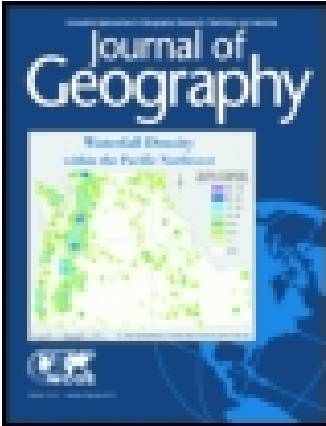


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### Geography and the War in Europe

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# *The* JOURNAL of GEOGRAPHY

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## GEOGRAPHY AND THE WAR IN EUROPE

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TO read the war news from Europe without understanding the geographical features of the Central European countries leaves the story a jumbled and confusing mass of facts without order or meaning. Back of many of the movements of the various armies are the facts of physical geography. To trace the influence of these geographical factors on the war operations is a most illuminating and interesting exercise for a class in geography. For example, what light does geography throw upon the fact that French territory was so quickly invaded by the Germans and Paris itself threatened in the present war similarly as in the Franco-Prussian war of 1870? Why was not Germany invaded by the French and Berlin threatened? On the other hand, why should Germany find her eastern borders invaded by the Russians, in a manner similar to her own invasions of France? Why was the neutrality of Luxembourg and Belgium violated at the very opening of the war but not Holland's? These, and similar questions, are answered, in part at least, by geography.

### DISTANCE

One of the important geographical features in the war is distance. In the movement of large armies distance to be traveled is a great consideration. The further an army gets from its home headquarters, the greater becomes the problem of transportation of men, ammunition, artillery and food supplies. Long marches, with much fighting, exhausts men and horses and the efficiency of the fighting force becomes lessened. The further an army penetrates an enemy's country, the greater the danger of flank attacks and the cutting off of lines of communication, and consequently the need of superior numbers to keep the rear of the army protected. Long marches require much time and in modern warfare when striking quickly often means sure victory, time is a very important consideration.

In the war between France and Germany, Germany has the advantage of distance. From Metz, the strongly fortified city of Germany near the French frontier, the distance to Paris is only about 165 miles in a straight line, but from the French frontier to Berlin the shortest distance is approximately 400 miles. The shortest route from Berlin to Paris passes through Aix la

Chapelle, on the Belgian-German frontier, Liege in Belgium, and Maubeuge on the French-Belgium borders. From Aix la Chapelle to Paris is nearly 200 miles, not quite half the distance being across Belgium. From Maubeuge to Berlin, however, the distance is 435 miles. Hence it follows that German armies have considerably less than half the distance to go from their fortified frontier posts to the heart of France, as compared with the distance French troops must go to reach the heart of Germany. Paris is, therefore, simply from the fact of distance, much more subject to attack than Berlin and hence the strenuous effort made by Germany quickly to strike the French capital.

Between Germany and Russia the conditions are reversed. Where the German-Russian boundary line curves westward in Poland the distance from Russian territory to Berlin is 180 miles. Germany's territory comes nearest to Petrograd (St. Petersburg) where the boundary line curves far to the east in East Prussia, but here Petrograd is 420 miles away. Near Thorn on the Vistula River, the main railroad from Berlin to Warsaw and Moscow crosses the boundary 250 miles from Berlin but 780 miles from Moscow. Practically the same conditions exist in regard to Russia and Austria. Vienna is about 225 miles from the Russian frontier near Cracow, while Petrograd is nearly 800 miles from Austria. Judged by distance, therefore, Russia has much the advantage over Germany and Austria for invading the heart of the enemy's country.

#### BOUNDARIES AND PHYSICAL FEATURES

*The French-German boundary.*—The character of the boundaries and the nature of the country along the frontiers determine, to a large degree, the routes taken by invading armies. The western boundary of Germany extends nearly north and south for about 450 miles, one third or 150 miles being with France. The northern half, bordering Holland, is entirely artificial, crossing a flat and open plain, densely settled and covered with a net work of roads, railways and canals. Along Belgium and Luxembourg, the boundary line crosses the dissected plateau of the Ardennes—a rough and wooded region sparsely inhabited. Encircling the northern and western edges of the Ardennes is the Meuse River, which, with its tributary the Sambre, leads from the German frontier across Belgium into France. South of the Ardennes the Moselle skirts the duchy of Luxembourg and offers a route into France. The boundary with France extends from the southern edge of the Ardennes near Longwy across the hilly, but low, plateau of Lorraine to the Vosges Mountains. The high, forested, granite slope of the Vosges continues the boundary southward, and is the most effective natural barrier between the two countries. Several passes cross the range, however, and at the southern end, between the Vosges and the Swiss Jura, a low, wide gateway opens—the Burgundian Gate. So low is this pass that a canal connecting the Rhine and the Rhone crosses it.

