

# Ethics and Technical Writing

## The Obligation to Instruct

Ethics—or *moral philosophy* as it is also called—has been the subject of philosophical investigation for thousands of years. What should we do and not do? What sort of person should I be? How should I live? These are questions that have exercised some of the greatest minds: from Aristotle (and no doubt earlier) to Peter Singer (and no doubt later). Their search has been for a general principle that reflects our strongest moral intuitions, one that might guide us in our quest to lead a moral life, a good life. And this is no trivial matter. Whether we acknowledge it or not, morality influences many of our personal decisions. It also drives the formation of many of a society's laws.

Sometimes the moral dimension of our actions is not clear, drowned out by custom, greed, laziness or simple ignorance. It can take much effort, argument and even radicalism to bring a society to see the immorality of hitherto accepted actions or customs. For example, slavery, animal cruelty and disenfranchisement based on gender were once deemed perfectly acceptable—until an evolution in moral discernment drew out their inherent repulsiveness. That evolution is still underway, with more and more of our actions and customs coming under the moral microscope for the first time. One question such an evolution invites is whether the force-field of morality extends also to technical writing?

A core notion in ethics is the undesirability of doing *harm* to others (where *harm* is understood as physical harm, mental harm or being made worse off). Any code of conduct that had nothing to say about such actions could not, by definition, be classified as a system of ethics. (A personal-fitness code of conduct would fit into that category.) Understood as a system of harm-mitigation, morality does, as I'll argue below, have relevance to technical writing. Moreover, it imposes obligations not just on technical writers, but also on those manufacturers who produce products that technical writers typically write about.

First, the technical writer. There are at least four measures of the moral suitability of the end-user documentation that technical writers typically produce:

- Does it pose any risk of physical harm?
- Does it pose any risk of mental harm?
- Does it offer what is reasonably expected of it?
- Does it impose unreasonable costs on readers?

Here are some examples of potential physical harm that clearly show that end-user documentation can come within the force-field of morality:

- Poorly written instructions could be what turns a recoverable mid-air emergency into a disastrous plane crash.
- Poorly written instructions could injure those who operate or maintain dangerous equipment (such as lathes, grizzly feeders, mains transformers, and so on).
- A service technician, working from poorly written instructions, might mis-calibrate a diagnostic device, subsequently leading to mistaken diagnoses, ineffective treatment, pain or even death.

Second, the risk of mental harm. A person's self-esteem, and general mental wellbeing, can be affected by the degree of confidence they have in their ability to understand written material they need to understand. For example, a young apprentice having difficulty understanding operating instructions may give up their chosen trade because of a mistaken belief that they do not have the

intelligence to succeed in it. Mistaken? If their difficulty arises not from poor language skills on their part but from carelessness on the part of the writer of those instructions, then the apprentice's belief that they are not up to it might very well be mistaken. Their chosen career might be denied them by the thoughtlessness or laziness of writers who have provided them with vague or impenetrable instructions.

Third, the notion of "my station and its duties", introduced by the British philosopher FH Bradley, is central to morality. The complexity of modern life means that we cannot do all that we might want to do. Thus we employ others to do it for us and, more importantly, *trust* that they will do it. We entrust teachers to teach and nurses to nurse, and there is a strong societal expectation that they will do just that (for without trust a society quickly collapses). If you accept the station of nursing, you accept the burden of others' legitimate expectation that you *will* look after and comfort the sick. Failure to do so deserves moral reproach. If you accept the station of teacher, you deserve moral reproach if you fail to teach. Likewise, if you accept the station of documenter, you accept the trust that others have placed in you by documenting what is expected. You are under no less a moral obligation to instruct than a teacher is to teach. To deny that is to deny the moral relevance of trust.

Fourth, time is everyone's most valuable asset. It might be an intangible asset, but it is clearly more valuable than any tangible asset. (What good is having a Ferrari if you haven't the time to drive it?) Time is a birth right. And like many other intangible assets—goodwill, patents, copyright, licenses, and so on—a price can be put on time. For example, your salary is the price you accept for selling our time to others. Now if the theft of a tangible asset—such as a car—is a moral issue, then so must be the theft of an even more valuable asset: time. Hence readers are right to feel aggrieved at having to swim through the time-stealing treacle of verbosity, redundancy, tautology, padding, nominalisation, procedural bloat, and so on to get the information they need. They are having time stolen from them that could be put to more profitable use. So technical writers have a moral obligation to write in ways that ensure *efficient* communication, communication that does not steal their readers' time.

