

OLD AND NEW ASPECTS OF THE ARYAN QUESTION.¹

THIS book is a monograph of *Homo Europæus*; that is, of that variety of man which has been designated by writers in different fields by the various names of the dolichocephalic-blond, the Kymric, the Galatic, the Germanic, and the Aryan race. I prefer to designate the race ordinarily by the scientific name given to it by Linnæus. In a work devoted to the scientific study of a form of *Homo* it is desirable to use a zoölogical terminology such as is employed in describing *Felis*, *Corvus*, or *Ammonites*. Such a terminology is a means of impressing upon the reader that man is biologically akin to the animals and subject to the same biological laws. Too often man is regarded, even in serious works, as an exceptional being apart from, or even superior to, law. This is an error which must be rigidly avoided. The arbitrary in human affairs exists only in the imagination of mystics. Anthro-p-sociology, and in general political science as based on the doctrine of evolution, is bound to substitute a concrete knowledge of the laws of human life in place of the metaphysical and mystic conceptions of the sociology of the philosophers.

If I employ also the term Aryan, I do so partly to avoid constant repetition of the longer designation, and partly as a concession to the reading public whose education is usually literary rather than scientific. Ammon, Wilser, Muffang, Fouillée, Closson, Ujfalvy, Ripley, and others have, indeed, employed in publications of a more or less popular character the terminology that I adopted from Linnæus, but it still needs to be explained by the terminology in more general use. I have had, then, to choose between the words: Kymric, Germanic, and Aryan. The first of these, which means literally compatriots, dates only from the Middle Ages, and has been used only in reference to some Gallic tribes. The second has never been generally accepted as

¹ Translated by CARLOS C. CLOSSON.

These pages are from the introductory chapter of the forthcoming work of DE LAPOUGE, *L'Aryen*.

a designation for the entire race in question. I prefer the term Aryan to either of the others, because it has gained considerable currency during the last twenty years, and because it has been given a general significance by the philologists, and so by the reading public.

It is, however, as is shown by the history of the word, far from being a satisfactory term.

In the sacred books of India and Persia the word *Arya* designated the parent stock of the Iranians and the Hindus. From *Arya* the philologists derived the term Aryan to indicate the linguistic group and the special civilization of the peoples of this ethnic branch. Students came to regard all the Indo-European languages as derived from a more primitive Aryan spoken in the region of Bactria, and all the Indo-European peoples as descended from the Aryan stock, which is supposed to have swarmed all over Europe and a part of Asia.

In this conception, which was the prevailing one until recent years, there is much more of error than of truth. The Indo-Iranian group was not the parent stock of the Indo-European peoples, the Indo-European peoples did not come from central Asia, and the elements of which they are composed are of various origin and without any other ties than a certain community of languages and institutions.

Under these conditions it is not exactly a happy idea to choose the name of the Aryan branch as a general designation for the languages and institutions of the Indo-European peoples. It would be equally appropriate if, in the future, when all memory of present history is lost, philologists and ethnographers should designate what we now call the Anglo-Saxons by the term Tasmanians, because of the discovery in Tasmania of some traces of Anglo-Saxon institutions or literature.

Upon this deceptive generalization has been grafted a special doctrine still more confusing. Most scholars and specialists who regard the Aryans as having originated in Europe think that the development of the Aryan language and primitive culture occurred among a dolicho-blond people, or, at least, among a people whose controlling elements were dolicho-blond. Hence

arises a new connotation for the word Aryan; having been already extended from the Iranians of the Veda to cover all the Indo-Europeans, it now becomes, instead of a vague ethnic term, the name of a race in the zoölogical sense.

I share, indeed, this view that the dominant classes among the Aryans of the Veda were dolicho-blond, and perhaps also the mass of the people were dolicho-blond. This last, however, is so uncertain that one must regard the use of the term Aryan as equivalent to dolicho-blond as a case of very possibly confusing the part with the whole. The word Aryan, however, in thus changing its meaning, has become so elastic that it is still preferable for our purposes to such terms as Galatic, Germanic, or Kymric, which refer to definite peoples, each of which was without doubt dolicho-blond, but each of which represented only a small part of that race.

