

A map that changed the world!

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Italy, Tuscany, Pienza. The date is 1474, in the Renaissance. here lived a versatile explorer, a scientist, a genius, a brave innovator. For Paolo Toscanelli was indeed interested in maps and getting to know the world. He even collected special maps. Toscanelli was a good friend of Columbus, and he gave him the map that changed the world and the course of history for centuries. For Toscanelli knew that the Earth was round! “The Earth is round”, the phrase that caused Giordano Bruno to be burnt alive on the stake 130 years later.

Toscanelli told his friend, who, he knew, was about to embark on a long journey: “I know a much shorter route. You needn’t sail around Africa. Go West to reach India.” And the story is familiar from this point. Columbus set sail to the West to discover the fabulous East. He discovered a new continent, and the Age of Great Discoveries and a new Atlantic era of 500 years began. And of course, Toscanelli was wrong in one thing only: judging the Earth's perimeter to be half as big as it really was.

This example shows us that maps are important. Because maps give you a picture of the world to get to know it. A picture that helps us imagine the relations between places and things. This gives us stability and security in navigating in the world. We may say that maps are tools in our hands, a means of action... and, of course, they have long been such. The Pacific Islands: Polynesia. Somewhere hidden on the two edges of the world map, consisting of about a thousand islands. This area between “Easter Island, New Zealand and Hawaii” is just as big as if we were to fly from Madrid to Rio de Janeiro and Zambia and back again.

In this group of 1000 islands, in the 7th century AD, Polynesian boatmen discovered the entire archipelago with this unique hand-made map. For Polynesian boatmen knew the position of stars and sea currents, watched birds’ migratory routes and marked each newly

discovered island with a new shell. This knowledge and map were passed down generations, and they discovered the whole world known to them in 200 years.

Of course, today we have a different relationship with maps! In fact, we will not even start out without our maps. This is how our maps look like today: security, automation, time, distance, faster route and rerouting. But if we zoom out of this ordinary map, we see an extremely exciting world. An exciting world: the image and drawing of our Earth, which we can best understand with maps.

I would like to show you a map that we all know. This is the global political map of our Earth. Nearly 200 countries, 3 oceans, 5 continents and 6 colours to distinguish countries. And what's interesting about this world map is that Europe is in its center. Maps are also exciting to us because if we approach them from another point of view, we get a completely different picture. The same world map in a different light.

What does our world map look like if we put not Europe, but Asia and the Pacific Ocean at its center? Or what does the world map that China published in 2015 look like? The world map that has China in the middle, and it is interesting that the American continent, for example, is no longer east or west, but north. The story began from the noble and simple idea that if we were to travel from Shanghai to New York or from New York to Shanghai, the shortest way would be through the North Pole.

Or what does the network map that links the world's scientific partnerships between 2005 and 2010 look like? But we get an even more exciting picture if we look at the same map at a later time: between 2015 and 2020. The difference between the two maps is that our world has become much more complex and interconnected, particularly in Asia, Southeast Asia and the Indian subcontinent, where this world map is more and more dense. Or what does the map look like which studies the relative routes of the world's 182 airline companies? But it is even more interesting to see the relations between the regional breakdown of these air routes and the tourist and other destinations of each airline. Or what does the world map used by over 2 billion people daily look like? A network map of friends, relationships and likes. This is what the Facebook world map looks like. And what is the world map like which displays not cities but countries? This map shows the location of cities in the project "Our Earth at Night".

We live in an age of dynamic maps in a dynamic world! And what's interesting in this dynamic age is, that our maps are no longer static, but start to move. For example, this map

shows our planet's gross biological productivity output, that is how our Earth breathes between January and December.

Because each map is a pair of glasses: We are looking at the world through glasses! But today, as our world is much more complex, we need more glasses to understand the world's relations and economic trends, the global political and geopolitical processes. And I think that maps are tools and a language of this understanding! Maps are one of the most important and most special visual languages of the 21st century. I have been fond of maps since my childhood, and I am lucky to work with geography, and my most important task is to make our world's hidden context visible with our maps.

We live in the age of fusions and networks.

Where the two key passwords are connectivity and complexity. Fusions and networks. Of course, we find fusions in architecture, fashion and gastronomy. In gastronomy, when we say that Eastern tastes meet with the Western ones. Or we can see fusions in music. And, of course, these new fusional and network maps, connection maps show not just geographical locations, but music trends, too. Let us look at the territorial and network links of the world's music map and music geography: trip-hop and hip-hop, tango and electronic, folk and world music. Fusional world music genres from Malian blues through ethio-jazz to Thai funk, all new and exciting genres were born from fusions and music styles.

But we get the same map of fusions and connectivity if the most important geopolitical program of the 21st century is shown on the map. The Belt and Road Initiative or New Silk Road program, which links the easternmost parts of Asia to the westernmost point of Europe. The New Silk Road, the point of which is to bring the development axis back from the oceans to the mainland, creating a new world era, a long-term Eurasian era, which replaces a 500-year-old Atlantic age.

BRI, which consists of networks, links, infrastructure development, logistics centers, ports, scientific, educational, cultural, economic and commercial partnerships, and which links the most important intersections, cities and HUBs. Because cities have become the new powerhouses of the 21st century.

And if we look at the world map showing the key nodes, the world map of maritime trade routes, submarine Internet cables, infrastructure networks, motorways, rail networks, airplane

routes, and we superimpose the importance of cities and global cities on it, we will get the fusional map, which **I like to call the geofusional map of the 21st century.**

Geofusion is a fusion of locations and geography. Geofusion, which is both the network of geopolitics and the geopolitics of networks.

We live in a new Renaissance, and just as in the Renaissance, we have cities and city- states, commercial corridors and trade routes, technological explosion and, of course, bacteria, viruses and epidemics. And perhaps we are no longer surprised to see that if we examine the global spread of the coronavirus in space, we get the same map as the geofusional maps. A multitude of travel patterns, connections and networks.

I started with a map that had changed the world and I would like to finish with a map that has changed the 21st century. If only one map of the 21st century is to be highlighted, this would be it: the map of the 21st century: the map of the Internet. And if the Renaissance era brought an age of great geographical discoveries, the new Renaissance will bring a period of great technological discoveries in the 21st century.

The map of the Internet: connections and networks, fusions and nodes, connectivity and complexity. There are millions of maps in each node. And human-made things are more and more beginning to resemble biology, nature and technology itself. And this map is beginning to look like a cosmic network or the network map of the brain structure, but from this point it is another story that goes beyond the limits of geography.

Thus, the knowledge of maps, if summarised, is like literacy. If we can read our maps and read “between them”, we will be able to read and write and understand the most beautiful and special visual language of the 21st century.

Let us teach our children to write and read, pass on our knowledge, get to know the world with its driving forces, “read” maps and images, and pass down the generational knowledge that has navigated in life based on maps for thousands of years.

Wherever you live, wherever you learn, geography does matter...

Let us draw a map of the understanding of the 21st century and transform it into action so that more and more good stories can be told in good places and at the right time, for example here on the TED stage in this exciting new geofusional world order!