

Announcement

Virtual Colloquium Series

The Cognitive Science Society is hosting a 2004 virtual colloquium series presented live via the Internet, with the first talk given by David Kirsh. Register now to attend by clicking on <http://www.ctaresource.com/CognitiveScience>.

Time: Friday March 5, 2004
1:00pm US Eastern Standard Time

Presenter: Dedre Gentner
Psychology Department, Northwestern University

Topic: Analogical Reasoning

Analogy is a general learning process by which abstract knowledge can arise from experience. Comparison invites a structure-mapping process that fosters learning and conceptual change in at least four ways: they highlight common relational systems; they promote inferences; they call attention to potentially important differences between situations; and they lead to re-representations that maximize common structure.

Most prior work focuses on analogy as a means of importing knowledge from a well-understood case to a less familiar one. This kind of mechanism cannot explain the origins of human learning without postulating a fund of initial knowledge. I focus here on another form of analogical learning – analogical encoding – in which comparison between two partly understood situations results in better understanding of both. Thus structure-mapping acts as a bootstrapping process for learning.

The power of analogy is amplified by language learning. Hearing a common label invites comparison between the referents, and this structure-mapping process yields insight into the meaning of the term. The mutual facilitation of analogical processing and language learning is a major reason that humans are so smart.

Further information about this talk, the colloquium series, a schedule of future talks, and an archive of previous talks are available at <http://www.cognitivesciencesociety.org/colloquium>

Contact Janet Morrow at cta@aptima.com with any questions about registration for this seminar.