

PREFACE

Bifurcation theory has made a very fast upswing in the last fifteen years.

Roughly speaking it generalises to dynamic systems the possibility of multiple solutions, a possibility already recognised in static systems - physical, chemical, social - when operating far from their equilibrium states.

It so happened that quite a few staff members of the Erasmus University Rotterdam were thinking along those lines about certain aspects of their disciplines. To have a number of specialists and potential "fans" convene to discuss various aspects of bifurcational thinking, seemed a natural development. The resulting papers were judged to be of interest to a larger public, and as such are logically regrouped in this volume, one in a series of studies resulting from the activities of the Steering Committee on Interdisciplinary Studies of the Erasmus University, Rotterdam.

Although the volume is perhaps multidisciplinary rather than interdisciplinary - the interdisciplinary aspect being only "latent" -, as a "soft" interdisciplinary exercise (the application of formal structures of one discipline to another) it has a right to interdisciplinary existence!

This book could not have been published without a generous grant of the University Foundation of the Erasmus University Rotterdam, which allowed the conference to be held and the resulting papers to be published; that generosity is gratefully acknowledged.

Work based on the ideas exposed in this volume is going on in the various centres to which the authors belong; the editors hope that these ideas will be stimulating to readers in various fields of scientific research.

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