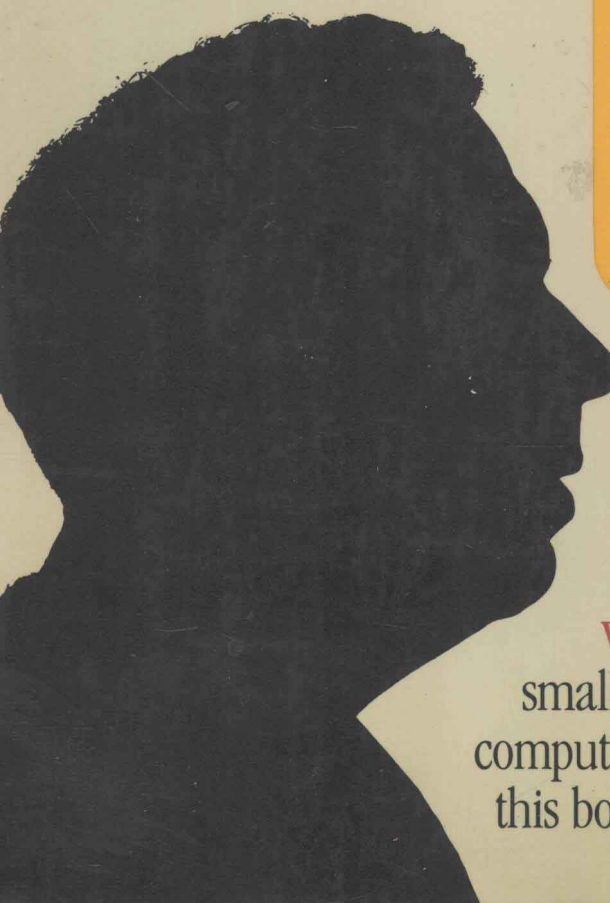


Read this book before you buy a computer—or before you give up on the one you already have.

# COMPUTER WIMP

PACKED WITH INFORMATION ON...

- How to buy a computer
- The shameful warranty situation
- Dealing with breakdowns and repairs
- Buying by mail, at discount houses, used, etc.
- Technobabble: how to talk to computer people
- Computer fear, anguish, and despair
- The Emperor's New Computer
- Why you never have to learn programming
- Computer crime, piracy, health hazards, games, and a great deal more




**166** Things I wish  
I had known before  
I bought my first  
**COMPUTER!**

by John Bear

an otherwise intelligent, sensible human being, who was turned into an unhappy, frustrated **wimp** by his first 10 years with small computers. Now, having achieved computer satisfaction, he has written this book to help spare others his fate.

# COMPUTER WIMP



**166** Things I wish  
I had known before  
I bought my first  
COMPUTER!

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## Dedication

Wait a minute. I know no one reads dedications (except, perhaps, the person being honored) but I wish you'd read this one, because it helps to explain why this book exists, and what's in it for you.

TO THEODORE R. HENDERSHOT, CAPT., U.S.N. (Retd.) for the following reason.

Ted Hendershot runs an art gallery in the little village in which we live. We say 'Hello' to each other outside the post office. One morning, at that very location, Ted stopped me and said,

"Say, *you* know all about computers. Maybe you can give me some advice. We're thinking about getting a little computer for the gallery. You know, perhaps to keep track of inventory, and a customer mailing list. Income taxes, accounts receivable. Things like that. We'd like to have your thoughts on what we might do."

My immediate reaction was to think, "But there's so *much* to say — so many things you need to know — to watch out for — to consider. Good grief, it would take a *book* to say everything that needs to be said."

What I said was, "I'll get back to you."

Sorry it took two years, Ted, but here's my answer, at last.

## Very Special Thanks

The only two people I know who are highly fluent in both English and computers have been extremely helpful to me for years, most recently in reading and intelligently commenting on the manuscript for this book. My grateful thanks to Julie Norman and Mike Young.

## Thanks

My computer education, such as it is, has come from interactions with a great many people in the industry. As I look back, I realize I have learned the most from Kaye K. Nelson, Marta McKenzie, Bernie Macdonald, Tom Lee, Michael Potts, Swami Ninad, and even David Sexton and Ralph Kling. Thank you all.