What now of manufacturers? There is little doubt that the relative quantity and quality of end-user documentation has fallen over the last few decades. When once a comprehensive user guide accompanied every product, now it is just as likely that all that will be provided is a quick start guide, no documentation—as with many smartphone and tablet apps—documentation that is difficult or costly to access, or documentation that is barely useful. Is this reduction in instructional offerings a legitimate commercial strategy? Or are there countervailing moral considerations?

Consider the following cases:

1. You buy an electric kettle but there is no power cord in the packaging.
2. You buy a portable radio and there are no batteries in the packaging.
3. You buy software and the instructions are only available while you are connected to the internet.
4. You buy software and there are no instructions on how to use it.

In each case, many if not most purchasers could not use the product as it is. What the product is advertised as being able to do cannot readily be done. Something more is needed. In other words, the product is not *fit for purpose* as it is. In case 1, the omission was no doubt an oversight. A retailer keen to remain in business would ungrudgingly give the customer a cord. In case 2, the omission was probably intentional. If not used for some time, batteries lose power and are prone to leak. So they are often excluded from products that need them. But in this case, ethics—supported by consumer law—insists that purchasers are made aware beforehand that further expense will be required. This usually takes the form of an indicative marking—such as "Batteries not included"—displayed prominently on the packaging. For consumers have a right to know the *full* costs of what they are buying: the radio

*plus the batteries*. It is a right grounded on the value *Homo sapiens* place on honesty. It is simply dishonest to sell a product for  $\$x$  knowing that the true cost to the purchaser will be  $\$(x + y)$ . And honesty is a fundamental moral expectation, to be dispensed with only in extreme circumstances. If you are unconvinced, consider this parallel: you buy a car from someone for \$4000 not knowing what the seller knows, namely, that another \$4000 will need to be spent on the car to get it drive properly. Has the seller acted honestly in not telling you? Has the seller acted morally?

Now just as the purchaser of a battery-powered radio has to spend more to get the radio to work, the purchaser of, say, software sold without a user guide—or with instructions that are only available while the user is connected to the internet—will have to spend more to get the product to work as advertised. Tangible assets (money for books or internet access) and intangible assets (time) add to the cost of the software just as batteries add to the cost of the radio. The latter calls for a warning on the packaging; why not the former? If the seller of a car behaves immorally in not informing you that the car needs more money spent on it to make it properly usable, isn't a company that sells you *any* product knowing that you will need to spend more to be able to properly use it also behaving immorally?

It might be argued that:

- it's good enough that goods are fit for purpose *for some customers*
- the omission of user documentation has lowered the price of the product (which, presumably, is of greater utility than having documentation readily at hand).

It is true that producing products that are fit for purpose is not an *unqualified* obligation on manufacturers. The manufacturer, say, of a game suitable only for those over 10 years of age has not produced a product unfit for purpose just because a toddler cannot understand it. So perhaps software that *some* people can use unaided is not necessarily unfit for purpose. But the manufacturer of the game is obliged to prominently place an age marking on the game's packaging (such as "suitable for children over the age of 10"). For it would be *dishonest* to take money from parents for games their children would not understand. Perhaps, then, the manufacturer of software should be obliged to affix a marking indicating that it is not suitable to all potential purchasers. A toddler has to wait to become more intelligent before being able to appreciate the game; the non-savvy software purchaser has to wait to become more informed before being able to use the software. In the former case, manufacturers are obliged to alert purchasers; why not in the latter case?

Age or skill-level markings are not needed on all products. Caterpillar, for instance, doesn't have to display markings on their tractors to indicate that they are suitable only for farmers. But that's because Caterpillar only markets tractors to farmers. Why market tractors to school students? But it is different when a product becomes cheap enough for most of us to buy and it is marketed without demographic discrimination. Take computers for example. They are now so cheap that just about anyone in a first-world country can afford to buy one. Moreover, they are marketed to everyone. And that includes many who have not had much prior exposure to computers: those whose previous occupations never required them to master a computer; parents returning to the workforce after a long absence; senior citizens. These people deserve to know that they will not, *without further expense*, be able to make the product do what the magnet of marketing convinced them it could do.

