

THE ART OF DRIVING:

A Lecture by Dennis Macchio

Part 2

This month Patricia Ktistes concludes the conversation on wheel-to-wheel competition driving begun with Dennis Macchio of Bertil Roos Racing last month. Here they discuss ideas about managing emotions behind the wheel, recovering from mistakes, the process of teaching and the lessons drivers don't want to learn.

Q: At the start, if you're not in front, is there anything that helps?

Macchio: There's one trick and one real technique. First, the minute the starter moves his body, go. Don't wait for the green flag. There are very few starters who just throw the flag without moving their bodies. What if you can't see the starter? Most starters will try to get the field onto the straight before they drop the flag and part of your responsibility is to know that or get some radios.

Second, the cleverest thing you can do is visualize. Usually you know where you qualified the day before. Figure out the array of cars as you enter turn one. Visualize every possible scenario of the start. I've had situations where the field parted in the middle like the Red Sea and I went straight through. I've had situations where everyone blocked everyone else on the left and I went to the inside and took five positions.

By the way, all these things I've mentioned have been done to me as well. The pole sitter's there for a reason. Primary axiom is that nobody wins a race on the first lap, first corner; but a lot of people lose the race there. You have to set realistic goals. Unless

something went drastically wrong during qualifying, if you qualified 20th, you're probably not going to finish third, so why try to pass 17 cars on the first corner?

The most you can take on the start in the first corner is two cars. It is rare that someone takes eight cars on the inside and it's usually because somebody else is doing something weird like missing a shift and backing everybody up. You have to be prepared and take advantage if it happens, but don't count on it. What happens at the start, more than any other part of the race, is that everything is quick and unpredictable. First of all, it's loud; you can't hear your own shifting; you can't hear your own rpms; there's no visibility. The one thing you can do is to have seen everything in advance through visualization so that if an opportunity opens up, you're a split second faster than the pack in meeting it.

Q: Say you missed a shift. How to recover from that?

Macchio: First understand there's no such thing as a perfect lap. You need a realistic point of view, knowing you're going to make mistakes and by presetting the stage for that, you're not caught off guard when it happens. When you make a mistake, record it mentally and forget it. Erase that mental recording before the next corner.

One thing you see frequently with new drivers is them smacking themselves on the side of the head. Virtually every big mistake is preceded by a small mistake. If you allow a mistake to dissipate your focus,



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you're going to make more. It's part of the discipline, which is a word that comes in very heavily in racing. You need self-discipline during and after a race. To never lose intellectual objectivity. You can't drive with emotion; you can't let it erode your logic.

What has made drivers like Michael Schumacher special is that he's completely dispassionate inside the racecar. When I'm coaching kids and their parents ask, "Does my kid have it?" one thing I look for is the ability to process information inside the car. If a kid can think almost as clearly inside the car as outside, I know he's got something. The second is how he responds to mistakes. Kids who have it make mistakes but absorb the mistake and move on at the next corner. The kids who get all upset have a self-confidence issue and it's usually a tell-tale sign that they're not going to progress quickly.

My little trick was that I could have any emotion be-

fore I put the helmet on. I might be mad at another driver, frustrated all night by a setup problem, annoyed at how badly I qualified, etc., etc. But once I put that helmet on I told myself, "This is the car you have to drive; this is the position; it's all about business now. Spending the next thirty or whatever laps being as meticulous and perfect as I can given the circumstances I've got no matter if I qualified on the pole or in 30th place."

When you're really on your game, you're confident and drive methodically. There were times I got mad at someone and went hunting for him. That was when I wasn't confident at the outset and allowed emotions to creep in. But once every year or so, you roll the car off the trailer on Friday and everything goes right through Sunday night. With experience, you know by Friday night this is how it will be. You're confident because you know you don't have to drive at eleventhens. You don't have to psych yourself up. All you

have to do is manage the car. Porsche has already given you the perfect car. All you have to do is manage it; be methodical.

Q. Any method for managing emotions?

Macchio: Somehow when you're insecure about your talent at a particular track that's when you think you've got to psych yourself up to get to the next level, and usually that's counterproductive. But to prevent yourself getting into this state in the first place, use creative visualization. Visualization calms you down.

