Three members of *The Telegraph* have recently bought multimedia PCs and all have experienced difficulties. In two cases, the computer did not work out of the box; in the other case the fax software tried to fax letters to the printer. They asked Professor Harold Thimbleby, Middlesex University, to comment:

In an ideal world, you'd get a computer home from the shop, get it out of the box, plug it in, and it would work. In the unlikely event it did not work, the guarantees would tell you exactly what your rights were, and you could get the problems sorted out.

What happens, though, is you get home, you sort out the wires, you plug in, and discover your problems are just beginning. The modem has to be installed specially, it runs some software that American incompatible with the printer, and the helpline number to ring is somewhere in California. Probably the computer will crash when try to install some extra software you bought. If you dig out the guarantee that came with it, you discover it the manufacturers might guarantee the machinery, but if the software doesn't work it's not their problem. Since you opened the packet the software came in (how else were you supposed to know if it worked?), you can't return it anyway.

I've just tried to set up the modem on my computer. I went through a sequence of instructions and entering phone numbers that took twenty minutes. At the end of it, the computer said I had chosen the wrong modem type, and that I should start again, choose a different modem AND ENTER ALL THE NUMBERS AGAIN. Surely it would not be too difficult to make the computer store what it had just been told?

I recommend you visit a book shop. You'll discover you are spoilt for choice with all the books explaining computers for people like you. Isn't it reassuring to discover you are not alone, and have joined a great band of people who find computers fundamentally difficult?

Using computers requires lots of trivial knowledge, like when to press the F1 key. That's why those self-help books are so thick. Certainly,

nothing works unless you know the right trick. When you do know something, it seems so simple. It is then easy to slip into thinking you must have been stupid for not knowing in the first place.

Now, what if all those people who wrote books on how to use computers actually talked to the manufacturers who made the difficulties? One of my hobbies is to through manuals, instructions to tell us how to cope with quirks that need not have been there in the first place. When a manual says, "make sure such-and-such," I ask why wasn't the computer designed to make sure for you? Almost all problems with computers are easily avoided by proper design, by manufacturers doing a little thinking first. What are computers for if they can't do obvious things?

Take any other modern product. You can buy a car. You don't get thick manuals telling you how to stop the wheels falling off. Wheels don't fall off on their own. In comparison, most computers are totally unsatisfactory: you get lots of "wheels" that fall off when you are not watching.

Computers are badly designed because manufacturers can make money without trying any harder. Yet most people say computers are truly wonderful! Before you know it, you too will be buying upgrades, some more RAM, and a few more training books, and when you've spent another thousand pounds you'll agree they are wonderful. When you've bought that new modem, nothing is going to stop you. It's not you who benefits from this, but the industry that likes to keep you dependent, and you staying believing you are responsible for fixing the computer's problems with more of your own money.

Professor Harold Thimbleby is Professor of Computing Research, Middlesex University. He can be contacted by email: harold@mdx.ac.uk, or see http://www.cs.mdx.ac.uk