

We have difficulty understanding the world map's edge

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Where do the aircraft pop up again? A new study shows that we have difficulty understanding how the edges of a world map are connected. Both adults and children have great difficulties to accurately indicate where an aircraft passing the world map's edge comes back to the map.

"It is very exciting to be able to make new discoveries in a field that has existed and been discussed as long as map projections", says Pontus Hennerdal, a PhD student at Stockholm University and author of the study.

The results, based on responses from 752 people, shows that both children and adults often mistakenly believe that an airplane passing over the southern edge of a rectangular map of the world will return to the map from the northern edge. This misunderstanding, to believe that the North Pole (the place on Earth that is farthest from the South Pole) is where you arrive just after the South Pole has been passed is clearly problematic for the understanding of the Earth.

The misunderstanding follows, according to the study, the idea of linear peripheral continuity, meaning the idea that the plane appears along the line that forms a straight tail after the aircraft when it goes out over the edge of the map. The same idea which misleads the map reader when it comes to how the edges of the world are joined together in a north-south direction instead helps the [map](#) reader to join the maps edges correctly in east-west direction.

"The discovery of this difficulty regarding the [edge](#) of world maps enables focus on creating a better understanding of this through, for example, education. But the discovery could also affect how world maps will be designed in the future", says Pontus Hennerdal.

More information: "Beyond the Periphery: Child and Adult Understanding of World Map Continuity" [DOI: 10.1080/00045608.2015.1022091](#)

Provided by Stockholm University

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