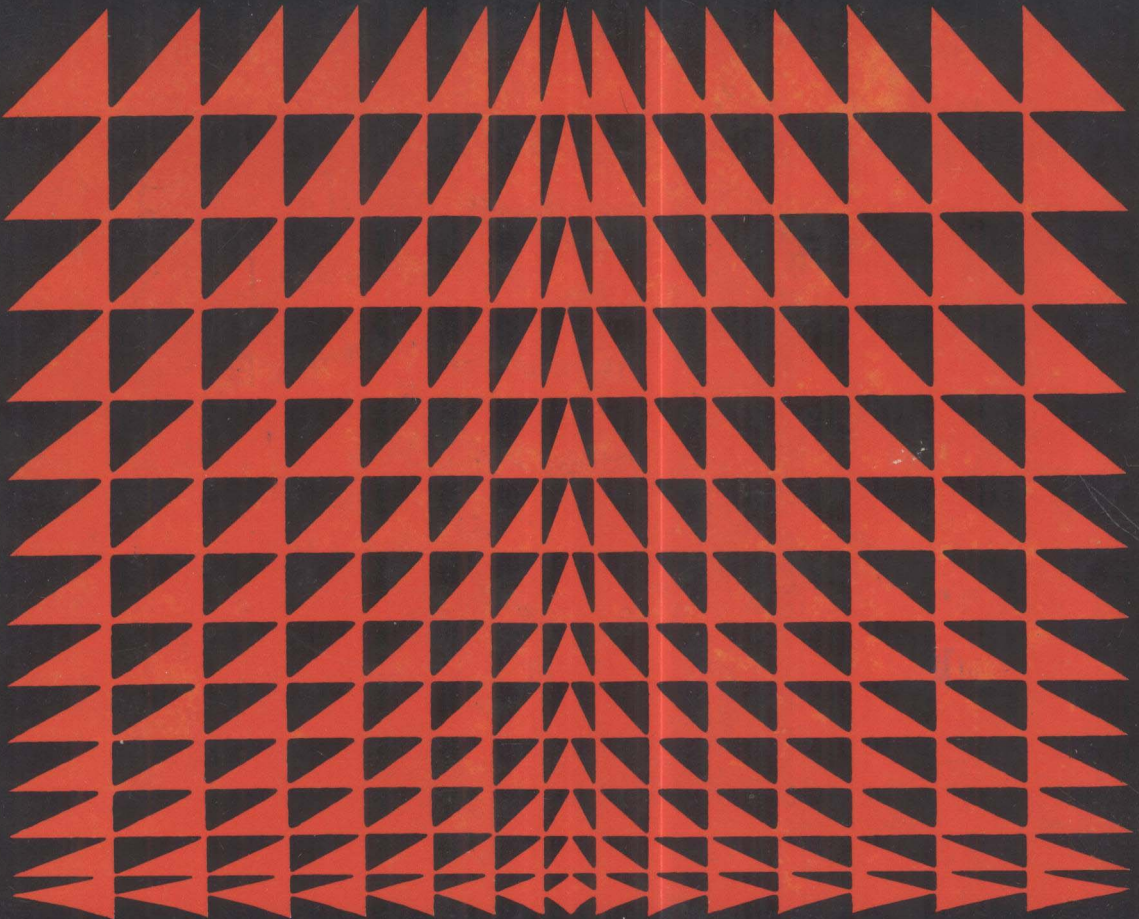


CHILTON'S  
COMPUTING  
SERIES

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# PLUGGING IN

## The Microcomputerist's Guide to Telecommunications



Sasha Lewis

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# **Plugging In**

The  
Microcomputerist's  
Guide to  
Telecommunications

**Sasha Lewis**

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CHILTON BOOK COMPANY  
Radnor, Pennsylvania

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# **As Near as Your Phone 1**

Futurists give us grim forecasts for human relations in the computer age, conjuring up images of people as robotlike technoslaves working alone in computer cubicles, isolated from society and alienated from family and friends. Such predictions are not only short-sighted, they hide the good news. The telecomputing revolution is here! It can bring you closer to people than you ever thought possible! It offers you the chance to truly have an effect in shaping the future of coming generations! And, it does not have to cost you a fortune to sign up for the future revolution's design team.

All you have to do is plug in, log on, and participate. This book is designed to help you do precisely that. It is an invitation to you to join a global human community growing closer and more intimate than ever before imaginable!

