

PALEOSOCIOLOGICAL CONCEPTS TO THE INVESTIGATION OF SOME SOCIAL PHENOMENA OF PAGAN AND CHRISTIAN PERIODS

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Abstract

This paper deals with methodological problems which arise during paleodemographic and paleosociological studies. The methodological principles of these two shared auxiliary sciences of archeology and anthropology were established by NEMESKÉRI, KRALOVÁNSZKY and ÉRY. The authors, apply these principles as starting point, and also make use of their own research experience and that of other colleagues, and stress the necessity for the application of new methods.

Methodological questions are discussed here on the basis of the 10th-11th century cemetery at Püspökladány-Eperjesvölgy as an example. This cemetery, highly representative from many points of view, provides an excellent basis for model investigations.

Key words: paleodemography, paleosociology, 10th-11th centuries, Hungarians, cemetery at Püspökladány-Eperjesvölgy.

Introduction

Paleodemography is an auxiliary science shared by archeology and anthropology, the main aim of which is to study demographic characteristics of ancient populations. It may also contribute to the outline of social structure, especially if study of the biological characteristics of ancient populations includes a special area of material culture, grave contents. Paleodemographic studies have three main phases. In the first phase, the excavated osteological material is assessed by means of anthropological methods. In the second phase, after quantification, the data are subjected to statistical analysis. On the basis of the ages at death and sex, mortality charts of the populations are prepared separately for the overall population and for both males and females considered to be adults from an osteological aspect. The third phase of the research involves the study of material culture relics, according to the demographic characteristics of the population, also called historical sociology or paleosociology. Paleosociology may be regarded as a discipline independent of paleodemography, but it should not be forgotten that the only possibility for a realistic evaluation of material culture relics is their analysis, on the basis of demographic statistics. Only this method

can guarantee that the analysis provides a reliable picture not only of the „rich” or „poor” character of the cemetery in question, but also of the ancient society.

Results and Discussion

The 10th-11th century cemetery at Püspökladány-Eperjesvölgy was used as an example to illustrate problems related to the methods of paleodemographic studies, and to present the methodological solutions suggested for introduction. The cemetery is extremely populous, being 5-10 times larger than other excavated cemeteries from the same period. In addition, due to the favourable soil conditions, the skeletons are well preserved, the majority of them being suitable for anthropological analysis. From the 601 assessable skeletons unearthed in the excavations by M. NEPPER between 1977 and 1982, 230 individuals may date from the 10th century and 371 from the 11th century (M. NEPPER, manuscript).

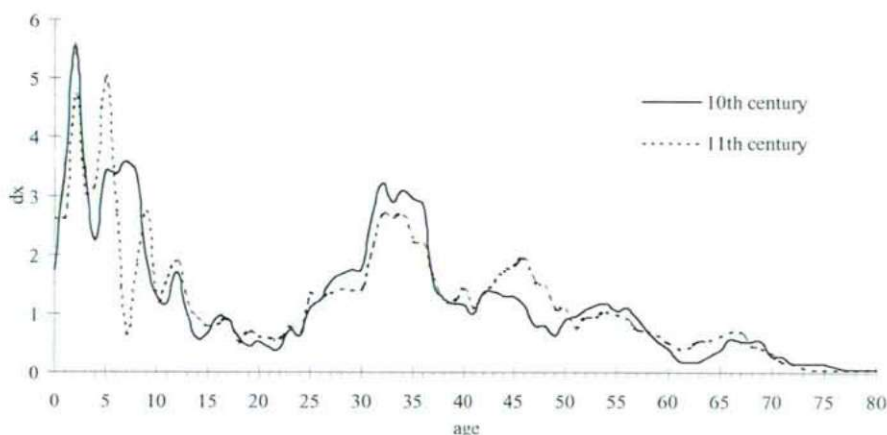


Fig. 1. Distribution of deaths per cent at X age. Püspökladány-Eperjesvölgy.

Anthropological studies on the population of the Püspökladány-Eperjesvölgy cemetery were made by the following methods: for subadult individuals, the age of death was determined according to the concepts of SCHOUR and MASSLER (1940) and JOHNSTON (1961); for the adults, the method of ACSÁDI and NEMESKÉRI (1970) was used; the same method was used for sex determination. The mortality charts contain the following data: age = X; distribution of deaths, no. at age X = Dx; distribution of deaths, percentage at age X = dx; distribution of surviving individuals, percentage at the beginning of age X = lx; probability of death at age X = qx; life expectancy at age X = ex0. These charts were prepared for both centuries separately, on the basis of the data relating to the overall population, the adult males and the adult females (Figs 1 and 2).

