

projection, for example, even though it is in fact 14 times bigger.) This was not a big problem for 16th-century sailors, of course, and the Mercator projection remains popular to this day.

In Mr Krause's map (above) he seems to have used the shapes of the countries from a Mercator projection, but has scaled up the outline of Africa, without changing its shape, to show the appropriate area. An alternative and arguably more rigorous approach would be to repeat the exercise using an "equal area" projection that shows the countries' areas correctly while minimising shape distortion. These two properties are the hardest to balance when showing the whole world on one map. I decided to rework Mr Krause's map using [Gall's Stereographic Cylindrical Projection](http://en.wikipedia.org/wiki/Gall-Peters_projection) (1855) with two standard parallels at 45°N and 45°S. Distortions are still evident at the poles, but for most countries shape is maintained, and their areas are shown correctly. As you can see (below), the results are distinct from Mr Krause's map. But however you look at it, his point is a good one: Africa is much bigger than it looks on most maps.