## **STRANGER IN A STRANGE PLACE**

John Able has just moved from Atlanta to a foggy, and many say lonely, San Francisco. He plugs in his modem and calls one of the city's half-dozen "Dial Your Match" numbers (often called a DYM number), a free computerized matchmaking service anyone can access from a personal computer equipped with very inexpensive hardware and a free computer program.

John must first respond to a questionnaire that asks him such things as what music he likes, how he prefers to dress, what he thinks of monogamy, what his

sexual preference is, and whether he smokes, drinks, or uses drugs. Having completed the questions, John gets a personal password and a second number called a "mailing address." This electronic mailbox will allow any of the several hundred people who regularly call the DYM service to leave messages for John. John can read these messages the next time he calls the service.

John has several options at this point. He decides that first he'll type out a public bulletin that he entitles "Wanted: Jogging Partner." John leaves his DYM mailing address for anyone who is interested.

Next, John tells Dial Your Match to make him a match. After a few minutes, while the computer searches through the thousand questionnaires on file for people who are most likely to be compatible with John's profile, a list of two dozen women is printed out on John's monitor, along with their compatibility ratings. John is asked if he wants to read any of the questionnaires completed by these "matches." John types in the word "YES" on his keyboard along with the electronic mailbox numbers of the women he is interested in. John surveys the questionnaires, and after 15 minutes feels as if he already knows at least a few people in the city by the bay. All that remains is voice and personal contact.

This is easily arranged. John types out a note for Jennifer496 asking her if she would call him at work.

When Jennifer496 calls DYM a few days later, she finds John's note. Before contacting John personally, she decides to look at the answers to the questionnaire he completed. She finds that they both enjoy the symphony. Both are interested in politics. John wants a dog, and Jennifer would prefer a cat, but both are pet lovers. John doesn't smoke or use drugs, nor does Jennifer. Both John and Jennifer have responded that they are "somewhat shy."

The next day, Jennifer calls John and they arrange to meet. John has broken the ice in his new home town without leaving his apartment, paying a fee, or even getting on anyone's mailing list.

## **SOLVING MEDICAL MYSTERIES**

Dr. Maureen White, an endocrinologist, has diagnosed what she believes to be a rare and potentially deadly illness, called Cushing's Disease, in one of her patients. Dr. White needs to find out how best to confirm the diagnosis. She recalls mention of some new diagnostic tests being tried experimentally in New York. Dr. White would like to review this report and learn more about recent developments in treatment.

Dr. White sits down at her personal computer and signs onto Bibliographic Retrieval Services, an electronic data base service that produces abstracts of reports in international medical and scientific journals for those researchers

who need to look up timely references. Within 20 minutes she has stored summaries of five papers on the disease on her own data diskette for future review and ordered complete copies of two of the reports. The charge to Dr. White's account for accessing the electronic data base is less than \$50. For this investment Dr. White has received an up-to-the-minute medical education on the most current treatments and diagnostic techniques for a disease that strikes only two or three in every million Americans. White also has the names and affiliations of researchers and specialists in the disease whom she can contact for further information about their work.

If Dr. White had had access only to a standard medical library of printed materials, she could have invested considerable time in running down these reports, and probably would not have found some of them because the data base she consulted specializes in getting the information out fast—in many instances, much quicker than the mails can deliver a medical journal or a printed directory can update its index.

## **A GROWING COMMUNITY**

John Able and Maureen White are only two of a rapidly growing community of microcomputer users who are expanding their knowledge and their personal networks through telecomputing. Other people are using computers to do their banking, travel planning, ticket buying, and gift shopping. Investors are keeping a closer eye on corporations, stocks, bonds, and commodities without waiting for the afternoon paper or even the hourly news broadcast. Telecomputing investors have more data at their fingertips than ever before, and they can make more informed decisions than those made by many brokers.

Ranchers in Ohio and Oregon are following the most recent developments in animal husbandry being reported at a Montana university using the same microcomputers that they use to plan animals' feeding programs. Computer hackers use a free California electronic bulletin board to exchange ideas and techniques on using computers to assist the handicapped. Children share notes on computer camps and the latest computer gadgetry on Kid-Net, a bulletin board operated by kids. Students are on line to special low-cost, evening-hours data bases to help with their research for school projects.

Using everything from matchmaking services to highly specialized data bases, hundreds of thousands of personal computer owners are bringing the world home through telecomputing without any special training.