PART ONE

# INTRODUCTION

The Emperor's New Computer: The  
Nature of the Computer Revolution



## Introduction to the American edition

I always wanted driving a computer to be just like driving a car.

I enjoy driving a car.

I don't mind checking the vital fluids and the tire pressure.

I did change the oil once, but it was no fun, and as long as somebody else is willing to do it in a few minutes for a few dollars, why bother.

Under no circumstances would I ever consider tuning the engine, replacing the alternator, or rebuilding the transmission.

This analogy comes often to mind, as I find myself with telephone handset jammed between shoulder and ear, delicately attempting to plug a 36-pronged chip into what surely must be a 34-hole socket, while an anonymous voice on the manufacturer's Technical Support Hotline in Tulsa, Oklahoma is trying to talk me down.

*What has gone wrong?*

Why should an intelligent, manually-dextrous, communicationally-proficient human being regularly be turned into a quivering, angry, frustrated, despondent computer wimp, when all he wants to do is drive the damned machine.

There are a lot of books written for the computer beginner. I tried most of them, but the various authors' idea of beginner is not my idea of beginner. And besides, computer people are, by and large, the worst writers in the world, often managing to be both terminally smug and technically incomprehensible at the same time.

Here is an unsolicited testimonial from me. If I had had this book in 1975, before I bought the first of my four computers, I would have saved at least \$50,000, thousands of hours of my life, and probably staved off at least four attacks of gout.

If I can spare even one person out there my fate, then I will surely have earned my place in heaven, and a dollar in royalties to boot.

**1.**

**"Driving" a computer should be as easy to learn and do as driving a car—but rarely is.**

It is only when they go wrong that machines remind you how powerful they are.

—Clive James

# The Emperor's New Computer: The Nature of the Computer Revolution



Voice recognition is a developing science.

## The medium-sized deal

All right, *something* is going on out there, but it may not be exactly what many of us have thought.

What has happened is that approximately one out of every thousand people on earth has bought a small computer. If the forecasters are right, by the time the 1990s roll around, perhaps four or five people out of every thousand will jump on this particular electronic bandwagon.

In 1983, computer sales in the richest nation on earth will amount to about \$35 per person.

The man who wrote *Time* magazine's cover story when they named the computer as "Man of the Year" doesn't particularly like computers. "I've edited on a word processor, and I don't like them," he says.

The man who wrote the book you're reading now *does* like computers, and that is why he used one to write and edit the book.

What a mixed bag of evidence there is, once you get past the popular magazines' cover stories, the 35 computer magazines to be found on any self-respecting newsstand, and the throngs waiting to get into the computer shows, fairs, and festivals. (I've just returned from what the press called "One of the biggest computer shows ever." More than 40,000 came. But more than 3 million living within a 30-mile radius did not.)

Over a thousand computer books are being published each year—but none has yet appeared on a best-seller list along with the diet books and the cat books.

What does it all mean? Clearly, there is *something* important happening out there. Computers have already changed our lives, and will continue to do so. But we must distinguish between *other people's computers*—the big ones that design airplanes, handle our credit card accounts, fight wars, and fill our mailboxes with "junk mail,"—and *our own computers*—the IBMs, Apples, Radio Shacks, Osbornes, Timex-Sinclairs, and Sonys that we buy for under \$10,000 and set up in our homes or small businesses.

Small computers may, in time, become a really big deal. But for now, they are much more of a medium-sized deal.

## 2.

The computer revolution may relate more to other people's bigger computers than to our small personal ones.

### **You mean I don't have to?**

While I was writing this book, I sent letters to the editors of more than 100 daily newspapers, describing what I was doing, and inviting people to write or telephone me and tell me how they felt about small computers. I was deluged by the response. And when I got it all sorted out, the respondents generally fit into these four categories:

About 50% of the people said, in effect, "Do you mean that I really don't *have* to join the computer revolution?" These people expressed a tremendous feeling of relief when I reassured them that they could probably live out their lives in peace and joy without ever setting foot in a computer store.

About 20% of the people told me that they were really interested in taking the plunge, but they were having a lot of trouble finding the diving board. They were almost hopelessly confused by the number of different computers (a new brand came on the market every three days in 1982!); the advertising (who makes a better computer — Charlie Chaplin, Bill Cosby, George Plimpton, or Dick Cavett?); the magazines; the shows; and copious advice and counter-advice from friends and neighbors.

