

## **LEIU HEAPOST – 75**

*Mart Viikmaa*



Leiu Heapost is the third great Estonian anthropologist next to and after Juhan Aul (1897–1994) and Karin Mark (1922–1999). She, however, is the most versatile of our anthropologists. She has published studies on somatology, age-related anthropology, paleoanthropology and population genetics of Estonians and several other peoples. On the occasion of Leiu Heapost’s recent 75<sup>th</sup> birthday, it is natural to look back – where has she come from and how has she become like she is?

Leiu was born on Muhu island into the family of a farmer and fisherman on Mihkli farm in Rootsivere village on 13 March 1936. The family was wealthier and more educated than the average in Muhu. Leiu speaks with excitement about the drawings in his father’s diaries. Her father was also a masterful smith and cabinetmaker. Her mother came from Tüü farm in Pallasma village. This was also the home place of her mother’s two uncles who were schoolteachers. The family also had an “official artist” (like Leiu says), i.e. a woman who had graduated from art school.

Leiu began her education at Piiri school, also on Muhu Island, but completed secondary school in Orissaare in Saaremaa (1956). After leaving secondary school, Leiu had a few gap years to think about her future prospects. She worked as head of Tamse village library then. Her father recommended her to study medicine. Leiu, however, did not find this profession close to her heart. She decided in favour of biology.

It could also have happened otherwise. Leiu had the skills and vision necessary for an artist. She definitely had hereditary talent for that; her

two sisters became artists indeed. Luckily for Estonian anthropology, this did not happen – Leiu was saved for science.

In 1958 Leiu became a student of biology at Tartu State University. Being delighted about the lectures of Prof. J. Aul, Head of the Department of Zoology, Leiu approached him with the wish that he would become her supervisor. Juhan Aul had recently started studies on anthropology of Estonian children's physical development. As a second-year student, Leiu began to accompany Prof. Aul on his expeditions to conduct anthropological measuring of schoolchildren. Sometimes she also joined K. Mark on her expeditions to the settlement areas of Finno-Ugric peoples and their neighbours. Thus, Leiu acquired perfectly the technique and methodology of physical anthropology and collected material for her term and graduation papers.

Nonetheless, Leiu did not forsake art either. In parallel with her studies of biology, she practised at the art studio of the university and listened to Prof. Voldemar Vaga's (1899–1999) lectures on art history. She still speaks with great enthusiasm about those lectures and the accompanying demonstrations.

Leiu graduated from the university in 1963. Her graduation thesis discussed anthropology of school students' physical development. Thus the small number of Estonian anthropologists was replenished by a new capable researcher. Unfortunately, in Soviet Estonia (just like now), the administrators of science did not consider anthropology an essential branch of science. There were no teaching or research positions for anthropologists either at the university or in the institutes of the Academy of Sciences.

As Prof. Aul did not want to lose the trained colleague who would help him in his research, he applied for an additional position of a senior laboratory assistant for his department. Leiu filled this position until 1970. Along with participation in J. Aul's research expeditions, she was engaged in statistical analysis of the data. Because of her abilities as an artist, she was used as the illustrator of textbooks written by the lecturers of the department (although her name is not mentioned there).

Along with all that, Leiu found time for studying school students of Tallinn.

In 1970 the Estonian Academy of Sciences opened postgraduate studies in anthropology. Leiu stood as a candidate and got a student place. She continued her study on anthropology of Tallinn school-

children at different ages she had begun during her Tartu period and defended her candidate's dissertation *Physical Development of Tallinn Schoolchildren* in 1976. (The materials of the dissertation were later published as a monograph). At that time, from 1974, Leiu was already a staff member at the Institute of History. She has worked in this institution up to the present, filling the positions from junior research fellow to leading research fellow. Even now, she is still working at the institute as a senior research fellow. As an active member of the academic community, Leiu has participated in several research societies (Estonian Naturalists' Society, Society of Geneticists and Selectionists of the Soviet Union, Estonian Society of Human Genetics, European Anthropological Association). She is a member of the international editorial board of the collection *Papers on Anthropology*.

Leiu has perhaps been the most inquisitive and versatile among the Estonian anthropologists. She is the initiator of systemic population-genetic research of Estonians and one of the first Estonian paleo-anthropologists in both craniology and osteology. As early as in 1966, she began, among the school students of Tallinn, in addition to somatometric studies, collection of genetic data and determination of frequency of antigen systems of several blood group systems and a few physiological characteristics (taste sensitivity to phenylthiocarbamide and red-green colour blindness). In the 1970s–1980s she broadened these studies to many samples (40 in total) all over Estonia. She initiated close cooperation with the geneticists of the Institute of General and Molecular Pathology at the University of Tartu to use their material equipment and potential for analysis.

Along with studies of Estonians, Leiu Heapost and Karin Mark, in cooperation with Soviet and Finnish anthropologists, participated in research expeditions to the Volga area, Vologda region, Western Siberia and Transcarpathia. Leiu has also collected comparative population-genetic data from Vepsians and Latvians.

