# Chapter 23: Ethics

## Objectives

Upon completion of this chapter, readers will be able to do the following:

* Define ethics.
* Analyze a situation regarding utility, rights, justice, and care.
* Explain the importance of ethical behavior.
* Explain copyright law, its importance in technical communication, and make ethical decision-making regarding these laws.
* Explain how to ethically analyze data.
* Explain how biases can lead to unethical decisions/behavior in technical communication.

## Introduction to Ethics

Virtue, then, is a state of character concerned with choice, lying in a mean, i.e. the mean relative to us, this being determined by a rational principle, and by that principle by which the man of practical wisdom would determine it. Now it is a mean between two vices, that which depends on excess and that which depends on defect; and again it is a mean because the vices respectively fall short of or exceed what is right in both passions and actions, while virtue both finds and chooses that which is intermediate. Hence in respect of its substance and the definition which states its essence virtue is a mean, with regard to what is best and right an extreme.  
  
Aristotle, Nicomachean Ethics, Book II

Ethics is one of the most important topics in technical communication. When you can communicate clearly and effectively, and when it is your task to help others to understand an object, process, or procedure, it is your responsibility to do so in an ethical fashion.

After all, good writing isn't just grammatically correct, or even functional. Writing professors Jonathan Bush and Leah Zuidema note that audience response is a key indicator of strong writing: "If we define good writing simply as writing that gets the audience to do or think what the writer wants, we fail to take into consideration the needs or well-being of the audience, and we ignore the ways in which writing may hurt others or cause harm" (2011, p. 95). But what does it mean to communicate ethically regarding technical communication? There is a lot of confusion concerning what "ethics" means; when you drill down to what ethical technical communication means, the answer becomes very complicated.

We might think asking someone if they are an *ethical* person is the same as asking someone if they are a *good* person. Certainly, my Aunt Maudie, who always held herself to be the definitive judge of whether someone was a good person or not, would tell you that a good person does what they feel is right in their heart--but the human heart can be very complicated. If you find a $20 bill on the floor, what is the right thing to do?

* Run around asking people if they lost $20? What if the person who says "yes" is lying and didn't lose the money? Was it right, then, to give the money to that person? What about the person who really lost the money? How do you know?
* Turn the $20 into lost and found?
* Keep the $20, with the rationalization that you probably lost $20 in the past, and this is just karma returning that money to you?
* Give the money to charity with the rationalization that by doing so, at least you know it will do some good?

Any of these potential answers might feel morally right or ethically right or just right in your heart. Those criteria aren’t the best for judging complex, ethical problems like those in technical communication.

Also, note that all of these potential answers are legal. Just because something is legal doesn't make it ethical. In the past, in the United States, it was legal for health care insurance companies to deny coverage to persons who had pre-existing health problems. That is, if a person had a heart attack and did not have insurance at that time, then they would not be able to purchase insurance afterward, even though it was clear that they would not be able to afford health care without health insurance. Such a practice was common and legal, was it ethical to deny sick persons the ability to afford the health care they needed?

## Key Concepts: Rights, Justice, Utility, and Caring

According to ethicist Manuel G. Velasquez, there are four basic kinds of moral standards: "utility" (61), "rights, justice, and caring" (59). While each of these categories is complex, at the basic level, these categories can be explained as follows:

1. Rights: This standard "look[s] at individual entitlements to freedom of choice and well-being" (68).
2. Justice: This standard "look[s] at how the benefits and burdens are distributed among people" (68).
3. Utility: "The inclusive term used to refer to the net benefits of any sort produced by an action" (61). This standard favors the solution that yields "the greatest net benefits to society or impose[s] the lowest net costs" (61).
4. Care: With regard to the "ethic of care,....the moral task is not to follow universal and impartial moral principles, but instead to attend and respond to the good of particular concrete persons with whom we are in a valuable and close relationship. Compassion, concern, love, friendship, and kindness are all sentiments or virtues that normally manifest this dimension of morality" (102).

You may have noticed that these standards can quite easily contradict each other. Let's think through a rather silly example.

Let's say you have a face-to-face technical communication class at a local college or university. Twice weekly, you attend the scheduled class periods. One of your classmates, let's call him Percival, likes to sleep during classtime. More than that, he snores loudly while the professor is trying to teach.  
  
