Ethnic changes which take place over a period time are studied by various branches of science. One important branch is anthropology (gr. anthropos – man; logos – teaching). Its task is to study physical and mental changes in human beings. Mankind is not uniform: men and women differ one from another by their outward appearance. Each nation, like each person, has its own peculiar features. As people and families have not lived separate one from another but have always formed close ties, no people is absolutely uniform. We can still see the individuality of each people, some peculiarities, however faint.

Because of their intermingling with others, Latvians have lost many of the peculiarities which were characteristics of their ancestors. In the early 20th century, little attention was paid to Latvian anthropology, as there were no scientists sufficiently interested in taking up such studies. The development of anthropological studies in Latvia is connected with the name of the Swedish professor Gaston Backman, who headed the Institute of Anatomy and Histology at the University of Latvia, and his assistant, Prof. Jēkabs Prīmanis.

The first descriptions of the outward appearance of Latvians date back to the 17th century. In 1677 R.Lentilius characterized the Latvians thus: "Outwardly they look strong and muscular, but their hearts are cold." In 1796, Garlieb Merkel wrote that "the Latvians are tall, muscular and stout with ruddy complexions, lanky, brown, shoulder-length hair and beards." J.v.Recke at the beginning of the 19th century, W.Hillner in 1846, and F.Wiedemann in 1852 characterized the outward appearance of the Livs as follows: "Of medium height, fair-haired with grayish blue eyes and elongated shapes of the skull." In 1857 A.v.Richter wrote that "the Latvians resemble Lithuanians, ancient Prussians and the Estonian-Mongol type. They are shortish with flaxen hair." In other words, we see that each author characterized the Latvians differently. This is understandable, given that the evaluation was of a subjective nature.
Several scientists (J. Baehr in 1850 and R. Virchow in 1877) described the stature of Latvians based on skeletons found in archaeological excavations. Virchow came to Latvia at the invitation of Count C. v. Sievers and studied Stone Age settlements near the Burtnieki and Āraiši lakes. In his article Virchow described the Latvians as having elongated skulls (the Livs and Estonians having broader skulls). Virchow wrote that the bodies of Latvians were well-built, though not very tall. In 1879 O. Waeber came to the conclusion that Latvians were of medium height and proportionately built. In 1895, in his work "Über einige Schädel aus älteren Liven-, Letten- und Estengräbern", R. Weinberg presents a characterization of Latvian skulls as compared to those of Estonians and Livs. (The characterizations of the cited authors correspond to a reproduction of a Latvian woman made by M. Gerasimov based on findings in the Āraiši burial ground.)

Mention should be made of authors who have described the outward appearance of Latvians, such as F. Waldhauer (1879) and Landau (1908). One should, however, note that these studies were scanty and could not produce a full anthropological description of the Latvian type. Scientifically grounded anthropological studies in Latvia were only begun in 1920, and they were the result of work by the Swedish professor Backman and his colleagues – L. Jēruma-Krastiņa, J. Primanis, N. Jērums, J. Vilde, et al. Their scientific studies aimed at determining the Latvian anthropological type are invaluable.

The first anthropological expeditions in Latvia went to Jaunpiebalga and Pāle in 1920. They were organized by Backman. He also took anthropological measurements from 11,415 Latvian soldiers who came from a variety of areas in Latvia, thus representing the entire people.

The question may arise as to why Backman started his anthropological studies in the first place. In the 19th and 20th century, scientists throughout the world began determining anthropological types in order to study the characteristics peculiar to each people. Numerous scientific anthropological expeditions were conducted in Germany, Scandinavia, Italy, England, Finland and America. As a competent Swedish anthropologist, Backman took part in many anthropological and archaeological expeditions, and not only in Sweden. In Latvia he also was able to create interest in anthropological studies among research workers at the University of Latvia's Institute of Anatomy and Histology. When in 1925 Backman returned to Sweden, his work was continued under the guidance of Prof. Primanis. Backman published works on the color of the eyes and hair of Latvians, as well as their height. These were published in collections of scientific papers assembled at Upsala and the University of Latvia. Primanis always demonstrated deep reverence toward the determination of the Latvian anthropological type. The view that all peoples were more or less
intermingled led to attempts to learn the reasons for this having happened. History records several causes which led to the intermingling of various peoples. Primaniš thought that trade contacts were the primary reason. As early as the 5th century, the Baltic territories were traversed by the so-called Eastern Route along which Scandinavians traded with the Byzantians. This fact is reflected in Scandinavian sagas.

