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THE GEOGRAPHICAL APPROACH TO EUROPEAN HISTORY

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The environmental factor in history has not perhaps been stressed as much as it deserves by past and present historians. Yet it has not been wholly neglected. The late Marion Newbigin, the Scottish geographer, has led the way with her modern studies of southern Europe (*Mediterranean Lands*, London, 1924). The present writer for the past eight years has been lecturing on the liaisons between geography and history, and is of the opinion that it is a field worthy of greater exploitation. It is a commonplace that while men like Charlemagne or Napoleon have altered the map of Europe most drastically, some factor seems to wipe out most of their regional alterations within a few decades of their deaths. In general the national areas revert to something of their condition before the great conqueror took charge. The main reason for this reversion seems to be that there is a large number of environmental and cultural factors which only act very slowly on national development, but in the long run seem to the writer to outweigh the control exercised by personality, however vigorous it may seem to be for a time.

Few students seem to have made use of graphical methods in investigating their historical problems. These are of course the chief characteristic of geographical research. Especially is this true in regard to the use of isopleths (lines of equal abundance), which can be applied to cultural facts almost as readily as to such features as temperature or elevation. The present writer in his paper on "Environment and Nation" (1934)¹ has linked historical isopleths with those expressing race, climate, topography, language, health, etc. In the present paper he gives seven diagrams in which he correlates graphically the history of Europe with build, corridors, race, language, etc., and illustrates the use of isopleths in studying the spread of various culture complexes through Europe.

The most constant factor in European history is of course the build of the continent. Europe is readily divided into three east-west belts. In the north is the very stable area extending from Ireland to the Urals, which consists either of very shallow seas (like the North, Baltic and White Seas), or of vast plains like those of Germany, Poland or Russia. This is mainly due to the presence of the dominant "Russian Shield" which underlies much of this level region and has resisted earth-folding for millions of years. The effect of these unbroken plains on the development of the nations concerned has often been described and will not here be elaborated.

Across the centre of Europe, extending from Brittany and Portugal to the Black Sea, is a series of somewhat isolated blocks, which represent the *relics* of ancient mountain-arcs which were buckled up about 150 million years ago. (They are shown as black patches in Fig. I at A). Lastly there is the almost complete rampart of *young mountains* extending from Gibraltar to the Caucasus; which mainly developed about 10 million

¹*American Journal of Sociology* (July, 1934), 21-33.

years ago (in late Tertiary times) during that phase of crustal folding which is known as the "Alpine Storm". They arose where formerly had been the "Tethys Sea" (Fig. 7, inset C). Its weak sediments yielded in the Alpine Storm, and became two sets of more or less parallel folds which are shown as heavy lines in Fig. 1, inset A. These folds are known as the Alpides and the Dinarides. Thus the major elevations of southern and central Europe are of two quite different types, the ancient relic-blocks and the young fold-mountains. These, as we shall see, have had somewhat different effects on human affairs. During the Alpine Storm while certain parts of the crust were sharply buckled upward, others were depressed to form earth-hollows. The latter are called *downfolds*. They necessarily became filled either with water or with river-silts. These three types are distinguished in the block-diagram constituting Fig. 1. If these types are tabulated we may be able to make some useful generalizations.

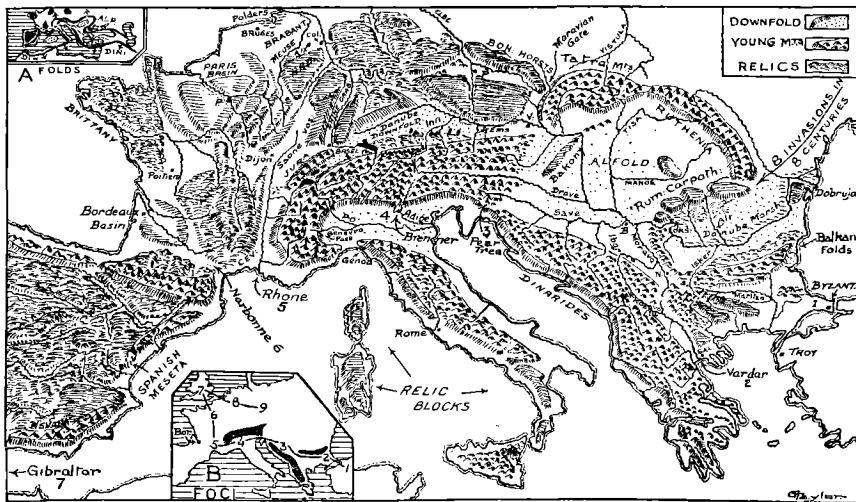


Fig. 1.—Block diagram of the Topographic Units in Southern Europe.