About 20% already *had* small computers and weren't totally thrilled by the experience. They were disappointed by their hardware, their software, or, most commonly, their inability to make the computer a truly important addition to their lives.

The remaining 10% also had small computers, and were so happy with them, they were on the verge of threatening to send goons out to my house to break my typing fingers if I said even one bad word about these fantastic tools.

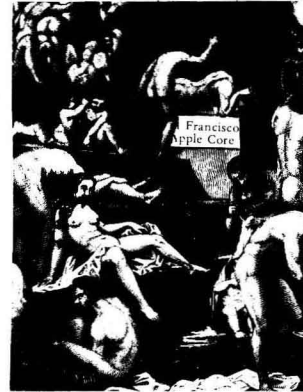
Of course this isn't even remotely an impartial survey — but I think it does accurately identify the four categories of people who have more than passing interest in small computers.

### **The generation gap**

If we are having a genuine computer revolution, we'll know for sure in about 20 more years. Major changes in society rarely happen all at once to everybody. When huge numbers of people emigrated to America from Germany, Italy and Sweden, the old people never really did learn English well or fit into "the American way of life." The young people learned pretty fast. And the babies born in America grew up utterly American.

## **3.**

**Draft dodgers in the computer revolution probably won't be punished.**



Just because 'everyone else' is doing it doesn't mean you have to do it too.

However extraordinary computers may be, we are still ahead of them. Man is still the most extraordinary computer of all.

— John F. Kennedy

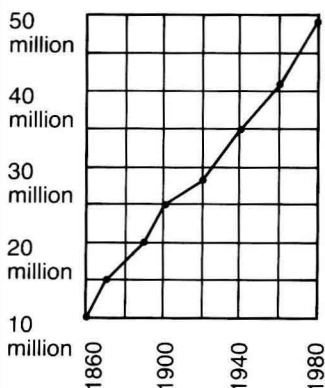
## 4.

People who come to computers later in life cannot expect to be as good as children who have grown up with them.

## 5.

The free-standing computer may fade away as small computers are built into various household tools and appliances.

Date: March 3, 1860  
PROJECTED NUMBER  
OF HORSES IN  
AMERICA, 1860–1980



This projection was 25 times too high. Unexpected events play havoc with any long-range forecasting.

So it is with small computers. We middle-aged folks will never, ever feel as comfortable or be as knowledgeable as today's teenagers. My 17-year-old daughter has no particular interest in the computer phenomenon *per se*—but she keeps her diary on the Osborne computer at school, and guards her disk the way the last generation fretted about their secret little books. And *her* children will routinely use computers of all kinds—even though they may call them something else.

### What do you mean, they may not call them “computers?”

Therein lies perhaps the best answer to where things are headed.<sup>1</sup> Consider the invention of the modern electric motor by Tesla nearly a century ago. People were fascinated by this development, and many people acquired electric motors simply as a curiosity.

But the *real* growth of electric motors came as they were incorporated into all kinds of other machinery. No one says, “I’m going to buy a vacuum cleaner plus an electric motor” (or a washer or a food processor or a water pump or a typewriter). The motor is taken for granted when we acquire the machine or appliance that it runs.

So it may well be with computers. By the time the millennium rolls around, the “free standing” home computer, sitting there on the kitchen table, may be as rare as a free-standing electric motor is today. But it is more than likely that each home will contain a dozen or more separate computers, built into the television, the burglar alarm, the car, the lighting system, the doorbell, the stove, and almost every other machine or gadget. We may not call them computers any more than we call them “motorized washing machines” today.

*However*—notice the “weasel words” in that paragraph: “may,” “likely,” etc. The simple fact is . . .

### No one knows where we’re headed

In 1948, the founder of IBM predicted that as many as 12 companies might someday have their own computers (an estimate expanded to 50 companies by 1954!). Experts really aren’t very good at forecasting the future of technological things.

