

# Straight Lines on Maps: Land Borders

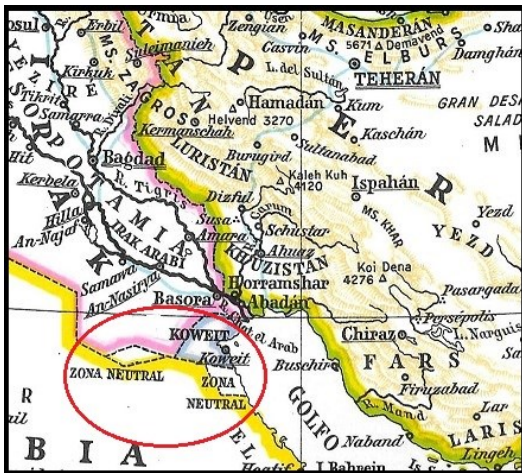
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### 1. Introduction

On a political world map in an atlas, we see a mosaic of colors mostly delimited by irregular lines. These lines generally follow geographical elements such as rivers, mountains, lakes, and other natural features. Also, in addition to the meridians and parallels, we see other straight lines, whether vertical, horizontal, or oblique on the continents or on the seas and oceans. These are political borders that define the territory of the countries.

The first atlas I saw was one that belonged to my maternal grandmother, a 1917 edition of a small school geography atlas that I still have. It had 64 pages of text with some maps and illustrations. Possibly that book was what sparked my interest in geography. Later during my secondary education, I had my own atlas, an *Atlas Escolar* edition of 1963, with 66 pages measuring 30x23 cm, which I also still have. In it I discovered the straight line on the border limits of some countries, mainly in Africa and America.

My attention was drawn to some small rhomboids that were on the borders between Iraq and Kuwait, and between Kuwait and Saudi Arabia, both named “zona neutral,” (neutral zone) (Figure 1).



**Figure 1: Neutral zones between Iraq-Kuwait and Kuwait-Saudi Arabia, from *Atlas Escolar* 1963.**

Considering my poor drawing skills, I thought that the borders drawn based on straight lines were an important aid for making maps for school tasks. Perhaps that is why today, many years later, I am writing about straight border lines on maps, illustrated on stamps with maps, as it could not be otherwise. I hope it will entertain you while you read it.

In the following text we will see some straight lines that define borders, are part of land borders between countries, and that stand out for their characteristics.

The distances and geographical coordinates shown here are approximate. I have obtained them by measuring on maps in the *National Geographic of the World* (1987 printing of the 1981 edition), and *Le Grand Atlas de l'Histoire Mondiale*, 1979 edition published by Albin Michel, Encyclopaedia

Universalis France S.A. I also used thematic maps from the *National Geographic Magazine*, confirmed, as far as possible, with Google maps. Also note that when I give details of the border lines of country X, I do not repeat them for its neighboring countries, such as Y or Z.

### 2. Large straight border lines on the world map

If we look at North America on a world map, we can see a long straight line that is an important part of the land border between Canada and the United States. This line is the result of various treaties between Great Britain and the United States (Treaties of London of 1818, and of Oregon of 1846). It runs along the 49°N parallel and goes east-west from the 95°W meridian in the Province of Ontario (Canada) and the state of Minnesota (United States) to the Pacific Ocean, about 2,000 kms (1243 miles). This is the longest straight land line that delimits two countries.



**Figure 2: Canada Scott 893. Canada since 1949 showing straight line border with U.S.**

This long, straight line boundary can be seen in two stamps. In Figure 2 (Canada Scott 893), we see the southern Canadian border with its long straight line bordering the United States. Figure 3 (U.S. Scott 858) is a map of the United States with most of the states that form its straight northern border with Canada.



**Figure 3: U.S. Scott 858. 50th Anniversary Statehood of North and South Dakota, Montana, and Washington. Straight line border can be clearly seen.**

Another notable straight line in North America, due to its length, is the one that separates Canada (Yukon Territory) and the United States (Alaska). It is about 1,050 km (653 miles) long on the 141°W meridian, (Figure 4, U.S. Scott C53 and Figure 5, Canada Scott 1413, next page).

