Tuesday, August 18

2:00 - 9:00 Registration — Residence Hall, Unit 1

6:00 - 9:00 Welcome Reception — Residence Hall Patio

Wednesday, August 19

8:00 - 9:00 Registration

9:00 Opening Remarks

9:15 - 10:15

William Labov
University of Pennsylvania
On Restricting the Meaning of Meaning

Break

10:30 - 11:30 Session 1 155 Dwinelle Hall

Interestingness and Memory for Stories

John B. Black, Steven P. Shwartz, Wendy G. Lehnert

Use of Goal-Plan Knowledge in Understanding Stories Edward E. Smith, Allan M. Collins

Inferences in Story Comprehension
Raymonde Guindon (sponsored by Alice Healy)

Session 2 145 Dwinelle Hall

Self-Embedding is <u>not</u> a Linguistic Issue **John M. Carroll** 

Center-Embedding Revisited Michael B. Kac

The Comprehension of Focussed and Non-Focussed Pronouns

Jeanette A. Gundel, Deborah A. Dahl

Lunch break

12:45 - 1:45 Session 3 155 Dwinelle Hall

The Natural Natural Language Understander Henry Hamburger, Stephen Crain

Why Do Children Say "Goed"? —
A Computer Model of Child Generation

Mallory Selfridge (sponsored by Katherine Nelson)

Five Experiments in the Development of the Early Infant Object Concept

George F. Luger, T. G. R. Brower, Jennifer G. Wishart

Session 4 145 Dwinelle Hall

Analogy Generation in Scientific Problem Solving John Clement

**Understanding Design** *Gerhard Fischer, Heinz-Dieter Boecker* 

System Properties of American Law:
Constraints on Applying Cognitive Science
Janet L. Lachman, Roy Lachman

Break

2:00 - 3:00 Session 5 155 Dwinelle Hall Writing with a Computer

Writing with a Computer Ira Goldstein

Creating Pleasant Programming Environments for Cognitive Science Students Marc Eisenstadt, J. H. Laubsch, J. H. Kahney

New Tools for Cognitive Science Leonard Friedman

Session 6 145 Dwinelle Hall

The Cultural Constraints on Models of Cognitive Representation

Alf C. Zimmer

Some Thoughts on Logic, Language, Mind and Reality
Rachel Joffe Falmagne

Time and Cognition:

The Domestication of the Maya Mind Hugh Gladwin

**Break** 

3:15 - 4:15 Session 7 155 Dwinelle Hall

Why Some Modified Class Inclusion Tasks are Easy for Young Children: A Process Model for Finding Referents of Labels in Arrays

Adele A. Abrahamsen

MOPs and Learning Roger C. Schank

Retrieving General and Specific Information from Stored Knowledge of Specifics

James L. McClelland

Session 8 145 Dwinelle Hall

Can IF be Formally Represented?

D. S. Bree

To See and Not to See, That is the Question A. Andreewsky, G. Deloche, D. Bourcier

E/Motional Memory as Mediating Construct *Marisa Zavalloni* 

Break

4:30 - 5:30 Session 9 155 Dwinelle Hall

The Perception of Disoriented Complex Objects Steven Shwartz (sponsored by Stephen Kosslyn)

The Role of Intrinsic Axes in Shape Recognition Marianne Wiser (sponsored by Mary Potter)

Relations Between Schemata-Based Computational Vision and Aspects of Visual Attention

Roger A. Browse (sponsored by D. Kahneman)

Session 10 145 Dwinelle Hall Growing Schemas Out of Interviews Jerry R. Hobbs, Michael H. Agar

Shaping Explanations:

Effects of Questioning on Text Interpretation

Richard H. Granger, Jr. (sponsored by Dogulas R. White)

The Need for Context in Event Identity John M. Morris

Dinner break

7:30 - 9:30 155 Dwinelle Hall

Symposium Goals
Robert Wilensky, Chair
Richard Fikes
Barbara Hayes-Roth
James Levin
Naomi Quinn

Social get-together — location to be announced

Thursday, August 20, 1981

9:00 - 10:00

Robert P. Abelson Yale University Constraint, Construal and Cognitive Science

Break

10:15 - 11:35

Session 11 145 Dwinelle Hall

Point of View in Problem Solving Edwin L. Hutchins, James A. Levin

Representing Problem-Solving Episodes Arthur M. Farley, David L. McCarty

Where Process-and-Measurement Models Meet: **Evaluation of States in Problem Solving** Jan Drösler (sponsored by Walter Kintsch)

Positive Affect and Creative Problem Solving Alice M. Isen, Gary P. Nowicki

Session 12 155 Dwinelle Hall

**Memory in Story Invention** 

Natalie Dehn (sponsored by Robert Abelson)

Recognizing Thematic Units in Narratives Brian J. Rieser, Wendy G. Lehnert, John B. Black (sponsored by Andrew Ortony)

Using Qualitative Simulation to Generate Explanations Kenneth Forbus, Albert Stevens

**COGNET** — Special Session (open meeting) Allan Newell, Dick Millward

Lunch break

12:45 - 1:45

Session 13 155 Dwinelle Hall

The Role of TAUs in Narratives

Michael G. Dyer (sponsored by Wendy Lehnert)