The archeological material was studied according to three main groups of objects: I. everyday artifacts and weapons; II. clothing objects; III. ritual objects. This division corresponds to the usual classification of archeological material, though at the same time raises certain questions. One is whether it is reasonable to consider everyday artifacts and weapons from the Pagan period strictly according to their instrumental nature. Considering Pagan beliefs concerning the other world, after the burial these objects lose their instrumental purpose and acquire a religious character, serving to supply the dead in the other world, thereby becoming objects which definitely belong in the category of „ritual objects” (Figs 3 and 4).

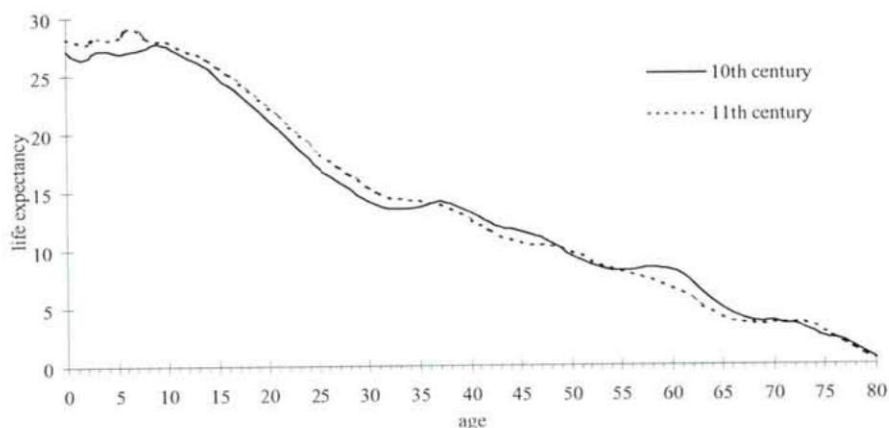


Fig. 2. Life expectancy at X age. Püspökladány-Eperjesvölgy.

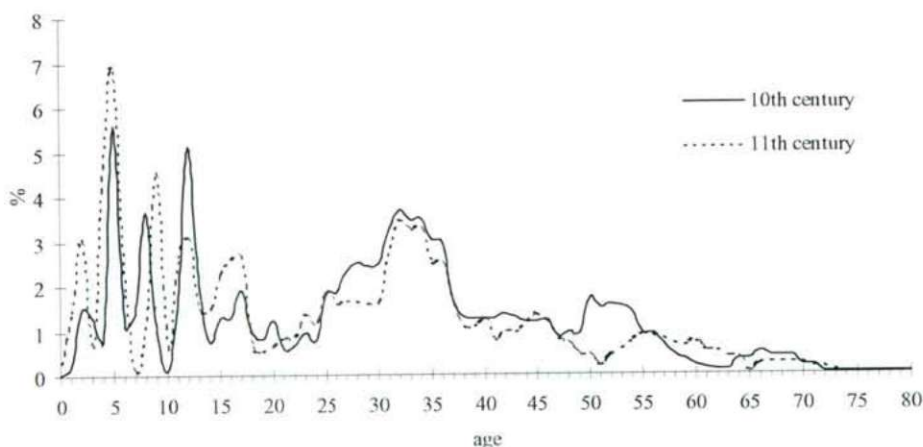


Fig. 3. Ratio of grave goods. Püspökladány-Eperjesvölgy.

When a classification of grave contents is prepared, consideration must be given to the length of the period studied and the nature of the changes which took place in beliefs and ideology during the period in question. In the present example, social customs of the Pagan period and of the beginning of the Christian era appear to be intermingled within the same cemetery. If we consider the buried artifacts and weapons of the Pagan period (which serve to supply the dead in the other world) as belonging among ritual objects (by which devotion toward a deity is manifested), this is probably do not a misinterpretation, yet in this case the process of changing might be lost, i.e. the significant change which can be observed in the group of objects in question during the change to Christianity (Fig. 5).