In Africa, we find many borders with straight lines of different lengths. These lines have their origin in the European colonial occupation, mainly in the 19th century. They were drawn up arbitrarily, many times far from where natural terrain boundaries would be, through treaties, conferences, and other agreements between colonial powers.

We will examine the major straight border lines in Africa, from north to south.

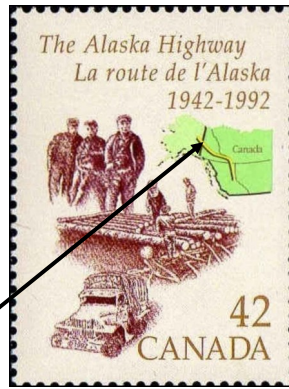
The southern border of Algeria runs in a straight line from the tripoint with Western Sahara and Mauritania 27°40'N, 8°40'W in a

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Figure 4 (above): U.S. Scott C53. Figure 5 (right): Canada Scott 1413. Straight line border between Alaska and Yukon Territory.



southeast direction for about 1,200 km (746 miles) (Line A in Figure 6, Algeria Scott 1377) bordering Mauritania (460 km, 286 miles) and Mali (740 km, 460 miles). It changes to a northeast direction for

Figure 6: Algeria Scott 1377.

Line A:  
Line B:



780 km (485 miles), bordering Niger up to the geographical coordinate 23°30'N, 12°00'E (Line B in Figure 6).



Figure 7: Mali Scott C45.

The current states of Mali (Figure 7, Mali Scott C45), called French Soudan until 1960 (Figure 8, French Sudan Scott CB4),



Figure 9: Niger Scott 820.



Figure 8: French Sudan Scott CB4.

and Niger (Figure 9, Niger Scott 820) were, until 1958, part of colonial Afrique Occidentale Française/ French West Africa (Figure 10, Scott 84), along with other territories in the area.

Mauritania, also part of French West Africa, borders Mali in a straight line of about 950 km (590 miles) from the point 25°N, 6°06'W in a southeast direction to the geographical coordinate 16°30'N, 5°30'W (see Line A in Figure 11,



Figure 10: French West Africa Scott 84.

Mauritania Scott 592). Further northeast we find Libya whose border with Egypt has a straight line of 800 km (497 miles) on the 25°E meridian and continues another 210 km (130 miles) on the border with Sudan (see Line A in Figure 12, Libya Scott 1758).

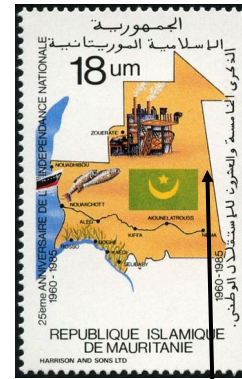


Figure 11: Mauritania Scott 592.

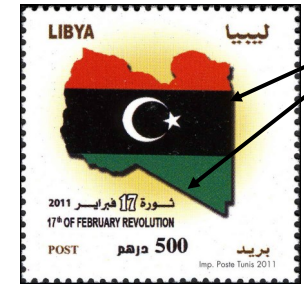


Figure 12: Libya Scott 1758.

In the south, Libya borders Chad in a straight line with two parts. The first of about 110 km (68 miles) runs in a northeast direction. The second (Line B in Figure 12) is about 940 km (584 miles) in a southeast direction from geographic coordinate 23°30'N, 15°53'E to reach the Libya-Chad-Sudan triple border at geographic coordinate 19°30'N, 24°E.



Figure 13: Egypt Scott 1539.

Egypt is bordered on the south by Sudan (Figure 13, Egypt Scott 1539) where its border runs along the 22°N parallel for about 850 km (528 miles), excluding the territory of the Hala'ib Triangle whose boundaries are in question, circled in red, in both Figure 13, and Figure 14 (Sudan Scott 679).



Figure 14: Sudan Scott 679.

