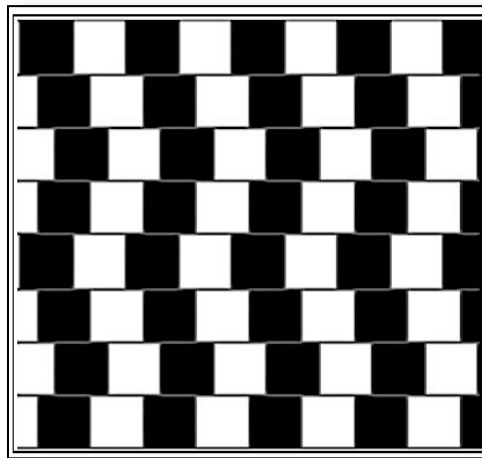




I know this has happened to many of us while driving our car. We intend to change lanes. We look in our rearview mirror – it looks clear. We look in our sideview mirror – it looks clear. We turn our blinker on. Then, before committing to changing lanes, we take a quick glance over our left shoulder (like we were taught in Driver's Education class) only to be stunned to see that there is a car right next to us that we never saw! How long has that car been there? For the next 30 seconds our heart beats like a hummingbird. That car was in our blind spot.

Neuroscientists have long known that our brains have a certain bias to see objects in a particular way. Many optical illusions are designed with that bias in mind. Our brains are wired to think more vertically than horizontally. The below optical illusion somewhat illustrates this point. We can readily see that the black squares are not vertically aligned but it's not so obvious that the horizontal lines are perfectly level and evenly spaced just as they are on a chess board. They look slanted, but they're not.



We sit at the chess board with our opponent sitting opposite us. His forces are aligned directly opposite our forces. The game begins. His pieces move toward ours while ours move toward his. Forward, march! We look for open files. We frequently position our rooks to take advantage of those open files. Can we penetrate into his position? Our mental bias is already at work while our blind spot looms in the dark recesses of our mind.

We are mostly thinking *vertically*!

Many opening traps are based on this blind spot. For instance, in the Slav Defense, there is this variation: 1.d4 d5 2.c4 c6 3.Nc3 Nf6 4.Bg5 Ne4 5.Nxe4 dxe4.



According to the Lichess database of non-master games, the above position has been reached over 12,600 times. In over half of those games, white has blundered with 6.e3? Black replies with 6...Qa5+ and it's, "Bye, bye, bishop!" Yet, black misses this opportunity in nearly a third of the games. The horizontal blind spot works both ways. You might be thinking, "Sure, non-masters might play this way, but a master would never make this mistake." You'd be wrong! In [Attila Kovacs \(2365\) vs Peter Horvath \(2380\)](#), white stumbled into this "trap" and black didn't even realize it. They both missed it!

I'm sure many of you are familiar with other opening traps with this common theme – the queen check with the hanging piece on the opposite side of the board. It doesn't just happen in the opening. It can happen in middle and endgame positions, as well.

Those of you who are familiar with the Cambridge Springs Defense probably know the following trap. It even has a name, the *Fly in the Ointment Trap*. 1.d4 d5 2.c4 e6 3.Nc3 Nf6 4.Bg5 Nbd7 [There's an interesting trap from [this position](#), *The Elephant Trap*, by the way – but, I digress.] 5.Nf3 c6 6.e3 Qa5 7.Qc2 Ne4 8.Bd3? Nxe5 9.Nxe5 dxc4. The blind spot strikes again! White's bishop is under attack but so is the hanging knight on the other side of the board. White can't save them both.



One technique that some chess instructors use is it to have the student play a few games with the board turned 90-degrees. The thinking is that the player will see these sideways attacks more readily and that it will help eliminate their vertical bias. This also explains why observers, often watching from the side, see these types of attacks quicker than the actual players at the board.

Moral of the story: Check your blind spot!