Although public life appears to grow more fragmented, with access to information increasingly dependent on such factors as education, occupation, and a large expenditure of time and money, the private world of electronic communi-

cations over personal computer networks is eliminating most of the barriers separating people from each other, from what they want to do, and from the things they want to know.

## **WELCOME ON LINE!**

This book will help you bring the telecomputing revolution into your home and office. Here you will find a guide through the maze of hardware gadgetry and software options to help you buy and use the specific equipment you'll need. You'll also find everything you need to know to plug in to the telecomputing world without being overwhelmed by incomprehensible technical specifications and a confusion of technobuzzwords.

Equipment and programs, however, are just the beginning. What do you do with the electronic hardware after you bring it home and hook it up? **PLUGGING IN** will give you the details of what is available and where. You'll also find tips generally available only to the experienced telecomputerist on how to use efficiently and cheaply the resources you select.

**PLUGGING IN** is written to make your first experiences of the telecomputing revolution both pleasurable and profitable. And, once you and your keyboard have made your introductory explorations, this book will provide tips and inspiration to help you pursue the electronic world to its limits and perhaps even to push beyond today's limits into tomorrow's opportunities.

## **HOW TO USE THIS BOOK**

You can use this book in several ways. It is designed to be used by people who haven't yet bought a computer, by people who are only interested in buying telecomputing hardware or software, by people who already have a computer but want to "plug in" to the telecomputing universe, and by people who want to learn more about services and data bases available to them. It is also designed to be a permanent reference.

Chapter 2 gives a short overview of telecomputing technology. If you already know the difference between a bit and a byte, between analog and digital signals, then you can skip this chapter. Chapter 3 discusses some of the details of telecomputing hardware that you should be familiar with before you buy your system.

Many other books try to avoid or hide technical references. The technical material, however, isn't as difficult as it is made out to be. If you know some of the technology that supports your work you will not be an unknowing victim of a black box that you don't understand. Many would-be computer users long for

the day when no technical buzzwords or technical concepts stand in the way of their computer use, and they are correct. Technogarbage should not stand in anyone's way, and both hardware and software will someday meet this criterion. But, every user should have some idea of how the technology works or the technology will become master. This is especially important in the world of telecomputing, because in the next decade the users will largely define that world and what it will offer. Technologically ignorant users will, by default, leave important decisions to an elite group that may be technically proficient but not in tune with human needs and priorities. Do not be afraid of technology and its buzzwords. It is a lot easier than you think. Grab it, understand it, and use your understanding to help shape the world we will be living in tomorrow!

The next three chapters should aid you in your buying decisions when you shop for hardware and software. The main purpose of these chapters is to show what is possible and help you avoid bad buying decisions. Specific manufacturers are not discussed because the products they offer change almost weekly. What do not change are product capabilities. You should decide on the capabilities that you want, and then find a manufacturer who fulfills them. Most often, once you have decided on the kinds of options you want, you can refer to current reviews in computer magazines or seek help from a group like the People's Consulting Service to help you target specific manufacturers' products. Following the chapters on hardware and software is a chapter providing a short checklist of options, which is designed to help you in comparison shopping.

Chapters 6 through 10 explore many of the various commercial services available to the telecomputerist, so-called on-line services. Although the section is not designed to make you a fully qualified electronic librarian, it does go into some depth and considers a few data bases that many consumer-oriented books do not discuss. Research data bases, for example, are explored in the chapter entitled Caviar Data Bases. No single service meets everyone's needs, but with a review of most of the services available you may find that one of the caviar services is just what you have been looking for. On the other hand, if your needs are very specialized, you may find the section on bulletin boards in Chapters 13 and 14 more relevant to your applications than you thought.

Chapters 11 and 12 are designed to help you when you actually get on line. One offers strategies to assist you in learning how to use the service you've signed up for, and another focuses particularly on the techniques involved in designing a good data-base search strategy. These self-help chapters are not tied to particular on-line services, but are designed to convey concepts you can apply to any service you may acquire — both today, and tomorrow.

The last chapter is a bit of crystal-ball gazing. Sometimes, because good computer centers are few and far between and the computer-service distribu-



tion world is still unsettled, it is easy to slip into thinking of the telecomputing field as a kind of Rube Goldberg contraption. Telecomputing is real; it is not going to go away. It will become the way of the future.

“On the Horizon” is written to make you feel like a real part of the telecomputing revolution. Each person who plugs in helps to shape our future.

So, plug in, sign on, and I’ll see you in the telecomputing network of today and tomorrow!