With these explanations as to terms, we may turn to another preliminary matter. In a work devoted to the Aryans it would hardly do to dodge altogether the so-called "Aryan question." The "Aryan controversy" has consumed whole reams of paper and has played a considerable part in the literature of the last half of the century. The interest of this controversy is, however, now for the most part only historical; the only point still debatable is the part played by the dolicho-blond race in the evolution of the proto-Aryan civilization. Reserving my space for the results of my own researches as to *Homo Europæus*, I will here, as elsewhere where adequate monographs already cover the ground, simply refer the reader to the existing literature of the Aryan question, and, in particular, to the works of Penka, Taylor, and Salomon Reinach.¹

¹ REINACH, *L'Origine des Aryens; Histoire d'une controverse*, Paris, 1892.

This work is devoted to the Aryans in the ethnographic, not in the anthropological, sense; that is, to the discussion of the Aryan *peoples*, considered without reference to their physical *type*. It includes a nearly complete bibliography of all the previous linguistic, ethnographic, and historical works bearing upon the subject. The author, who in this book does not decide between the different views, has in a later work accepted the hypothesis of the European origin of the Aryans ("Le mirage oriental," *Anthropologie*, 1893, IV, 539-78, 699-732).

The twofold thesis of the European origin of the Aryans and of the prevalence among them of the dolicho-blond type—this last the Aryan question in the anthropological sense—has been expounded by several writers. It dates back to Bulwer

THE ARYAN CONTROVERSY.

In a work full of brilliant errors, *Lectures on the Science of Language* (1861), Max Müller asserted that there was a time when the ancestors of the Hindus, of the Persians, the Greeks, the Romans, the Slavs, the Celts, and the Germans lived under the same roof. This idea of a patriarchal family of Aryans, the ancestral stock of the various Aryan peoples, the home of their languages and institutions, gained widespread acceptance. In the early sixties it was the prevailing view. It is still to be found in some works of vulgarization, and is still taught in some institutions of learning which have become hospitals for all kinds of infirm and invalidated doctrines.

The conception was very simple, too simple to correspond with the complicated data of history and science. It supposed that, as the tribe of Aryans increased and their language developed, groups detached themselves; and so, one group crowding another, they spread over a vast area the language and institutions that prevailed among them at the period of their separation.

Lytton (*Zanoni*, 1842) and Omalius d'Halloy (*Bul. Ac. de Belgique*, 1848, XV, 549). It implies a different conception of the problem, and reasons thus: The Aryan being dolicho-blond, and the dolicho-blond being of European origin, the origin of the Aryan peoples must be sought in Europe. This thesis, sustained by Latham in the preface of his edition (1851) of the *Germania* of Tacitus, was, therefore, no longer a new doctrine when it was brilliantly developed by Clémence Royer at the Congress of Anthropology of 1872 and the Congress of the Anthropological Sciences at the exposition of 1878. From that time the leading exponent of this view has been Penka, the advocate of the hypothesis of the origin of the dolicho-blonds and of the Aryan civilization in Scandinavia. The principal works of Penka are: *Origines aryacæ*, Vienna, 1883; *Die Herkunft der Arier*, Vienna, 1886; "Die arische Urzeit," *Ausland*, 1890, 741-4, 764-74; "Die Entstehung der arischen Rasse," *Ausland*, 1891, 132-6, 141-5, 170-4, 191-5; "Die alten Völker der östlichen Länder Mitteleuropas," *Globus*, 1892, LXI, n. 4-5; "Die Heimat der Germanen," *Mitt. der Anthr. Gesellschaft in Wien*, 1893, XXIII, Heft 2; "Zur Paläoethnologie Mittel- und Südeuropas," *ibid.*, 1897, XXVII, 19-52.

This hypothesis of Scandinavian origin was earlier propounded by Wilser at the meeting on December 29, 1881, of the Archæological Society of Karlsruhe (*Karlsruher Zeitung*, January 22, 1882). Wilser has published a considerable number of articles upon this question, the most recent being "Stammbaum der arischen Völker," *Naturwissenschaftliche Wochenschrift*, 1898, XIII, 361-4.

Even before Wilser's advocacy of the Scandinavian hypothesis, Latham had modified his earlier theory of the origin of the Aryans in central Europe. Still regarding the latter as the region in which the Aryan *civilization* developed, he came

The Iranians and the people of India were the eldest of the family, the most faithful conservators of the primitive language and institutions. The Celts, the Latins, Greeks, Germans, and Slavs represented swarms or colonies of the original stock pushing farther and farther westward. In this hypothesis Europe was conceived as a region without previous inhabitants, for the idea of the existence of prehistoric man in Europe was still regarded by scholars as a dream and by conservatives as a nightmare.

