

"How do you guys DO that?" (#2)

Part 1: Pros turn their motorcycles with their head and eyes

As simple as this statement is, it is also nearly a waste of time telling folks. Even when I tell folks it is THE NUMBER ONE MOST VALUABLE LESSON I EVER LEARNED ABOUT RIDING! Like most folks, I had heard a version of this for years, but never really understood how important it was. "**Yeah, yeah, look where I want to go, and don't look where I don't want to go - I got it.**" But I didn't really. In fact, I rode for 10 years before it dawned on me how important this was - again, THE NUMBER ONE MOST VALUABLE LESSON I EVER LEARNED ABOUT RIDING!

Check me on this. Ask any seasoned motor officer or experienced MSF Rider Coach, what they think is the most valuable lesson THEY ever learned about controlling their motorcycles. Surprise! Every one of us will answer the same way. Knowing it and DOING it, however, are two entirely different matters. Most KNOW it (or more accurately, HEARD it), but few actually DO it.

Why is this such a tough concept to put into practice? The most honest answer I can give you is "I don't know", but I have some anecdotal theories from my own experiences:

Accident statistics and studies clearly show that riders fixate on (look/stare at) objects that scare them; an on-coming car, a guard rail, across the double line, etc. We all do it as normal defensive reflex. This normal reaction is the number one reason riders fail to negotiate scary turns and curves - fixation. Motorcycles REALLY DO go where you are looking as these statistics and studies prove. Every second you are looking at where you DON'T want to go, is a second that you are doing precisely that - going where you DON'T want to go (on-coming car, a guard rail, across the double line, etc.). While we might not ever be able to completely overcome this normal defensive reflex, we can manage it. Even after 50 years of riding my instincts STILL tell me to fixate. With practice, however, you CAN substitute a smarter alternative.

Aiming your motorcycle with your head requires DOING IT. Doing it requires aiming your motorcycle with your head. Yup, a catch 22. How do we break this infinity chain? IN LITTLE STEPS.

The first step is to watch others do it close up, and also see what happens when they DON'T do it. The second is to **try it** for that first uncomfortable moment doing something new. The third and subsequent steps are to extend these less and less uncomfortable "moments" to comfortable continuousness. Here is where the value is in taking a class, or practicing with others that are employing the techniques. Opportunities to see it in practice and take our first baby steps. Soon you'll see that those that turn their heads the most also make the tightest turns. It's NOT a coincidence!

BEST EXAMPLE ON THE RANGE: FIGURE EIGHTS

BEST EXAMPLE ON THE RANGE: OFFSET CONE WEAWE

Part 2: Pros "Level Scan" and use peripheral vision

Unless you race motorcycles or are an experienced motor officer, you may NOT have heard of this before - keeping your HEAD LEVEL, maintaining a sense of a LEVEL HORIZON, and SCANNING TO/FROM THE VANISHING POINT.

Balance in humans use primarily 3 systems working together; the eyes or VISUAL SYSTEM, ears or VESTIBULAR SYSTEM and the body's muscle and joint sensors or PROPRIOCEPTION. When throwing your body into various centrifugal forces in an airplane or on a motorcycle, your VISUAL SYSTEM becomes primary, because the vestibular system and proprioception both are adversely affected ("confused") by centrifugal force.

Airplanes have a device called an ARTIFICIAL HORIZON (AH) to help mitigate the degradation of the vestibular system and proprioception systems when tossing about in an airplane. Pilots are taught to *rely* on the AH when there is no real horizon available (flying in the clouds). Unfortunately, motorcycles don't have Artificial Horizons, so our unaided visual system is always primary for motorcyclists.

Try this; stand on one foot with your head level and a view of the horizon or objects that clue you to where the horizon is. Next; *quickly* look straight down at your feet. Was there a little "bobble" in your balance as your body had to adjust to vestibular and proprioception systems alone? Try it again with your eyes closed - even tougher not to wobble a bit. Just imagine how much worse it would be if you were turning, accelerating or de-accelerating as you would be in an airplane or on a motorcycle.

At least *privately* (notwithstanding machismo effect - a topic for later discussion), all of us are afraid to lean our bikes to some degree or another. Investigating further, however, shows us the real truth - it's not the bike lean at all, its leaning our HEAD that is so intimidating. Please look at the three pictures below of PRO riders and note the one constant - **HEAD LEVEL AND A VIEW OF THE HORIZON**:



HEAD LEVEL AND A VIEW OF THE HORIZON

As seen in the pictures above, it doesn't matter which of the 3 basic ways you lean the bike (see my previous articles on which lean to use when). If your head is level and you keep a sense of the horizon leaning the bike *underneath* you is FAR less intimidating, allowing you to lean your bike faster and further with safety and confidence (see "Soft Scraping" article).

