

CONCEPTUAL ENGINEERING

Online Seminar 2021

#04 | Peter Gärdenfors (Lund)

Natural Concepts in Humans and in Machines: A Design Perspective

Abstract

The core idea of the theory of conceptual spaces is that concepts can be represented as regions in dimensional spaces. A key question is what characterizes a natural concept. In previous works, I have proposed that the region representing a concept should be convex. I will present some motivations for this requirements. Together with Igor Douven, I have developed some further criteria that natural concepts should fulfil: Parsimony, informativeness, representativeness (based on prototypes), contrast (concepts should be easy to tell apart), and learnability. I will present and discuss these criteria. In the final part, I present some ideas concerning how a machine can learn concepts (and the corresponding words) that fulfil these criteria. Here a central problem will be how events are represented.

The **Conceptual Engineering Online Seminar** series is co-organized by the Department of Philosophy of the University of Zurich and the Arché Philosophical Research Centre at the University of St Andrews. The meetings take place on zoom every Tuesday at 4-6pm Swiss Time/3-5pm British Time, from September 14 to December 14, 2021 (with 14 sessions in total).

Organizers

Manuel Gustavo Isaac
& Kevin Scharp



WEB DETAILS

Zoom meeting ID: 675 8251 8255

Password: CEOS21 (invite link)

YouTube channel: www.youtube.com/c/ConceptualEngineering