION THAT IS VAGUE, UNCERTAIN, GRANULAR, FUZZY ETC, ETC. THE CLUSTER AIMED TO DISSEMINATE THESE NEW IDEAS AND TO EXPLORE THEIR APPLICATION TO DESIGN.

## Activities

We have held regular meetings bringing together people from many disciplines which included presentations on diverse aspects of spatiality which were followed up with discussions. We held a two-day 'Spatiality Marketplace' at the Yorkshire Sculpture Park in July. The marketplace enabled participants to come with needs for spatial thinking from their own areas and to leave with new ways of addressing these needs as suggested by other participants. One of the marketplace outcomes was the involvement of Prof Tom McLeish (University of Leeds, School of Physics and Astronomy) with interior design students from the Leeds College of Art and Design around the topic of higher-dimensional spaces. Another focus for interdisciplinary activity for the cluster has been a system for drawing in three-dimensional space. The use of this system by a number of artists, including Claude Heath, has enabled us to explore new ways space can be represented. Interviews with the artists were recorded and examined to provide insights into the use of language when talking about space.

## Insights

The interest in the cluster showed that spatiality was an important element for people from many very different backgrounds. Our activities were deliberately open-ended, not assuming what aspects of spatiality were most important. One lesson is that this has enabled unexpected fruitful collaborations, but has sometimes been too diffuse to generate immediately measurable outcomes. We will be producing a publication about our main activities, and we expect to continue exploring topics generated by the three-dimensional drawings; in particular, asking: *What forms of spatial representation which allow interaction and collaboration are most effective in design?* Spatiality underlies much of design, and the cluster experience has provided evidence of how spatiality might be used as a unifying theme capable of bringing together separate areas within design research.