



• A woman plans a detour to do some grocery shopping on her way home, but instead her car seems to drive directly home "*by itself*."

• A young man returns home after a workout and tosses his sweaty T-shirt into the toilet. (This was not simply an aiming error. The laundry hamper – his intended target – was in another room.)

• A woman fills an electric coffeepot with water, plugs it in and turns it on, but forgets to put in the coffee.

• A woman leaves her desk to get her glasses in her bedroom. By the time

she gets there, she forgets what she is looking for and combs her hair instead.

We all make errors of this type, but why do they happen? Psychologist Donald Norman calls these errors "*slips of action.*" In life, we do a great many things automatically, with little attention and thought. Experience and skill tend to go along with behaving automatically and mechanically. For example, when first learning the rules of a foreign language, we have to continually recall these rules to speak that language. Once we become fluent, we no longer need to call up the rules, and we tend to forget them. In fact, losing conscious access to rules is linked with various types of expertise. Automatic behavior is an efficient strategy – most of the time. It allows us to direct our mental abilities to complex new matters that require more attention.

Most of our actions are largely carried out by subconscious mechanisms. At a conscious level, you may will yourself to do something, like scratch a mosquito bite that is itching. Once you decide, the scratching occurs automatically. You do not have to decide how to scratch.

What about actions that are more complicated? Suppose you plan to stop on the way home to pick up some meat for dinner. To do this, you probably have to formulate a plan. In this case, it is to take the route that passes the grocery.

However, our plans have a **hierarchical structure** – a system in which various parts are arranged one above the other. For example, "going to the grocery store" – like any other plan – tends to have a series of substeps: (1) take offramp #4, (2) go to the first stoplight, (3) turn left, (4) proceed four blocks, and so on. "Going home" includes a different set of subtasks.

Once you have done something many times, the subtasks may be done automatically with little attention. With the grocery store, you know precisely what exit to take and which turns to make. Each subtask is switched into readiness by simply recalling the plan – what you want to do. You don't need to think about the details.

Slips of action suggest that several different plans may be active at a given time – each competing for control. The "go to the grocery store" plan competes with the "go home" plan and maybe the "water the plants" plan (once you are home). This is the source of potential errors. If you happen to think about watering the plants as you pass a crucial exit, the normal "go home" plan is likely to take over – and the car will "drive itself" home. You may not even remember the meat, until you start thinking about dinner again.

## Any distraction can cause a "*slip*" in our plans.

With slips of action, failure can occur at several points.

1. With a choice of plans, we may describe the wrong one to ourselves. Thinking about discarding a facial tissue may have been the problem for the man who threw his T-shirt into the toilet.

2. Once we have selected an action, we may run into trouble executing the substeps. Like the woman who combed her hair instead of getting her glasses, we may forget in midstream. Similarly, we may omit a step while doing the task, like the woman who forgot to put the coffee in the coffeepot. This is even more likely if something distracts us in the middle of the sequence.

3. If we are "*in range*" of one of our well-established behaviors, it may "*capture*" us. We discover ourselves doing one thing, when we had intended to do another. The "self-driving" car illustrates this.

We can prevent these slips of action by **monitoring our behavior**. In this way, we can catch many of these slips before they can do any harm. Essentially, we need to check to see if what we are doing matches what we intended to do. For example, did you turn off the headlights? To find out, make it a point to look as you leave the car. There is another way to catch our slips of action. Our error may often cause something unexpected to happen, making the problem obvious. If we forget to turn off the car lights at night, we are very likely to see the beams when we get out. If we forget to unbuckle our seatbelt in the car, we can't get out at all!

If you have been suffering from many slips of action lately, this does not mean that you are becoming senile or suffering from Alzheimer's disease. However, it does mean that you need to monitor your behavior more carefully, especially those tasks that have become automatic, because you know them so well.

\* Adapted from Linda Davidoff's *Introduction to Psychology*, McGraw-Hill Publishers, 1987, pages 131-132.