The intermingling of peoples in Latvia was further facilitated by numerous wars. The 12th and 13th centuries, for example, brought a German invasion of the area. Later, fierce battles raged in the Zemgale region. In 1281 the Zemgalia King Nameisis fled to Lithuania with his warriors after their defeat. A peace treaty concluded in 1561 in Vilnius provided that Kurzeme be given to G. Kettler, while the lands on the right bank of the Daugava be granted to Poland. In the 15th century, the crusaders brought "Vots", or "Krievins", from Pskov, and in the 19th century Russians brought Turkish prisoners of war into Latvia. In the 17th century Sweden and Poland fought on Latvian soil, with the Swedes capturing Riga and Vidzeme. The Great Northern War raged in the 18th century, and in 1812 Napoleon's armies traversed Latvia. And the intermingling of nations was facilitated further still when the Russian and German armies traversed Latvia during World War I.

On November 18, 1918, an independent Latvian state was established. Its territory approximately covered the area which since ancient times had been inhabited by Latvians: the regions of Kurzeme, Zemgale, Sēlija, Vidzeme and
Latgale. A third cause was the numerous deaths caused by epidemics of disease, such as an outbreak of the bubonic plague in 1709—1710.

Primanis concluded that all these facts influenced the intermingling of the Latvians with other peoples. In his research, Primanis also approached the question of the Livs. In 1920, during archaeological excavations in Pāle, he obtained 33 skulls, as well as many other bones dating back to the 16th and 18th centuries. According to stories told by local residents, the excavation site was on an ancient Livian burial place. Primanis took anthropological measurements of the skulls and published the data in a work called "The Skulls of Pāle" (1924). This work brought Primanis worldwide recognition as a competent Latvian anthropologist. Primanis concluded in his work that the Livs had assimilated with the Latvians. On the other hand, he also found Latvians as possessing some of the characteristics common to the Livs.

Of paramount value is Primanis' work, "The structure of the Latvian body in Latvian folk songs". He wrote it in 1928 at the request of Prof. J. Endzelins. The work was published in the fourth volume of "Latvian Folk Songs" and in March 1929 received the Kr. Barons prize. The poet Kārlis Skalbe, too, valued Primanis' work highly. In the introduction to his work, Primanis states that folk songs vividly reflect the Latvian soul. He also notes that the ancestors of Papers Latvians described the outward appearance of people in their songs. At the same time, Primanis expresses the thought that folk songs reflect emotion, which means that many facts were idealized. Passing from one generation to another, folk songs changed, new songs were created. Primanis comes to the
conclusion that Latvians were influenced by intermingling with other peoples. Thus, the author sadly states that the anthropological type of the ancient Zemgalian, Sel, Latgalian, Couronian and Liv tribes cannot be determined. Taking into consideration the folk songs, Primanis does, however, point out the outward appearance of Latvians in various regions. The build of Latvians was, for example, described as proportionate: strong and tall, as oaks or other trees:

Brāļi mani kā ozoli,
Māsas manas kā liepiņas,
Es jau pate brāļu māsa
Kā rozīte dārziņā. (B.V.5391*)

This folk song describes the singer's brothers as being like "oak trees" and her sisters as "lindens". The singer describes herself as a rose in the field.

J. Primanis notes that G. Backman devided Latvia in to 3 regions according to the height of the population: the region around the Bay of Riga having residents with an average height of approximately 171.5 cm., the Liepāja region having residents with an average height of 174.75 cm., and the Eastern region of Latvian having residents with an average height of 170.4 cm. A tall build was the result of hereditary factors, as well as outside influences. It is interesting to note that some folk songs attributed height to heredity:

Es uzaugu liela meita
No tās mazās māmules.
Teceđama birzi loku,
Stāvēdamā zvaigznes skaitu. (B.V.5319)

The singer describes herself as tall but her mother as short.