In the southwest of the continent, we find Namibia's border with Botswana and South Africa (Figure 15, Namibia Scott 659). It is a straight north-south line of 1,100 km (684 miles) divided into two sections. The first border of 400 km (249 miles) runs along the 22°E meridian from the Caprivi Strip to the 22°S parallel. At that point it heads 100 km (62 miles) to the west to follow another 700 km (435 miles) along the 20°E meridian. About 300 km (186 miles) borders Botswana; the remaining 400 km (249 miles) borders South Africa.

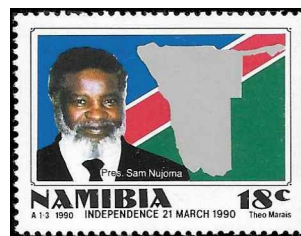


Figure 15: Namibia Scott 659.

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In Asia, the longest straight line border section is about 410 km (255 miles) between Uzbekistan and Kazakhstan along the 56°E meridian. It goes from the 45°N parallel to the tripoint with Turkmenistan at geographic coordinate 41°19'N, 56°E (Figure 16, Uzbekistan Scott 74).

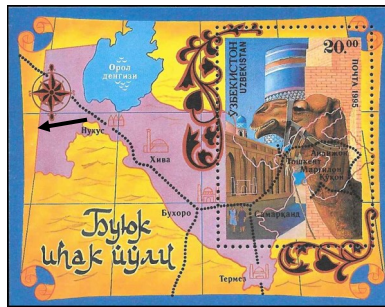


Figure 16: Uzbekistan Scott 74.

In Saudi Arabia, almost all land borders are formed by straight lines (Figure 17, Saudi Arabia Scott 1387). They are irregular in the southwest area bordering Yemen (Saudi provinces of Jizan, Asin and Najran) and about 60 km (36 miles) of the border with Qatar. The border with Iraq is about 800 km (497 miles) long in five straight stretches, the longest of which is about 330 km (205 miles) in the southeast direction from 31°06'N, 42°04'E to 29°13'N, 44°43'E. We can see in Figure 17 that the Neutral Zone mentioned in the introduction, drawn in the 1920s, does not appear on the stamp map because the territorial limits of the respective countries have been agreed upon.



Figure 17: Saudi Arabia Scott 1387.

Up to this point we have seen the longest straight lines on land borders by means of stamp issues with maps.

**3. Other countries that have borders with rectilinear profiles or peculiar shapes**

Now we will examine countries whose borders in a straight line are not long and other countries with striking silhouettes because of their shape.

We will first consider maps on stamps resulting from the June 1900 Treaty of Paris signed between Spain and France. The purpose of the Treaty was to delimit their territories on the Sahara coast and in the Gulf of Guinea.

In the case of Western Sahara/ República Árabe Saharaui, seeing the sad end that the territory has had, we can see the negotiators did their job in a very unserious way. Its outline suggests a big capital Z. According to the Treaty, the limits followed the parallel 27°40'N in the north and 21°20'N in the south. In the east it was more complicated: it followed the meridian 8°40'W until the parallel 26°N. The border then went south along the 12°W meridian to the Idjil salt flats where it formed an arc to the 13°W meridian with the 21°20'N parallel. It follows that parallel to Cape Blanco on the Atlantic coast. In summary, the border is about 700 km (435 miles) long from north to south, following a winding route very different from the great straight lines of the African countries discussed above. In Figure 18 (Spanish Sahara Scott 114), we see these borders clearly.



Figure 18: Spanish Sahara Scott 114.



Figure 19: Rio Muni Scott 12 on FDC. Equatorial Guinea in cachet.

The continental territory of the Republic of Equatorial Guinea is practically a quadrilateral (190 x 130 km, 118 x 81 miles). Its land borders are straight following to the north and south the parallels 2°21'N and 1°01'N, respectively. To the east the boundary follows the 11°20'E meridian. The Atlantic façade in the west breaks the straightness of the limits. In (Figure 19, FDC with Rio Muni Scott 12) we see that the east boundary is poorly drawn as it does not follow the meridian in its entirety. It does follow the meridian of the former Spanish province of Rio Muni, which is now the continental part of the Republic of Equatorial Guinea.

