University of Waterloo

As with other areas of knowledge, development of the ideas in STAT 231 requires terminology with carefully-defined meanings; an overview of this terminology is provided in the Glossary in Figure 1.5 the Course Materials. The definitions have been refined over time and, in some cases, an apparently minor change in the wording can make a definition wrong; for instance:

- a correct statement is: the target population is the group of units to which the investigator(s) want Answer(s) to the Question(s) to apply;
- an **in**correct statement is: the target population is the group of units from which the investigator(s) want Answer(s) to the Ouestion(s) to come.

The article EM9534 reprinted below illustrates how difficulties arise from disagreements over meanings of words; from the perspective of STAT 231, the word *error*, used in the second paragraph and onwards, would be better as *mistake*, as in the first paragraph.

EM9534: The Globe and Mail, July 1, 1995, page A2

Truth, lies and disputes about accuracy

BY ROBERT EVERETT-GREEN Senior Features Writer

EWSPAPERS, being human, make mistakes. Since some of those mistakes are made in public, *The Globe and Mail*, like most other newspapers, has a place in its pages for public atonement. It's usually found on Page A2 in the front section (occasionally also in *Report on Business*) under the terse heading, Correction. This is where experienced Globe readers turn to find out what news wasn't quite fit to print in yesterday's editions.

Most often, it's a factual error, though part of the sport of reading The Globe's deeds of contrition is trying to deduce what the error actually was. A correction in Tuesday's paper, for instance, announced that "the University of Alberta is in Edmonton." You might reasonably think that we had said it was in some other town, say Camrose or Dewberry. In fact, we had got the location right, but misidentified the institution as the University of Edmonton. In cases in which an error may be seen to damage an individual, printing a correction is not just about serving the truth, but about staying out of court. In such situations, the wording of the correction may come under close legal scrutiny, and may even be drafted by the lawyers of the offended party – a rare relaxation of *The* Globe's prized editorial independence.

Truth, however, is largely a matter of judgement, especially at the level of complex ideas. If a minister of the government

Papermaking

doesn't agree with *The Globe's* portrayal of her department's effectiveness, the complaint does not usually end up in a correction. More often, it becomes a letter to the editor, allowing her to vent her opinion directly, and perhaps also to dispute the factual basis of our story. If the minister turns out to be more right about the facts than we were, her published letter would be understood to correct our fault. This saves printing even more corrections than the 260 or so that we have published during the past year.

There are times, however, when a dispute over accuracy seems to resist the standard remedies. I discovered this last week, when I got a telephone call from Catharine Mac-Kinnon, the prominent feminist legal theorist. I had recently referred to Ms. MacKinnon in an article in *The Globe's* Arts section, saying that she "has argued that pornography is rape and intercourse is violation." This, Ms. MacKinnon said, was "a 100-percent lie."

Reaching for my copy of *Only Words*, Ms. MacKinnon's influential 1993 study of pornography, I pointed out that she had written that pornography "is sex," and that "protecting pornography means protecting sexual abuse *as speech*." True, she replied, but "pornography isn't rape. Rape is rape. Pornography is a violation, a form of an act, a form of forced sex." But isn't forced sex what rape

means for most of us? "Women aren't raped by books, they're raped by people," she said.

Quite so. Turning to the other part of my "lie", I noted that Ms. MacKinnon had written: "Violation, conventionally penetration and intercourse, defines the paradigmatic sexual encounter." She replied that she had been writing only of the paradigm – meaning the socially constructed, "overwhelmingly" accepted model – of sexual intercourse. In other words, she had not argued that nonviolational intercourse was impossible, just highly unlikely in our present society.

After speaking with her for nearly an hour, I felt our differences were matters of interpretation, hence opinion. But since these opinions were about the true nature of Ms. MacKinnon's opinions, I had to grant that she had inside knowledge of the subject. How can you tell someone that you know her thoughts and beliefs better than she does? For her part, Ms. MacKinnon still maintained that my published summary of her views was "totally false," and requested a correction.

As you may have guessed, *The Globe* is not going to satisfy Ms. MacKinnon's request. Rather than publishing a cryptic correction, or suggesting that Ms. MacKinnon write a letter, it seemed more suitable to air the dispute in a column about how *The Globe* deals with disputed information. For as Mark Twain almost said, there are lies, 100-per-cent lies, and conflicting ideas about what lies – and errors – are made of.

As another illustration of how language can affect our perception of the world, consider the two pairs of opposites at the right.

1 and 2 can make two statements appear equivalent but the fact that noise is a *perturbation* of silence is conveyed better by 2 than by 1.

silence absence of silence
absence of noise noise

Exercise: Discuss 1 and 2 with respect to their bearing on deciding between:

- a person who wants *silence* and so objects to music playing on their neighbour's deck;
- a person who wants *noise* and so objects to *not* playing music on their deck so as to maintain silence for their neighbour.

More technically, the practice of referring to dependence as lack of independence may obscure two matters:

- dependence is the *usual* state of affairs in the real world as we continually experience it;
- independence is unattainable in the real world but is a useful idealization for modelling.

The article EM0301, The scribe who came in from thinking clearly, also deals with the importance of the meaning of words.