CHAPTER I

INTRODUCTION

§1. Method of anthropometry. §2. Methods of analysis. §3. General description of the geographical conditions. §4. Ethnical movements. §5. Anthropological investigations.

§1. Method of Anthropometry.

The anthropological subjects measured consist of Chinese (396 males), Manchus (81 males and 50 females), Koreans (142 males), Dahurs (49 males), Tungus of Urulga[1] (65 males and 16 females), Tungus of Barguzin and Nerchinsk[2] (85 males and 26 females), Tungus of Amurland[3] (27 males and 34 females) and Tungus amalgamated with the Russians (16 males). Besides these series I have some measurements I cannot use for comparison because of the limited number of individuals.

In the present work my principal attention was devoted to the Chinese series; the other series mentioned above were taken only for comparison, therefore I shall omit the complete analysis of them. The Chinese series is composed of men from Shantung (185), Chihli (114) and Manchuria (96). The Korean series is composed of men from Northern Korea and the Maritime Province of Siberia. The Manchu and Dahur series are composed of men from the Aigun district of Hei-lung-kiang.

The measurements were taken with the instruments made by P. Hermann, Zurich, and consist of the anthropometer and two callipers. The points on the trunk and limbs as also those on the head and face were taken according to the list of measurements elaborated by the International Commission in Geneva in 1912.[4]

With the anthropometer the points were taken as follows: 1. Stature. 2. Height of the ear hole. 3. Height of the supra-sternal notch. 4. Height of the acromion. 5. Height of the upper edge of the head of the radius. 6. Height of the tip of the styloid process of the radius. 7. Height of the tip of the middle finger. 8. Height of the upper edge of the great trochanter. 9. Height of the knee-joint. 10. Height sitting.

With the callipers the points were taken as follows: 11. Maximum length of the head. 12. Maximum breadth of the head. 13. Minimum frontal breadth (diameter). 14. Physiognomical length of the face. 15. Anatomical length of the face. 16. Interzygomatic breadth. 17. Gonial breadth. 18. Internal interocular breadth. 19. External interocular breadth. 20. Height of the nose. 21. Breadth of the nose. 22. Greatest length of the ear. 23. Greatest breadth of the ear.

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1. Nomad Tungus who live near Chita, Transbaikalia.
2. Reindeer Tungus, who live within the Northern Transbaikalia.
3. Namely Tungus who live on the banks of the Amur River near Aigun of Hei-lung-kiang.
4. Revue Anthropologique, No. 7-8. Juillet-Août, 1913. p. 281 ff. This list is generally used in Russia. The list elaborated by the Commission in England does not differ from this except in the measurement of the physiognomical length of the face.

The stature was taken two times: the first time the individual measured was standing with his back to the instrument to take the stature as such; the second time he was standing at $\frac{3}{4}$ profile to the instrument to take the stature and immediately height of the ear hole (from the ground). It was thus possible to work out the height of the head by the subtraction of the height of the ear hole from the stature. Unfortunately the point of the lower end of the tibia was not taken because the anthropometer was always fixed on a plank so that it would have been necessary to change the position of the individual one time more. That was very inconvenient during the field work.[1]

The length of the upperarm was worked out by the subtraction of the height (from the ground) of the upper edge of the head of the radius from the height of the acromion. Other absolute measurements were worked out as above described (See the Roman numeration of the table below). The relative measurements were worked out by the division of a certain absolute measurement by the absolute measurement taken for comparison, and multiplied by 100 for example:

$$\text{Relative length of the arm} = \frac{\text{absol. length of the arm}}{\text{stature}} . 100.$$

The characteristics was worked out as follows:

Measurements taken with the anthropometer.

Absolute measurements.

I. Stature (1) (Arabic see above).
II. Height of the head, (1—2).
III. Length ,, ,, upper arm, (4—5)
IV. ,, ,, ,, forearm, (5—6).
V. ,, ,, ,, hand, (6—7).
VI. ,, ,, ,, arm (4—7).
VII. ,, ,, ,, leg, (8).
VIII. ,, ,, ,, thigh, (8—9).
IX. Height ,, ,, knee-joint, (9).
X. Length ,, ,, trunk, [10—(1—3)].