Inset A, the Folds of the Young Mountains.

Inset B, Culture Foci along some of the Main Corridors. (Young Folds are black.)

A. RELIC-BLOCKS

| Region | Elevation | Some Historical aspects |
|-------------------|------------|--|
| Spanish Meseta | 2,000 feet | Unusually dry. Splits the national stocks. |
| Brittany | 500 | Helped to maintain Breton culture of Alpine race. |
| Cevennes | 3,000 | Tip of Alpine Wedge. Focus of revolt, (Albi, etc.) |
| Ardennes | 1,000 | Deflects trade and war into Brabant Corridor. |
| Bohemia | 2,000 | Main factor in maintaining Czech culture. |
| South Carpathians | 7,000 | See later. |

B. YOUNG FOLD-MOUNTAINS

| <i>Region</i> | <i>Elevation</i> | <i>Some Historical aspects</i> |
|-------------------|------------------|---|
| Sierra Nevada | 11,000 feet | Marginal, not significant. |
| Pyrenees | 11,000 | Separate the French and Spanish cultures. |
| Western Alps | 15,000 | Separate French and German from Italian cultures. |
| Eastern Alps | 13,000 | Bound Italian culture. German in broad valleys. |
| Apennines | 9,000 | Helped to delay Italian unity. |
| Dinarics | 8,000 | Conserved Montenegrin and Albanian cultures. |
| North Carpathians | 8,000 | Conserve Slovak and Ruthenian cultures. |

The resistant relic-blocks were mostly somewhat re-elevated during the Alpine Storm, and to-day they appear as rather rugged plateaux with their edges eroded by numerous rivers. On the whole their effect has been to preserve culture-groups of some importance, which however are not so isolated that they do not benefit from intercourse with other cultures. Their rich minerals (common in ancient rocks) have often led to important industrial communities.

The second group, the young mountains, are quite different in structure. They consist of steeply folded ridges, whose summits have been removed by erosion. Since they represent the sediments of the Tethys Sea of fairly late geological age they do not contain ores to the same extent as do the ancient rocks (e.g., Harz, Erz Gebirge, etc.) of the relic-blocks. They are far higher and more rugged than the relic-blocks, and usually act as barriers between culture groups to a much greater extent. Where they serve as refuges their sterile character usually forbids the development of any noteworthy population, and their peoples are usually much more primitive than those found on the relic-blocks.

The role of the Southern Carpathians seems to be somewhat of an exception at first glance. It clearly forms part of the arc of Alpides, and yet it has been the prime factor in the preservation of the remarkable Rumanian culture in the face of almost continuous barbarian invasions (from 5th to 12th century) from Asia. Indeed I have been accustomed to refer to these as "Eight invasions in eight centuries". The explanation is that the southern Carpathians (between the Danube and the Oitoz Pass) are not true young-mountains, but represent former relic-blocks "caught up" in the Alpine Storm, but still preserving their plateau character (see Fig. 1.). In these upland pastures the Rumanian culture was preserved.

The downfolds are of course the complements of the upward crustal buckles, but they comprise some of the most attractive regions of Europe. For instance the whole development of the Magyar people since A.D. 895 (when they crossed the Carpathians) is based on the flat silted plain of the Alfold, a typical downfold. So also the only large fertile area in Italy, and the leading region throughout her struggle for liberty, is the Po Basin. This is another downfold filled with debris torn from the Alps and the Apennines. An analogous area is the Wallachian Plain, which is however so open on the east that it has acted primarily as a corridor of invasion from the Asiatic Steppes. To-day it constitutes the richest area of Rumania and controls the rest of the country. A smaller elongated area of similar origin extends from Geneva to Vienna. It is marked by numerous

lakes, which indicate that the silts have not yet filled up the downfold. Its presence has decided that the dominant culture-group in Switzerland shall be the German cantons, which are only separated by the Rhine from the similar downfold in Bavaria. The importance of the Vienna gate linking the Bavarian downfold to the Hungarian downfold is obvious.