Leiu has presented her research results at several international conferences of anthropologists; her papers have been published, in addition to the Soviet Union and Estonia, in a number of foreign countries (Finland, Sweden, Poland, Germany, Hungary, Belgium). The list of her printed works includes more than 100 publications. Along with the above-mentioned monograph, her largest work is the chapter on population genetics written in cooperation with Karin Mark and Galina

Sarap in a book on Estonians' ethnogenesis (1994). At present she is supplementing and editing the manuscript of her deceased colleague K. Mark *Physical Anthropology of Finno-Ugric Peoples*. Some of these materials have been published as separate articles.

Leiu's studies have given a remarkable contribution to the fact that anthropologically Estonians are one of the most thoroughly researched peoples in the world.

Leiu's population genetic analysis has confirmed and broadened the conclusions of physical anthropology on Estonians' great biological variability. She has found that in within the whole of Estonia the main scale of differences runs in the East-West direction. Based on the greatest differences, four main groups of Estonians can be differentiated: inhabitants of the Western Estonian islands, the West Estonian continental area, North-East Estonia and South-East Estonia. Other regions form transitional zones between them. She has noted that the Setu dialect area is very close to other South-Estonian samples in its genetic structure. On the contrary, some samples from the western part of Võru County clearly differ from their neighbours, and the inhabitants of Muhu Island essentially differ from those of Saaremaa (the former being closer to Northeastern Estonians).

Leiu's research results have made her critically reappraise the Mongoloidness index created by K. Mark as a Mongoloid addition to the genetic structure of Finno-Ugric peoples. Leiu considers those "additions" traits of the peculiarities of the Finno-Ugric original population where Mongoloid and Europoid features might have appeared in an original combination.

These viewpoints contain appeals for further studies and theoretical analysis. The scientist whose works raise such problems has been successful in her research.

## **A SELECTION OF LEIU HEAPOST'S PUBLICATIONS**

- Heapost, L. (1972). Rapla rajooni kooliõpilaste füüsilisest arengust. – Loodusuuri ajate Seltsi Aastaraamat, 61: 218–248. Tallinn.
- Хеапост Л. (1977). Некоторые материалы к серологии угорских народов. – *Antropoloogia-alaseid töid III: Eestlaste antropoloogiliste andmete analüüs*. TRÜ Toimetised, 438: 104–113. Tartu.

- Heapost Л., Парик Ю., Микельсаар А.-В., Илус Т. (1982). Частота генов группы крови у эстонцев. – Финно-угорский сборник. Антропология. Археология. Этнография: 172–178. Москва.
- Heapost, L. (1984). Tallinna kooliõpilaste ealine antropoloogia (1966–1969), 281 lk. Tallinn: Valgus.
- Heapost, L., Kivisild, T. (1992). Discrete cranial traits in 11<sup>th</sup>–17<sup>th</sup> cc. craniological samples from Estonia. – Papers on Anthropology, V: dedicated to the 95<sup>th</sup> birthday of Prof. Juhan Aul. Acta et commentationes Universitatis Tartuensis, 951: 14–29. Tartu.
- Heapost, L. (1994). Populatsioonigeneetilised tunnused eestlastel. – Mark, K., Heapost, L., Sarap, G. Eestlaste antropoloogia seoses etnogeneesi küsimustega: 110–196. Tallinn: Teaduste Akadeemia Kirjastus.
- Heapost, L. (1996). A comparative Characterization of Estonian Cranial Samples of the II Millennium AD. – Congressus Octavus Internationalis Fenno-Ugristarum Jyväskylä 10–15.8.1995. Pars VII: Literatura, Archaeologia and Anthropologia: 278–282. Jyväskylä.
- Heapost, L., Viikmaa, M. (1996). Genetic differentiation of Estonians. – Proceedings of the Estonian Academy of Sciences. Biology, 45 (3/4): 128–136. Tallinn: Estonian Academy Publishers.
- Heapost, L. (2000). Population Genetic Characterization of Estonians. – Anthropologischer Anzeiger, 2000, 58, 2: 137–154.
- Heapost, L. (2001). Baltic Finns and Indo-Europeans. An anthropological aspect. – Congressus Nonus Internationalis Fenno-Ugristarum 7.–13. 8. 2000 Tartu. Pars VIII: Dissertationes sectionum: Literatura, Archaeologia & Anthropologia & Genetica & Acta Congressus: 278–283. Tartu, 2001.
- Heapost, L. (2003). Variation of the stature in Estonia from the 12<sup>th</sup> to the 20<sup>th</sup> centuries. – Papers on Anthropology XII: 51–61. Tartu.
- Heapost, L. (2007). The cemetery of Siksälä: osteological and paleodemographical analysis. – Siksälä: A Community at the Frontiers. Iron Age and Medieval: 213–236. Tallinn – Tartu.
- Leiu Heapost, Karin Mark. (2010). Ethnic and geographical variability of Finno-Ugric peoples' stature. – Papers on Anthropology XIX: 94–109. Tartu.