Prospectus:

First International Conference on Event Perception

Summer 1981
University of Connecticut

Robert E. Shaw
William H. Warren, Jr.
Department of Psychology
University of Connecticut
Storrs, Connecticut 06268

Jerry Wald
Jon David Wald
Center for Research in Human Learning
205 Elliott Hall
University of Minnesota
Minneapolis, Minnesota 55455
I. **Purpose of Proposal**

We are seeking support for the First International Conference on Event Perception planned for the Summer of 1981, to be held at the University of Connecticut. Resolution of the problem of how *changes in structure over time* (events) might be perceived, characterized, measured and predicted would have far reaching theoretical and practical implications for a variety of scientific and social areas.

Consider several examples. In medical science, diagnosis, prognosis and treatment planning often depend upon an understanding of the perceptual information for changes in fine morphology (cellular structure), as in the case of cancerous tumors, or gross morphology (skeletal structure), as in the case of orthodontic treatment. In human engineering, an understanding of the perceptual information for changes in the pattern of traffic flow which precede and predict "bottlenecks" or collisions is crucial to air and ground traffic control and safety engineering. In computer science, an outstanding problem of "pattern" recognition is to explain the perceptual information by which a moving object might be tracked, steered toward or away from, and grasped by a machine with a visual guidance system (a robot). Finally, in education, an understanding of the perceptual information made available by animated displays depicting scientifically or socially significant events, such as the laws of motion or the gestures of sign language, is crucial to the successful development and evaluation of programs of instruction.

The above cases provide but a small sample of the implications that the study of event perception has for a wide variety of problem areas. It seems certain that no single area of scientific endeavor will be adequate to provide all the theory, method or fact necessary to address the subject. The proposed conference is intended to bring together experts in a number of relevant fields...
and to motivate a multidisciplinary exchange on the event approach. Our expressed goal is to create a "workshop" rather than "convention" atmosphere where we might work toward a consensus of opinion on both the scientific theory and social applications of event perception. In sounding out the opinions of scientists from Europe, Great Britain, Canada and the United States, we have received unanimous and enthusiastic endorsement for the proposal (see comments below).

The following sections provide a list of planning advisors, participants whose interest has been confirmed, and other possible participants (if funding permits), followed by an outline of the likely schedule of topics together with related conferences and areas of application. A selected bibliography illustrating the international and multidisciplinary range of relevant publications, most by conference participants, and a summary of the projected budget complete this prospectus.

II. Participants

Organizing Committee

Robert Shaw, Dept. of Psychology, University of Connecticut
Jerry Wald, Honeywell, Inc. and Center for Research in Human Learning, University of Minnesota
Jan David Wald, Center for Research in Human Learning, University of Minnesota
William Warren, Dept. of Psychology, University of Connecticut

Advisory Panel

Michael Arbib, Dept. of Computer & Information Science, University of Massachusetts
James Jenkins, Center for Research in Human Learning, University of Minnesota
Joseph Lappin, Dept. of Psychology, Vanderbilt University
David Lee, Dept. of Psychology, University of Edinburgh
Sverker Runeson, Psychology Institute, University of Uppsala
Michael Studdert-Kennedy, Haskins Laboratories and C.U.N.Y.
Confirmed Participants

Reuben Baron, Dept. of Psychology, University of Connecticut
John Bransford, Dept. of Psychology, Vanderbilt University
James Cutting, Dept. of Psychology, Cornell University
Eleanor Gibson, Dept. of Psychology, Cornell University
Alvin Goldman, Dept. of Philosophy, University of Michigan
Ronald Gromay, Dept. of Psychology, University of Connecticut
Julian Hochberg, Dept. of Psychology, Columbia University
Claes von Hofsten, Psychology Institute, University of Uppsala
Gunnar Johansson, Psychology Institute, University of Uppsala
Scott Kelso, Haskins Laboratories and Dept. of Biobehavioral Sciences, University of Connecticut
Jan J. Koenderink, Dept. of Medical and Physiological Physics, University of Utrecht
William Maca, Dept. of Psychology, Trinity College
Grover Maxwell, Center for Philosophy of Science, University of Minnesota
Howard Pattee, Dept. of Systems Science, S.U.N.Y., Binghamton
John Pittenger, Dept. of Psychology, University of Arkansas
Frank Restle, Dept. of Psychology, Indiana University
James Todd, Dept. of Psychology, University of Connecticut
Michael Turvey, Haskins Laboratories & Dept. of Psychology, University of Connecticut
Robert Verbrugge, Haskins Laboratories & Dept. of Psychology, University of Connecticut