Relative measurements.

XI. Height of the head $= \frac{\text{I-II}}{\text{I}} .100.$

XII. Length ,, ,, arm $= \frac{\text{VI}}{\text{I}} .100.$

XIII. ,, ,, ,, upperarm $= \frac{\text{III}}{\text{VI}} .100.$

XIV. ,, ,, ,, forearm $= \frac{\text{IV}}{\text{VI}} .100.$

1. This measurement is not of great interest because of the insignificant variations of it among different ethnical units,—ethnoses. I use the term *ethnos* for the unit of ethnological investigation, i.e., tribes, nations, peoples and so on. The motives which led me to introduce this term have been presented in my work "Ethnos.—The General Principles of the Ethnical and Ethnographical Variations." (In Russian, Shanghai, 1923).

XV. Length of the hand $= \frac{V}{VI} 100.$

XVI. ,, ,, ,, leg $= \frac{VII}{I} .100.$

XVII. ,, ,, ,, trunk $= \frac{X}{I} .100.$

The measurements taken with the callipers :

Absolute measurements.

XVIII. Maximum length of the head, (11).

XIX. Maximum breadth of the head, (12).

XX. Minimum frontal breadth, (13)

XXI. Physiognomical length of the face, (14).

XXII. Anatomical length of the face, (15).

XXIII. Height of the forehead, (14—15)

XXIV. Intezygomatic breadth, (16).

XXV. Gonial breadth, (17).

XXVI. Internal interocular breadth, (18).

XXVII. External interocular breadth, (19).

XXVIII. Ocular length $= \frac{14—15.}{2}$

XXIX. Nasal length, (20).

XXX. Nasal breadth, (21).

XXXI. Length of the ear, (22).

XXXII. Breadth of the ear, (23).

Relative measurements (indices).

XXXIII. Cephalic index $= \frac{XIX}{XVIII} .100.$

XXXIV. Height of the head to the length of the head $= \frac{II}{XVIII} .100.$

XXXV. Height of the head to the breadth of the head $= \frac{II}{XIX} .100.$

XXXVI. Physiognomical facial index $= \frac{XXIV}{XXI} .100.$

XXXVII. Anatomical facial index $= \frac{XXII}{XXIV} .100.$

XXXVIII. Gonial index $= \frac{XXV}{XXIV} .100.$

XXXIX. Nasal index $= \frac{XXX}{XXIX} .100.$

XL. Auricular index $= \frac{XXXII}{XXXI} .100.$

XLI. Frontal index $= \frac{XXIII}{XX} .100.$

The facial index (XXXVII) is taken sometimes by anthropologists as $\frac{\text{length of the face}}{\text{interzygomatic breadth}} .100$, because the indices are always >100. It will be more illustrative and easier during the calculation to take this index, as I did above.

Of course, besides these measurements it is possible to take and work out some others, but as regards anthropological characteristics, the measurements taken by me will be sufficient for my purpose, namely to discover the anthropological typest hat composet he present Chinese. This list of measurements taken on living persons and the characteristics later worked out constitute my anthropological investigations of the Asiatic ethnoses.

§2. Methods of Analysis.

The arithmetical means, M and MM in my abbreviations, in all the cases have been tabulated and these data have been later elaborated by the method of interserial differences according to Dr. Molisson[1] and Prof. Y. W. Czekanowsky[2] combined by me[3] in a method which provides the means of the differences between MM of the series and simplifies the calculation of the coefficient of interserial differences. Since this method disclosed the fact that the Chinese are not homogeneous, I calculated the coefficients of correlation for the different measurements which had shown the significant differences of MM between the Chinese and those of the other series.

Besides this I have worked out for some measurements the following calculations, (1) standard deviation, (2) coefficient of variation and (3) probable errors of MM.

The method of correlation has helped me to discover the influence of the different anthropological types on the formation of the present Northern Chinese and to elucidate the results of the application of the method of interserial differences.

