

In the Introduction, the author promises that the book will not only describe how to get started with DOS but will also provide practical advice about how to use a personal computer and what types of software are best to buy. Peter Norton is an experience computer consultant who is well known both for the Norton Utilities software package for the IBM-PC as well as because of his many articles in computer magazines, and so his opinions deserve careful consideration. He covers topics such as how to choose software, copy protection, advantages of hard disks over floppies, and the best programming language to use. Most of his suggestions are not profound, but they should provide helpful guidance to someone just beginning to work with a computer as well as some interesting food for thought for all users.

The book offers an excellent coverage of some of the advanced features of DOS. Potentially one of the most useful sections of the book is the discussion of batch files. Batch files can replace a number of DOS instructions with a single command, and so they are a convenient way to save a great deal of typing. More important, they can be set up to provide some protection against incorrect commands that can cause the loss of data. There is good discussion of some of the new UNIX-type features, such as re-direction, filters, and pipelines. Norton provides a description of EDLIN, the DOS text editor, that should be quite adequate for most purposes. However, he suggests that readers should use a better editor than EDLIN.

Since this book seems to be rather clearly aimed at beginners, it is no surprise that not all of the advanced DOS techniques are equally well discussed. Topics related to hard disks are scattered throughout the book, rather than being grouped together in one or two places, and the explanations would be clearer if they included more specific examples to show how the techniques actually work. In certain circumstances, it can be very valuable to reconfigure the system, but Norton doesn't discuss how this can be done with the new versions of DOS.

Norton has written a clear description of the important features of DOS that will probably be useful to a broad range of computer users, but in order to achieve this breadth, he has sacrificed some specificity. The strongest features of the book are the use of everyday analogies to clarify basic concepts of DOS and the equally down-to-earth advice on how to set up a new computer system. If you are using PC-DOS 2.0 or 2.1 on an IBM machine, you may well wish to consider a book that deals specifically with your system, but if you cannot find a book that fits your situation, or if you are a beginner and wish to obtain a general understanding of how DOS works, this is a book that you should consider.

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PC ODS User's Guide
by Chris Devoney
Que Corporation, 1984, 330 p., \$12.95
7960 Castleway Drive
Indianapolis, IN 46250
Reviewed by Harry E. Pence*

This book was designed with a specific purpose in mind: to teach a beginner how to use both basic and advanced features of PC-DOS version 2.0 on an IBM personal computer. Throughout most of the book, the author uses what I would consider to be a true hands-on approach. He explains what the reader should type in at the keyboard as well as what response is expected from the computer, using different type fonts to identify which is which. There is even an explanation of the common error messages at the back of the book to make it easier to correct mistakes.

Like many other authors I have read, Devoney urges all users to change to the new versions of DOS in the 2.x series. He suggests several reasons for this, including the increase in minifloppy disk storage, the greater convenience of the new commands, and the improved speed of disk operations. In addition, the newest software products will probably utilize the more powerful features of the latest DOS releases, and so will require the changeover.

Although this book is designed to teach DOS 2.0, it should be equally useful for the latest release, PC-DOS 2.1. As far as I can determine, the only difference between these two is that the new release fixes some bugs in the old version and also changes the disk reading procedure slightly to prevent data loss on PCjr's that use PC-DOS. No commands seem to have been added or deleted.

DeVoney covers all of the common DOS commands, including their most useful switches, and discusses all of the important advanced topics. The presentation is excellent throughout, and the topics are treated in a logical order. In particular, the discussion of the hard disk related commands, such as BACKUP, and RESTORE, are quite clear and include step-by-step explanations of the concept. This is also true in the treatment of hierarchical directories, where the example sets up and revises a multiple level directory. There is one error in this latter section, where an MK is written instead of an MD, but otherwise I found very few errors in the book.

In older versions of DOS, the only way to change the configuration of the operating system was by means of a special routine written in assembler. The new versions allow this to be done by simply changing the system configuration file, CONFIG.SYS. With this procedure, it is easy to increase the number of disk buffers for improved random disk access, to install a device driver to control peripherals, or to make other modifications. DeVoney discusses this technique and also the use of the MODE command to change the set-up of the computer. The choice of topics is very good, except that I wished that he had included some discussion of device drivers.

DeVoney has designed the book carefully so that it not only is good for learning the system but also serves as a good reference. Many types of information are summarized in easy to read tables, and approximately a third of the book is a summary of all of the PC-DOS commands. This is not simply a copy of the DOS documentation, but rather an expanded treatment of each command which includes probable error messages, a listing of switches, special rules, and useful notes.

This book is intended to do a definite job, and it accomplishes this task very well. Those who prefer a hands-on approach to learning about the computer and wish to learn specifically about applications of version 2.0 or 2.1 of PC-DOS on an IBM-PC should find this to be a worthwhile book.

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FOOD FOR THOUGHT

The electronic computer bridges all segments of our spectrum of change, raising - and solving - problems in each.

Its sociological effects will derive from its tremendous potential as a decision maker and from its application in the field of automation. It will free the productive processes of industry from dependence on the labor of human hands and the thought of human minds. It will solve problems; it will create others.

Could a computer be built, capable of weighing legal evidence, making it possible to circumvent the factor of human error? The idea is not so farfetched as it might appear. The computer has already been introduced into the administrative machinery of the income tax, where it has taken over some of the functions of judge, jury, and executioner. Fearful as we may be of its merciless analysis, we must admit its impartiality.

Extension of this idea leads me to suggest the coinage of a new word, cybernocracy, meaning government by computer. Imagine, if you can, a computer sitting in the White House, optimizing the political well-being of each of us. We would continue to vote every four years - not for one program as opposed to another, but for or against a change of programming, and whether to the right or to the left. All of which leads logically to a fascinating concept that might be called *differential cybernocracy*: a state of political Nervana where change is always possible but revolution impossible - unless someone pulls the plug on the computer!

B.D. Thomas
Science and Society: A Symposium, 1965.