It might be retorted that consumers should expect to have to spend some time learning how to use a new product. Yes, but the impost on their time should be *reasonable*. And what is reasonable is easy to determine. You take the entire demographic to which the product is being marketed and consider the person likely to have the *least* background knowledge about it. The time it would take this imaginary person to work through and apply a well-written procedure is reasonable. If it would take longer—because the procedure does not exist, is poorly written or is buried in the archives of some obscure forum—then the call on some customers' time will be unreasonable. It doesn't matter that

some customers will learn the task more quickly. The point is that both sub-demographics—the less knowledgeable and the more knowledgeable—are being marketed to. If a manufacturer is going to take assets from *any* customer, it is only fair that the customer knows what those assets are likely to be.

So honesty and fairness impose on manufacturers an obligation to provide consumers with usable instructions or clearly label their product packaging in a way that makes the true cost of purchase estimable by those to whom the product is marketed. Package-markings like the following would help manufacturers meet this obligation:

- Instructions included
- Instructions available by one-off internet download
- Internet connection needed whenever instructions are sought

where “instructions” means instructions on how to use each advertised feature and each feature a consumer can reasonably expect the product to have). Only then are consumers given an opportunity to make an *informed* decision about the true cost of their intending purchase.

So far we have only considered whether consumers have a moral right to be informed of the presence or absence of instructions and the potential cost in retrieving them. Might consumers have an even stronger moral right, namely, to expect that there *are* instructions on how to use a product?

First, consider whether consumers might be willing to give up that right if the omission of instructions brought about a significant reduction in the retail price of the product. To claim that they necessarily would assumes that the retail price is the only measure of cost to the purchaser, and hence the cheaper the better. But this is blatantly wrong. The true cost of any product includes various externalities. For example, the true cost of electricity includes the cost of environmental degradation (and far exceeds the cumulative charges that appear on consumers’ electricity bills). Likewise, the true cost of a product that one wants to use must include the opportunity cost of the time taken to learn how to use it. If it takes me 2 minutes to find out how to do something by reading about it in a user guide, but 12 minutes by trial and error or forum-trawling, then 10 minutes of my time has out-competed 10 minutes of time that could have been put to purposes that yielded me greater utility. Suppose there are 15 things I need help with, each of which involves trial and error or forum-trawling. All up, 150 minutes of my time will have been spent on tasks that could have been substituted with tasks more pleasurable or profitable. You might argue that by undertaking that learning I have judged it to be the most valuable activity to me at the time, otherwise I would do something else. But is the impost on my time fair? Based on the average salary in Australia, that amount of trial and error and forum-trawling equates to approximately \$100 of potential income. Does a user manual add \$100 to the cost of a product? Hardly. Amortised over, say, 50,000 sellable units, a 200-page printed user manual with a usable index would add no more than \$10 to the cost of the product (or \$2 if provided only as a PDF). So your net loss is at least \$90 (and more if you earn an above-average salary). Thus cheaper does not necessarily equate to less costly.

But even if it did lead to net savings to consumers, omitting instructions from some products should set the moral Geiger counter ticking. It is true that the use of some products is too intuitive to warrant instructions: pens, and books for example. But what of non-intuitive products marketed to everyone indiscriminately? Computers and mobile phones fall into this category. Given the bell curve of general intelligence, it is clear that some purchasers of such products will not be able to get them to work as advertised without instructions. (Recall that their use is non-intuitive, and note too that 50% of people are, by definition, below average intelligence.) To sell a product knowing that some purchasers will not be able to use it is simply deception. It is tantamount to selling a product knowing that perhaps as many as 50% of units don’t work as advertised—and with a no-returns policy. It is

taking money under false pretences, the immorality of which should be obvious. Thus providing instructions *is* a moral imperative in such circumstances.

Thus poor or absent documentation can fall within the force-field of morality by it being the result of dishonesty and deception: the manufacturer fails to reveal the true cost of the accompanying product or sells a product that is unusable. It can also cause harm: asset theft will make some, perhaps all, consumers worse off than they reasonably expected to be. Thus the current diminution of instructional offerings that society seems to be acquiescing in is not a legitimate commercial strategy. Morality is on the side of consumers, not manufacturers. It is time for the law to catch up.

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