1. I am grateful to Robert Wachtel for the following line of reasoning.

Sometimes, as with the 12-computer prediction, they are incredibly pessimistic. Sometimes, as when AT&T predicted 500,000 homes with picturephones by 1980, the error is on the side of optimism. Banking has been “poised to leap into the cashless, checkless, electronic money world” for a quarter of a century — with *Changing Times* magazine lamenting in 1968 that we would not see the end of checks until the mid-1970s.

Anyone who thinks that *anyone* can predict our technological future with any accuracy is well advised to read back issues of *Popular Science* and comparable magazines. Most enlightening. *Scientific American*, which was intensely interested in the concept of aviation, didn’t even *mention* the Wright Brothers flight until nearly three years after it happened!

I enjoy Arthur C. Clarke’s hypothesis that about half the great inventions of history were not really big surprises—they had been speculated about for years (airplanes, television, movies); while the other half were complete surprises—utterly unexpected, until they happened (phonograph, nuclear power, lasers).

Will astonishing breakthroughs revolutionize the revolution we’ve already got going? Or will computers “merely” continue to get smaller, faster, cheaper, and more versatile? Stay tuned.

### One last thing, before plunging in

As it happened, I was living in England when that country undertook one of the major social-technical changes of the century: the largest country ever to “go metric.”

Years of planning, study, public relations, advertising, and consumer education were undertaken. And then one day I had need of a piece of wood. I studied and rehearsed what I was supposed to say. I headed for the lumberyard, and said to the man in charge,

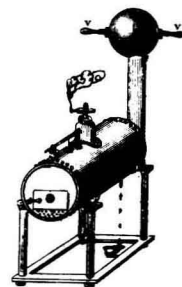
“I’d like a 5-centimeter by 10-centimeter board, 2 meters long.”

Without hesitation, he turned and shouted, “Alvin, get this bloke a 6-foot 2 b’ 4.”

Somehow, I knew everything was going to be all right.

## 6.

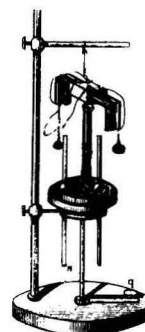
Experts have been remarkably wrong in predicting where we are headed in our technological revolution.



MARK I



MARK II



MARK III



## Introduction to the British edition

I may have been the first person in the entire U.K. to purchase an electronic data processing machine for the home. It was late 1972, and I was living on the Isle of Wight. A friend who knew my fondness for gadgetry rang me up one Monday morning and said, 'The most extraordinary devices have just gone on sale in a shop here in my building.' I raced for the hovercraft, then the train, and less than three hours later, found myself in an electronics shop on Oxford Street, hand quivering as I wrote a cheque for £140 to purchase a digital device that added, subtracted, multiplied and divided, before my eyes.

Of course it is now possible, little more than a decade later, to purchase a far more sophisticated electronic calculator for £4.99 at Boots or Tesco – and, I daresay, a far more reliable one, too. After about three months, that £140 wonder had decided to stop displaying the numbers '3' or '7' – and the nearest repair depot turned out to be in Hong Kong. I ended up with a £140 paperweight.

And there we have, in microcosm, the entire computer experience. Fascination. Enchantment. Acquisition. Joy. Confusion. Concern. Disappointment. Desolation. Abandonment. I went through these steps five more times, with machinery costing up to £20,000 before I (a) figured out what I had been doing wrong all those times, and (b) achieved a high level of computer satisfaction.

And so what I have done is write the book that I wish someone could have handed me and required me to read all those years ago. It truly contains everything I wish I had known before buying my first, second, third, fourth, and indeed fifth computer. But I *am* genuinely content now, as I type these words on my £500 hand-held battery-powered 2-kilogramme word processor – a gadget that would have weighed two tonnes in the early 1970s, and would have cost £1 million in the early 1960s.

A few words about the peculiar spelling herein. By a chain of events too complex and too irrelevant to describe, I find myself *still* living in a rural village, but now it is three hours from San Francisco rather than three hours from London. This book was originally written for my American compatriots, which is why the prices are mostly in dollars (worth about 60 to 65 pence); some brands may be unfamiliar, and some words are spelled wrong (i.e., American).

As some Irish toast must have proclaimed, May your positive experiences be better than mine, your negative experiences fewer than mine, and may it all happen a great deal faster to you.

J.B.