A survey of the great European barrier thrown up some ten million years ago in the Alpine storm, shows that there are seven noteworthy gaps linking the cool wet forested northern environments with the hot dry-summer regions of the Mediterranean.² There is of course a geological reason for each of these depressions, which is worthy of mention. One of these gaps, the Dardanelles, is below sea-level, and hence throughout early European history it was by far the most important corridor of commerce. It is due to the faulting of the crust during the Alpine Storm. It led to the growth of Troy at one end, and to Byzantium at the other end. To Europe as a whole Constantinople was probably a more vital centre of culture than Rome, which sank into relative obscurity after the fifth century. Rome's importance was largely man-made, for it has no great natural advantages justifying it as an imperial centre.

The second corridor is that up the Vardar valley and down the Morava (Fig. 1). It lies between the Alpides and the Dinarides folds (Inset A), but is somewhat rugged and flanked by young mountains for long distances. Still the Plain of Kossovo on this route has seen many critical incidents in European history. A branch to the east (*via* Nish and Sophia) to Constantinople has somewhat rivalled it in importance. The third corridor is the Pear-Tree Pass, a low gap in the Dinarides, linking the Adriatic to the Danube basin. It has been used from the legendary time of the Argonauts by barbarians attacking Italy. The fourth is the Brenner Pass, which was the main pass linking Germany to Italy. It is only 4,400 feet high, whereas most of the other passes in the Alps are about 7,000 feet above the sea. It occurs where the core of hard *Crystalline* rocks is only 7 miles wide, in place of the usual 30 miles. Its command materially contributed to the rise of the Hapsburg dynasty, and it is the basis of the Trentino Irredenta of to-day.

The fifth corridor rivals in interest that of the Dardanelles. It is a somewhat similar sunken part of the crust, which is called the "Rhône Graben" by the geologist and the "Way of Light" by the cultural geographer. The *Pax Romana*, the Christian religion and many a later culture complex reached the northwest of Europe by this corridor. The sixth corridor, that of Narbonne, is of less significance; and the seventh at Gibraltar, while it breaches the young mountains, leads to America rather than to northern Europe.

During the palmy days of the Roman Empire the great land-route from west to east was that used and described by the Bordeaux Pilgrim in A.D. 333. He travelled to Palestine by way of the Narbonne Gate, the Geneva Pass over the Alps (Fig. 1), the Pear Tree Pass, the Nish and Maritza route to Constantinople, and thence to Palestine. This is the line joining "5" to "1" in the Inset in Fig. 1 at B. The same corridor has determined the migration of cultural concepts, as is well illustrated in studying the revolts against orthodox religion. Ever since the days of the early Church there have been small groups of recalcitrants; and if the

²See E. Semple, *Geography of the Mediterranean region* (1931).

foci of the chief of such revolts be charted we find that they lie along the same historic corridor. Though not always related, these foci gradually move to the west along the track indicated. Thus the Paulicians, a sect who rejected the orders of the church, spread through Anatolia (1 in Fig. 1, Inset B), and many migrated to Thrace in 752 (2 in Fig. 1B). One hundred thousand are said to have been massacred here in 850. A century later Bogumil led a revolting group in the Balkans (3 in Fig. 1B). In the eleventh and twelfth centuries the Cathars and Patarenes opposed the orthodox religion in the northern parts of Italy (4), while the Waldenses became prominent in the Savoy after 1170. In the next half century the south of France was the scene of fierce crusades against the heterodox Albigenses.

It was in the 14th century that the chief focus of dissent shifted north to Wyclif in England (7). Thereafter it passes to the centre of Europe, and John Hus of Bohemia was the chief opponent of orthodox Catholicism in the 15th century. The student of cultural geography can use other features besides religion to show the gradual shift of foci from the east to the west, then to the north and then to the centre. We shall see something more of this "Migration of foci" in charting the development of the Renaissance.

The cartographic approach is very helpful in making a quantitative summary of the facts of history. The plan of using the vertical ordinate of a graph for the time-factor, and the horizontal ordinate for the area-factor (of various nations) gives a time-space diagram, which has been illustrated and described in the *Canadian Journal of Economics and Political Science* (November, 1935, page 548). In Fig. 2 herewith is shown a technique analogous to that used in the study of the build of a country. Here a series of vertical columns give the historical strata for each nation (which is named at the side). Necessarily the strata are rather generalized. The vertical scale gives the time interval, and the classes of government are shown in the legend. Taking Spain as an example, we see that Rome was in control from A.D. 0 to 400. Then the Goths ruled till 700, and the Moors until 1500. Self-government (i.e., rule by a leader of similar nationality) has been in vogue since that date. I know no better method for charting some of the main facts for every nation throughout nineteen centuries upon one diagram.