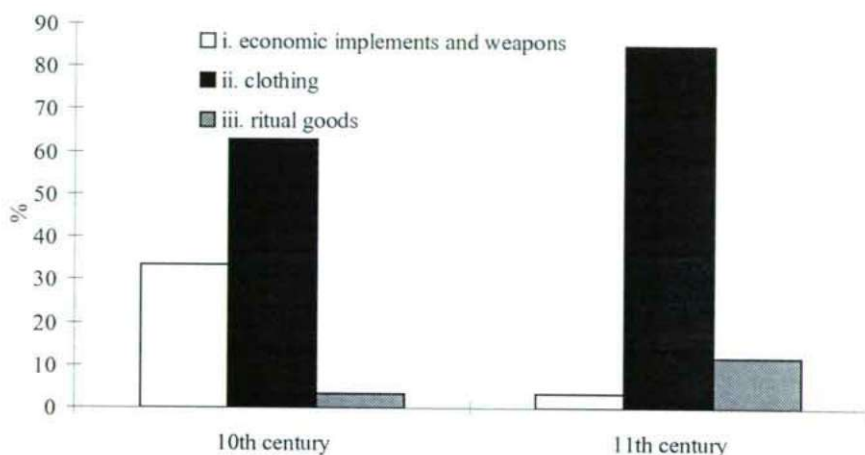


Fig. 4. Percentual distribution of grave goods by groups of objects. Püspökladány-Eperjesvölgy.



Fig. 5. The distribution of grave goods in subadult and adult female and male cohortes by groups of objects. Püspökladány-Eperjesvölgy.

The second problem is related to the interpretation of the quantity of items found within a grave. To what degree can the number of grave contents reflect the social status or the richness of the deceased?

We believe that this question can be answered at the microlevel (individual level), while a complete paleodemographic analysis may reveal processes at the macrolevel (the level of the overall society or a group level). Confusion of these two levels may lead to errors (MOKSONY, 1985). At the same time, if it is accepted that those who live at a lower social level (i.e: the poor) have worse chances in life, we can justifiably search for manifestations within ancient populations, too. We consider that the poor within ancient populations are represented by burials without grave goods.

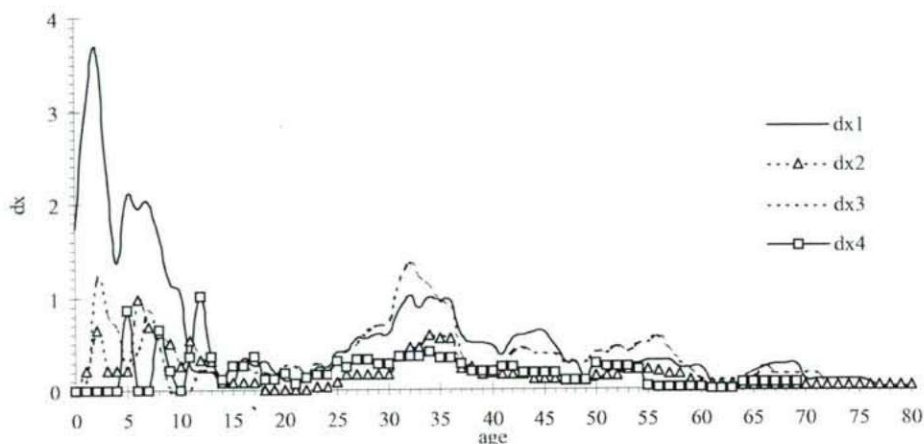


Fig.6. Mortality rates within groups established according to the number of grave goods (10th century). Püspökladány-Eperjesvölgy.

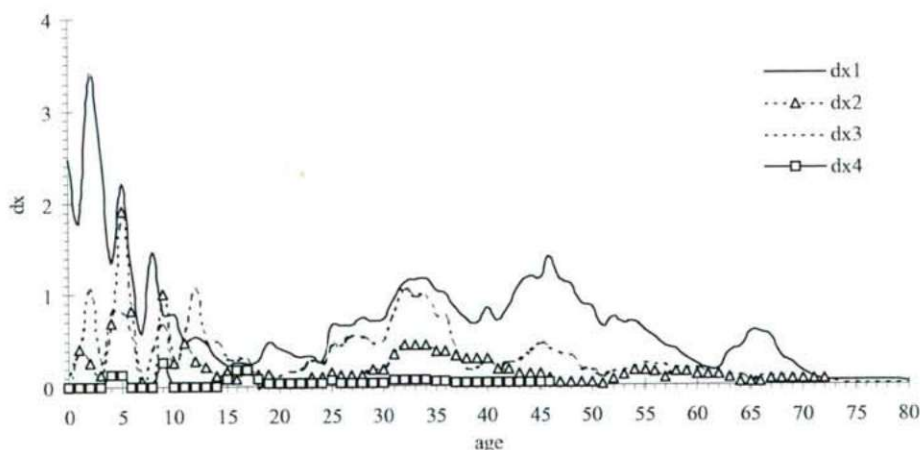


Fig. 7. Mortality rates within groups established according to the number of grave goods (11th century). Püspökladány-Eperjesvölgy.

