I guess we’ve just always done it that way...

The standard North American railroad gage (i.e. distance between the rails) is 4 feet 8.5 inches because that’s how they were built in England and US railroads were built by English immigrants.

Why did the English build them like that? Because the first rail lines were built by the same people who built the pre-railroad tramways, and that’s the gage they used.

Why did they use that gage? Because the people who built the tramways used the same tools that they used for building wagons, which used that wheel spacing.

Why did the wagons have that particular wheel spacing? If they tried to use any other spacing, the wagon wheels would break on some of the old, long distance roads in England, because that’s the spacing of the wheel ruts.

Who built those old roads? The ancient Romans built the first long distance roads in England. Their chariots formed the initial ruts, which everyone else had to match for fear of destroying their wagon wheels.

When you see a Space Shuttle, there are two big booster rockets attached to either side of the main fuel tank. These are solid rocket boosters (SRB’s). Reportedly, the engineers who designed them would have preferred them wider, but they had to be shipped by train to the launch site. The railroad line from the factory runs through a tunnel in the mountains.

The SRB’s had to fit through that tunnel, which is slightly wider than the railroad track and the railroad track, as you now know, is about as wide as two horses’ behinds. So, a major Space Shuttle design feature of what is arguably the world’s most advanced transportation system was determined thousands of years ago by a horse’s back end.

Whether this story is true or not, it gives us the opportunity to consider our own work: what do you do that you’ve just always done that way? Could it be improved?