It is easy to draw up the two inset maps, which are of a more usual pattern. In Inset A in Fig. 2, we see the three zones where Roman culture was dominant for "over five", "four", and "one to three" centuries respectively. In Inset B is a less familiar chart in which the favourable situation of the Nordic nations is emphasized. It is readily deduced from the historic strata in the main map. Here again Europe is divided into three zones, but now running from southwest to northeast. In the southeast are the regions long subjected to Asiatic invasions, whether Early Siberian (5th century to 12th century), Mongol (1200 to 1400), Turkish (1550 to 1650) or Moorish (8th century to 15th century). The last mentioned was essentially an invasion by peoples of Arab culture, and therefore also of Asiatic type.

The second zone (shown by the dots in Inset B) is the protector zone. Here aided by the environment of forest, bogs and young mountains, the nations indicated (such as the North Russians, Poles, Austrians, North

Spanish, etc.) devoted a large part of their energies to holding back the Asiatic invaders. The third zone consisted of the protected nations, who almost exactly agree with those of Nordic race. This relative relief from warfare is a factor which is often ignored by those who advocate the superiority of the Nordic peoples of Europe. An allied method of illustrating the effect of three variables (such as race, religion and language) upon the European nations has been published in the *American Journal of Sociology*, July 1934, page 33.

A third method of approaching history is given in Fig. 3. Here in the

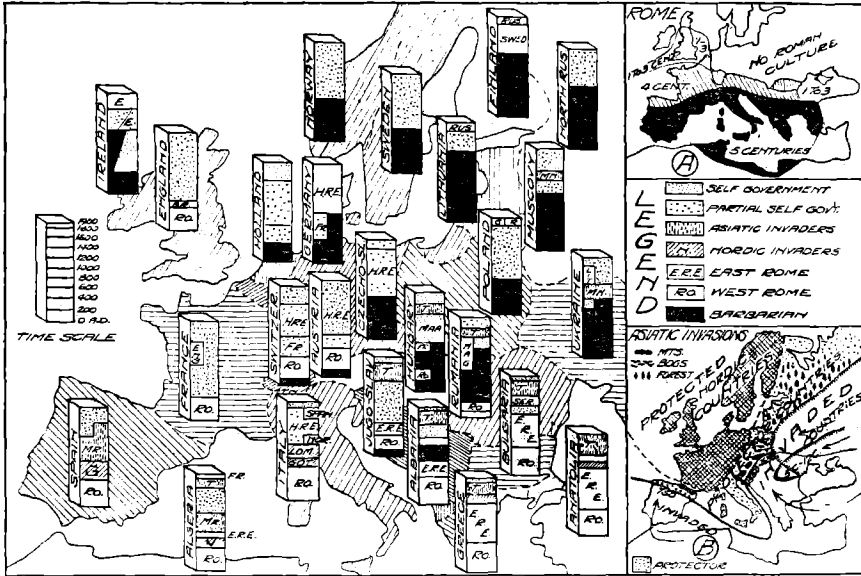


Fig. 2.—A Time-Space Chart showing Historical Strata for the major nations of Europe. Also the spread of Roman culture (Inset A); and the Protector and Protected States (Inset B). (N.B.—Self Government means that the ruler was of similar nationality.)

central map is shown the build of England and Wales, represented in a somewhat novel fashion which I have named a “mantle-map”. To the layman the ordinary geological map presents so complicated a picture that it is of very little use to him. But in the mantle-map the geological formations are somewhat simplified, and the younger formations are shown as “mantles” flung over the older formations. In England, for instance, the older basal strata are in the west. The formations numbered 1 to 5 belong to the Paleozoic rocks, and are grouped by geographers as the “older-mass”. The later formations or “mantles” (numbered 6 to 10) clearly lie regularly one over the other, and are known as the “younger-mass”. In general the second group consists of much softer rocks than those of the older-mass. But even in the younger-mass two “mantles” (7 and 9) are considerably harder and stand out as long ridges of limestone or chalk.

