

ALINA WIERCINŃSKA

PALEODEMOGRAPHY OF THE IRON AGE
IN POLAND

The burial custom of cremation dominated over the whole territory of Poland in the La Tène and Roman Periods.

Consequently, only very scarce anthropological information can be used in paleodemographic studies. The purpose of this Report is to present such a paleodemographic survey based on the analysis of the frequency of the age categories in buried individuals.

These data are presented in *table 1*. Of course, they suffer from sampling error due to the size of the conserved sample. Moreover, the series from the cemeteries in Niedanowo, Netta, Cecele and Kleszewo were only partially examined.

A greater variability should be noticed especially for the categories of Infans I (2.1–44.7%) adultus (5.6–56.7%) and matusus (13.3–47.2%).

A higher degree of mortality in infancy appears in Niedanowo, Karczewiec and Brdujście in the La Tène Period, while it is lower in maturity.

The series from Wichrowice and Brdujście show the highest frequencies in the adults while the maximum in Wesólka appears in the matusus group. Also, there is a complete lack of samples in the category senilis in all the La Tène series, with the exception of Karczewiec.

However, senile group individuals appear in the three series from the Roman period from Szwajcaria, Netta and Korzeń.

Generally speaking, the structure of the distributions of age categories in the latter period differs from the previously considered La Tène finds. This

difference usually consists in a lower mortality of the infantile individuals and of a higher one in adultus and matusus groups in the Roman Period.

The series from Osowa is the most distinctive in this respect.

The findings seem to suggest a higher standard of living in the Roman Period.

This result is further confirmed by the data presented in *table 2*, which presents the mean age at death as well as the mean reduced age, i.e. omitting the infantile individuals.

Again, a greater variation may be observed in these distributions. The lower values are more characteristic for the La Tène Period.

The Roman Period is distinguished by a greater interpopulation variability (Total age: 14.6–34.8, reduced age: 26.6–38.8). The series from Korkliny and Netta reveal the highest values of the mean age, that from Niedanowo — the lowest ones.

The greater territorial variability of the series from the Roman period can not be attributed to migratory changes, since we are dealing here with the same Baltic tribes. Consequently, the changes in living standard seem better to explain this fact.

Unfortunately, the size of the series compared is too low for calculating suitable measures of dispersion. The same applies to calculation of the correlation coefficients between particular age categories and between the mean reduced age at death and stature, which would be of greater interest.

We have at our disposal only very few examples of stature values (*table 3*). It is worth men-

TABLE 1

Frequency distributions in age categories: La Tène and Roman Periods

Site	Chronology	Author	N	Infans I	Infans II	Juvenis	Adultus	Maturus	Senilis	All age groups
Wesółka	La Tène	with A. Wierciński	28	17,9 %	3,6 %	10,7 %	28,6 %	39,3 %	—	100,0 %
Podwiesk	La Tène	A. Florkowski	249	21,7 %	6,8 %	15,7 %	36,9 %	18,9 %	—	100,0 %
Wichrowice	La Tène	A. Malinowski	33	15,1 %	15,1 %	3,1 %	51,5 %	15,5 %	—	99,9 %
Brduyjskie	La Tène	A. Florkowski	22	31,8 %	4,5 %	9,1 %	40,9 %	13,7 %	—	100,0 %
Niedanowo	Late La Tène Early Roman Period	A. Wiercińska	38	44,7 %	10,5 %	18,4 %	15,8 %	10,5 %	—	99,9 %
Karczewiec	Late La Tène Early Roman Period	A. Wiercińska	79	31,7 %	27,9 %	6,3 %	15,2 %	16,4 %	2,5 %	100,0 %
Brzeżce	II-III A.D.	A. Wiercińska	28	21,4 %	14,3 %	10,7 %	17,9 %	34,7 %	—	100,0 %
Cecele	III-IV A.D.	A. Wiercińska	259	42,5 %	12,5 %	3,9 %	17,0 %	23,9 %	—	99,8 %
Osinki	III-IV A.D.	A. Wiercińska	39	33,3 %	12,8 %	7,7 %	25,6 %	20,5 %	—	99,9 %
Korkliny	IV-VI A.D.	A. Wiercińska	36	22,2 %	5,6 %	2,8 %	22,2 %	47,2 %	—	99,8 %
Osowa	V-VI A.D.	T. Dzierzykraj-Rogalski	48	2,1 %	4,2 %	12,5 %	43,7 %	37,5 %	—	100,0 %
Szwajcaria	IV-V A.D.	T. Dzierzykraj-Rogalski	30	16,7 %	3,3 %	6,7 %	56,7 %	13,3 %	3,3 %	100,0 %
Netta	III-V A.D.	A. Wiercińska	95	15,8 %	8,4 %	9,5 %	41,1 %	17,8 %	7,4 %	100,0 %
Korzeń	Late Roman Period	A. Wierciński	89	27,2 %	10,1 %	6,7 %	5,6 %	39,3 %	1,1 %	100,0 %

