

Mistakes and Slips

People make mistakes and commit errors; it's a fact of life. Nobody is perfect. Designers of digital technology have to live with that fact. Actually, good designers do more than live with it; their designs take it into account. They avoid designs that make it likely for users to make errors (Norman, 2014). They create digital products and services that help people avoid and recover from errors.

Mistakes Versus Slips

When categorizing the types of errors people make, the first distinction is between *mistakes* and *slips*

Mistakes are errors of conscious decision. A choice presents itself and a person considers the alternatives, weighs the pros and cons of the alternatives ... and chooses the wrong one. Don Norman calls mistakes “errors of intention”—the person intentionally decides to do something that turns out to be incorrect or to have an undesirable result. Examples of mistakes:

- **You shop online for a flash memory card for your camera, but the one you order turns out to be incompatible with your camera.**
- **You take the freeway route to a concert, expecting traffic to be OK, but encounter a huge traffic jam.**
- **You vote for someone because you believe the policies they propose will help you, but after they are elected, you learn that those policies actually harm you.**

People make mistakes either because they have an incorrect understanding of the choices or because they have inaccurate or incomplete information. Don Norman calls this “having a faulty mental model” (Norman, 1983a). Since mistakes are the result of intentional choices and actions, we detect them only afterward, when their ramifications become apparent. In engineering terms, we say mistakes can be detected only with feedback.

Slips, the other main type of error, are unintended. A person does something they did not mean to do. Think of a person slipping and falling on a wet floor and you will understand where the term *slip* comes from. **Examples of slips:**

- **You turn your oven ON to let it heat up before baking something but forget to check first to see whether there is anything already in the oven.**
- **You try to say “she sells seashells by the seashore” quickly, but your mouth won’t say the right words.**
- **You send a text to the wrong person.**

The same action can be either a mistake or a slip depending on whether it was done on purpose. For example, if you receive a company email that was sent to a group of people, you may decide that everyone on the list should get your reply, so you click Reply All. Later you learn that replying to everyone was a mistake—for example, because your reply contained company proprietary information, and some recipients of the first email don’t work at your company. In a different scenario, you receive a group email and intend to click Reply, but don’t look carefully and accidentally click Reply All, which is right next to Reply. That’s a slip.

Slip or Mistake?

On January 13, 2018, at 8:07 a.m., an emergency alert went out over television, radio, and cellphones in the US state of Hawaii. According to the alert, a ballistic missile was headed for Hawaii and expected to arrive within minutes. The alert urged residents to “seek immediate shelter” and ended with “This is not a drill,” as shown in Figure 15.1.