**Navigational Mindset**

Far too many people who have taken one of my classes, even those who do perfectly well in the field, get lost driving. Or follow their GPS into a muddy river crossing and get stuck.

No one with even rudimentary navigational skills should fall for bad GPS directions.

My wife -- like a surprising number of people –– has a problem with left and right; she adopted a navigational mindset, and uses cardinal directions (N,S,E,W) to indicate even simple directions. To do this, she is always aware generally which way is North.

PRACTICING NAVIGATION

To adopt a mindset -- to truly live it without even thinking about it -- you must begin by being constantly conscious of directions.

A key cheat here is that most of us live in cities. And in most parts of the US, at least, the vast majority of roads are laid out on a grid. Most roads, therefore, are pointing (roughly) in the cardinal directions.

When out driving, keep a compass around until you get used to which way is which. Every time you turn, re-adjust your internal compass to the new heading. Soon enough, because of the simple grid you are working off, you will always know which way you are pointing.

You will immediately get lost less, just by never going the wrong direction very easily.

MENTAL MODELS

Your "internal compass" I just mentioned above is part of the mental model you have of the world. When you glance at a map, and envision the way you go, you embed your version of the important parts of the route into your brain. You work off this when you drive there, and will base all changes and observations along the route on this.

You already have a model of your world, but if are not in a navigational mindset, probably have an incorrect model in some ways. And be aware, it's hard to discard a mental model; changes get stacked, and there can be problems with conflicts in information.

If you find yourself justifying conflicts with new information, stop and confirm the information. Be aware of the limits of your mind's ability to get confused, and don't fall prey to it.

INGRAINING NAVIGATION

Once you get used to directions, add on the next key portion, distance measuring. Your car has simple bur reliable and easy-to-read DME (distance measuring equipment), the odometer. If you don't want to do math, press the button on the trip meter all the time instead.

Whether you just keep track in your mind, or want to refer to a map and take notes, start keeping track of how far you go, in each direction. Even if there are many turns, keep adding and subtracting each axis of movement, and estimate how far the total distance from home, and what direction you have gone.

The same should happen when you walk. How far away from the car is the store? What angle?

LOOK AT THE TERRAIN

Don't have a compass? Or no straight roads? Look around harder. This is an extension of terrain association.

You will find something straight, and on the grid. Roads near your angled road might be on the grid. Power lines, and even fences are even more on the grid than roads.

When walking, use terrain association to keep track of buildings, use power pylon counts and other features (not to mention hills and streams) to keep track of where you are.

DON'T USE TECHNOLOGY AS A CRUTCH

And then, once you can do all this pretty reliably, feel free to start using your GPS. But never, ever, ever use turn-by-turn directions. In fact, you will soon become annoyed by them.

No, not from the annoying voice, but because you know where you are before the unit tells you. You won't need it.

How to use the GPS? Preferably, you use a field unit like the GPS60, vs a car nav (or for a phone, real software instead of simple road navigation software). Use it to confirm north simply, at a glance. Use it to have a convenient moving map display, but do not assume the map is perfect.

And in paper or on the GPS, be sure to review the route before you go. Set waypoints, so you can glance at the map to see the relative location of the start and end points.

Make sure your location makes sense, and don't assume the unit is working properly, or that the precision is perfect; it often isn't, and you need to believe street signs and your knowledge over the little car icon.

Explore the area, and try shortcuts. Not by having the unit try to re-route you, but by stopping and glancing at the map, and seeing if there is a better way to go. Be happy when you get there with your new, secret route.

But don't drive or walk anyplace, or any direction the GPS tells you to, that doesn't make sense. If you get lost due to a GPS, or get stuck, go back to the top and get back into your navigational mindset.