Though the number of observations, which for brevity I shall indicate as N, in my series is not quite sufficient for any final conclusion as to the components of the present Chinese, nevertheless, I have analysed all my materials with a view to finding new clues for further investigations; and I have attempted to apply new methods to this analysis of the Chinese series. The question of the necessary value of N which might warrant all the calculations is not yet resolved and this study, it may be, will offer new data relative to this problem. At the same time this study would close the hiatus of our knowledge on the anthropology of Northern China.

§3. General Description of the Geographical Conditions.

The part of Asia in which I have secured my anthropological series lies approximately between 35° and 55° of North Latitude and extends from Lake Baikal to the Pacific. It represents four different sets of geographical conditions, which I need to describe first as briefly as possible.

In this part of Asia we must distinguish the Northern region, which includes the part of Transbaikalia north of the Siberian Railroad Line, the northern part of Hulun-Buir

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1. Korrespondenz-Blatt der Deutsch. Gesel. fuer Anthrop. Ethn. und Uhrgeschichte. No. 6/7. 1909, and No. 9/12, 1910.

2. Y. W. Czekanowsky "Zarys metod statisticznych wzastowaniu do antropologii," (In Polish). Warszawa, 1913.

3. The formula and explanation of this method were published in my work "The Problems of Anthropology in Siberia." (In Russian). Petrograd. 1915.

(Mongolia) and of the Tsitsihar district (Hei-lung-kiang), the land lying on the north and east of the Amur River, i,e., the Amur and partly Maritime Governments of Siberia, and northern districts of the Hei-lun-kiang and Kirin Provinces.

This spacious region is watered by the Amur River and some tributaries of the Lena River and is crossed by four systems of mountain chains running in a general direction from SW to NE.

The part lying within the limits of Hulun-Buir and North-Western Manchuria is a plateau, which I shall call the Manchurian Plateau. It is over 2500 feet above sea level and from it radiate in all directions the mountain chains,—Great and Little Khingan, Ilhuri-Alin, Albazin and Panga Mountains and so on.

Across the eastern part of this Plateau passes the Nonni River and the Sungari River forms the eastern limit of this highland. The northern part of this Plateau is crossed by the Amur River, which breaks through the mountain chains and forms a fertile valley 300-800 feet above sea level. This valley was densely populated during the stone Age.

The part of this region lying in the Transbaikal Government also forms a high plateau—the Plateau of the Vitim River (an affluent of the Lena River) — over 3000 feet above sea level, is subdivided by three water systems,—the Yenesi River basin, the Lena Rever basin and the Amur River basin,—and is bounded on the west by Lake Baikal and on the east by the valley of the Shilka River.[1]

The part of this region that lies within the limits of the Amur Government is traversed by the ranges of Yablonov Mountains and is crossed by affluents of the Amur River.

In all above mentioned subdivisions of this region except the valley of the Amur River the conditions of the meteorology, zoology and phytology are about the same. The summer is very short and cold,—the period of vegetation is from about June 1 to August 1; the winter is excessively cold and long. Therefore the ground during whole year is frozen and does not thaw even in the summer time. According to the geologists this region is now under conditions characteristic of a "dry glacial period." The mountains are covered with excellent forests of green trees and lichens, the best food for the domesticated reindeer. The narrow valleys are so marshy, that some places in this region in summer time are absolutely inaccessible to investigators. The

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1. The Shilka River is the same river as the Amur River. The variations of the names are due to local tribal differences in geographical names. For example, the source of the Amur River within the limits of the Mongolian (Buriat) language is known as the Ingoda River, but within the limits of the Tungus tribes it is called the Shilka River or properly Shilkir. The name Amur arises from "Kara Mur" (the Black River) of the Dahurs who live on the middle course of this river. When the Russians came from Yakutsk (XVII century) into this part of the Amur River valley, they called it by a mutilated name, which was adapted to their own language from the Dahurian. The Manchu name—Sahalan Ula—and the Chinese name—Hei-lung-kiang—are translations of the Dahurian name—the Black River. The lower course of the Amur River among the Manchus is known as Sungari Ula, because they were living on the banks of the Sungari River before they came to know the middle and upper courses of the Amur River.

