

PREFACE

The Second Symposium on the Analytic Hierarchy Process (ISAHP-II) was convened at the Joseph M. Katz Graduate School of Business of the University of Pittsburgh, August 12-14, 1991. ISAHP-I was held in Tianjin, China, September 1988. The papers included in these proceedings were all submitted by participants in the meeting. We did our best to proofread and edit a number of the papers particularly those written by non-English speaking authors. We apologize if in working over these papers we misunderstood and altered meanings intended by their authors.

The proceedings include a foreword by T. Saaty. They are divided into two parts. Part I is dedicated to theory and includes papers on extensions of the AHP, rank preservation and reversal, group decision making, and topics related to single matrices such as the scale to use and how to synthesize the judgments into a unidimensional scale. Part II deals with practice and includes applications of the AHP in modelling, expert systems, marketing and business, measurement and evaluation, environmental, and social and urban planning.

Among the new topics I found most interesting was the work being done by Tom Saaty on systems with feedback. He has many examples which show the appropriateness of the use of a network model in situations we are usually inclined to model with a hierarchy. Practitioners are now using network models when the interactions among the components of a problem require it.

Another topic of interest is the concept of rank preservation and reversal (see the papers in Part I, Section 2). Until the AHP was developed, people learned about the legitimacy of rank reversal from real life counterexamples given to traditional utility theory where they are banned from ever occurring by an axiomatic approach as if that puts them out of existence. It was not until the AHP came along that it became possible to deal analytically with intransitivity and even more with cardinal inconsistency. Despite the many counterexamples, to preserve their normative theory, utility theory practitioners hold onto rank preservation as a dogma to be applied in every situation, because that is what ranking alternatives one at a time is good for. They have no way like paired comparisons to deal, for example, with rank reversal brought about by the impact of the number of alternatives itself. The AHP allows the decision maker to decide on whether or not rank is to be preserved in a particular problem before he uses the necessary AHP procedure for the purpose.

This volume contains many interesting and exciting papers. We have learned that the AHP is not just another technique to derive priorities. It is a theory anchored in human behavior. Once exposed to it one becomes subconsciously addicted in every decision made thereafter.

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