The first time this problem manifests itself, the professor tries calling on Percival to keep his attention, and then the professor nicely suggests he go get a drink of water to wake himself up. Percival, however, is unphased. He evidently prefers to spend class time sleeping and snoring. The snoring is really distracting, and everyone finds it difficult to learn in this environment. During the second class period, the drama repeats itself, but the professor has come prepared. At the first loud, earsplitting snore, the professor pulls out a water gun at Percival. She aims, fires, and SPLAT! Percival is awake! The class laughs uproariously, and every time Percival snores, he gets water in the face. It's still kind of hard to concentrate, with the professor water gunning Percival every 15 minutes or so, but it's very entertaining.  
  
This scenario is a little off the wall, but let's evaluate it, anyway. The professor's solution to the problem is effective, at least in this one instance. But how does it stack up to an ethical evaluation?

**Rights:** people in contemporary societies have a wide variety of rights. For example, students have the right to a conducive learning environment. On one hand, students have the right to attend class and not have to fight through Percival's snoring to hear the professor's lecture. On the other hand, students have the right to attend class and not be shot at with a water gun.

**Justice:** the benefit to the professor's solution to the problem is that it is effective. It stops Percival's plan to snore through class and make learning difficult for the other students. It also seems, at first, to bring the class together against a common distraction and provide some temporary amusement. Everyone is having fun at Percival's expense. But let's think. Students have a right to attend class and not be subjected to abuse. Shooting a student with a water gun is abuse. It's very much outside of the appropriate treatment a student might expect from a professor, not to mention it is humiliating. Kant's categorical imperative has been translated thus: "Act only on that maxim through which you can at the same time will that it should become a universal law," (Kant 24). Granted, all sleeping students will be attacked with a water gun would be a silly maxim. Reasonable people wouldn't even consider such a rule. But if they were to, it would be clear that we wouldn't want to be attacked with a water gun if we accidentally fell asleep and started snoring, and we wouldn't want our loved ones subjected to such treatment, either. Certainly, Percival never consented to be attacked with a water gun. His rights are being violated in this example. Regarding justice, sure, at first the water gun accomplishes the goal, but it is also distracting. And how long will it take for students to wonder, who else will get water gunned? Suddenly, the professor's blatant disrespect for Percival can easily move to disrespect for anyone. Morale can drop. The students can lose respect for the professor, and then the learning environment is compromised. The entire class suffers, and the learning outcomes also suffer, because the professor made the decision to employ a water gun. You can probably think of other complications, as well.

**Utility:** One of the ways to look at utility is to ask the question, "Is there a better solution that helps everyone achieve the desired outcomes?" Or at least, is there a solution that minimizes the disadvantages to the larger population? In this case, yes. At most institutions, the professor has a variety of ways to deal with a disruptive student. After informing the student of the consequences of repeating disruptive actions, the professor may call campus security to remove the student. The professor may also contact the student's academic advisor to discuss a solution, and at some institutions, the professor can have the student removed from the class roster. While official solutions may not be as dramatic, as fun, and as quickly effective as water gunning a student, they do protect all students' dignity and right to a safe environment conducive to learning.

**Care:** At the end of the day, a professor is a human being, too. And they may be overwhelmed trying to deal with students who do not want to be in the class and are actively working against the professor's efforts to do their job. It is frustrating. And it might even be understandable that they want to pull out a water gun and just solve the problem and blow off a little steam. But the professor has a job, and that job brings in income to support their family. Water gunning a student will bring in negative publicity to the professor, the class, the academic department, and the institution that they teach in. With public scrutiny, the professor might earn a reprimand or, at worst, lose their job. How will they help to support their family?

As we analyze this situation, we quickly see that water gunning the student is unethical. It violates the rights of the student and can impede upon the professor's ability to care for their family. Furthermore, it may lower morale in the classroom, which may rob all students in the class of an environment conducive to learning. There are better, accepted channels to use to deal with this situation. And you can probably think of other details, as well.