The map of Egypt (Figure 20, Egypt Scott C90) reminds us of an irregular quadrilateral with straight sides to the south (Sudan) and west (Libya) and irregular sides on the Mediterranean coast to the north and on the Red Sea to the east.

- Sudan border.
- Libya border.

The contour of Angola with its land borders formed by irregular



Figure 21: Angola Scott 1006. Its many straight line borders can be seen.



Figure 20: Egypt Scott C90.

straight lines with incoming and outgoing lines (Figure 21, Angola Scott 1006) reminds us of a piece of the big puzzle that is the map of Africa.

Now, speaking of puzzles, look at the partial sheet in Figure 22 (South Africa Scott 1692A) with the African part of the world map in puzzle form.



Figure 22: South Africa Scott 1692A.

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Returning to Asia, the silhouette of Iraq (Figure 23, Iraq Scott 328, next page) resembles a trapezoid with its west and south sides straight and the northern boundary with Turkey and eastern boundary with Iran irregular. The straight lines are the result of the division of the Ottoman Empire according to the Sykes-Picot Agreement of 1916 between the United Kingdom and France. The Agreement respected the existing border of the Ottoman Empire with Iran (Persia at the time). As this stamp was issued in 1963, the rhombus in the southeast is of one of the Neutral Zones mentioned in the introduction and that could not be seen in Figure 17 that was issued in 2007.



Figure 23: Iraq Scott 328.

In Central America, Guatemala has the most straight lines, with a very irregular shape (Figure 24, Guatemala Scott C49).



Its border with Mexico is mostly in straight lines except in two fluvial stretches. In the Treaty Herrera Mariscal signed in 1892 between Guatemala and Mexico, both countries recognized the current borders. To the north the border runs along parallel 17°49'N

- Belize—See Figure 25.
- Usamacinta and Chixoy Rivers
- Suchiate River

Figure 24: Guatemala Scott C49.

from meridian 89°09'W to 90°59'W (see area A in Figure 24). To the west the border goes from that point to the geographic coordinate 17°15'N, 90°59'W, and follows another straight line (see area B in Figure 24) along the parallel 17°15'N until it meets the Usumacinta River. It then follows to the east the course of the Usumacinta and Chixoy rivers to the geographic coordinate 16°04'N, 90°26'W. From this point, it runs in a westerly direction (see area C in Figure 24) along the parallel 16°04'N to the meridian 91°43'W. From there it follows to the southwest to 92°12'W and the 15°15'N parallel. From there, it changes to a southeast direction to the 15°04'N parallel. Here the border follows the course of the Suchiate River to the Pacific Ocean.

The exact border between Guatemala and Belize has been a long-running dispute. The matter is now in the hands of the International Court of Justice. It should be noted that the stamps with maps of Guatemala (Figure 24) include the silhouette of the state of Belize (Figure 25, Belize Scott 1205).

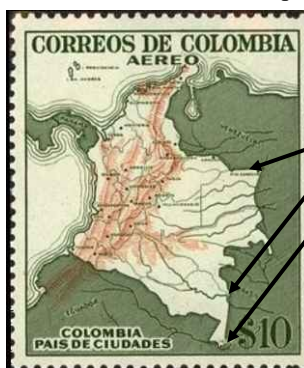


Figure 25: Belize Scott 1205

In the Guatemala stamp (Figure 24) we can see a straight line of about 220 km (137 miles) from parallel 17°49'N to 15°53'N. It runs mostly on the meridian 89°09'W until it meets the Sarstún/Sarstoon river bordering Belize, until its mouth in the Amatique bay of the Gulf of Honduras, as can be seen in Figure 25.

In South America, there are few straight lines. Because of its area and geography, Brazil is the South American country with most the straight-line borders. Brazil shares borders with ten countries; we will see some of the straight-line borders through some of these countries.