But it soon transpired that between the great linguistic divisions had existed complex affinities wholly different from what the above theory required; each of them was related in a particular way to several others, and unfortunately these relations existed between the languages of peoples now occupying neighboring regions; that is, they were correlated with the present geographical relations, and not with the order in which the colonies were supposed to have separated from the parent tribe. It was then necessary to assume that the expansion of the Aryans had occurred only after their differentiation into great tribes, Celts, Germans, Slavs, Hindus, etc., and that the respective position of these tribes in the primitive Aryan land was the same as that of the historic peoples of Europe. Thus it came to be thought that the Aryan tribes had developed in his later years—so I am informed by his friend, Dr. Beddoe—to consider the region now largely covered by the North Sea as the cradle of the Aryan race. He thus reached substantially the hypothesis advocated by the present writer.

Among the authors who have regarded central Asia as the original home of the Aryans, because they considered the true Aryans to have been brachycephalic, must be cited Ujfalvy. This author has, however, abandoned this earlier view. He now considers, and rightly so, the brachycephalics as comparatively late arrivals in central Asia. The Tadjiks, so analogous to the brachycephalics of the Alpine region that Topinard regards them as Savoyards retarded in their migration, are in reality a people transplanted into Bactria only a short time before our era, coming from the confines of Armenia. Ujfalvy, in his recent work, *Les Aryens au Nord et au Sud de l'Hindou-Kouch* (Paris, 1896), allies himself with the twofold hypothesis of the European origin of the Aryans and of the prevalence of the dolicho-blond type among them.

Taylor's *Origin of the Aryans* sustains a twofold hypothesis, first, the European origin of the Aryan languages and civilization, and, second, the prevalence among the Aryans of the brachycephalic Finnic type. This work, although full of anthropological errors, is in general the best and most recent guide in regard to the ethnographic and philological aspects of the matter.

in central Europe, and that, as their numbers increased, they had simply spread out over adjacent territory, with the exception of the Phrygians, the Armenians, the Iranians, and the people of India, who had reached their final habitats only after long migrations. In a word, it was more logical to place the original center in the region where so many Aryan nations exist with the geographical relations corresponding to the linguistic relations, rather than in the remote region of Bactria.

Meanwhile many other discoveries were made, especially in archæology, prehistoric anthropology, and philology. It was found that the different human races, in the zoölogical sense, existing in the modern population of Europe were present thousands of years before the time of the Aryans. It was found also that the Lithuanian and other languages of Europe retained forms more primitive than the Sanskrit or the Zend. Recent criticism, exceeding the truth, perhaps, in the opposite direction, restores to a comparatively recent period those works of fictitious antiquity, the sacred books of Persia and India. M. Darmesteter, in his *Le Zendavesta* (Paris, 1893), asserts of this book, reputed the most ancient in the world: "It was entirely compiled after the conquests of Alexander, between the first century before and the fourth century after our era." This is perhaps correct as regards the Zend compilation, but the compilers may have had at their disposition documents of an earlier date in Aramean or cuneiform.

Max Müller's theory has now only one serious advocate—himself. The philologists have worked out, little by little, the following conception: Instead of a patriarchal family, or even a primitive Aryan tribe, there existed a number of nomad tribes, spread out over a great territory, with languages closely related and undergoing a collective linguistic evolution toward the Aryan forms, each dialect influencing its neighbors. In this complex and ramifying mass of dialects, a process of selection eliminated the weaker and gave a broader extension to the stronger. Thus by the suppression of intermediate dialects were formed the great linguistic groups, just as, more recently, the French, Spanish, and Italian languages have been formed

by the extension through historical events of local idioms over large territories and the choking off of various less fortunate dialects which had equally sprung from the common Latin base.

With this theory, a result largely of the old wave doctrine of Smidt and others, is associated a complementary explanation of the increasing simplification of idioms. The destruction of forms is due to the development of a kind of jargon in countries where conquest superposes peoples speaking dialects too diverse for mutual comprehension, and in families where the father and the mother do not speak the same language.

It is by such arguments that the philologists have come to abandon the theory of the origin in Bactria of both the Aryan peoples and the Aryan languages and civilization.