The scenario is simple, but it presents many challenges. Analyzing any situation regarding ethics should take time and careful consideration so that the best evaluation can be produced. Here we have only invoked some of the ethical aspects of Aristotle, Kant, and Velasquez. In this short introduction to ethics, we are only scratching the surface of a much larger and very complicated and fascinating field.

Here are some sample scenarios that you can analyze about rights, justice, utility, and care.

[Ethical Dilemmas Archive](https://www.goodcharacter.com/the-daily-dilemma/)

## Faulty Communication and Real Consequences

Let's move to a real example of an ethical situation in technical communication.

In 1986, the space shuttle Challenger exploded. What you may not know is that a failure of communication was partially responsible for that disaster. There was an "O-ring problem," or "the failure of a rubber seal in the solid rocket booster" with regard to the shuttle's construction (Winsor, 1988, p. 102). From early 1984 until July 1985, the O-ring problems were noticed but not taken seriously. On July 22, 1985, MIT engineer Roger Boisjoly sent a memo to R.K. Lund, who was MIT's Vice President of Engineering. In the memo, Boisjoly stated that the O-ring problem was serious, and concluded, "It is my honest and very real fear that if we do not take immediate action . . . to solve the problem . . . then we stand in jeopardy of losing a flight along with all the launch pad facilities" (Winsor 341). MIT engineer Brian Russell wrote an August 9 letter in response to Boisjoly's memo. Russell's letter stated the facts very plainly. For example, he writes, "If the primary seal were to fail from . . . 330-660 milliseconds the chance of the second seal holding is small. This is a direct result of the O-ring’s slow response compared to the metal case segments as the joint rotates" (1988, p. 104). Russell's memo does not provide any interpretation of the situation, and as such, "did not communicate its intent [as] is shown by the fact that the people who read it were uncertain about what it meant" (1988, p. 105). The important information in the Russell memo, which was quoted above, was buried deep in the letter after such reassurances as "MIT has no reason to suspect that the primary seal would ever fail after pressure equilibrium is reached" (1988, p. 105). While it might seem prudent in the face of bad news to report "just the facts," if lives are at stake, it is important to communicate clearly. Do not hide or bury the information that there is a problem. Make a clear recommendation to solve the problem, if appropriate and possible. Make clear the perceived consequences if the problem is not dealt with. Of course, no one wants to be wrong or to be perceived as overly dramatic. But at the same time, ethical communication is clear and appropriately detailed to prevent disasters such as the Challenger explosion. The Challenger launch was delayed because of the O-ring problem, but on January 28, 1986, the shuttle launched, resulting in the tragic loss of seven lives.

Of course, no one wants to be the bearer of bad news. And no one wants to point the finger. We as humans are concerned about how we are perceived by others, and we don't want to jeopardize our position within a company or organization. Also, we might be asked by someone above us to "fudge the data" a little bit to keep a grant or contract. Our working relationships or even our jobs might be on the line. Perhaps a grant might not get funded if certain data are not reported. Or perhaps our company won't get a contract if we don't promise that our construction plan can hold the number of cars the client desires. When the pressure is on, the consequences may not seem so dire. But as Kant reminds us, if we don't wish others to lie about the maximum number of cars that can use the parking deck safely while we are in the parking deck, then we certainly should not do it, either.

You can learn more and practice more ethical thinking at the [Online Ethics Center for Engineering and Science: The Space Shuttle Challenger Disaster](https://onlineethics.org/cases/engineering-ethics-cases-texas-am/space-shuttle-challenger-disaster#:~:text=Prior%20to%20class%20discussion%2C%20ask,responsibilities%20of%20a%20manager/engineer.).

## Appropriate Language in Technical Communication

How does appropriate language relate to ethics in technical communication? Appropriate language becomes an ethical concern if inappropriate language is imprecise or disrespectful.