Another song, however, attributed height to outward factors:

Tā, bāliņ, tava vaina,
Ka es liela neizaugu:
Kam tu mani agri cēli,
Aukstu rasu brīdināju. (B.V.5364)

Here, however, the singer attributes her height to the fact that her brother woke her up early and made her walk in the early morning dew.

Primanis concludes that peculiarities are best revealed in the head. The size of the head is determined by the length and width of the brain. The shape of the head is determined by various indices: the dolichocephalic, mesocephalic and brachycephalic (long, medium and short) shapes of the head are distinguished. According to anthropological data, Latvians tend toward the brachycephalic shape of the head. Archaeological excavations, in turn, provide evidence that the older the burial place, the more its occupants tend toward the dolichocephalic shape of the head. The same has been observed in Swedes and Danes. Primanis notes that the size of

the face is closely correlated with the size of the head, as well as the whole body:

\[
\begin{align*}
\text{Siku seju, valodiņu} \\
\text{Bāliņ, tava ligaviņa.} \\
\text{Vai bititē šūpojuse} \\
\text{Savā vaska šūpuli ? (B.V.21346)}
\end{align*}
\]

The singer notes that her brother's bride-to-be is "small faced with small talk" and asks whether this might be because the bride's cradle when she was an infant was rocked by a bee.

In analyzing the folk songs, Primanis states that the color of the eyes often depends on the color of hair. Latvians have predominantly blue and grayish blue eyes, while black and brown eyes occur less frequently. The color of the eyes also was thought to point to a person's character:

\[
\begin{align*}
\text{Kur tu augi melnacite,} \\
\text{Ka es tevi neredēju ?} \\
\text{Es panēmu ligaviņu} \\
\text{Pelēkām actīnām. (B.V.21272 et varie)}
\end{align*}
\]

The singer, a male, states that he has chooses a grey-eyed girl for his bride

\[
\begin{align*}
\text{Neņem, manu bālēliņu,} \\
\text{Melnu galvu ligaviņu;} \\
\text{Melnu galvu ligaviņa} \\
\text{Ienaidiņa cēlājīņa. (B.V.12167)}
\end{align*}
\]

The singer warns her brother not to marry a black-haired woman because such women "create hatred". Primanis' work with the folk songs is of an anthropological nature. At the same time, it represents a survey of all that had been done in stating that much work must still be done in anthropology in the 10 years that Latvia had been independent. The author concludes the piece by stating that much work must still be done in anthropological research, and it must be done quickly, as Latvians continue their intermingling with other peoples, thus losing their initial anthropological peculiarities.

In 1937, Primanis wrote a work called "Introduction to the Methods of Anthropology", which served well in Latvian anthropological research. The book has 50 illustrations and two color plates. In 1936, Primanis wrote "The Anthropological Peculiarities of Latvians", analyzing the historical aspect of the changes in the structure of the Latvian body. In 1937 he summarized everything achieved in anthropology up to that time in a work called "Anthropological Work in Latvia".

Far from his native country, while working in the anatomy department of the University of Pittsburgh, Primanis always remembered the anthropological work he did in Latvia. He wrote several works, including "Some Observations on the Changes of the Structure of the Human Body" and "Anthropology of Latvians" (published in a collection of works at the
Equipment for making anthropological pictures
University of Pittsburgh in 1960). In the latter work, Primanis stated that "in connection with World War II, Latvian blood has absorbed Russian blood. This process continued because of the military occupation of Latvia. It is obvious that traces of foreign nations will be observed in the following generations. It is clear that because of the intermingling with other peoples, we cannot find in our people the anthropological type which would coincide with that of our ancestors." (Primanis' manuscripts are kept at the Primanis Museum of Anatomy in Riga.)

Many anthropological expedions were organized and many research works were written under Primanis' guidance. In 1924 N.Jērums and T.Vitols went on an anthropological expedition to the Cesvaine district, where they carried out anthropological measurements. Urged on by Primanis, they wrote a book, "Beiträge zur Anthropologie der Letten". In 1924 Primanis and Jērums performed measurements in the Kuldiga district on descendants of the so-called "kuršu ķoniņi" (the yeomen of Kursa). The collected research material showed that the descendants of the "kuršu ķoniņi" differed from their neighboring population.