Damn little happens just in front of your motorcycle that can't be picked up in your peripheral vision or during your scan to the horizon or vanishing point. The closer you look in front of your bike, the less stable you will become, as demonstrated in our little balance experiment on one foot.

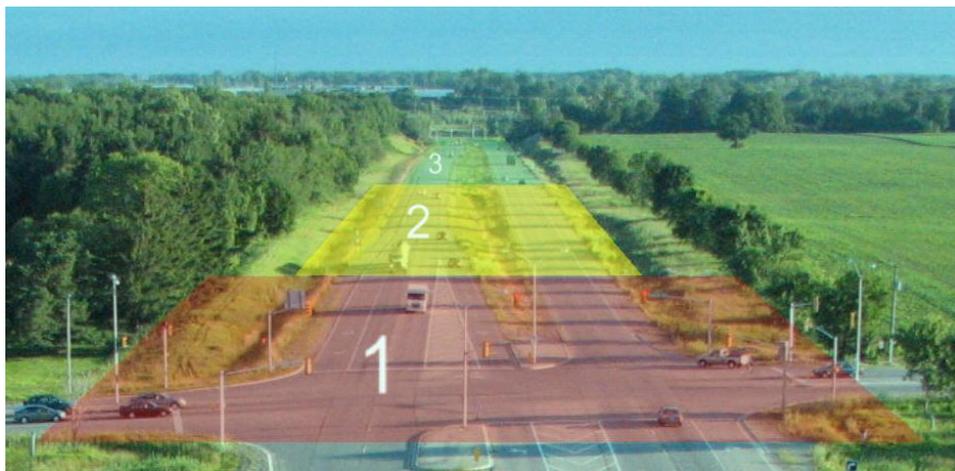
Try this too; sit on your bike with feet on the pegs or floorboards, or in a chair for that matter - keep your focus on the horizon. Without looking down, wiggle one knee. See, you picked up which knee wiggled STRICTLY IN YOUR PERIPHERAL VISION. So looking down at your motorcycle front wheel or anywhere close in front of your bike, is just counterproductive and puts you in a corner of having to rely on your 2 remaining senses to maintain your balance. And we already know these are nearly useless when turning, accelerating or de-accelerating on a motorcycle.

**BEST EXAMPLE ON THE RANGE: SLOW CONE WEAVE
PRACTICE WHILE "CAGING"**

Let's talk about the SCANNING TO THE HORIZON and VANISHING POINT I just mentioned:

First, scanning to the horizon in straight-aways. This one is a biggie for motor officers. They are taught to focus as far down the road as line-of-sight will allow about 75% of the time. Nearly everything that is happening around you, was developing FIRST out in the distance. Whether it is a traffic accident, a hazard or an opportunity to fill your "ticket quota", damn few developed right in front of your bike. What about the other 25% of the time? The other 25% is spent scanning TO and FROM the horizon or vanishing point looking for issues along your intended path. Scan for pot-holes, gravel, etc. as well as those things you learned about in MSF BRC (Basic Rider Course) that come from the sides, like left turning vehicles, etc.

See the drawing below. Note that this scan begins as a very wide view in the red zone including peripheral vision, and becomes narrower as you scan out to the horizon and/or vanishing point in the yellow and green zones. About 75% of your time should be in the green zone to the horizon after scanning out. 25% scanning.



STRAIGHT AWAY VANISHING POINT AT THE HORIZON AND SCANNING OUT TO IT

**BEST EXAMPLE ON THE RANGE: SLOW CONE WEAVE
PRACTICE WHILE "CAGING"**

Second, scanning to the vanishing point in curves. The vanishing point of each curve or turn is essential to constructing the imaginary line every motorcycle racer uses to determine his or her "line through the turn". This line tells them how deep into the turn they begin their lean and at what point their bike should be closest to the apex of the curve to get through safely at speed. Safety and speed BOTH SUFFER for those that don't do this.

Here is what I do - I imagine a painted line on the pavement that represents the line I want my front tire to track. I scan along this line right out to the vanishing point of the curve (as represented by the white triangle in the left picture below). And in some cases I look even BEYOND where I can really see (red triangle in the picture to the right below) for purposes of keeping my turn going where I want it to go. Again, about 75% of your time is spend looking at (and therefore heading towards) the vanishing point AFTER you have scanned along your line.



SCAN ALONG YOUR "LINE" TO THE VANISHING POINT IN CURVES

BEST EXAMPLE ON THE RANGE: CIRCLE PARTICIPANTS DEMO