conditions are very favourable for wild animals; the region abounds in sable, squirrals, lynx, bears (three species), deer, wild goats, elks, reindeer and many other animals useful for the local hunting tribes. In Manchuria, especially east of the Nonni River, are some tigers and leopards.[1]

The region is populated by Tungus tribes speaking five different dialects and known under the names of Tungus, Orochons, Maneghirs, Birars and so on.[3]

The population in the forests can be estimated at 4000 to 5000 souls only. The common occupation of the Tungus is hunting and partly fishing. Reindee rare used as means of transportation and as a food reserve in time of famine. The Tungus of the Amur River banks, Manchuria and Mongolia have lost the reindeer and are now using horses. They are all organized in paterline clans, have no houses nor permanent residences and are a wandering people.

In this region the Russians, Chinese, Mongols and Manchus have spread along the big river valleys and present all possible types of economic and cultural life. Goldmining, hunting, more seldom agriculture and breeding of domestic animals are the pursuits of the new population of this region. The people in comparison with the population of other regions are very poor and do not number more than some hundreds of thousands.

The Mongols were the first to come into this region some hundreds years ago. After them, in XVII century, came the Russians and Manchus. The Chinese were the latest immigrants, coming in the second half of the last century.

The second region of this part of Asia lies south of the region already described and includes the eastern end of the great steppes of Central Asia. It forms an angle, the top of which is near the confluence of the Nonni and Sungari Rivers in Manchuria. It is crossed by the branches of the Manchurian and Vitim Plateaus and is watered by the systems of the Yeni ei and Amur Rivers. The western part of this region lies on the Mongolian Plateau,—over 2000 feet above sea level. It can be characterized as cold, very dry and almost treeless country. It is very rich in pasturage for cattle, horses and camels.

The population of this part consists of Mongols in the south and some Mongolized Tungus in the north,—the Tungus of Urulga, of the Aksha district (in Transbaikalia) and the Tungus on the frontier of Mongolia and Siberia in general. Near Manchuria the Dahurs and Solons (a Tungus group) occupy the eastern borders of this Plateau. The Russians

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1. Some years ago in Transbaikalia, near Lake Baunt, the Tungus killed a tiger.

2. I omit the Russians, more or less numerous in the valleys of the Ingoda Rever, Shilka River, Amur River, Zeya River and so on, also the peculiar mixed Russian and Chinese population of the gold mines.

3. All these groups recognize their relationship and call themselves "evenki." The above mentioned names were uncritically adopted by writers in their ethnographical and geographical descriptions of this region. The name *Tungus* is a Yakut name for these ethnical groups; the name *Orochon*—from Manchu name *oroncun*, which means: "using the reindeer—" was probably adapted by the Evenki themselves; *Maneghir* is the name of an Evenki clan—*managir; birar* can be translated from the Evenki "living on the banks of the river" (the Amur River) and is borrowed probably from the Manchu—officials. It is of the same origin as *lamut*,—"living on the coast of the sea." The mutilated names: kilin, chilin, kile, byraly, orochi, oroki have arisen from the linguistic mistakes of the Russsian, Manchus, Chinese, and other neighbouring peoples.

took the best places for agriculture, but do not despise other trades,—hunting, breeding of cattle and so on. The Chinese colonization is just in its beginning so they are not yet numerous in this section. Their principal occupations are commerce, hunting and some agriculture.

The eastern part of this region lies east of the Great Khingan Mountains. It is lower and better for agriculture than the western section. It is populated by Manchus and later Chinese, who little by little squeeze out the original Manchu population. The Chinese colonization based on the occupation of the land for agriculture is very successful. The Russians colonies are only along the railway and have no permanent roots in this country.

The third region is formed of the Manchurian Provinces of Shengking (Mukden) and partly Kirin, also the provinces of Chihli and Shantung in China Proper. In this region I shall distinguish three principal subdivisions, viz., northern part, Chihli and Shantung.