Controlling Parsing by Passing Messages Brian Phillips, James Hendler

A Parser with Something for Everyone Eugene Charniak

Session 14 145 Dwinelle Hall

Thought Sequences and the Language of Consciousness Benny Shannon

What Conditions Should a Theory of Consciousness Satisfy? Bernard J. Baars

The Role of the Observer in Cognitive Science Richard Hammersley (sponsored by Donald Norman)

Break

2:00 - 4:00 155 Dwinelle Hall

Symposium — Perception Stephen Palmer, Chair Alan Gilchrist Geoffrev Hinton Paul Kay Shimon Ullman

Break

4:15 - 5:15

Session 15 155 Dwinelle Hall

Are We Ready for a Cognitive Engineering? Stuart K. Card, A. Newell

**Knowledge Structures of Computer Programmers** Beth Adelson (sponsored by Marilyn Shatz)

GLISP:

An Efficient, English-Like Programming Language Gordon S. Novak, Jr.

Session 16 145 Dwinelle Hall

Some Questions About Verbal and Pictoral Representation

Sheldon Richmond

The Relationship Between Human Motion and Objects in the Cognitive Representation of Visual Events Margot D. Lasher

Toward a Model of Cognitive Process in Cartoon Comprehension

Michael Masson, Inga Boehler (sponsored by Peter Polson)

Dinner break

6:30 - 7:30 155 Dwinelle Hall **Business Meeting** (open meeting)

8:00 - 10:00 155 Dwinelle Hall

Symposium – Affect George Mandler, Chair Wendy Lehnert Katherine Lutz Andrew Ortony Amos Tversky

Friday, August 21, 1981

9:00 - 10:00 155 Dwinelle Hall

Manfred Bierwisch Academy of Sciences (GDR) — topic to be announced

Break

10:15 - 11:15

Session 17 155 Dwinelle Hall

Demon Timeouts: Limiting the Life Span of **Spontaneous Computations in Cognitive Models** Steve Small (sponsored by Chuck Rieger)

The Effects of Integrated Knowledge on Fact Retrievel and Consistency Judgments: When Does it Help, and Does it Hurt?

Lynne M. Reder, Brian H. Ross

A Question Answering Method of Exploring Prose Comprehension: An Overview Arthur C. Graesser

Session 18 145 Dwinelle Hall

The Role of Context in Cognitive Development

Concept Formation Through the Interaction of Multiple Models

Mark H. Burstein (sponsored by Christopher Riesbeck)

A Simulated World for Modeling Learning and Development

Pat Langley, David Nicholas, David Klahr, Greg Hood

Lunch break

12:45 - 1:45

Session 19 155 Dwinelle Hall

Why Do We Do What We Do

James A. Galambos, John B. Black (sponsored by Lance Rips)

An Activation-Trigger-Schema Model for the Simulation of Skilled Typing David E. Rumelhart, Donald A. Norman

Toward a Formal Theory of Human Plausible Reasoning Allan Collins, Ryszard S. Michalski

Session 20 145 Dwinelle Hall

Skills, Learning, and Parallelism

Aaron Sloman

Cognitive Style and the Learning of a First Computer Language

M. J. Coombs (sponsored by R. Wilensky)

The Concept of E-Machine: On Brain Hardware and the Algorithms of Thinking Victor Eliashberg

Break

2:00 - 3:00

Session 21 145 Dwinelle Hall

Invariance Hierarchies in Metaphor Interpretation Jaime G. Carbonell (sponsored by Philip Hayes)

**Dual-System Processing in Language Comprehension** Jon M. Slack

**Metaphor as Nonliteral Similarity** Odella Schattin, Hartvig Dahl (sponsored by Virginia Teller)

Session 22 145 Dwinelle Hall

A Theory of Intelligence Pieter van Heerden

A Tetragenic Frame for Modelling Unmediated **Knowledge Acquisition** 

Egon E. Loebner

Surrealistic Imagery and the Calculation of Behavior Sheldon Klein, David A. Ross, Mark S. Manasse, Johanna Danos, Mark S. Bickford, Walter A. Burt, Kendall L. Jensen

**Break** 

3:15 - 4:15

Session 23 145 Dwinelle Hall

Learning with Understanding

James G. Greeno

The Growth of Number Representation: Successive Levels of Schematic Learning Lauren B. Resnick

The Role of Experiences and Examples in Learning **Systems** 

Edwina Rissland, Oliver G. Selfridge, Elliot M. Soloway

Session 24 145 Dwinelle Hall

I-interruption Effects in Backward Pattern Masking: The Neglected Role of Fixation Stimuli J. Pascual-Leone, J. Johnson, D. Goodman, D. Hameluck, L. H. Theodor

Cognitive Load Affects Early Brain Potential Indicators of Perceptual Processing Jackson Beatty, Francois Richer

The Spatial Representation and Processing of Information in Cognition Gary W. Strong, Bruce A. Whitehead

(sponsored by John Holland)

Break

4:30 - 5:30 155 Dwinelle Hall

Thomas Kuhn Massachusetts Institute of Technology From Revolution to Salient Features

Dinner break

6:30 - 7:30 155 Dwinelle Hall

FRANZ LISP - USERS MEETING

Special Session

Richard Fateman, Keith Sklower

7:30 - 9:30 155 Dwinelle Hall Symposium — Mental Models Dedre Gentner, Chair John Seely Brown Andrea diSessa Philip Johnson-Laird Jill Larkin

Social get-together - location to be announced