These ridges are known as Cuestas and they alternate with low flat Vales. It is my present purpose to show how this arrangement of older-mass, younger-mass, Cuesta and Vale has dominated English history to a degree not always appreciated by students.

Surrounding the main map are six smaller maps each representing culture-groups at various periods in England's development. Fleure and others have shown that in Neolithic times the primitive population was distributed as in the top-left map.³ Clearly it is controlled by the older-mass and the two Cuestas. They represent the more open uplands of Britain, for Neolithic man could cope neither with the forests nor with the wild beasts of the Vales. In the second map the distribution is quite different. The Romans controlled the softer weaker rocks of the younger-mass, where agriculture was possible, but left the older-mass to the less

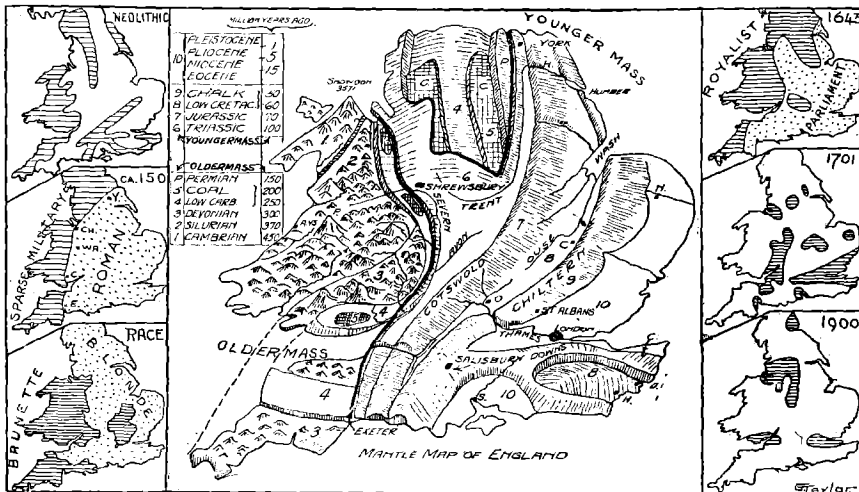


Fig. 3.—A Mantle-Map of England and Wales. The effect of the Build on the population at six stages of English history is shown in the six inset maps.

cultured British tribes. They only maintained scattered garrisons in the rugged older-mass. In the third map the racial strains of to-day are charted. Before 450 A.D. the people of England were mainly of the brunette Mediterranean race. The composition of the people was radically altered with the coming of the blonde Nordics, known as the Anglo-Saxons, chiefly during the fifth and sixth centuries. The two Danish invasions of the 9th and 11th centuries also added many allied blonde stocks to the nation. The race map shows the division of England and Wales into a west portion consisting of the rugged older-mass, which is essentially Mediterranean (brunette) in race, while the eastern younger-mass is essentially Nordic. However, the Pennine area, although a part of the older-mass, was not rugged enough to serve as a refuge for the Mediter-

³This relation is discussed more fully in the writer's book, *Environment and Race* (Oxford, 1927), 128.

ranean peoples, though they seem still to dominate in the Chiltern Cuesta and the swampy areas north of London.

In Stuart times (1643) the cleavage between royalist and parliamentarians was in part based indirectly on the build. Thus the older-mass was wholly royalist while the younger-mass was wholly for the parliament, except for the region around Oxford. Here again the marginal rugged country seems to have been a stronghold of conservative ideas, while London and the more progressive southeast supported the Puritan party. The distribution shown for 1701 (based on Muir)* shows the control of the dense populations by the farm-lands of the Vales (e.g., 6, 8 and 10 in Fig. 3). Here also the charcoal produced in the forests in the same areas was the basis of many of the industries of that date. In 1900, however, the Industrial Revolution had taken place, with the result that the coal supply (5 in Fig. 2) was the chief factor in determining the dense populations, except as regard London. It seems likely that similar correlations could be demonstrated for any other area of somewhat complex build and culture. It is therefore surely impossible to deny the importance of studying the environmental factors in all detailed historical research.

Some authorities have adopted as the briefest of all the definitions of geography the phrase "the science of isopleths". This term is somewhat new in science, being first used about 1909. It is a general term for all such lines as isotherms, isobars, contours, etc. Since the most important function of geography is to explain the causes of various distributions, these isopleths are important tools in modern geographical technique. Obviously many cultural distributions are of great importance in historical research, though isopleths are not in general use therein. I have chosen two subjects, the evolution of architecture and the spread of the Renaissance to illustrate the use of isopleths in history.