Nominated Participants

Michael Benedikt, School of Architecture, University of Texas at Austin
Myron Braunstein, Dept. of Psychology, University of California at Irvine
Thomas Collet, School of Biological Sciences, University of Sussex
Michael Dempster, I.I.A.S.A., Austria (Mathematics)
Daniel Dennett, Dept. of Philosophy, Tufts University
Carol Fowler, Dept. of Psychology, Dartmouth
Nancy Frishberg, Dept. of Linguistics, N.Y.U.
Alan Gilchrist, Dept. of Psychology, S.U.N.Y. at Stonybrook
Peggy Hagen, Dept. of Psychology, Boston University
Patrick Hayes, Dept. of Computer Science, University of Essex
Gunnar Jansson, Psychology Institute, University of Uppsala
Rebecca Jones, Center for Research in Human Learning, University of Minnesota
Michael Land, School of Biological Sciences, University of Sussex
Harlan Lane, Dept. of Psychology, Northeastern University
Bjorn Lindblom, Dept. of Linguistics, University of Stockholm
Roly Lishman, Dept. of Psychology, University of Aberdeen
Darren Newton, Dept. of Psychology, University of Virginia
Thomas Pitcairn, Dept. of Psychology, University of Edinburgh
Howard Poizner, Salk Institute, San Diego
K. Przadny, Dept. of Computer Science, University of Essex
Dennis Proffitt, Dept. of Psychology, University of Virginia
Zenon Pylyshyn, Depts. of Psychology & Computer Science, University of Western Ontario
Nominated Participants (continued)

Paul Reddish, Dept. of Psychology, University of Edinburgh
Ed Reed, Center for Research in Human Learning, University of Minnesota
William Schiff, Dept. of Psychology, N.Y.U.
Quentin Summerfield, Institute of Hearing Research, University of
Nottingham Medical School
James Thomson, Dept. of Psychology, University of Strathclyde, Glasgow
Shimon Ullman, Artificial Intelligence Laboratory, M.I.T.
Rik Warren, Dept. of Psychology, Buffalo State College
F. Eugene Yates, Director of Biomedical Research, University of Southern
California Medical School

III. Schedule

A. Topics, Relevant Participants, and Applications

Day 1: Overview: The Event Concept in Philosophy and the Sciences

Goldman, Kelso, Mace, Maxwell, Pattee, Shaw, Todd, J. D. Wald, Yates

Day 2: Perception of Motion, Dynamics, and Biological Events


Applications: Medical diagnosis and biomaterials, pattern recognition, instructional design in education.

Day 3: Perceptual Constraints on Activity

Arbib, Collett, von Hofsten, Jansson, Kelso, Land, Lee, Lishman, Schiff, Thomson, Todd, Turvey, R. Warren

Applications: Medical prosthetics and biomechanics, perceptual aids, human engineering and safety, robotics and perceptual guidance, special education.

Day 4: Communicative and Social Events

Speech perception and production, sign language: Fowler, Frishberg, Lane, Lindblom, Poizner, Studdert-Kennedy, Summerfield, Verbrugge
Social activity: Baron, Benedikt, Bransford, Jenkins, Newton, Pitcairn, J. Wald

Applications: Perceptual aids, special education, second-language learning, human engineering, architectural environments.

Day 5: Summary and Evaluation

Jenkins, Lane, Hochberg, Summerfield
III. Schedule (continued)

B. Format

Day 1: To function as an orientation to the problem and topic areas. Four - six paper presentations with discussants.

