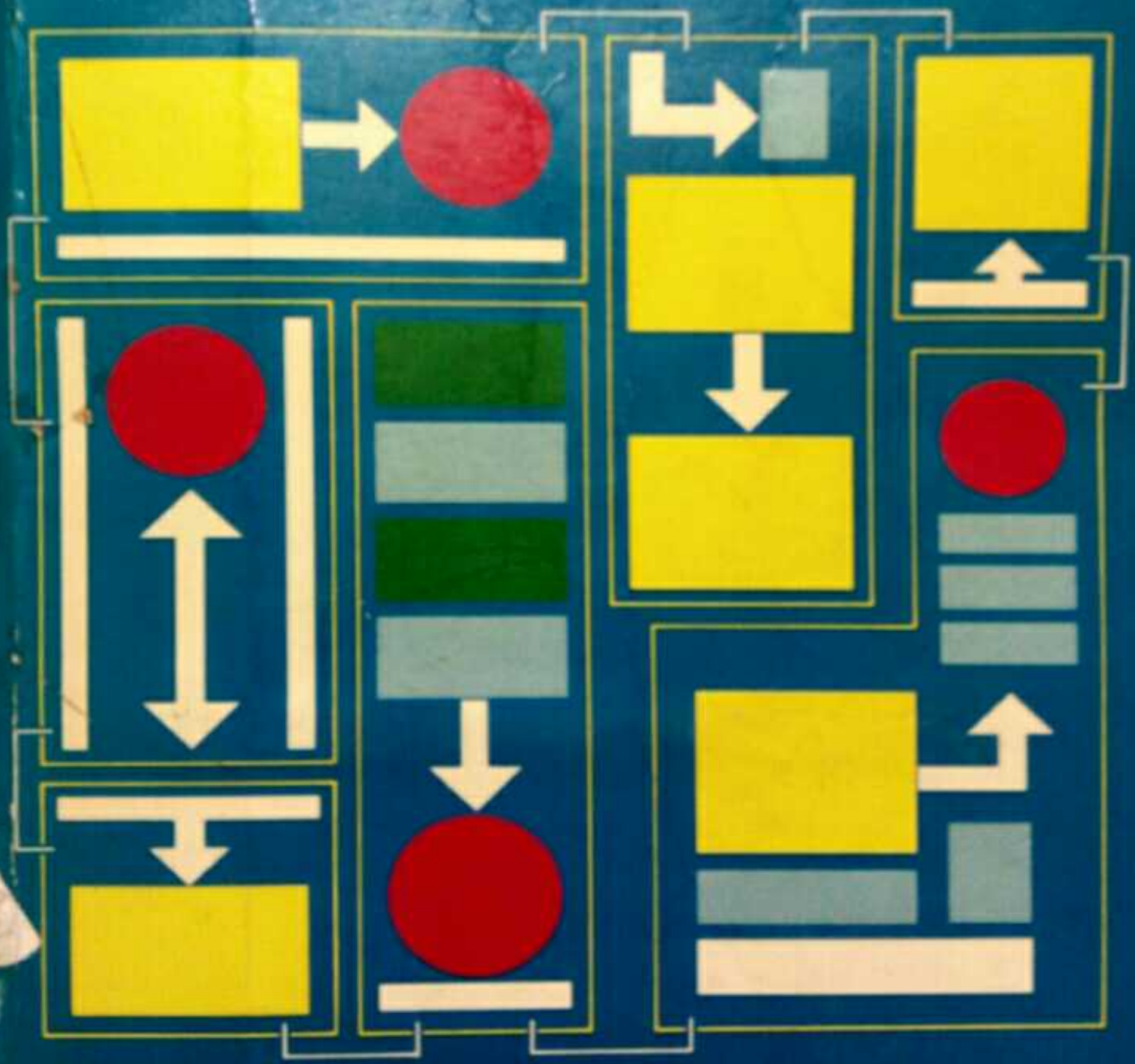
OPERATING SYSTEMS

COMMUNICATING WITH AND CONTROLLING THE COMPUTER



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Preface

The material for this book was originally gathered and written in a different form as the operating systems' half of a module, *PMT601: Computer Architectures and Operating Systems*, from the Open University's postgraduate course in the *Industrial Applications of Computers*.

I would like to thank the people who had a hand in producing it: Gordon Davies, who wrote the original versions of the CP/M and Unix case studies (Chapters 7 and 10) and Mark Woodman, who wrote the p-System case study (Chapter 9). Their work remains substantially as they wrote it. I would also like to thank Jonathan Blandon of Geophysical Service International (who is also my husband) for the benefit of his experiences as 'systems man' on the older IBM/360 systems and MS-DOS, Mike Cowlishaw of the IBM (UK) Scientific Centre at Winchester who took the time to read and comment on the material on VM and to demonstrate to me the latest bells and whistles, Geoff Gardiner of PA Technology (Cambridge) who had a hand in the computer architectures side of the original course and taught me a lot about array processors and multiprocessors, and Derrick Robinson of IBM (UK) Ltd who read the material on TPF/II.

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ORGANIZATION AND ORIENTATION OF THE BOOK

This work is divided into two major parts. The first part describes the nature of and fundamental principles which govern operating systems. Part I answers the questions: what is an operating system and what does it do? Part II contains case studies of specific operating systems, ranging from the simple one-user microcomputer's operating system to the complex mainframe operating system. The range of case studies given is intended to impart a flavor of the variety of computing needs and how those needs are met by the different operating systems.