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Nota di contenuto	Invited Talks -- Invited Talk: Representations to Mediate Geospatial Collaborative Reasoning: A Cognitive-Semiotic Perspective -- Invited Talk: Jon Barwise: A Heterogeneous Appreciation -- Tutorial 1 - Formal Approaches to Diagrams -- Tutorial 1: Formal Approaches to Visual Language Specification and Understanding -- Tutorial 2 - Cognitive Approach to Diagrams -- Tutorial 2a: Cognitive History of Science: The Roles of Diagrammatic Representations in Discovery and Modeling Discovery -- Tutorial 2b: Cognitive (Production System) Modelling of

How an Expert Uses a Cartesian Graph -- Tutorial 2c: The Coordination of External Representations and Internal Mental Representations in Display-Based Cognitive Tasks -- Logic and Diagrams -- Positive Semantics of Projections in Venn-Euler Diagrams -- On the Completeness and Expressiveness of Spider Diagram Systems -- Non-standard Logics for Diagram Interpretation -- Reviving the Iconicity of Beta Graphs -- Constraint Matching for Diagram Design: Qualitative Visual Languages -- Picking Knots from Trees -- Theoretical Concerns about Diagrams -- Differentiating Diagrams: A New Approach -- Logical Systems and Formality -- Distinctions with Differences: Comparing Criteria for Distinguishing Diagrammatic from Sentential Systems -- Cognition and Diagrams -- How People Extract Information from Graphs: Evidence from a Sentence-Graph Verification Paradigm -- Restricted Focus Viewer: A Tool for Tracking Visual Attention -- Communicating Dynamic Behaviors: Are Interactive Multimedia Presentations Better than Static Mixed-Mode Presentations? -- Capacity Limits in Diagrammatic Reasoning -- Human Communication with Diagrams -- Recording the Future: Some Diagrammatic Aspects of Time Management -- Lines, Blobs, Crosses and Arrows: Diagrammatic Communication with Schematic Figures -- Animated Diagrams: An Investigation into the Cognitive Effects of Using Animation to Illustrate Dynamic Processes -- A Comparison of Graphics and Speech in a Task-Oriented Interaction -- Diagramming Aesthetics: Modernism and Architecture in the 21st Century -- Diagrammatic Reasoning/Proof Systems -- JVenn: A Visual Reasoning System with Diagrams and Sentences -- A Proposal for Automating Diagrammatic Reasoning in Continuous Domains -- Playing with Diagrams -- The Use of Intermediate Graphical Constructions in Problem Solving with Dynamic, Pixel-Level Diagrams -- Diagrams for Systems, Systems for Diagrams -- Treatment of Diagrams in Document Image Analysis -- Universal Arrow Foundations for Visual Modeling -- Diagrammatic Acquisition of Functional Knowledge for Product Configuration Systems with the Unified Modeling Language -- Evaluating the Intelligibility of Diagrammatic Languages Used in the Specification of Software -- Executing Diagram Sequences -- MetaBuilder: The Diagrammer's Diagrammer -- Diagrammatic Control of Diagrammatic Structure Generation -- Two-Dimensional Positioning as Visual Thinking -- Reordering the Reorderable Matrix as an Algorithmic Problem -- Posters -- Clouds: A Module for Automatic Learning of Concept Maps -- A Diagrammatic Notation for Interval Algebra -- Animation of Diagrams: An Aid to Learning? -- Diagrams as Components of Multimedia Discourse: A Semiotic Approach -- Formalising the Essence of Diagrammatic Syntax -- Using Grids in Maps -- Case Analysis in Euclidean Geometry: An Overview -- Bar Charts Recognition Using Hough Based Syntactic Segmentation -- Experimenting with Aesthetics-Based Graph Layout.

Sommario/riassunto

Diagrams 2000 is dedicated to the memory of Jon Barwise. Diagrams 2000 was the ?rst event in a new interdisciplinary conference series on the Theory and Application of Diagrams. It was held at the University of Edinburgh, Scotland, September 1-3, 2000. Driven by the pervasiveness of diagrams in human communication and by the increasing availability of graphical environments in computerized work, the study of diagrammatic notations is emerging as a research ?eld in its own right. This development has simultaneously taken place in several scienti?c disciplines, including, amongst others: cognitive science, arti?cial intelligence, and computer science. Consequently, a number of di?erent workshop series on this topic have been successfully organized during the last few years: Thinking with

Diagrams, Theory of Visual Languages, Reasoning with Diagrammatic Representations, and Formalizing Reasoning with Visual and Diagrammatic Representations. Diagrams are simultaneously complex cognitive phenonema and sophis- cated computational artifacts. So, to be successful and relevant the study of diagrams must as a whole be interdisciplinary in nature. Thus, the workshop series mentioned above decided to merge into Diagrams 2000, as the single - terdisciplinary conference for this exciting new ?eld. It is intended that Diagrams 2000 should become the premier international conference series in this area and provide a forum with su?cient breadth of scope to encompass researchers from all academic areas who are studying the nature of diagrammatic representations and their use by humans and in machines.