To continue to address some specific aspects of ethics in technical communication, Kueffer and Larson remind us that sometimes writers use inappropriate metaphors in technical communication that reduce the credibility of the scientific writing or research that they are trying to communicate to the public. We live in a time when, especially in advertising and popular culture, dramatic language is pervasive. It may be tempting to overstate or dramatize a scientific finding to garner public attention to something very important such as climate change. For example, a letter with the title, " 'Alien species: Monster fern makes [International Union for Conservation of Nature] invader list' " really grabs the attention. But Kueffer and Larson explain, "We consider this choice of words to be undesirable, because it merely expresses a value judgment of the authors (i.e., that the species is like a monster because it is bad) rather than illustrating the science. The metaphor devalues this plant species in its entirety (like a monster that is always bad) rather than specifying which aspects of its behavior are problematic" (2014, p. 721). Kueffer and Larson continue, "It is better to communicate precisely, and to use appropriate metaphors so that if, for example, later contradictory information becomes available, the public does not dismiss scientific findings. Responsible technical communicators understand that scientific research involves a level of uncertainty which must be made clear to readers" (2014, p. 721).

**From Kueffer and Larson**

**Factual Correctness**

Every metaphor simplifies by illustrating certain aspects of a scientific object while neglecting others. Scientific metaphors can nonetheless, be interpreted in terms of their factual content, and, in this respect, they can be considered wrong. At the start of the genomic era, for instance, Avise (2001) proposed alternative genetic metaphors to replace prior mechanistic ones (e.g., the blueprint metaphor) that he felt misrepresented new insights about the nature of the genome.... Metaphors should be consistent with the state of knowledge to the degree of scientific accuracy required in a particular context (e.g., research, popular science writing, science-based decision making).

**Socially acceptable language**

The same rules that apply to everyday life concerning socially acceptable language also apply to science. Metaphors that are racist, sexist, or in other ways offensive should be avoided. Herbers (2007) for example, condemns references to slavemaking and negro ants and reference to rape in animal behavior studies. As Herbers explains

Let us apply to the slavery metaphor those arguments developed for changing the jargon of animal reproductive behavior. First, using human labels to describe animal behavior implies similarities that may be mistaken. Indeed, my experience verifies that use of the slavery metaphor triggers a connection with human brutality that is hard to shake ([Anonymous 2002](javascript:;)). Second, such terms are offensive because they evoke negative human experiences and can serve to reinforce the prevailing social order ([Zuk 1993](javascript:;)). More than one colleague has expressed this point of view to me concerning the slavery metaphor. (104)

**Neutrality**

It is often difficult to assess the neutrality of a metaphor. Scientists should, nonetheless, seek in their communication to avoid language that is generally recognized to be loaded with emotion, such as apocalyptic warnings and dramatic hyperbole. This language can distract from the perceived neutrality of a scientist, who is expected to present research results that invite open and critical discussion. One rhetorical function of such metaphors is to convince when evidence is missing or ambiguous; however, this is inadvisable, insofar as it leads to scientific statements being supported with rhetoric instead of facts.

**Transparency**

When a metaphor is used, it should be introduced as such and its connection with specific aspects of scientific concepts should be illustrated. At least in longer texts, authors should explicitly reflect on the connotations and performativity of their chosen metaphors. When metaphors are replaced by similes (i.e., using an X is like Y statement), there is a lower risk that they will be taken literally (Carolan 2006). (Kueffer and Larson 722)

Kueffer and Larson’s discussion reminds us that language choices in technical communication are never neutral; they carry ethical weight because they shape both how knowledge is perceived and how communities are respected. When metaphors or word choices mislead, stereotype, or exaggerate, they undermine credibility and risk distorting scientific knowledge. In this sense, ethical technical communication requires not only factual accuracy but also sensitivity to the social and cultural implications of language.

Just as the precision and appropriateness of language reflect ethical responsibility, so, too, do the ways writers handle intellectual property. Copyright law and ethical citation practices ensure that creators are fairly credited and that knowledge circulates responsibly. Both areas—language choice and copyright—demonstrate how ethics in technical communication extend beyond simply conveying information to shaping trust, accountability, and respect between communicators and their audiences.

## Ethics and Copyright Law

An important aspect of ethics involves awareness of and respect for copyright law.

The information found here is based on materials developed by Jean T. Kreamer and Georgia Harper for the LaCADE (Louisiana Consortium for the Advancement of Distance Education) program.

Copyright has become a widely discussed topic with the advent of the Internet. Images and designs are everywhere. It is so easy to click and save a background, a photograph, even a cartoon from a web site. Many ask, "what are the rules?" Here are the answers to some frequently asked questions about copyright laws.

