TURTLES

all the way down

April 21, 2025

A reader asked me to look at this one. I had never seen it before. In a short from Oxford University, we find an interesting phenomenon of spin. That little boat with turtles on it will spin with the turtles facing forward, but if you spin it backward it will begin to rock and then will actually turn around and spin the other way.

If you are one of my readers, you might think this is a result of the Coriolis Effect, and that this experiment would work the opposite in the Southern Hemisphere. But no: if you face the turtles the other direction, the boat will now spin with them. So it will spin either CW or CCW, as long as the turtles are facing forward. So it can't be what my reader thought at first. It isn't just a result of the rising charge field on the Earth, or at least not a direct result of photons moving in the vertical and spinning CCW and not CW.

The Oxford professor doesn't explain it, beyond saying that the asymmetry caused by the turtles makes friction engage more strongly somehow, and that the rocking motion is then turned into spin in the opposite direction. That explanation doesn't even begin to solve this mystery, does it?

At first my reader thought this problem was connected to the intermediate axis theorem we pulled apart here. The one where I embarrassed both Terry Tao and Veritasium, remember? I used the charge field to solve that one, and this one does look on the surface like an analogue. But we have already seen it isn't just a straight-up spin in the horizontal plane. Because then the boat wouldn't spin just as well in either direction. I suspect the boat *doesn't* spin equally well in either direction, but the difference is apparently small, so it isn't the answer here. This is big and obvious, like a hand reaching out and moving the boat in the opposite direction.

One big difference from that theorem is that in that problem we were looking at a key spinning in space, or at least outside the Earth's main atmosphere. It was in a zero-gravity environment well above the Earth. Here we are in a normal room on the Earth, in the Earth's fairly thick atmosphere, so we have that to work with. So your second guess might be that the toy is more aerodynamic in the forward position. And while that is obviously true, it can't explain this either, because while that might explain slightly more slowing in that direction, it couldn't cause a reversal.

So let's riff on the professor's solution for a moment. He must be at least partially right, since it is clear the asymmetry *does* cause the boat to wobble, which *does* give the boat more points of contact with the surface and therefore more friction, which would cause it to slow. But the boat is equally asymmetrical in both directions, so why doesn't it wobble in the forward bias? It seems like the boat would have to be built to favor one turtle position, but it isn't. I assume that without the turtles the boat spins about equally in either direction.

Which leaves us with no other conclusion but the original one: the ambient field must be strongly favoring the forward spin, but only with the turtles onboard. Unlike our Oxford professor, we know the ambient field on the Earth is not only gravitational, but is also charge or EM. It is rising straight up and it has a spin component. That spin component isn't favoring CW or CCW, but it IS favoring turtles facing forward. Why and exactly how would it do that?

Well, once the turtles are loaded, the toy is no longer acting like a boat, it is acting like a . . . propeller. The turtles have the same effect as tilting the blades in opposite directions, like the propeller. The turtles want to go up in their respective positions, like a propeller tilted up there. They catch more air underneath, you see. If we spin the toy, it wants to rise pretty much equally on both sides, so it spins freely. In that bias it also has an equalizing mechanism, since your push won't ever be exactly horizontal. But it can quickly equalize any tilt, since the high side will feel less pressure against the table surface, and the low side will feel more.

However, if you spin it the opposite direction, the propeller will force the toy into the surface, and in this position it won't be able to equalize, since both sides are being pushed into the table. Air will quickly be forced out of the gap, and without the air there is no way to equalize. This is what causes the wobble. Or, the wobble was always there from the bad push, but in the forward position the wobble is damped in the backward position it isn't.

Still, we haven't needed charge to explain anything there, so the professor's explanation is looking pretty good so far. And once the backward propeller is stopped, the air of course rushes back in, refilling the sail, as it were. That air rushing back in is like air blowing on the back of the propeller,

which, as we have already seen, will make it turn forward. It will also tend to move it up, giving it the ability to equalize again, which will quickly damp the wobble.