In Fig. 4 the main features of the spread of the chief types of medieval architecture are charted. The diagrams are self-explanatory. The generalized isopleths in Fig. 4 represent the outer fringe of the various types at the dates specified. The data are generally taken from the *Encyclopædia Britannica*, and do not pretend to be exhaustive. The Romanesque style (akin to Lombard in Italy and to Early Norman in England) seems to have migrated about 800 A.D. up the Brenner Gate into South Germany at a very early stage in its development. The eleventh century saw an imposing number of Romanesque cathedrals built in England, France and northern Spain. The cold cloudy environment of northern Europe led to the development about 1100 of better-lighted buildings than the Romanesque, and this in part accounts for the rise of Gothic. By 1200 such churches were fairly numerous near Paris, while a few had been built in northern Spain. The spread into England and into western Germany occurred mainly in the 13th century as the second map in Fig. 4 demonstrates. By 1400 the Italians were experimenting with a return to classical architecture, and during the 15th century many Renaissance buildings were erected in north Italy and northern Spain. In the 16th century this style of architecture spread through southern Spain and France, and reached England about 1620. The writer submits that these three maps with their characteristic isopleths epitomise the whole subject and lead one to profitable lines of enquiry far better than

*Muir, Philip and McElroy, *Philip's Historical Atlas* (London, 1927), 74.

do several pages of text. (Indeed the two concepts in the previous sentence rather clearly indicate the value of the isopleth technique).

In Fig. 5 a number of isopleths illustrating the spread of the Renaissance are charted. In "I" some of the chief teachers of Renaissance ideas about 1350, such as Petrarch and Boccaccio, are localized. Later writers dealing with the "life of the times in living languages" (a phrase which in part describes the Renaissance) were Wyclif, Froissart and Chaucer. Hence toward the end of the 14th century we see the new ideas moving north up the "Way of Light". In diagram II (Fig. 5) I have stressed the spread of printing as perhaps the most characteristic feature of the second period of the Renaissance (1450 to 1550). Modern research (by J. H. Hessels and others) seems to refer the invention of movable type to

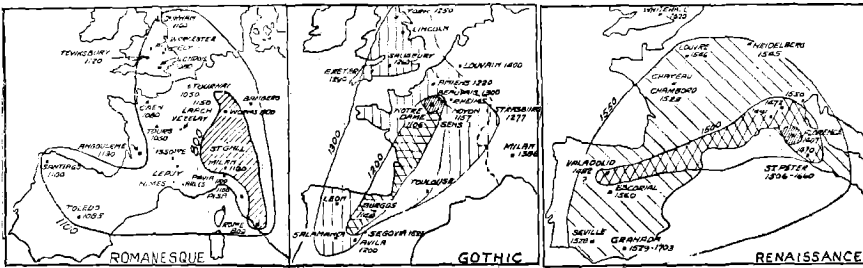


Fig. 4.—Isopleth maps illustrating the spread of three types of Architecture in Western Europe.

Costar of Haarlem about 1446. It had spread to Mainz and the vicinity by 1460, moving along the "Rhine-Way", and reached Rome by 1465 and Paris by 1470. We have here an interesting example of a culture spreading along a new route, far removed from the familiar "Way of Light". Other isopleths showing the rapid spread of printing throughout western Europe by 1480 are also charted.

In the third diagram of Fig. 5, I have plotted the "schools" of the famous teachers in the third period of the Renaissance (1550 to 1650). Here I have not attempted to draw isopleths. But when I labelled each teacher as concerned either with science or letters, it was surprising to find that practically all the former were to be found in the eastern portion of the map, and all the latter in the western part. This is an interesting distribution which is in part no doubt associated with the leading religions

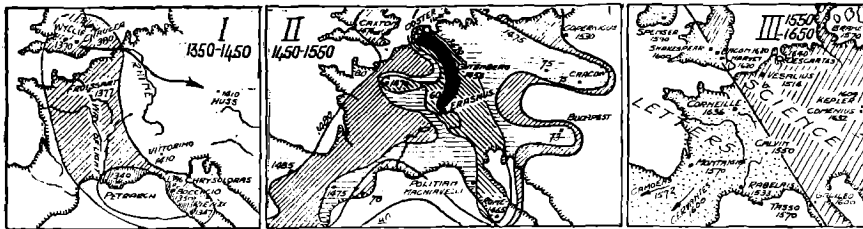


Fig. 5.—Isopleth maps illustrating the spread of the Renaissance in the three periods 1350-1450, 1450-1550, and 1550-1650.