REGION OF ORIGIN.

As I have indicated above, the philologists are today pretty well agreed to regard central Europe as the region in which has occurred the evolution of the Aryan languages and institutions. There exist, indeed, several other opinions, but some of these have been abandoned and the others have not been received with favor. Of these opinions the two most serious are those which place the origin of the Aryan culture respectively in southern Russia and in Scandinavia. The first of these views rests on the fact, generally admitted, that the early Aryans were nomad and pastoral peoples, and this manner of life naturally develops on the steppes rather than in a forested country such as central Europe. This argument, however, neglects climatic changes. It is easy to reply that just as the great Hercynian forest, highly developed at the commencement of our era, covered what were formerly steppes, so the impenetrable forests where the Gauls and Germans struggled in the historic period may very probably not have existed five or six thousand years before our era. The Scandinavian hypothesis errs by confusing two separate problems: the origin of the Aryan *civilization*, and the origin of the dolicho-blond *race* considered as the Aryan *par excellence*. We shall see that this race developed in the Scandinavian region, in the lowlands of the North Sea and the Baltic, but at the epoch

of the Aryan civilization *Homo Europæus* had spread out already into central Europe.

If we trace on a map the known lines of the migrations of the Aryan peoples, the arrows point as if they had all been shot from a bow in central Europe. The migrations toward India and Iran came from the northwest; those of the Armenians and the Phrygians from the west; the Greeks and Latins moved from the north southward, the Gauls and Germans from the northeast toward the southwest, the Scandinavians from the south northward, the Slavs from the southwest toward the northeast. The reservoir from which flowed the migrations of the historic period is then limited on the south by the Alps, the Balkans, and the Black Sea. In this region are to be found all the objects the names of which occur in all of the Aryan languages. The philologists have attached great importance to arguments of this latter sort, and the present limitation of the habitat of the beech tree—the name of which is found in all of these languages—to the region west of a line passing through Königsberg and Odessa convinces them of the occidental origin of the Aryan civilization. As intimated above in another connection, I do not place much weight on considerations of this nature. The botanical and zoölogical areas of distribution vary so much with climatic changes that it is difficult to say where were the extreme limits of distribution of the beech or of the eel seven or eight thousand years ago. I will limit myself, therefore, on this point, to a reference to the works of Penka and his predecessors. Moreover, under our conception that the Aryan civilization developed in no single tribe, but among a number of nomad peoples occupying a large area, and by no means identical or homogeneous in race or culture, it becomes unprofitable to seek for a narrower localization of the origin of that civilization.

PRIMITIVE CIVILIZATION OF THE ARYANS.

The same philological methods make it possible to frame hypotheses of a certain degree of probability in regard to the state of civilization of the Aryan peoples before their differentiation.

There are no names of common origin for the metals or for objects constructed of metal. Hence it may be concluded that the differentiation was already complete before these peoples learned the use of the principal metals. Agriculture was rudimentary, and wheat was unknown. Barley, however, appears to have been cultivated; indeed, the men of the Magdalenian period knew this cereal and have left us graphic representations of it. The principal domestic animals were dogs, sheep, and cattle, these last raised in great herds and constituting the only form of wealth. This manner of life did not allow for the existence of any dense population, but only of semi-sedentary tribes which might under certain circumstances undertake distant migrations. The soil, richer in herbage than that of Tartary, Arabia, or the Cafir country, did not necessitate the continual movements and changes of habitation characteristic of the Mongolian, Arab, and Zulu tribes; but, on the other hand, it did not retain the population, as does land appropriated and improved, when any strong reason impelled them to seek new homes beyond the adjacent regions.

Max Müller and Pictet have given a description of the life of the ancient Aryans, which is sufficiently accurate if one discards the romance of the myths, and if one restricts the subject to the Aryans in the proper sense, those of Ariana and of Media, the ancestors of the Persians, the Medes, and the Hindus. This branch of the Aryan family, having migrated by the way of Thrace or by the Russian steppes, Crimea and the Caucasus, had for a long time dwelt in conditions most suited for a pastoral life. Prehistoric archæology shows us, on the other hand, a greater tendency in central Europe toward agriculture. The primitive Aryan civilization, therefore, was not entirely uniform, but included various stages in the passage from a régime of the chase to that of settled agricultural life.