### Why do we have copyright laws?

Copyright laws exist to protect the creator's creation. If you come up with a fantastic new logo for Kennesaw State University, for example, you would want credit and compensation for your work. Technically, your design and anything else you create is already copyrighted. You could offer to sell the copyright (usage rights) and design to KSU. KSU might buy it and then decide to use it. You might grant KSU exclusive rights for free, or you might require a one-time fee for KSU to buy the rights of the design, or you might request a sum of money every time the design is used. All of these negotiations would require you to waive, protect or sell your copyright.

However, think about a situation where you sold your design to KSU for a fee each time the design was used or for a percentage of the sales. Then, a large discount chain began marketing shirts with your logo, but without your permission. What if buyers could get your great new design at half the price because you were no longer getting your cut? It's great for the consumer and the discount chain, but you and KSU have been cheated. To prevent such theft and unethical use, there are copyright laws.

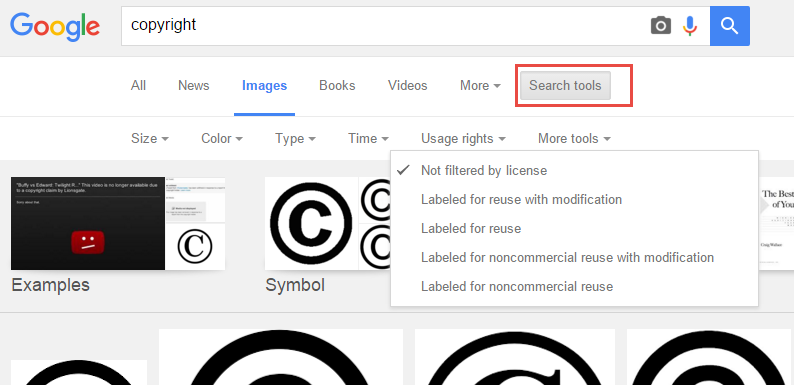
### What does copyright protect?

Copyright does not protect facts, ideas, or descriptions (United States Copyright Office). To use another's facts, ideas, or descriptions in your work you will need to cite properly using an acceptable form of documentation (APA or MLA, for example). Copyright protects creative expression. Creative expression is found in designs (such as web page designs or layouts, portfolio designs, etc), logos, pictures, icons, and other creative ways to express information. To use an image, likeness, photograph, icon, logo, graph, chart, or layout that was not created by the user and for which the user has no agreement or authorization is an infringement of copyright. It does not matter how benign you believe the use is or how beneficial you feel the use might be to the creator. It is an infringement of copyright to use creations that are not your own if you do not have permission from the creator or his or her agent.

### Is it okay to take an image if I can save it to my desktop?

No. It is a mistake to think that an image is only copyright protected if the web page designer has made it so that the image cannot be copied onto the computer. Just because an image can be taken doesn't mean it is not copyright protected. If you need copyright free images, Pixabay and Creative Commons are great places to search. You can enter a term into the search box, and then you can narrow your search by license, depending upon what you plan to do with the image.

Here is how you might find copyright-free images on Google. After you have searched for an image with Google, click on "Search tools" to see more tools. One will be "Usage rights." Use that tool to filter by license.



*Figure 1: Usage rights tools on Google Images*

### Isn't using images, such as a popular fast food chain logo, actually free advertising?

It may be free advertising, but it is also a violation of copyright. It is a popular myth that linking the image back to the original bypasses copyright laws. The designer can still sue you. Always get written permission to use a design. Some designers announce that designs may be used if the designer is credited and/or if a link is provided back to the home page. In this case, you are given permission to use the graphic as long as you abide by the designer's stipulations.

### What about fair use laws? Can't I use a graphic if I follow the fair use laws?

Unfortunately, graphics are not covered under fair use laws that apply to students. In the US, the limits of copyright exist mainly for libraries and government use. For example, a designer's copyright protection does not prohibit libraries from making copies for interlibrary loan purposes or archiving; does not prohibit book owners from throwing away or reselling books; does not prohibit educational uses in face-to-face teaching and in distance learning; and does not prohibit making copies of a work or altering it to make it available to disabled persons.

Fair use does allow people other than the copyright holder to use part of a copyrighted work in certain circumstances even without permission.