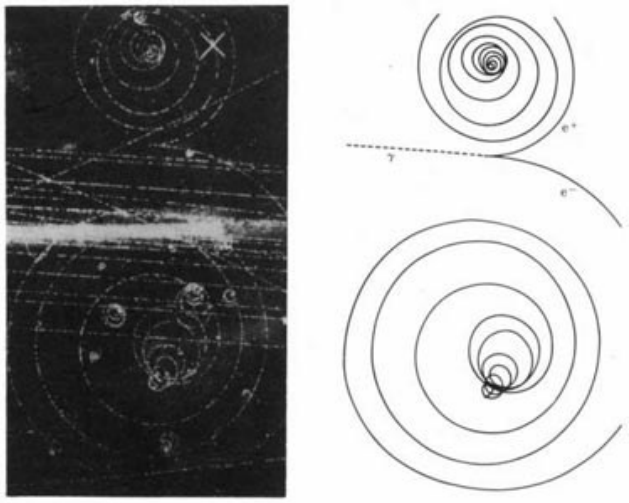
Problem solved and the Oxford professor proved correct, right? Not so fast. Yes, correct as far as it goes, but we still have the problem of atmospheric pressure to explain. This all relies on the toy acting as a propeller, which relies on the buoyancy of the air, which—as we saw here—the mainstream has never really explained. Yes, they have some equations that normally work fairly well, but when it comes down to the nitty-gritty of supplying a logical explanation of atmospheric pressure, mainstream theory crashes and burns. As you see there, or at Wiki or any other mainstream site, they try to explain air pressure as a function of the molecular weight above, but since that weight is suspended, that doesn't answer. Since the weight is suspended, it can't be the *cause* of the pressure. Just as they have never explained how planes fly—and now admit it—they have never explained the old Chicken Little question: why isn't the sky falling? It has weight, so what is holding it up? Air pressure, we are told. Yes, but where does the air pressure come from? From the weight of the atmosphere, we are told. We just went circular, you see. Something has to be inflating the atmosphere in the first step, and that thing is charge. Photons. And those photons aren't mainly coming down from above as sunlight, they are coming up from below, as heat or charge. And where does that charge come from? Dynamos in the core? No, from the Sun. Charge comes in at the poles on huge vortices and is recycled through the Earth. Tesla knew that and used it, though he didn't comprehend the larger cycles.

This is why the mainstream tends to keep its answers to soundbites on problems like this. They don't want you asking them any questions they can't answer.

You will say they know all that, but this guy from Oxford has created a Youtube short not an extended lecture or book chapter. Nope, they don't know all that. They know very little of it. Yes, they know about propellers and I suppose they know this turtle problem is solved by the propeller answer, though he says nothing about propellers there. But even so, they don't know anything about the charge answer. They don't anything about how rising charge is created by being recycled through the Earth, or that this charge is what inflates the atmosphere and holds it up. They don't know that this is how birds and airplanes fly. They also don't know how sails work, so it is doubtful they know how propellers work, either.

Which brings us to the really interesting thing about this turtle toy experiment. As I said above, this toy actually *won't* work exactly the same in both directions. Yes, as a matter of air pressure, it will, since that is the big effect here. But in fact there is a lesser effect that IS caused by charge, and IS a cohort of the Coriolis Effect, as we saw here. But you won't see it in a rough experiment like this, with a hand pushing the toy in an uncontrolled environment. What you need to do is spin the toy precisely with a machine in both forward directions, and you will find one direction is preferential. I know because these experiments have been done with a variety of devices, including pendula. See here for a few of these. This is also what causes spin asymmetries in beta decay and other decays.

They now admit these asymmetries in pendula experiments and other similar experiments, though they usually misinterpret them. The closest they get to the truth is assigning it to the spin of the Earth about its axis. But the right answer is that the ambient field here on Earth is 2-to-1 asymmetrical regarding charge. We have about twice as much charge as anticharge here, meaning about twice as many photons as antiphotons, or twice as many left spinners as right spinners. It is a small effect here with this turtle toy, which is a macro-object, but it becomes very obvious with particle pairs spinning out in the field in pair production.



The electron spiral is double the positron spiral, because they are both spinning out in a field dominated by negative spinning photons. Positive spinning photons spin down the electron, and negative spinning photons spin down the positron, but since there are twice as many negatives, the positron is turned twice as much. Both will spin down until they are in equilibrium with the ambient charge field.

And no, the mainstream doesn't know any of that, at Oxford or anywhere else. Only my readers know it.