DOMINANT RACE AMONG THE PRIMITIVE ARYAN PEOPLES.

We take up now a subject of more direct interest, and one which does not appear to have been as yet anywhere satisfactorily treated. It will, therefore, be necessary to enter more into

detail, since there exists no literature to which I can refer the reader.

First it is necessary clearly to understand the question. Formerly, when the Aryan peoples were regarded as descended from a single family, it was permissible to ask what was the anthropological type of that family. This manner of view can no longer be tolerated when it is realized that the Aryan peoples proceeded from the evolution of earlier peoples. The unity of type possible within a single family is no longer found throughout a tribe. Probably no tribe in the world can be found entirely homogeneous, and this appears to be equally true of tribes in the past, as far as we can study them in the light of prehistoric anthropology.

In order to solve the question as formerly framed, "What was the type of the primitive Aryan?", it would be necessary that prehistoric anthropology should show us a homogeneous population in the region and epoch of the formation of the first Aryan civilization. The region was that to the north of the Seine, the Alps, the Balkans, and the western part of the Black Sea; the epoch was that of the middle and end of the period of polished stone. Now, instead of a homogeneous population, there existed a considerable number of human types, among which it is necessary to choose. The question ought, therefore, to be framed thus: *Of the races present among the Aryan peoples, which race was socially predominant, to which ought the civilization to be attributed?*

It is necessary to exclude the races represented only by the servile element, or only by savage tribes existing more or less separately from the Aryan peoples, like the Indians in the United States, or only by strangers, who may have been slaves brought from a distance, or travelers or adventurers. Among every people, in fact, and especially among peoples like the early Aryans or the Indo-Chinese of the present day, it is necessary to distinguish between the element which counts and that which does not count, between that which is influential and that which simply exists within the society without playing any active roll.

This less simple aspect of the problem is more in conformity with the real conditions, but it cannot be said that the problem in this form becomes easy of solution.

Five or six thousand years before our era, at the earliest possible epoch of the beginnings of the Aryan civilization, there existed already in central Europe and the British-Scandinavian region a confused mixture of types. Later in this work we shall study them more in detail; at this point I will simply enumerate them:

1. *Homo Europæus*.—He existed everywhere from the British Isles and the north of France to Moscow and Ladoga Lake.

2. *H. spelæus*.—The so-called race of Cro-Magnon, which appears to have come from the southwest of Europe, and which from this epoch begins to be less common in a pure state, is found in the region with which we are concerned only as an accidental element, but the neolithic burial places furnish subjects who are more or less closely related to this type. It is mentioned here mainly for the sake of completeness.

3. *H. meridionalis*.—The Mediterranean race, represented by subjects sometimes pure, sometimes mixed with the two preceding races, abounds in the Long-Barrows of Great Britain. It appears to have played a smaller rôle in central Europe, but is found in some degree in the various regions.

4. *H. contractus*.—This race, which I first distinguished in the ossuaries of the Cévennes of the copper age, is found as an important element in various parts of France. It appears to have come from the northeast, and by further study its presence would probably be recognized in the neolithic series of central Europe.

5. *Pygmy races*.—The excavations of the Schweizersbild have furnished examples of dolichocephalic pygmies with long narrow faces, who differ from *H. contractus*, and who may be regarded as a distinct race.

6. *H. hyperboreus*.—This, the characteristic race of the Laps, has been found in the dolmens and other neolithic sepulchres in Denmark, Sweden, and the north of Russia. Its presence in Belgium appears to be established by one of the skulls of Sclaigneaux and by other remains.

7. *Race of Borreby*.—Another brachycephalic race, but of tall stature and with a broad high face, has been found in several localities, notably in Denmark and the British Isles. This race appears only at the very end of the neolithic epoch. It is probably the result of a cross between *H. Europæus* and some brachycephalic race of tall stature analogous to *H. Dinaricus*. Some remains in central Europe may be assigned to this last race. These tall brachycephalics have been wrongly associated with certain mixed Mongolian races. There is nothing in common between them except the characteristics resulting from the presence of *Acrogonus* among the common ancestors of these races.

8. *Race of Furfooz*.—This race, also a mixed one, played a rôle of some importance in the western part of central Europe toward the end of the polished-stone period. It has been wrongly associated with the Finns, who appear to be mixed races of recent formation, for the different Finnic types of the present day do not appear in the sepultures before the Middle Ages. No trace of them is found in the neolithic or protohistoric tombs of Russia.