The first subdivision is connected with the first region, the southern limit of which can be fixed not far from the Chinese Eastern Railway line. The southern limit of this subdivision is the coast of Gulf of Pechihli, the eastern limit—the Yalu River, or more exactly the forest region of the Kirin Province, and the western limit—the eastern limit of the Mongolian Plateau. This part of the region is noted for its very fertile soil; it has been populated since ancient times by agriculturists. The moderately developed forests, the system of big rivers, like the Sungari River, Nonni River and Yalu River, and the relatively mild climate form quite favourable conditions for cultural development.

The second subdivision of this region, the Province of Chihli, though very near to the cold Mongolian Plateau, presents the best conditions for agriculture in this third region, in some ways even better than Southern Manchuria.

The third subdivision of this region, the Province of Shantung, a mountainous peninsula with a salubrious climate, quite fertile soil and rich in mineral sources, presents the best imaginable state for the development of all kinds of economic and cultural activities. Its position near the sea facilitates social contacts and results in a population unusually active.

The population of this region is now almost exclusively Chinese. The northern part of it some centuries ago was occupied by Manchus, but the aggressive northward movement of Chinese created the mixed population of Manchus and Chinese. The provinces of Shantung and Chihli are real Chinese territory, but there are, as everywhere in China, Manchu colonies.

The fourth region of this part of Asia is the Korean Peninsula, isolated, mountainous and in some places good for agriculture and mining. Its moderate climate and long sea coast facilitate the development of its population. The climate and topography are always good for plantations of rice, the principal cereal of the Koreans. The isolated position of Korea presents some advantage to her population, who have occupied the country almost exclusively during the last two thousand years. The population of this region consists up to the present time mainly of Koreans. The Japanese colonization is very incomplete.

§4. Ethnical Movements.

The movement of fhe Chinese from west to east and their expansion from Central China to the north-east and south is the history of this part of Asia. On the other hand the opposition of the northern ethnical groups, the dispersion of these aborigenes and their respective decline represent the history of these groups.

According to the archeological and ethnographical evidences it might be supposed that this part of Asia some four or five thousand years ago was populated by Tungus, Turko-Mongols and Palaeoasiatic groups. The southern part of the second region and whole of the third region were occupied by the Tungus and Turko-Mongols, the ethnical differentiation of which must be referred to prehistoric times. The Tungus groups were probably living to the east and south-east of the Turko-Mongols. All the rest of this part was populated by Palaeoasiatic groups and in addition the whole of the Amur River basin was Palaeoasiatic area. The archeological evidences resulting from my excavations in 1916 and the archeological evidences from the Ussuri River basin, Sakhalien Island, Kamchatka and the lower course of the Amur River, supply materials, which show that the cultural state of the population of these regions was similar. The people lived in underground houses, like some palaeoasiatic groups of the present time, they used the bow and arrows with heads of stone or bone, they practised at one time the ceramic arts and had domesticated animals,—the dog, the pig and, may be, the reindeer. The principal occupations of this population were fishing, hunting and also the searching for nutritive roots. They did not know iron and brass.[1]

The Tungus and Turko-Mongols of the Yellow River basin and Mongolia were in a stoneage culture, but the lack of archeological evidence does not allow me to describe the details of their culture. Meanwhile some ethnographical evidence leads me to suppose, that some ethnical groups used ceramic utensils and knew agriculture.

The original Chinese area at that time was confined to a territory west of these ethnical groups ; the question of the original Chinese site, I leave open. For my present study it is not important to be precise as to whether they came from the far western region or were in this territory since the Old Stone Age.