What causes a driver to get unraveled? First being surprised by something and, second, having something happen that you can't respond to quickly enough. Someone spins in front of you and you haven't visualized that happening. You can decrease response time by pre-visualization. It goes way beyond figuring out how I'm going to start the race. It's more like, "What am I going to do if I drop a wheel in turn five? What am I going to do if the front tires are wearing prematurely?" There are ways to mitigate the damage in these situations. I've driven cars that were 30 hp down because a cylinder was leaking, cars where one tire was nearly bald and I had to manage it through the last five laps. I preplanned for these things. You learn about what can go wrong through racing itself. But if, for example, you're doing a four-wheel drift and going into a spin, there's an art to spinning. You can practice spinning, which is car control. The problem is often when someone does this, they don't know how they did it. That's where conscious creation comes in.

I had a situation at Bridgehampton 15 years ago. I was in a Formula Ford and was going through the downhill, two really fast kinks, probably 125 mph and had my right rear wheel break off. I did six 360s and somehow managed to keep the car on track although it kept spinning wildly. For years, people would ask about it and I would tell them I was just along for the ride. But so many people asked that it forced me to run the tape through my head a lot. The reality was that, after I reran it, each time I came around and faced down track, I remembered that I was releasing the brake just enough to get a little steering before the next revolution.

But the point of mentioning this is that I had visualized that happening. It was just enough, between that and ocular driving—which meant that every time I came around I looked down the track at a target—to get me through the episode. I use this example to teach drivers to never give up in a car until they come to a dead stop. No matter what's happening; how violently you're spinning or whatever. If you can't correct the car and make the turn, there are ways you can spin in such a way that you never leave the pavement. Visualization takes the fear and mystery out of it.

The thing that helped most was that I started keep-

ing a written journal. I recorded everything. What my mentality was the morning before a race; how did the car feel; etc. So whatever it was that was promoting success, I could look back and try to duplicate it. Some things were irrelevant, like what I ate for breakfast, and other things were critical, like what I did in my first testing session. There were times when I went out the first testing session and drove like a maniac. Other times I had a methodical plan to test two or three things. When I started to identify what I'd done on successful weekends, looking for common denominators, it led to more success. They're not necessarily things that work for everyone. Some guys aren't aggressive, so they use test sessions to get their aggression levels up. I was born aggressive so I needed to develop the discipline of using practice sessions to work on specific problems in the car.

Q: You've taught economics. How is teaching racers like teaching economics students?

Macchio: Virtually everyone in an undergraduate economics class doesn't want to be there.

However the similarities are that I work very heavily in economics with self-teaching. I never require anyone to memorize a formula. But they need to be able to take a problem and figure out a formula to fix it. So it was having them apply mathematics through the back door. I found teaching racing to be the same. If you try to learn by rote, it's not going to happen. I still don't know the lyrics to *The Star-Spangled Banner* because I can't memorize things. But I can visualize the events in the song and come up with most of the lyrics based on that. You don't have to know the formula for an apex but you have to understand the theory. "Why do I want the widest radius possible?"

I'll bet you half the people who've been driving for years never thought about the fact that the steering wheel controls speed. They know it instinctively but never consciously think, "I'm going to use this as little as possible." So for a new driver, that's how you explain it to them. Right away they start thinking, "Here, let me go through this corner and I really don't want to use this wheel too much..." All of a sudden they're recreating that fudge factor without having been told to. They're leaving three feet on the entry to the corner, three feet at the apex, three feet at the exit. All of a sudden it's a tighter corner. When you explain in a twisted way that the steering wheel's their enemy, they want those extra three feet.

Q: Is there any lesson drivers don't want to learn?

Macchio: I had a bad crash at Summit Point in the late '80s and we never figured out why. The thing that bothered me most was not knowing why something went wrong. It's a reminder that you're not in control of fate,

which nobody who drives racecars wants to accept. Every other time, I could trace back and if I determined I was the one who screwed up, I wouldn't do it again. But when something happens you can't explain, it reminds you you're not always in control. Sometimes it's just *la forza del destino* (the force of destiny). ❄️

Dennis Macchio offers a wide variety of individual and group driving and racing programs through the Bertil Roos Racing School at BeaveRun Motorsports Complex, Moroso Motorsports Park, Pocono International Raceway, and Virginia International Raceway. Contact him through (800) RACENOW, roos@epix.net, or www.racenow.com