9. *H. Alpinus*.—I cite this form of half-breed of *Acrogonus* mainly for the sake of completeness, for I am not sure that it is allowable to assign it to the various neolithic skulls hitherto regarded as "Celto-Slav."

10. *Acrogonus*.—I cite also for the sake of completeness this type, whose existence is proved by the existence of mixed races which sprang therefrom, and necessarily, too, in various localities, for they inherit a part of their characteristics from the local races of each region from Galacia to Tibet.

I do not deem it necessary to include in this enumeration *H. Asiaticus*, the Chinese type, which, originating in Kashgaria, appears to have moved constantly toward the east, nor the cross between it and *Acrogonus*, the Mongol in the proper sense, so unhappily designated by Bory as *H. Scythicus*.¹

¹No one has maintained seriously the Asiatic origin of the dolichocephalic-brown race, although their affinities with the most ancient populations of the Orient are incontestable. It is the same for the dolichocephalic-blond race; those writers who

Of all these races only one is found everywhere in the neolithic sepultures—the dolichocephalic-blond, *Homo Europæus*. In certain regions this type is found alone, in forms varying somewhat, but often identical with those of the present population of the same locality. In other sections it is represented by individuals of practically pure race, and also by cross-breeds, in which the type is, however, clearly recognizable. In most localities, however, this race is found represented by only a part, perhaps one-half, of the remains in the sepultures. Among the other elements the brachycephalics become more and more numerous toward the end of the polished-stone period, and they are represented by very diverse types, the greater part of which do not correspond to any fixed race existing at the present day.

The remains that are found in the sepultures of the polished-stone period probably do not represent accurately the relative proportion of the different races in the population of the time. A careful study of the sepultures leads to the conclusion that the skulls and other bones belong almost exclusively to the chiefs or to families above the masses of the people, and these

regard it as originating in the south of Russia have not connected it by any genealogical tie with the yellow races. It is different, however, in the case of the brachycephalics who have been for a long time regarded as directly related to *H. Scythicus*, the brachycephalic Tartar of central Asia. This idea is connected at once with the theory of the Asiatic origin of the Aryans, these being regarded by certain writers as brachycephalic, and with the theory of Pruner-Bey, which associated all the primitive inhabitants of Europe, even the dolichocephalics, with the yellow races. This last theory is not wholly incorrect. *H. priscus* was certainly very closely related to the Esquimaux, and the latter have several characteristics in common with the yellow races, especially the color of the skin, to which so much importance was attached in the rudimentary stage of anthropology. The false part of Pruner-Bey's theory is the attempt to establish a tie of blood-relationship between the brachycephalics of Europe and those of Asia.

The Mongolian characteristics occasionally appearing among western people may be adequately explained by occasional crossing with isolated individuals of the Mongolian or the Chinese type who came in connection with the incursions of the Middle Ages or under various circumstances. These characteristics are of extreme tenacity, and may reappear through atavism after an interval of many generations. Often, also, the supposed resemblances are due simply to individual variation, the possible range of which is greater than often supposed.

Our ultra-brachycephalics of the regions of the Cévennes and of the eastern Alps far excel any of the Mongols in the degree of their brachycephaly. This brachycephaly is, moreover, the sole characteristic which they have in common with the

remains belong almost uniformly to *H. Europæus* or to crosses between this race and other races occupying apparently a lower position in the social scale. On the other hand, it is only rarely that these sepulchres contain individuals distinctly typical of races other than the dolichocephalic-blond. The subjects who do not belong to this race appear to be women taken from the inferior classes or from savage races living in juxtaposition to the Aryan civilization, half-breeds resulting from chance unions, and sometimes simply slaves put to death to accompany their masters in the other world. Apart from such cases of joint interment, the representatives, probably more numerous than is often supposed, of the slaves of foreign race, and of savages living on the confines of the relative civilization of the Aryans, do not appear to have practiced modes of burial capable of transmitting their bones to us. I may cite, as a typical example, *H. contractus*, the rigorously pure examples of which are all feminine.

We reach, then, the conclusion that the dominant class among the primitive Aryans was dolicho-blond. Whether that latter, and even in this point the analogy in cephalic index is not accompanied by an analogous form of skull.