The nature of this boundary belt explains the German plan of invasion. A northern army, the Army of the Meuse, followed the route skirting the Ardennes barrier. This is not only the shortest route from Berlin to Paris, but the easiest as far as natural conditions are concerned, and, because of the fertile plain, capable of furnishing large supplies for an army. By leaving German territory near Aix la Chapelle and reaching the Meuse at Liege, Holland's neutrality could be observed, but Belgium must be crossed. Advancing up the Meuse and Sambre through Namur, Charleroi, Maubeuge, La Fere and Givet, low divides, crossed by canals, lead to the headwaters of the Oise and Aisne which continue in a direct line toward Paris.

The Moselle offers a second way of entering France. The army of the Moselle, following up the river to Luxembourg, in order to reach France by the shortest route, must cross Luxembourg territory to Longwy. Hence the invasion of this little country at the beginning of the war.

A third way of reaching France is across the Lorraine Plateau from the Rhine at Strassburg. The Army of the Rhine, following this route along the line of the Rhine-Marne Canal, reached France near Luneville and Nancy. Once through these frontier passes, by whichever route entered, the land becomes lower and more level and the French rivers lead in converging lines upon Paris. An invasion through the Burgundian Gateway is less advantageous. It is far from the heart of Germany, the narrow entrance is easily defended by the great French fortress of Belfort, and it leads, not into the heart of France, but down into the Rhone Valley.

The physical geography of this boundary belt offers much greater obstacles to an invasion of Germany by the French. In the first place, unless a route is followed across the low plains of Belgium and Holland into North Germany, French armies must leave low and open country for the increasingly more rugged and higher lands that lie west of the Rhine. Not only is the advance of an army into such a country difficult, but invaders can be easily repelled. The passes can be heavily guarded. In the second place, the great rivers of Germany lie across the path of invasion toward Berlin, rather than converging upon it. This is especially true of the deep valley of the Rhine, and beyond the Rhine lies the Ems, the Weser and the Elbe.

*The Russian-German Boundary.*—The Russian-German boundary is a great inverted S-shaped line 700 miles long, with no natural barrier throughout its length. The eastern extension of German territory between Poland and the Baltic exposes that portion to attack by the Russians from three sides, but the western "wedge of Poland points menacingly towards the German capital, and leaves the military strength of Russia free to choose upon what part of the long frontier it will direct the full force of its onset." (Partsch's *Central Europe*—Appleton, New York, p. 334). As the rivers of France converge upon Paris, so the rivers of eastern Germany—

the middle Vistula and Netze, the Warta, the Oder—point toward Berlin. The only natural barrier to the advance of Russian armies is the tangle of swamps and lakes in East Prussia. That the Russians should cross this long open frontier into Germany as soon as their armies had assembled is not surprising.

The same open frontier separates Russia from Austria, and here again Russian invasion of Austrian Galicia was easy of accomplishment. To cross the Carpathian barrier into central Austria-Hungary, however, would be a much more difficult task. But by taking and holding Galicia, Russia would open a possible line of advance for her armies from Poland up the valley of the Oder toward Berlin. To oppose this advance, Germany must depend upon the strength of her arms, unaided by natural factors.

A German invasion of Russia meets many difficulties. In addition to long distances, already mentioned, are the difficulties of poor roads formed by the deep soils of the plains; great stretches of swamp and lake; and the large area that would be necessary to conquer. As the Czar's armies advanced into Germany, they would constantly become more and more concentrated. They go from the large end of a funnel toward the small end. German invading armies must constantly spread out, from the small to the large end of the funnel.

Climate also offers protection to Russia. The long and severely cold winters are more effective than armies or fortifications, and the intensely hot days of summer would be very trying upon an invading army.

*Sea Coast and Naval Warfare.*—Germany does not need a navy to defend her sea-coast. Nature is her best defense. A low, flat, plain, slightly submerged, the German shore is bordered by very shallow waters, blocked with sand bars. All German seaports are situated far up the mouths of submerged rivers or at the ends of deep bays or "haffs," whose entrances are protected by bay-bars. No port is near enough to the open sea to be bombarded by warships; the narrow, crooked entrances to the rivers and bays are easily protected by land forts and sea-mines; the gently sloping shore line and barrier beaches would make the landing of a large army a slow and difficult task. Hence, the most that an enemy's fleet can do is to blockade the German coast and keep her fleet bottled up in her protected haens until such time as it will voluntarily come out. No matter how powerful the navy, it cannot harm the German coast nor force the German fleet to open waters. On the other hand, with the aid of the Kiel canal across the neck of the Danish peninsula and the enclosed bays, the German fleet can move along her own coast and concentrate in either the North Sea or Baltic at will. Any general naval battle that may occur between the English and the Germans will be the Germans' own choosing. As long as the English fleet is undefeated, however, Germany must remain cut off from the rest of the world by sea.