In 1931 research workers from the Anatomical Institute, P.Lapsa and A.Miltiņš, went to the Bauska district in order to study the influence of the "Krieviņi" or "Vots" upon Latvians. In his work "Anthropological Data About Latvians from Bauska District" (1936), Lapsa concluded that the influence of the "Krieviņi" was evidenced by the fact that dark hair predominated over blond.

In 1935 Lapsa carried out anthropological measurements in the Rucava, Bārta and Nica districts. This research resulted in another work, "Latvian Anthropological Types in South-Western Kurzeme" (1938). In 1936, N.Cauna took measurements of 700 Latgalians in the Latvian army. In the same year, T.Vitols measured 150 recruits from the Talsi and Tukums districts. In the summer of 1937, an expedition under the guidance of Cauna and Lapsa was organized in Vecpiebalga and Janunpiebalga. In 1938 K.Arājs headed an anthropological expedition to the Vidzeme seaside, where he performed anthropological studies of the descendants of the ancient Livs. In 1939, anthropological measurements were taken in the central region of Zemgale – at Bērzmuiža, Sīpele and Livbērze. The materials collected during the expedition were summarized in scientific research works published not only in Latvia, but also abroad. (A card file of anthropological measurements is kept at the Primanis Museum in Riga.) The workers of the Institute of Anatomy and Histology also carried out valuable scientific research work, processing the skeletal material obtained during excavations and publishing under the guidance of Primanis. An expedition in 1920 to Jaunpiebalga (under the guidance of Backman and
Primanis) and the Riga district led to T. Vitoľ's "Os parietale bipartitum". During the period between 1925 and 1932, skeletal material from the 8th to the 12th centuries was found in the Ludza and Rēzekne regions. After scientific study of these materials, G. Knorre wrote an article "Kraniologische Untersuchungen an Schädeln aus Skelettgräbern Lettgallens" (1933). E. Pilmanis wrote a work, "The Height of Ancient Latvians", in 1934, basing his research on skeletal materials from the 9th and 10th centuries found in the Bauska region, from the 5—7th centuries found in Dobele and from the 11th century found in Piebalga. J. Licis (1933), A. Švangeradze et al. also have written scientific works under the guidance of J. Primanis. J. Ėrūma-Krastiņa wrote her doctoral thesis under Primanis' guidance. "The Latvian Woman from the Anthropological Point of View" (1935) gained widespread renown and was highly praised.

In 1938 Primanis and Cauna headed the organization of a study room and a museum for exhibiting and studying archaeological materials obtained from excavations and expeditions. Artist M. Bēniece created busts of a chimpanzee, a primitive man, a Neanderthal man and a negroid. Graphic artist N. Loginovs drew pictures of these sculptures and skulls. A photo laboratory was established. Primanis also procured measuring instruments as well as a library containing rare volumes of anthropological literature.

While studying the anthropological type, Primanis always stressed that extensive work had to be done in order to locate the correct characterization of
the Latvian anthropological type. The professor also expressed the thought that more attention should be paid to the study of Latvian psychological anthropology. Primanis noted that no research had been conducted to learn how the Latvian character was connected to somatic peculiarities such as the Latvian anthropological type, because there are close connections between body and mind.

Primanis highly valued the scientific studies of his colleagues in the field of anthropology. The professor had great plans for future work which were, however, cut short by World War II. It was only in 1952 that anthropological studies were renewed in Latvia (by H.Moora, N.Čeboksarovs). Dr.R.Denisova and Dr.R.Grävere have written outstanding works in the field of anthropology. Primanis contributed greatly to the development of Latvian anthropological research. It is difficult to overestimate his work in the study of anatomy and anthropology. He wrote textbooks, compiled a dictionary of anatomical terms and published a number of historical surveys. When carrying out his research work the professor always kept in mind the saying by the scientist W.Roux:

"Study what, 
More of how, 
But never forget the why."

REFERENCES

3. Backman G. Der Körperlänge der Letten // Upsala Läkareförenings Förhandlingar. – 1924. – Bd.29. – 1—2.—S.99—126


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