In December, I was traveling on a one-lane road that borders a creek when I hit a patch of ice. As the rear wheels lost traction, the back of the vehicle began to skid toward the creek. I envisioned spinning out of control, gulped as I assessed the riverbank and cursed the manufacturer of my vehicle – my new (used) four-wheel drive truck.

You may wonder why a truck owner was spinning on ice. A 4x4 truck is designed to power all four wheels, which provides better control. But I couldn’t find a way to switch into a different gear. So as I fought embarrassment, I silently cursed the truck manufacturer, asking, “Why is there no perceptual affordance?”

I first learned about affordances when I read Donald Norman’s seminal text, The Design of Everyday Things. (I actually have an early edition entitled The Psychology of Everyday Things.)

In the book, Norman describes design based on the needs of the user, rather than focusing on preference and aesthetics. He describes the structure of tasks, how designers can make choices visible and how we can design for error by depending, in part, on what we can see or expect to see as we perform our tasks.

I am often thwarted by a lack of perceptual affordances. I will routinely pull on doors that must be pushed. I’ll plug in a USB device with about 50 percent accuracy. These design snafus bug me – but they are hardly as threatening as careening into a creek because you cannot find the controls.

I suspect I should have studied my vehicle guide to learn the location of the controls for my 4x4 options. But I expected the 4x4 gears to be an option close to other transmission choices.

Where were the controls? I had no idea. I turned to the manual for help, finding “Four-Wheel Drive Operation” in a section called “Starting and Operating.”

FOUR-WHEEL DRIVE OPERATION

The NV233/243 is an electric shift transfer case and is operated by the 4WD Control Switch (Transfer Case Switch), which is located on the instrument panel.

“How” I wondered, “does this content help me understand how to operate my truck?” I felt thwarted. Would most readers be familiar with an electric shift transfer case? I wasn’t – I don’t know what it is, what it does, what it looks like or where to find it. I needed a picture of the instrument panel. The manual provided no cross-reference, so I turned to the table of contents, found
a section called “instrument panel and controls” and looked for an image (Figure 1) on which I might find the control I had not found while driving.

Can you find the “hidden” control knob? If you look closely, you’ll see it underneath the climate controls. The illustration identifies the part as a transfer case switch.

Notice the communication challenges I faced. If I had read the manual before operating the vehicle, I would have found an illustration that pointed out “transfer control switch” but provided no other information. The manual did not link the content on “what something is” to content on “how to use it.” And to use my four-wheel drive, I first had to find a switch that, because of its location on the dashboard, did not fit my expectations nor was it easy to see from the driver’s seat.

As humans, we encounter information and try to gain knowledge across channels. To drive my vehicle, I relied on my own expectations of where I might find certain controls. When that failed me, I turned to printed content. I shifted from relying on the architecture in the physical world to the architecture in the printed world. My task remained the same: Use 4x4 feature on truck.

My experience affects my perception of the truck manufacturer as well. Although I stayed on the road, the incident made me feel embarrassed and grumpy. Pouring through a manual that barely answered my questions further hampered my customer experience.

How can we keep customer experiences from slipping away?

As information architects, we work in a profession where we strive to improve the customer experience by making the complex clear. Through our work we can influence product development and ask questions such as, “Does the placement of this control make sense?” We can influence content, asking questions such as, “Am I using terminology my readers understand?”

Our work as information architects and user experience professionals puts us at the forefront for helping people understand and act. If we hope to make the complex clear, we’ve got a lot of work to do.