TABLE 3

Mean stature-height calculated from the cremated bones from La Tène and Roman Periods

Site	Chronology	N	Stature M	N	Stature F
Brduyjskie	La Tène	5	162,1	4	151,8
Kozia Góra	La Tène	19	162,9	18	150,5
Podwiesk	La Tène	27	163,1	29	152,4
Kunowo	La Tène	1	168,0	—	—
Lubieszewo	La Tène Roman Period	3	—	4	152,3
From late La Tène to Roman Period (400 b.c. to 200 b.c.) according to A. Malinowski		24	164,8	16	153,8

TABLE 4

Changes in mean reduced age at death in Poland

Chronology	Mean (M + F)
Neolithic Age (2000 B.C.)	35.57 years
Bronze Age (1150 B.C.)	28.63 years
La Tène (350 B.C.)	34.19 years
Roman Period (200 B.C.)	36.65 years
X-XII c. (1050 A.D.)	36.94 years
XVII-XVIII c. (1700 A.D.)	40.70 years
XX c. (1960 A.D.)	54.18 years

TABLE 5

Territorial variation of mean reduced age at death in the Roman Period

Territory	Mean
Ancient Rome	31.19 years
Egypt	37.09 years
Poland	36.65 years
Hispania and Lusitania	40.12 years
African Provinces	51.27 years

TABLE 2

Mean age at death in the late La Tène and Roman Periods

Site	Chronology	Author	Mean			
			M	F	M + F	
					total age	reduced age
Kunowo	La Tène	B. Marecki				
		A. Malinowski	38,0	34,5	26,7	35,6
Podwiesk	La Tène	A. Florkowski	—	—	21—22	—
Długie	La Tène	B. Marecki				
		A. Malinowski	37,8	31,3	23,1	31,4
Wesółki	La Tène	A. Wierciński	—	—	—	30,4
Karczewiec	Late La Tène					
	Early Roman Period	A. Wiercińska	—	—	17,96	34,4
Niedanowo	Late La Tène					
	Early Roman Period	A. Wiercińska	—	—	14,6	26,6
Kleszewo	Late La Tène					
	Early Roman Period	A. Wiercińska	—	—	—	29,6
Brzeżec	II—III A.D.	A. Wiercińska	—	—	—	34,8
Cecele	III—IV A.D.	A. Wiercińska	—	—	21,29	27,6
Netta	III—IV A.D.	A. Wiercińska	—	—	30,3	37,7
Korkliny	IV—V A.D.	A. Wiercińska	—	—	34,8	38,8
Korkliny	VI A.D.	A. Wiercińska	—	—	22,5	36,3
Osinki	V—VI A.D.	A. Wiercińska	—	—	19,4	31,5
La Tène (pooled) according to A. Malinowski					21,5	32,2
Roman Period (pooled) according to A. Malinowski						

tioning that the stature in the La Tène period is always low.

Finally, a wider comparison of the mean reduced age at death may be considered. *Table 4* presents the data for Poland, from the Neolithic Period up to recent times. It includes our new data for the La Tène and Roman Periods as well. It appears that the previously published means for those periods were too high (A. Wiercińska, 1966). The new corrected means are in accord with the statement of A. Malinowski (A. Malinowski, 1971).

Thus, the second peak in the Roman Period disappears and the trend towards gradually higher values becomes very regular. Again, worthy of mentioning is the distribution of the mean age at death calculated for a larger territory of the Roman Period, taken from the previous publication of the author (A. Wiercińska, 1966). This is seen in *table 5*.

All these data seem to support the conclusion that the territorial differentiation in paleodemographic parameters is greater than the chronological variation.

LITERATURE

- MALINOWSKI A.: Wyniki badań antropologicznych materiałów kostnych z cmentarzysk okresu przedrzymskiego i rzymskiego oraz wczesnego średniowiecza w Lubieszowie, pow. Gryfice. *Materiały zachodniopomorskie*, Vol. XVI, pp. 151—166.
- WIERCIŃSKA A.: Zmienność długości trwania życia ludzkiego na terenie Polski w świetle danych antropologii. *Acta Facultatis Rerum Naturalium Universitatis Comenianae*, Vol. X, *Anthropologica* XI, 1966, pp. 21—29.

Archeological Museum,
Warsaw
Dr. A. Wiercińska,