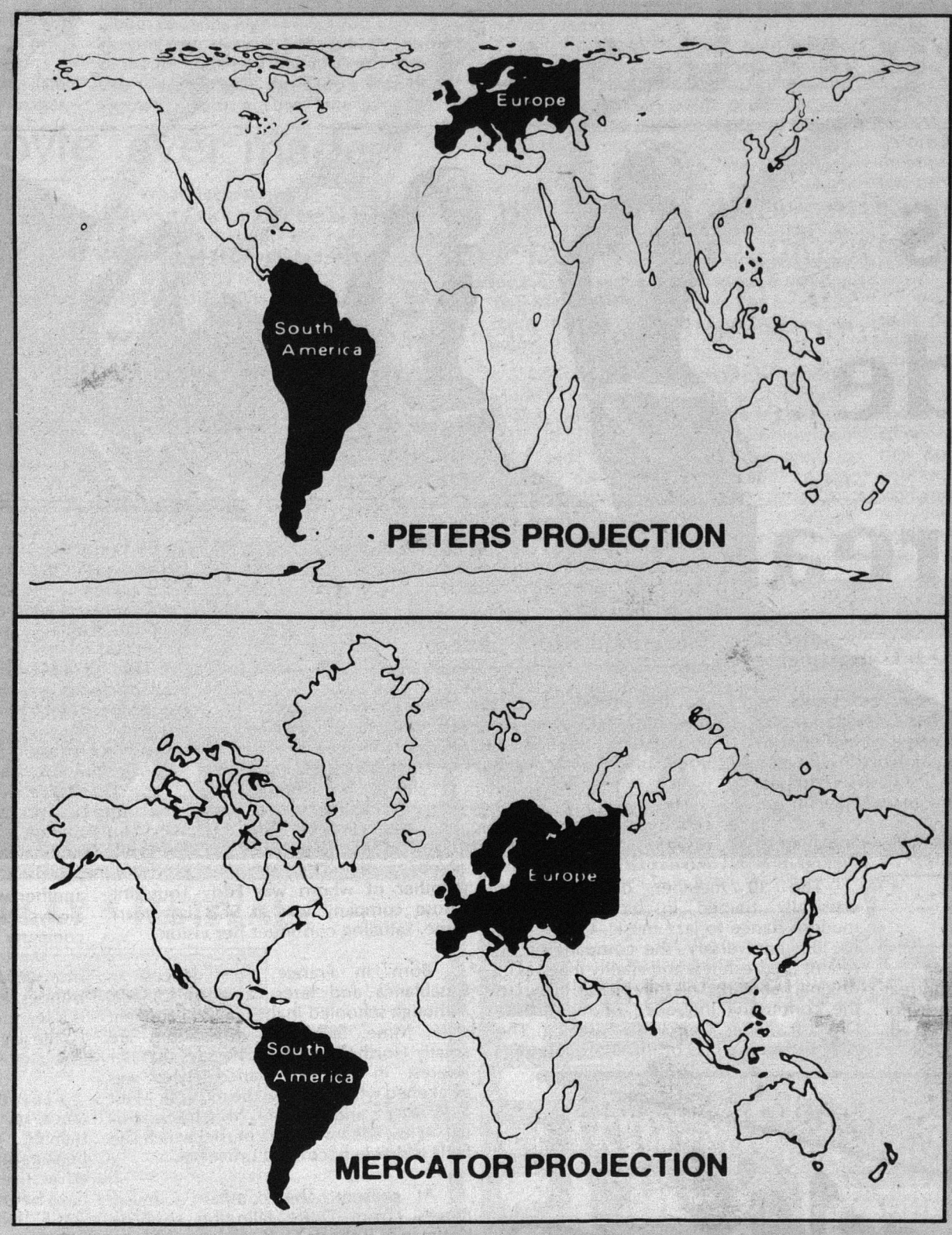

Generally, on the Mercator map, high latitude areas are tremendously expanded in surface area, and low latitude areas — those near the equator, and generally third world countries — seem small and insignificant by comparison. As it turns out, this distortion favours the industrialized north, to the detriment of developing countries. This is precisely what the area-factual Peters projection endeavors to correct.

Mathematical Impossibility

It is important to recognize that any world map will have some inherent bias or inaccuracy. The mathematical impossibility of transferring the surface of a sphere to a two-dimensional plane ensures that every world map will be distorted in one way or another. Cartography, to a great extent, depends on the art of compromise.

Has the Mercator map given the world a false impression of itself? Dr. Peters thinks so.

Peters is convinced that his map is necessary for a correct view of the world. Concerned with the political implications of Mercator's visual over-emphasis of northern industralized countries and the diminished importance of third world and developing countries, Peters devoted ten years to working on a map that would give the world an accurate impression of itself.

"It's time we Europeans realized we occupy no more than a small corner of the northern quarter of the globe. My map makes that clear by showing all countries in their proper size relation to one another," Peters was quoted as saying in an interview with *World Paper*.

In order to present an area-factual picture of the world, Peters has had to make compromises. Some angles are distorted, although in a way different from the angle distortions of the Mercator map. Distances are distorted, although generally less so on the Peters than on the Mercator projection. Accuracy of direction is off as well, with the exception of the principal compass points of north, south, east and west. In terms of shape distortion, the land areas close to the equator on the Peters map appear elongated while the areas near the poles seem compressed.

World relations are very much coloured by the map that was on your schoolroom wall.

Accuracy in terms of shape and area are mutually exclusive ends in mapmaking, Head is quick to point out. The Peters projection is completely area-accurate; consequently, land shapes are distorted, although minimally. And in spite of the shape distortion of the Peters map, it remains more appropriate as a general usage map than the Mercator map, which Head notes is neither shape - nor size-correct. The Mercator map's real merit ends at its usefulness to navigators.

Other Advantages of the Peters Map

In addition to the Peters projection's chief improvement over the Mercator's area distortion, the Peters map makes a number of other important advances.

Also known as the orthogonal map of the world, the Peters map displays the entire earth, including the polar regions. The seas cover 70 per cent of the Peters map, whereas the Mercator projection shows an inaccurate 50-50 land to sea ration. And on the Peters map, the equator is situated logically at the middle of the map instead of two-thirds of the way towards the bottom. Europe is hence transferred from the centre of the map to the northernmost quadrant, where it actually lies.

The colouring of the map is also, according to Peters, more "honest." On the Mercator map, former colonies are depicted in the same colours as their colonial mother countries. The Peters map colours each continent in shades of a single colour in order to eliminate cases in which India and Australia, for example, are coloured in the same shade as Britain simply because they were at one time under British colonial government.

Current Applications

Will the Peters map replace the Mercator as the standard world map? Peters himself is convinced of the demand for his map. Over eight million copies were distributed in Europe within a few years. As well, the Peters map is in use in over 20,000 German schools, in the government of the Federal Republic of Germany, and in the Vatican, and is the official map of UNICEF, the World Health Organization, and Christian Aid.

"World relations are very much coloured by the map that was on your schoolroom wall," maintains Dr. Head. Head "would love to see both (the Peters and the Mercator maps) used together" in the classroom, in part because of the questions about cartography it would raise in students' minds. "Any flat map is distorted. Flat maps just don't tell the whole truth," says Head, who believes globes should be consulted much more often in the classroom.

The Peters world map is being distributed in North American by Friendship Press, the publishing arm of the New York-based National Council of Churches. Copies of the map are available through bookstores or directly from Friendship Press.