Tappeiner, who is the authority on the ultra-brachycephalics of the eastern Alps, has made a special study of this question. The conclusions of his work are categorical (*Der europäische Mensch und die Tiroler*, Meran, 1896): "Ich habe bei der anthropologischen Untersuchung der 3,400 lebenden hochbrachycephalen Tiroler keinen einzigen Mann gefunden, welcher die charakteristischen Merkmale der mongolischen Rasse an sich gehabt hat (p. 42). So wird auch der weitere Schluss nicht bezweifelt werden können, dass alle europäischen brachycephalen Schädel wesentlich verschieden von den mongolischen Schädeln sind, dass also die europäischen Brachycephalen keine Nachkommen der Mongolen sein können, und dass daher eine prähistorische Einwanderung von Mongolen aus Asien ein anthropologischer Irrthum ist" (p. 48; cf. also p. 53).

To this testimony of Tappeiner, based on his study of 3,400 living subjects and 927 skulls, I may add my own, which rests on about equally extensive studies in the Cévennes. I have not found a single subject of the Mongolian type. The reader may be referred for details to my *Matériaux pour l'Anthropologie de l'Aveyron* and *Recherches sur 127 ultra-brachycephales de 95 à 100 et plus*. I may say, further, that I have been unable to find any Mongolian types among ancient skulls of brachycephalic Europeans preserved in the museums.

The question has, moreover, of late taken a new turn. The anthropological researches in Russia, in the Caucasus, in eastern Siberia, and in Turkestan have not yet furnished a single Mongolian skull anterior to the Huns, the Turks, and the Tartars. The arrival of the yellow brachycephalics in central Asia does not appear to

predominance was at once social and numerical, or merely social, matters little. The civilization of a people is the creation of the master class, even if with the language it is shared by the slaves, the serfs, and the foreign element. Our solution of the Aryan question is, then, the identification, in the sense and in the degree indicated above, of the Aryan with *H. Europæus*.

This thesis differs at once from that of Penka, who regards the dolichocephalic-blond as having alone constituted the Aryan peoples, and from that of Mortillet and Topinard, who identify the Aryan race with the brachycephalics, attributing to these, also, the language and culture.

I regard the thesis of Penka as at fault, in that it assumes an absence—certainly very improbable—of social relations between the dolicho-blonds of the proto-Aryan epoch and the brachycephalics living with or near them. Penka and Wilser seek in

have antedated our era. It is to be added that migrations by a route north of the Caspian Sea were not exactly easy until an epoch tolerably near the historic period.

On the other hand, our brachycephalics are, in part, very closely related to those of Asia Minor, of Armenia, and of neighboring regions, as far as north Persia and the Pamir. These last, studied by Ujfalvy, are, moreover, according to their own traditions, colonists brought to Bactria by the Macedonians. These are the Galtchas in whom Topinard saw Savoyards retarded in their migration toward the west!

It is well to take this occasion to finish with another myth connected with the one we have been discussing. It is currently assumed that the yellow race is brachycephalic. This is an error which I have several times exposed, as has also my friend Ujfalvy, but it appears to have a tenacious hold upon life. The true *H. Asiaticus*, of small or medium stature, yellow skin, black hair, black oblique eyes, is dolichocephalic. It is the cross between this race and some form of *Acrogonus* that is brachycephalic. In fact, of the seven hundred millions of the yellow races not one-quarter are brachycephalic. Yellow populations whose index is as high as the average of the brachycephalics of Europe are not numerous, and those with indices above 84 are comparatively rare. They consist of only a few tribes (Manchus, 84; Usbeks, 84; Kirghiz, 85; Kalmuks, 86). Their total number is not over three million. The yellow peoples of Siberia are usually below 80 or only slightly above it. The Ladikis of Pamir measured by Ujfalvy gave an average index of 77 for thirty-six individuals. Risley found an average of 80.7 for 388 mountaineers of Darjeeling. The people of Tibet are more dolichocephalic. Hagen found averages between 80 and 86.9 for numerous series of Malays, but the Malays are in part of another race. For 15,582 Chinese he found an average index of 81.7—lower than those of France, Germany, Austria, Russia, Italy, and the Balkan peninsula.