[Introduction to Creative Commons and the Basics of Copyright Law](https://onlineteaching.umich.edu/articles/introduction-to-creative-commons-and-the-basics-of-copyright-law/)

### If I am a student, does that mean I can use another's design in my own papers and presentations?

Because your papers and presentations are an educational use for a restricted audience, you are allowed to use copyrighted designs, under certain conditions. If a chart or graph or logo conveys the message that you want to convey in your paper or presentation, you may use it provided you cite it just as you would any other information that you used. Consult your documentation guide for proper documentation of graphs, charts, graphics, drawings, photographs, icons, symbols, or logos. In addition, if you take the information from a chart but create the chart yourself, you do not need to cite the chart in your paper, but you will still need to cite the information and document it properly in your paper. If you take information from a source and create a graphic explaining that information, you still need to document your use properly. The Conference on Fair Use (CONFU) Educational Fair Use Guidelines for Digital Images decided that "[s]tudents may download, transmit and print out images for personal study and for use in the preparation of academic course assignments and other requirements for degrees.” If you are creating work that will be put on the open web—such as in a publicly accessible blog for a class assignment—you will need to search for images that are copyright free or labeled for reuse.

### What if there's no trademark or copyright symbol on the design?

Stealing another's design is unethical. It is also important to note that an absence of a copyright symbol does not mean the design is not copyrighted. Designs that are in the process of copyright approval can win damage awards if an infringement occurs while the design is awaiting an official copyright. And today, copyrighted works are no longer obligated to carry notice of copyright. For works created after March 1, 1989, absence of copyright is no indication of copyright status.

### Will an international company such as Sony really catch me putting a few of their song lyrics up on my personal web page?

Large companies employ lawyers to surf the web searching copyright infringements. Many humble college students have been surprised by letters from big-name firms threatening lawsuits if lyrics or logos aren't removed from a personal web page. There are additional penalties if materials in question are not removed quickly enough to suit the offended party.

## Ethical Analysis of Data

As you analyze data, avoid cooking, trimming, and cherry-picking data.

**Cooking data** is the practice of falsifying data. It can also be the practice of deleting data that does not prove a hypothesis to present a stronger argument that proves the hypothesis. For example, what if you were ordering pizza for an event, and you really wanted every pizza to have bacon on it. You LOVE bacon. If you surveyed 100 people about whether or not they liked bacon, and 50 people said yes, and 50 people said no, but 25 of the "no's" were vegetarians, then you could report the data truthfully, that half of the people surveyed like bacon. Perhaps half of the pizzas should have bacon on them. Alternately, you could "cook" the data by excluding the vegetarians from the survey because, as you reason, it's not that they don't like bacon--but that they don't EAT bacon, which is completely different from liking it. You could then say that 2/3 of the people surveyed like bacon (67%), and, therefore, you have a rationale to order bacon on all the pizzas.

**Trimming data** is a method used to lessen the effect of statistical outliers on the results of a study. If you trim data, then you must inform your reader that you trimmed the data, and to what percent you trimmed it. For example, if you were ordering pizza for an event, and you really wanted every pizza to have bacon on it, then you could survey 100 people about whether or not they liked bacon. Your survey also includes a question about what planet people are from (this is a ridiculous example, but I just wanted it to be simple). When you look at the results, you see that 55 people really like bacon. You notice that 45 people say they don't like bacon, but that there are irregularities in that data. For example, 10 of those respondents say that they are from the planet Mercury, so they can't eat any human food at all. So, you will trim the data to omit these irregularities. That means 55 people really like bacon and 35 don't. You would tell your readers that 10% of the responses were culled for irregularities. You can also state what the irregularities were. It's fine to trim data that is outside the realm of possibility--as long as you tell your readers. It is not okay to trim data simply because it makes it easier for you or supports your argument better.

**Cherry-picking data** is the practice of only using data that supports your hypothesis. [A good example, with graphs and humor, of cherry picking is here](https://tamino.wordpress.com/2013/03/04/cherry-picking-is-childs-play/) (website).

We see these methods used so often in the presentation of data in the media, that we might come to believe it's okay to cook, trim, and cherry pick data for analysis. It is not.

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