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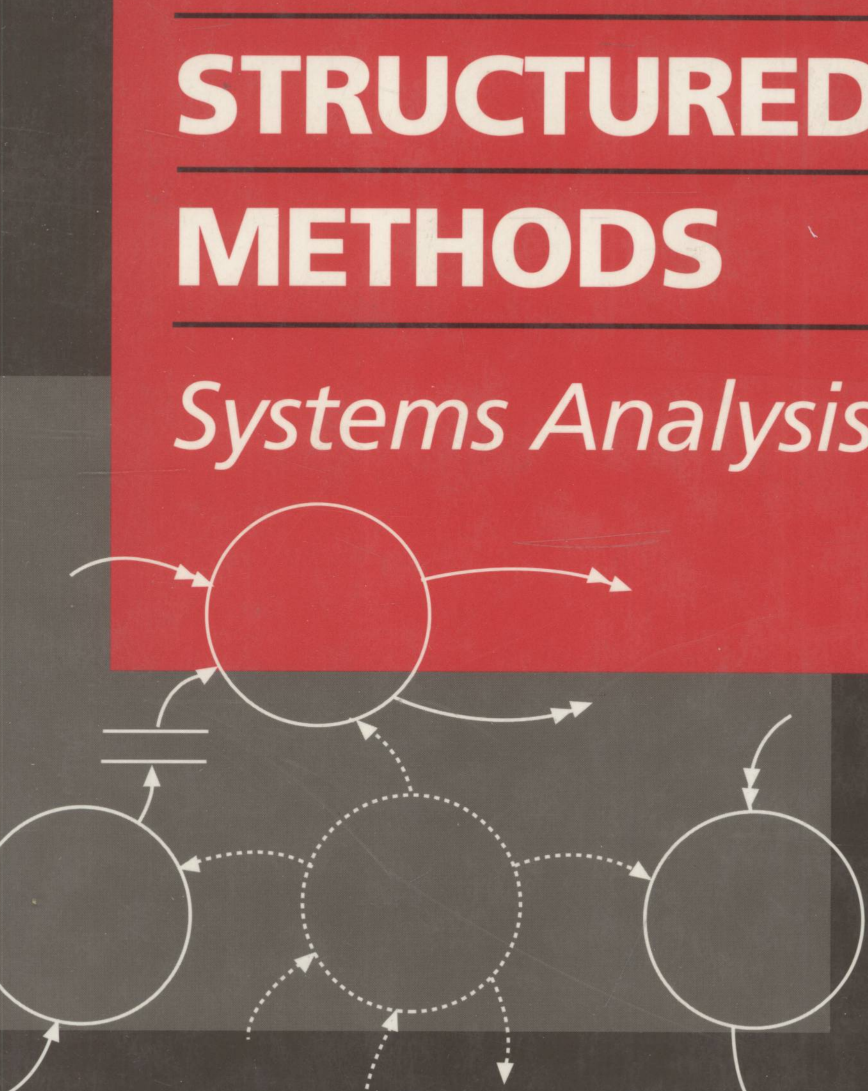

• Keith Edwards

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SYSTEMS ANALYSIS

Keith Edwards
RTSM Consultants Ltd, UK

华南理工大学
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PREFACE

Structured methods are not new, but their use still tends to be limited to problems destined for a "software" solution. Such a restrictive attitude is a waste of the potential of such methods, since they can be used for any type of system, including those which will be implemented with special electronics, PLCs, human or even mechanical components.

During my experience of teaching and consulting in the use of structured methods, I have frequently been asked to recommend a "good book" to provide a source of reference information. This has always proved to be a problem, mainly due to a lack of methods books covering *real-time* systems. This book is an attempt to address this problem, and is organised to cover *two requirements* - as an accompaniment to the training courses upon which it is based, and as a reference work for the resolution of problems during a system's development. Due to this latter requirement, I have attempted to address (at least to some degree) every practical question which could be encountered during the analysis of a real-time system's required behaviour.

One word of warning - this Structured Method is based upon a graphical language, with its own vocabulary and syntax, which is as precise as that for any other language. Learning to use these methods is like learning a language, and in this process there is no substitute for good training, followed by experience - preferably under the guidance of an expert practitioner.

Finally, this book only covers the area of Systems Analysis - ie. requirements capture. The procedures which allow these requirements to be translated into an implemented system will be covered in a companion volume on Systems Design.

Dr K Edwards
London 1993

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The content of this book represents ideas which have been refined through practical experience, by many people, over many years. The process of acquiring such knowledge is a long and difficult one, since only so much can be absorbed by reading books; the remainder must be obtained and consolidated through practice. In this respect the author would like to thank his friends and colleagues, as well as all of his students - since the best way to understand a subject is to try and explain it to someone else.

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