In Colombia, the map in Figure 26 (Colombia Scott 346), we see in its southeast a straight border about 310 km (193 miles) from the confluence of the Caquetá River with the Apaporis at 1°47'S, 69°45'W heading southwest to the Colombia-Brazil-Peru tripoint near Leticia (Colombia) at the geographical coordinate 4°12'S, 69°56'W, on the Amazon River.



Further to the north, we find a straight line of about 140 km (87

- 1°57'N
  - Caquetá/Apaporis rivers
  - Leticia, Colombia
- miles) that runs on the 1°57'N parallel.

Figure 26: Colombia Scott 346.

Between Bolivia and Brazil, the straight boundary runs along the 16°30'S parallel for about 180 km (112 miles) (Figure 27, Bolivia Scott 1651).



Figure 27: Bolivia Scott 1651.

In Peru, in the Peru-Bolivia-Brazil tripoint in the city of Iñapari, on the Acre River, at the geographic coordinate 10°56'S, 69°34'W, we find an oblique straight line border in a southeast direction for 200 km (124 miles) to the Madre de Dios River in the city of Puerto Heath

(Bolivia) in the geographical coordinate 12°30'S, 68°39'W



- Iñapari
  - Puerto Heath
- (Figure 28, Peru Scott 949).

Let's go further south to Argentina and Chile. After several disputes and agreements between both countries, we find two straight border lines, one in Patagonia that follows the 52°S parallel for 130 km (81 miles) (Figure 29, Chile Scott 1252, next page).

The other straight-line border is at Tierra del Fuego on the meridian 68°36'W at about 245 km (152 miles) (Figure 30, Argentina Scott 1411).

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(Continued from Page 4) To conclude, we return to what was mentioned earlier about the arbitrariness of the borders designed on paper, far from the actual territory. A practically straight border of about 820 km (510 miles) (Figure 31, Indonesia Scott



Figure 29: Chile Scott 1252.



Figure 30: Argentina Scott 1411.

1077, and Figure 32, Papua New Guinea Scott 424) not only separates an island into two countries, Indonesia and Papua New Guinea, but also politically separates Asia and Oceania. The border runs on the 141°E meridian except for 150 km (93 miles) which follows the winding course of the Fly River.

A different case is Antarctica and its maps with large circular sectors delimited by meridians and parallels. I will only show some stamps of Antarctica from where we will see meridians, parallels, and geographic coordinates (Figure 33, French Southern and Antarctic Territories Scott 659 and Figure 34, Chile Scott 1681).

Finally, we will look at one of the agreements on Antarctica after the Antarctic Treaty of 1959. The Protocol to the Antarctic Treaty on Environmental Protection, known as the Madrid Protocol, is

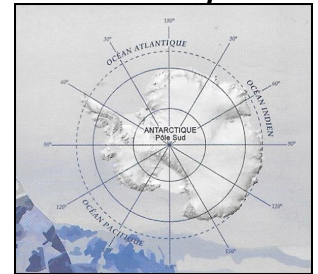
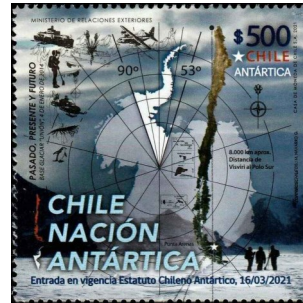


Top: Figure 31: Scott Indonesia Scott 1077.  
Bottom: Figure 32: Papua New Guinea Scott 424.

complementary to the Antarctic Treaty and was signed in Madrid on October 4, 1991 (Figure 35, Spain Scott 4254).



Figure 33: FSAT Scott 659. Detail from sheet to right.



Left: Figure 34: Chile Scott 1681.

We have now traveled through the straight border lines on the stamps with maps. We started in the north, looking at the border between Canada and the United States, and finished in the south with Antarctica. A small tour around the Earth through the world of stamps with maps. ♦



Figure 35: Spain Scott 4254.