You’re Seeing Things

Leonardo’s Mona Lisa is famed for her enigmatic smile. But this smile all but disappears when examined closely. Magic? Not at all. The smile disappears and reappears because Leonardo is playing a trick on us.

The retina, at the centre of the eye, is especially good at recognising sharp detail, while our peripheral vision remains somewhat less sharp – it developed to tell the brain where to look next, warning of approaching danger in a hostile world filled with razor-toothed predators (or fast moving motor cars).

By deliberately painting the edges of the Mona Lisa’s mouth in a slightly hazy fashion (a technique known as *sfumato*), he ensured that our eyes would not register the smile in full when viewed head on, but that it would seem to reappear when picked up by our peripheral vision.
Just in case you’re thinking that YOU couldn’t possibly be fooled in this way, take a 
look at these optical illusions and see if you can figure out what is really going on. 
Once you have, why not see if you can create a few illusions of your own?

Where do the grey dots go?

How many straight lines can you see?