of the two areas. The conservative west held by the old Catholic faith for the most part, while the eastern region was that where the reformed religion had the chief control. This distinction in turn is of course bound up with the deep-seated inheritance of Roman culture in France and Italy which was wanting east of the Rhine (see Fig. 2 inset A). The votaries of medieval science were not encouraged by the orthodox Roman Catholic Church, so that naturally they were not numerous in the western part of diagram III.

In Fig. 6 I illustrate certain relations between nation, topography, race and language which are perhaps not sufficiently stressed in most discussions of central Europe. The three races of Europe are shown in Fig. 7A. The "pioneer fringe" of civilization in the later Roman Empire was not far from the line of the Danube in the region shown in Fig. 6 at B. To the north of this lay a zone of grasslands, crossed by the young mountains at Vienna and Orsova-Belgrade. To the north again of the

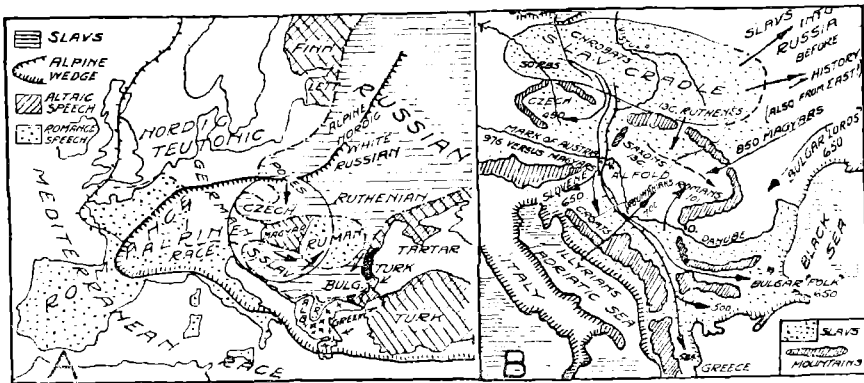


Fig. 6.—At A, Races and Languages of Europe. At B, Migrations of Culture-Groups in Central Europe.

grasslands was the zone of dense forests. After the fall of Rome central and southeast Europe (from the 5th to the 8th centuries) was subject to immigration from two environments, the folk of the forest on the north and the folk of the steppes on the east. As is well-known the Bohmer-Wald and the Alps formed the early bulwark against the eastern barbarians. Then the Vienna Gate became of greater significance in the struggles between the Teutons and heathen Magyars, just as still later the Carpathians aided the civilized Magyars to withstand the invading Turks.

In the 5th century the cradle of the Slavs in the Vistula Basin poured Czechs into Bohemia, and in the sixth century thousands of Slavs migrated into the southern Balkans. In the seventh century the Chrobats and Sorabs of the Vistula region gave rise to the Croats and Serbs of the northern Balkans. These great Slav movements did not alter the racial composition materially, since they were all members of the "Alpine wedge", which is illustrated in Fig. 6, at A. It was merely a transfer of folk of Alpine race from the north to a region already occupied in part by that race in the south. So also the migration of the Vlachs from the Dinarics into modern Rumania brought a Romance culture into the latter country, but did not

alter the races involved for the same reasons. Nor did the influx of thousands of Magyars into the Alföld (around 900) change the race, although their language was non-Aryan and akin to Finnish and Turk. On the other hand it seems likely from present-day surveys that the Bulgars from the Volga, who reached the Danube in the 7th century, were Finns of the Nordic race. Hence we find along the Black Sea to-day a region of rather narrow-headed people (shown black in Fig. 6A) not unlike the Ests and Western Finns of the Baltic. The main bulk of the Bulgars migrated from the Vistula and were governed by the Volga overlords. But the Slav culture and language of the peasant became dominant, just as the Saxon culture ultimately dominated the Norman in England.

