Max Wertheimer MINERVA Center for Cognitive Processes and Human Performance

Report of the Fourth Advisory Council Meeting Haifa, March 13 – 15, 2002

Like the previous meetings, the Fourth Advisory Council Meeting had two parts: a colloquium that took place on March 13/14 at Haifa University and the Technion, respectively, and the Council's formal meeting which took place on March 15 at Haifa University.

Participants at the Council's formal meeting were: Aaron Ben-Zeev, Joachim Hoffmann, Peretz Lavie, Wolfgang Prinz, and Frank Rösler. Dan Zakay could not attend for personal reasons. However, since he had attended the colloquium the two days before, he communicated his opinion to the Council. The Council's formal meeting took place in the presence of Mr. Kahle from the Minerva Foundation, Munich.

This report is based on the Center's Report of Activities 10/1999 - 09/2001. On the basis of this information as well as on extensive discussion with the two directors of the Center, the Council agreed on the following conclusions.

1.

The scientific work at the Max Wertheimer Minerva Center is in excellent shape. This time the Council was no less enthusiastic than at its last meeting. Though the benchmark provided by the Council's last report was very high, the Council found the Center again beating it. This is particularly true of the Center's growing international reputation and impact. The Council was pleased to see that this is true for each of the principal investigators:

• Professor Asher Koriat's work (Haifa University) on various issues of metacognition and language processing continues to be published in first-grade journals, attracting the attention of the scholars in the field. Also, the Council was pleased to learn that Professor Koriat has recently won the Israel Prize in Psychology which attest to his excellent achievements.

- Professor Ruth Kimchi (Haifa University) has become an international leader in the domain of behavioral studies on principles of perceptual organization. Her recent experimental contributions play an important role in the development of new paradigms in this field.
- Professor Joel Norman (Haifa University) has recently gained a great deal of international attention through a target article in *Brain and Behavioral Science*. In that article, Professor Norman suggests a stimulating analysis of the two visual systems hypothesis in relation to two traditional approaches to perceptual theory.
- Dr Morris Goldsmith (Haifa University) has not only successfully continued his previous work on the strategic regulation of performance in memory tasks but also successfully taken up a new research program devoted to the distinction between objectbased and space-based additional attention.
- Professor Daniel Gopher (Technion) is in the process of contributing new and highly
 original insights into the mechanisms underlying task switching. He has developed a
 new paradigm to demonstrate that transition costs may not only arise under conditions of switches between mapping rules but also under conditions of less salient
 segmentations of the trial sequence.
- Professor Ido Erev (Technion) continues to make significant contributions to our understanding of human decision-making processes. More specifically, he has provided a detailed analysis of the mechanisms underlying "small decisions" as well as an integrative model that covers the known evidence (to be published in *Psychological Review*).

In a way, then, in this unique Max Wertheimer Center, the Minerva Foundation gets two influential centers, one at the University of Haifa and one at the Technion instead for one. Though they are different in profile, they are both excellent by any scientific criteria. The subcenter at Haifa University concentrates on perception and memory, with an emphasis of basic over applied research. Conversely, the subcenter at the Technion focuses on information processing and decision making, with an emphasis of theoretically guided applied research. The Council was pleased to learn that the Center at the Technion was recently attested outstanding performance by an international review committee for the Faculty of Industrial Engineering and Management.

2.

Again, the Council noted that there is an excellent research atmosphere in both places. We found students and post-docs enthusiastic about their work and competent in both defending their work

against criticism and still taking up suggestions for further improvement. In both places there appears to be an open and intellectually stimulating atmosphere, providing ideal training opportunities for young students. The Council concluded that the Max Wertheimer Center is a first-rate place not only for research, but also for educating young people in this endeavor.

3.

The Advisory Council was pleased with the format in which the overview of research activities was given in both written report and oral presentations. As in previous meetings, oral presentations were made up of two parts, overview lectures by the PI's and exemplary research presentations and demonstrations by younger researchers. The written report was well-structured in its format and comprehensive in contents.

4.

In both places lab space is available for (and explicitly dedicated to) Minerva-sponsored research activities. As in previous years, Minerva funds are used in two ways: for direct support of ongoing projects (with a strong component of financing PhD students) and for seed money for preliminary work on projects for which additional money is attracted. Both places have again been successful in winning a number of additional grants from various sources, allowing them to enlarge their groups of graduate students and post-docs. As a consequence, both places have clearly reached, and exceeded, the critical minimum of mass for productive scientific interaction.

5.

Again, the Council was delighted to see that scientific contact with Germany has continued to increase. For instance, Professor Erev has started a new collaboration with a scholar from the Max Planck Institute for Human Development in Berlin. Likewise, Professor Koriat has won a large DIP project in the field of metacognition, which he initiated. This project will allow him to cooperate with several German scholars over the coming years.

The Council understands that the exchange of graduate students from Israel with German labs is not easy to achieve. Still, the principal investigators at the Max Wertheimer Center will continue their efforts to extend research contacts with Germany so as to include their graduate students as well.

6.

Given the Center's excellent condition, and given the upcoming external review procedure, the Council concluded that its next meeting at Haifa should be scheduled for spring 2004. It is planned

to take place on March 7 - 9, 2004. It would be desirable to have that meeting be held in a similar format as the present one.

After delivery of this report, Wolfgang Prinz will step down from the Chair of the Advisory Council. Frank Rösler is ready to take this position.

7.

The Advisory Council took the following formal decisions:

- The Report of Activities 10/1999 09/2001 is fully approved (for evaluation of scientific activities, see above).
- The Financial Reports for the period 10/1999 09/2001 are fully approved (pp. 60/61).
- The Budget Proposal 10/2001 09/2002 is provisionally approved. It should soon be replaced by a new budget proposal (based on a more realistic estimate of the interest to be received on the invested endowment).
- The Center's plans for future scientific activities which form part of the Research Report are fully approved. The Council does not believe that a more detailed plan (i.e., at a lower grain level) would make any sense.

These decisions were taken in accordance with all Council members (incl. Dan Zakay, who had given his assent prior to the formal meeting).

8.

The Advisory Council gave its unanimous consent to this report.

Munich, April 3, 2002

Prof. Dr. Wolfgang Prinz