



The Dymaxion map of the world

Explore a different view of the world with Richard Buckminster Fuller's map

GeographyReviewExtras



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Geography and mapping have long been synonymous. Maps allow us to represent different phenomena that are situated on, just beneath, or just above the face of the Earth at scales of our choosing. A 2D global map of the continents and oceans is perhaps the best known of all the maps ever made. This map can be created using various projections, which are transformations of a curved surface (the Earth, in this case) to a plane. Normally, world maps display the Americas to the left and Asia and Oceania to the right, with the poles top and bottom and lots of ocean between the various continents. We see these maps all the time on television news reports and daily weather forecasts.

The Dymaxion

This is why the so-called Dymaxion world map shown here is so striking. It was designed by American inventor and maverick Richard Buckminster Fuller (1895–1983). Fuller coined the term 'dymaxion' to mean any design that gives maximum advantage with greatest efficiency or least effort. He wanted a world map that did not distort the relative size or shape of the continents, unlike the famous Mercator Projection which 'shrinks' Australia and enlarges Greenland. His Dymaxion map was first published in American in 1943 in *Time* magazine.

Fuller's map still fascinates more than 80 years after it was created. It's a reminder that how we represent the world

can make a big difference to how we both understand and feel about it. Fuller's map is an 'unfolded' spherical polyhedron. This means areas of the Earth are divided into regular shapes (squares and triangles) and the divided sphere is laid flat. The unfolded

map has 12 vertices and 24 edges; parts of it can be hidden when laid flat by folding a shape underneath. As you look at the map, try to identify the main ways it differs in appearance from the world maps you're accustomed to.

A world island

What was Fuller's intention in depicting the Earth's surface this way? First, unlike traditional projections, his does not distort the relative size and shape of landmasses. Second, Fuller was keen to show there is

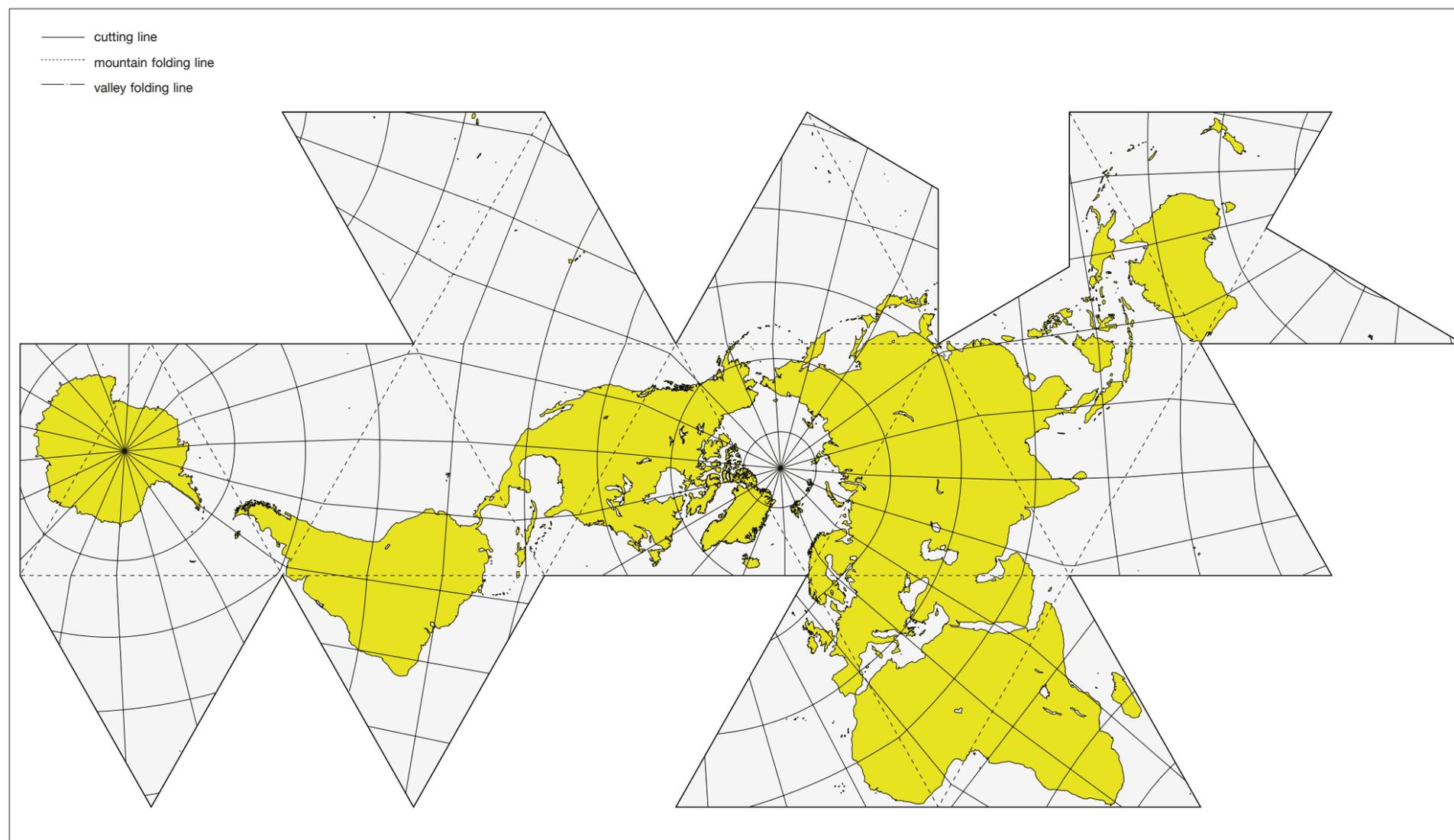
no one 'correct' way to view the planet's geography. Third, as a 'humanist' who believed in international cooperation to benefit all people regardless of nationality, Fuller's map emphasises the almost continuous land mass on the Earth's surface.

This offers a 'world island' perspective in which the lands of all peoples are shown to be linked, or very closely connected. The 'island' is surrounded by one enormous ocean. Fuller's map contrasts starkly with those that show large swathes of ocean between continents. Fuller lived through both world wars and through a period when concerns about global natural resource scarcity were first expressed (the 1960s and 1970s). He wanted humans to work together in a conflict-free world to ensure everyone's needs were met.

Today

Maps are extremely useful tools. Today, digital maps have largely replaced physical maps, as when we navigate using Google Maps on our mobile phone. Regardless, all maps offer selective representations of the planet. They highlight things of interest to us, and leave other things out. No map can depict everything because it would be unreadable and thus of no use at all.

Fuller's remarkable map is a reminder that the cartographs of the world affect the kind of world we want to live in. They help us to see threats, linkages, similarities, differences and opportunities, be they maps of nuclear weapons arsenals, human mortality, economic wealth, disease, religious affiliation or human migration. Historian Bill Rankin's book *After The Map* (2016) is one place to learn more about how and why maps are designed in different ways. How we map the world tells us something about what we value and how we want the world to be.



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