The advances of the Chinese on the east along the yellow River, and from this valley, to the north-east and south, and the pushing back of the Tungus from their original territory eastward and northward were the first important changes preceding the final fixation of the ethnical elements. It can be supposed that the vanguard of the Tungus came through Manchuria to the banks of the Amur River in the second millenium B. C. or, may be, sooner and there pushed out the Palaeoasiatic ethnical groups. They adopted from the Northern Palaeoasiatics the reindeer, the sledge, some utensils and so on, and migrated northward and westward, into Siberia, then almost free from population. In this cold northern country they forgot the ceramic arts but conserved their open coat which is clearly of southern origin, the bow and arrow of the southern type

1. I think that brass may have been known in the southern part of this area beerof the Chinese entered.

and so on, Their activity led them into the open area of the present Siberia and they pushed the Plaeoasiatics to tne borders of their former area. The Tungus folk-lore offers some evidence regarding these migrations from the south-east to the western region of their present territory. At the present time this territory lies from the Yenisei River up to the Pacific coast and from the Arctic Ocean down to Mongolia and Southern Manchuria,

The second group of Tungus stopped on the southern affluents of the Amur River. They adapted to their culture some palaeoasiatic elements and used underground houses at the time when the Chinese chronicles of the Han Dynasty were written. The breeding of the pig, hunting and fishing, and the culture of "five kinds of cereals" became their principal occupations. These Tungus, the ancestors of the Manchus, formed an independent state in the valley of the Sungari River and pushed out some Palaeoasiatics, who organized their own small state within the limits of the present Maritime Government and Northern Korea. Little by little these later Tungus spread their influence over the isolated Tungus and Palaeoasiatic groups and founded a power within the limits of Manchuria, the Ussuri River basin, and, perhaps, Korea Doubtless the Manchus fell under the influence of their neighbours,—the Mongols, Palaeoasiatics and the later Chinese immigrants. As regards the language, the Manchu, or southern branch of the Tungus linguistic family, in comparison with the proper Tungus, is much less developed from the point of view of grammar and is under the influence of other non-Tungus tongues.

The second important ethnical movement is connected with the success and failure of Turkic and Mongol ethnical groups. The first struggle between the Turko-Mongols and Chinese resulted in the failure of the Turks and this was the immediate cause of the Turkic-Mongol movement northward and westward, who then pushed out some Turkic and Tungus tribes. Those went northward and occupied the valley of the middle course of the Lena River. During this migration they lost the horse and, may be, cattle also but conserved the sheep. Then, in the centre of the Tungus area there is now living a tribe of southern nomadic origin speaking the Turkic dialect or to say better a dialect especially influenced by Turkic tongue—the Yakuts—who differ absolutely from surrounding peoples. The Manchus opposed the Mongol movement from which arose a series of wars. Since a lasting Mongol control of Manchuria was not secured by colonization, the Mongols have been losing their influence over the Manchus. In fact, the history of Manchuria consists in the alternate successes and failures of the struggles among the Mongols, Manchus, other Tungus groups and Palaeoasiatics.

Meanwhile the Chinese civilization, in the growth and spread of its influence over native tribes, created a strong power, which also took part in the racial and ethnical struggle. The control of Korea and Manchuria was the inevitable national objective of the Chinese policy. Many times they took the power but could not keep it and finally lost the control of their own country. Successively the Tungus and Mongol powers controlled China. Now, however, some of these tribes live peacefully together in Manchuria and Mongolia. For example, the Dahurs, who were probably tne founders of the Liao Dynasty (in Manchuria, Mongolia and Northern China), are living now in small villages among the Chinese and Manchus in Manchuria and among the Mongols in Hulun-Buir.

In the XVII century there appeared a now ethnical factor in this part of Asia. The Russian invasion into the northern region caused great disturbance among the Dahurs who lived in the Aighun district after their political downfall in the XII century; and the Manchu Government was compelled to send military forces to the Amur River. This was not a purely military expedition, but an organized movement to colonize the region with the Manchus who were then organized on a military basis. Such was the accidental origin of the Manchu agricultural colony on the banks of the Amur River. The Russian invasion was not stopped but progressed slowly from Transbaikal into Amurland and Manchuria. In the XVIII century it spread over Transbaikalia, in the XIXth over Amurland and Ussuriland; and in the XXth century it spread over Manchuria and Mongolia. The Manchu Dynasty paid no heed to this migration and finally lost its influence over Northern China. Then because it has no roots in Southern China, it lost its power once insignificant European pressure was exerted.