There are, then, in China, and among the yellow race generally, relatively fewer brachycephalics than in Europe, and there, as here, the brachycephalics represent a foreign or intruding element.

vain to avoid this objection by placing the cradle of the Aryans in southern Sweden. This localization appears to be accurate only for the primitive Germans. The country would have been too small for the various Aryan peoples, who had become differentiated to a degree which presupposes a considerable geographical separation. Moreover, even in Scandinavia some brachycephalics are found in the neolithic sepultures. Lastly, it is certain that even early in the neolithic period *H. Europæus* had already a wide area of dispersion around the North Sea and the southern part of the Baltic.

THE BRACHYCEPHALIC HYPOTHESIS.

The supporters of the brachycephalics' claim to Aryan glory are somewhat numerous. Behind Mortillet and Topinard are ranged Sergi and Ripley; the ethnographic and philological division is led by Taylor; and the more practical part of the campaign appears to have been taken up by M. Drumont and his anti-Semitic guerillas.¹

This hypothesis is, however, even less sustainable than that of Penka. It is one of the forms of that oriental mirage which makes both the people and the civilization of Europe appear to its victims to rise out of the East. The conception of Mortillet and Topinard is that the brachycephalics came from Asia, swinging the hatchet of polished stone, and leading the domestic animals. They are supposed, also, to have introduced wheat and various useful plants and trees. Now, in the Portuguese *Kjökkenmöddings*, in the grottos of the region of Corbières, and in other localities also, the brachycephalic appears anterior to the neolithic epoch. He has not, therefore, brought the tools of polished stone. On the other hand, the asylian deposits of the

¹ By reason of the prominence of the anti-Semitic movement and the unpleasant notoriety which it has given to the term "Aryan," it is desirable to indicate in what sense the word is used by these agitators. The anti-Semites assume the title "Aryan" for our brachycephalic masses. In point of fact, the real representative of the Aryans, the dolichocephalic-blond, has not much more liking for the anti-Semitic campaign than has the Jew himself. M. Drumont has no love for the Anglo-Saxons, and perhaps he is right, for it little matters to the brachycephalic, destined, in any case, to be controlled by some other element, what is the nasal profile of his master.

Pyrenees show us that wheat was cultivated since the fifth interglaciary period, long before the polished-stone epoch. These same deposits furnish us examples of the fruits of the walnut, the plum, the cherry, and of other trees of alleged Asiatic origin, already improved by culture. The domestic animals of the neolithic period appear to be mostly of African origin, especially the cattle. Further, the polished stone hatchet was not an Asiatic importation. It is rare in Asia, where its introduction was relatively late. Its origin is African. Its evolution can be followed in the African paleolithic deposits from the *acheuléen* form to the most perfect form of the neolithic epoch. These various importations were made rather by the Mediterraneans.

Moreover, wherever we find the brachycephalic in the neolithic burial places, he appears only as an accessory or accidental element. It can no longer be doubted that the brachycephalic skulls of the lake-dwellings of Switzerland, for example, belonged to captives taken in war, for, as we shall see when we come to consider the matter more in detail, the sepulchres of the lake-dwellers prove that that population was uniformly dolichocephalic.

Finally, in Asia itself we find no trace, either in Asia Minor or in Bactria, of an ancient brachycephalic Aryan civilization. There was, indeed, a civilization, but it was not Aryan; there were, indeed, brachycephalics, but they were not Aryans.

From all this may be drawn the moral of the unfitness of the term Aryan to describe a race of men in the physical or zoölogical sense. When the discussion is in regard to the Aryan civilization, languages, religions, institutions, etc., the word, although inaccurate in so far as it confuses the part with the whole, is a convenient and necessary term. It is, therefore, permissible, when the point of view is philological or ethnographic, and in these connections it has come to have a fairly uniform significance. As regards physical type, however, the image evoked by the name Aryan differs according to the author that one reads. For Mortillet, Topinard, or Drumont, the Aryan is an averred brachycephalic, resembling the chestnut peddler on our streets or the typical peasant of Piedmont, Auvergne, or Savoy. If the

author is Ammon, Penka, or Wilser, the image is that of the typical globe-trotter from England or the "Uncle Sam" of the Yankees—lank-bodied, dolichocephalic, leptoprosopic, usually blond, adventurous, and aggressive. In my view, both these types were represented among the Aryans, but the dominant classes among them, the builders of the Aryan civilization, were of the type of "Uncle Sam," or, to use the terminology most suitable from the anthropological point of view, were of the race *H. Europæus*.

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