Days 2-4: To function as working sessions on the day's topic. Invited papers from selected participants (distributed before the conference) and a major address will be the foci of discussants' remarks, and work groups will seek to identify central issues, questions, and critical comments. Written reports will be drawn up by work group moderators for a published report of the conference. The daily format will be as follows:

Morning: Address and questions
Break
Discussants' remarks
Lunch

Afternoon: Work groups
Break
Group reports and general discussion

Day 5: To function as a summary and evaluation of the conference, with particular attention to practical applications. Panel discussion, followed by open discussion.

IV. Selected Bibliography

IV. **Selected Bibliography** (continued)

A. Background and Review

1. **Monographs and Tech Reports**


2. **Review Articles and Chapters**


IV. Selected Bibliography (continued)


B. Selected Research


V. **Budget Summary**

To keep the conference a manageable size and yet guarantee its interdisciplinary and international nature, we propose to include between 25 and 50 participants. The outside estimates below are based on five days and nights at the University of Connecticut Conference Center.

<table>
<thead>
<tr>
<th></th>
<th>25</th>
<th>50</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Registration</strong></td>
<td>$3.00/day</td>
<td>$750</td>
</tr>
<tr>
<td><strong>Room</strong></td>
<td></td>
<td>2500</td>
</tr>
<tr>
<td><strong>Meals:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Breakfast &amp; lunch</td>
<td>5 @ $7.00/day</td>
<td>875</td>
</tr>
<tr>
<td>Dinner</td>
<td>4 @ 8.50/day</td>
<td>850</td>
</tr>
<tr>
<td>Coffee/Tea</td>
<td>5 @ 2.00/day</td>
<td>250</td>
</tr>
<tr>
<td><strong>Transportation</strong></td>
<td></td>
<td>10150</td>
</tr>
<tr>
<td>Air travel</td>
<td>9500</td>
<td>21,000</td>
</tr>
<tr>
<td>Auto travel</td>
<td>300</td>
<td>500</td>
</tr>
<tr>
<td>Airport limousine</td>
<td>350</td>
<td>700</td>
</tr>
<tr>
<td><strong>Equipment, duplication, postage</strong></td>
<td></td>
<td>500</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>$15500</td>
<td>$32900</td>
</tr>
</tbody>
</table>
Comments on the Letter of Enquiry

"I would be very much interested in attending the conference. My primary suggestion is that some serious thought be given to discussing the purposes of research on event perception. Event perception, adequately defined, is in my opinion the most important area of perceptual inquiry today." —Dr. Julian Hochberg

"I am eager to assist in any way I can with the development of the International Conference on Event Perception. I fully share your enthusiasm for the scientific importance and timeliness of this topic, and the interdisciplinary and international characteristics of the research." —Dr. Joseph Lappin

"This could prove to be a very interesting and important meeting, I am much interested." —Dr. Jan J. Koenderink

"I am definitely interested in the proposed conference on event theory. My personal interest is, first, in event theory as it relates to action theory and biology; second, as it can be applied to the study of speech perception. I would hope to learn something about perceptual information for events, event-detecting systems, and event cognition, set in a broad biological framework."

—Dr. Michael Studdert-Kennedy

"I think the Event Perception Conference is a great idea." —Dr. David Lee

"The idea of an International Conference on Event Perception sounds very interesting and suitable. I have been attempting to draw articles of this type to the Journal of Experimental Psychology: Human Perception and Performance, a fact I would like to call to the attention of you and your colleagues." —Dr. Frank Restle

"I am delighted to hear about the plans for an International Conference on Event Perception in 1981. I shall certainly try to arrange so that I can attend and also present a paper at the Conference. For a topic I would consider my ongoing studies of dynamic events involving inanimate objects and/or humans in action."

—Dr. Sverker Runeson

"Thank you for inviting me to participate in the conference on event perception. I would like to very much." —Dr. Jackie Gibson

"I think it is a very good idea to organize an International Conference on Event Perception and I would be most happy to participate in it. My topic area will be the developmental aspects of event perception and visually guided action. I am eagerly waiting to hear more about the conference." —Dr. Claes von Hofsten

"I am interested in both planning and participation for and in the International Conference on Event Perception." —Dr. Howard Pattee