We can now examine briefly the composition of the Austrian Empire as it was prior to 1918. Its area is roughly indicated by the circle in Fig. 6A, around Buda-Pest. To the west are German Austrians, Catholic Slavs are found in Bohemia and Poland, non-Aryan Magyars are in the centre, Ruthenian Slavs of Greek Uniate religion are in the northeast, Rumanians with a semi-Romance speech are in the east, Serbian Slavs of Orthodox Greek religion in the southeast, Bosnian Slavs of Moslem religion in the south, and Croat Slavs of Roman Catholic religion in the southwest. Here indeed is a diversity of national groups, but the chief point that I wish to bring out is that they are all Alpine in race. Indeed our generalized map (Fig. 6A) shows that the "Hapsburg circle" lies entirely within the "Alpine wedge". Since race is a biological function, while language and religion are merely man-made cultural functions, it is obvious that they cannot possibly be interchanged. Yet no concept is so often wrongly labelled as race.⁵ I dwell on this because cultural differences are merely a matter of education. They could be wiped out in one generation given enough commonsense and goodwill. Racial (i.e., biological) differences of course only change very slowly; but contrary to common opinion these are not factors in the national troubles of Central Europe.

What is the purpose of studying European History? Surely one main reason is to see how the nations of Europe have become grouped into the very definite pattern which is apparent in Fig. 7. European history traces the rise of the Roman Empire with its many colonies, and of the folk-wandering with its transfers of whole nations. It discusses the conquests of soldiers like Charlemagne, Saladin, Suliman and Napoleon. Yet it is almost impossible to find any trace of the changes which they brought about in the European *population-pattern* of to-day, which is perhaps the most characteristic result of social development. Far more significant are the controls summed up in the word environment. Build, temperature, rainfall and coal dominate Europe to-day, and to them alone is due the significant distribution of the peoples of Europe.

In Fig. 7 is shown the population-pattern, and in the small insets A, B, C, are shown the climatic and structural controls. The sparsest areas in the north (A1, A2, A3) are in the realm of King Frost, who has resisted all invaders (Fig. 7, inset at A). In the southeast (B and E) are regions ruled by King Drought. Of the remaining sparse areas F is also too dry for notable settlement, while G and G2 are young mountains

⁵Most of the topics discussed in this address are elaborated in the writer's book, *Environment and Nation* (just published by the University Presses of Toronto and Chicago).

(inset B). The remainder of Europe has a good climate and is accordingly somewhat densely populated. The densest areas of all (T, X, Y, Z) have their populations determined by the presence of the coal trough (inset C), which in turn results from the environment of 200 million years ago.

These facts are perhaps not unfamiliar to many historians. But if the emphasis of modern history is to be laid upon social history, then I hope that my colleagues in the sister discipline will devote a little more time in their studies to the less spectacular environmental factors. These have in the long run exercised as great a control on European affairs as have the *human* factors which they so adequately discuss.

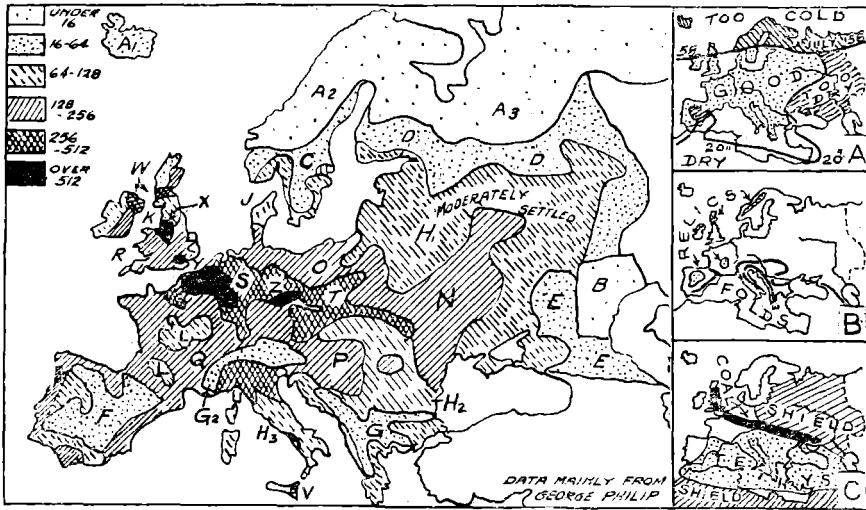


Fig. 7.—The present Population-Pattern of Europe, which is dependent on the Controls shown in the inset maps. A shows Climate controls; B shows Build; C shows the Tethys Sea (of Early Tertiary times), the Coal Trough, and the Russian Shield.