As an experiment, we divided the 10th and 11th century populations of Püspökladány-Eperjesvölgy into four groups, according to the number of grave goods: 1 - without grave goods; 2 - with a single item; 3 - with 2-5 items; 4 - with more than 6 grave items. Within each group, we calculated the percentage distribution of deaths (dx) for every age group and compared them with each other. It became clear that, whereas the three groups supplied with grave goods do not differ from each other, the group without grave goods exhibits a higher mortality rate in comparison with all the other groups (with grave goods). We do not consider the result of this experiment to be really surprising; nevertheless, it confirmed the valid of our supposition. The study of grave goods may make a marked contribution to the analysis of Medieval society (Figs 6 and 7).

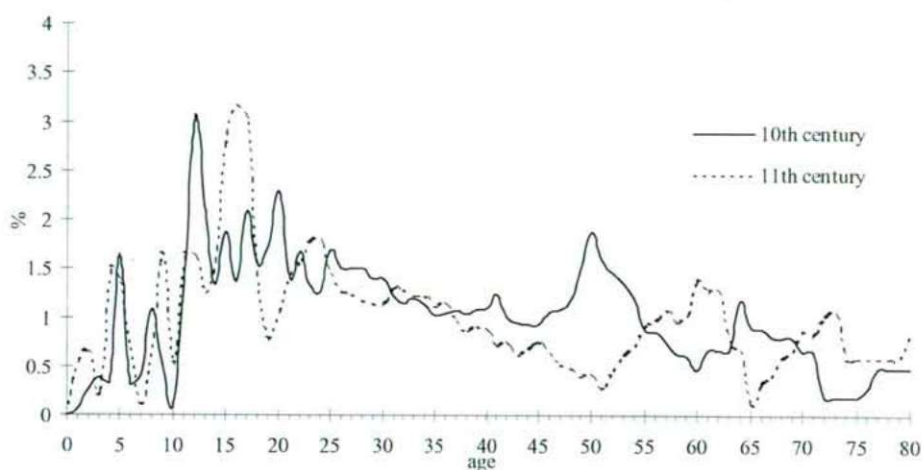


Fig. 8. Modified distribution of grave goods if the distribution of deaths per cent is 1.00 in every age group. Püspökladány-Eperjesvölgy.

The graph of the percentage distribution of deaths (dx) by age groups is markedly similar to that of the percentage distribution of grave goods by age groups. The latter graph demonstrates that grave goods appear most frequently in the graves of those who died between the ages of 3 and 18 years and between 30 and 40 years of age. The percentage distribution of deaths within these cohorts is similarly the highest. This suggests that the number of grave goods may not reflect the social prestige in the cohorts in question, but rather the higher mortality rate in these cohorts. Therefore, within each group we modified dx to 1.00 and the number of excavated grave goods was compared with this. The graph prepared on this basis shows the cohort of young adults (those at the beginning of self-reliant life, but dying between the ages of 16 and 25 years) to be the group primarily supplied with grave goods. This appear to be the group with the highest social prestige in the 10th-11th century Hungarian society (Fig. 8).

Conclusions

In paleodemographic studies on material from the 10th-11th century cemetery at Püspökladány-Eperjesvölgy, the sociological relations of this ancient population were investigated via the grave goods from the cemetery. The main findings of the study were as follows:

1. The above classification of grave goods is considered reasonable, and these groups appear to be suitable for study of the cultural-religious conditions of the Pagan period.

2. That the poor layers of the populations had less chances in their lives in the 10th and 11th centuries. Burials without grave goods are considered to be a paleosociological criterion of poverty. The mortality rate was higher among those buried without grave goods.

3. The group of young adults at the beginning of self-reliant life appeared to enjoy the highest social prestige.

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