In spite of this periodical failure of the Chinese to control Manchuria and Mongolia they spread their influence and became the masters of the ethnical situation among the populations of the northern region. By the end of the XIX century their colonies were so large that the Chinese did not need to marry the natives for lack of Chinese women. Meanwhile the Chinese of Manchuria have become so amalgamated with Manchus and other ethnical groups that now it is almost impossible to distinguish the Chinese elements In the Aighun district they were even incorporated in the Manchu military organization with all the special rights conferred thereupon. Thus the Manchus came to represent a very limited portion of the local population and little by little became only a small oasis among the Chinese immigrants.

At the present time the ethnographical distribution can be represented as follows:

The first region is occupied by the Tungus groups of the first Tungus migration except a limited area in the middle course of the Amur River, which is occupied by the Dahurs of uncertain origin but speaking now the Mongolian dialect, the Manchus and some Chinese. The country at the mouth of the Amur River is populated by the Palaeoasiatics —Gilyaks.

The second region is occupied by the Mongols and Mongolized Tungus in the western part and by the Mongolized Tungus and Manchus, also partly the Dahurs in the eastern part.

The third region is occupied by the Manchus and other Tungus groups of southern branch and the Chinese in the northern part and by Chinese in the southern part.

The fourth regioni s occupied exclusively by the Koreans, the probable descendants of palæoasiatic tribes, influenced by Tungus and Chinese.

Finally, the Russians movement in Manchuria met the Chinese migration and almost stopped it at the southern limit of the first region. Thus at the present time the influence of Chinese and Russian migrations is spreading over the insignificant native population, excepting the Koreans who are under the Japanese political and anthropological influence. The Russian migration is culturally effective because of its military forces and new technical

knowledge while the Chinese migration is effective because of its adaptability to the local conditions and its quantity.

The general movement of peoples may be thus summarized: First, the movement of the Chinese east, and northward provoked the first Tungus migration and the removal of the Palæoasiatics into Korea and the coasts of Asia. Second, the movement of the Chinese northward provoked the first migration of the Mongols westward, northward and eastward, causing the movement of the Huns into Europe, the migration of a Turkic group northward and a second migration of the Tungus (Manchus). Third, The slow spread of the Chinese was stopped by the later Russians but the sinification of the Manchus is almost accomplished by this time.

§5. Anthropological Investigations (on Living Subjects).

The anthropological investigations of the northern Chinese and other ethnical groups of Manchuria and Korea published up to the present time are so insignificant that they may be neglected. There are some materials on the Mongols (Buriats) and Mongolized Tungus of Transbaikal by Dr. Talko-Hryncewicz and some materials on the Tungus and Palaeoasiatics of Siberia by Mr. J. J. Mainoff and Dr. Yohelson-Brodsky.[1] Besides these materials, the major part of the anthropological investigations of Koreans[2] Gilyaks[3] Goldis[4] and Tungus of eastern part of my first region, as indicated above remain up to the present time unpublished. Some of them are known to me; some of them were elaborated under my direction. The Manchus, the Dahurs, the Tungus of Urulga and Barguzin and the Tungus of the Middle course of the Amur River had never been investigated previous to my expeditions.

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1. For the complete report of the investigations published and unpublished, vide §2, Note 3.

2. In 1915-17, Mr. Konrad of Petrograd University, collaborated with me in his anthropological studies and measured about 200 or more Koreans.

3. The measurements of Mr. L. J. Sternberg, Ethnographer of the Russian Academy of Sciences, and these of Mr. Vasilieff, of the Russian Museum in Petrograd.

4. The Gollis and other Tungus were measured by Mr. Sternberg, Mr. Vasilieff and in 1914 by Mr. Poniatowsky of the University of Krakow. Also Miss Afanasieff, who is Tungus herself, measured some tens of Tungus, but this material and ethnographical collections were burned by the bolsheviks in Nikolaevsk on the Amur River. Besides the above mentioned materials some measurements were made by Mr. Lopatin of Far-Eastern University and Colonel Arsenieff.