

## DATING OF GREAT FORTIFIED SETTLEMENTS IN THE BASIN OF THE UPPER WARTA AND PROSNA RIVERS

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**Abstract.** Vast fortified settlements in the basin of the upper Warta and Prosna rivers (Kurów, Strobin and Wieruszów-Podzamcze) are traditionally dated to the Hallstatt D period (550-400 BC). Radiocarbon dates obtained recently for the fortified settlement at Kurów ( $2770 \pm 50$  BP and  $2620 \pm 60$  BP) imply the necessity of a significant shift backward of that chronology. Most probably these fortresses correspond chronologically to the so-called "Silesian type" fortified settlements which were appearing in the Bronze Age V (traditional dating: 900-700 BC).



### 1. INTRODUCTION

One of the most interesting phenomena of prehistoric settlement in the basin of the upper Warta and Prosna rivers is the presence of vast fortified settlements situated at the places which in a natural way facilitated defence, as sand hills among marshes or promontories defended by rivers beds and basins. The earthworks at Kurów (having an area of 28 ha), Strobin (18 ha) or Wieruszów-Podzamcze (20 ha) in the Wieluń region are examples of such fortified settlements (Abramk, 1994, see Fig.1). Unfortunately, in most cases the fortifications having a form of earthen ramparts have been devastated and today only their remnants are visible. The type of soil and intensive field works on dried areas are among the reasons of the devastation. In view of the speed with which a natural and a man-caused destruction proceeds launching archaeological research aimed at the explanation of the civilisation role of the above earthworks has become very urgent.

### 2. ARCHAEOLOGICAL DATING RESULTS

All the above mentioned fortified settlements were once excavated to a varying extent. The site at Kurów (Fig. 2) was preliminary explored by R. Janiak in 1996 and 1997. Rather scarce traces of buildings concentrated probably in the vicinity of rampart were found. It is difficult to reconstruct the structure of a probably one-phase (?) rampart due to its poor preservation state and a small scale of the investigations. However, one

cannot exclude that it was a wooden construction reinforcing an earth-sand mound and shaped as a "wall" made of horizontal beams anchored between pairs of poles driven into the ground. The remains of charred beams and other traces of cinders indicate that a violent destruction of the fortification cannot be excluded. Pottery uncovered on this site confirms the presence here of a settlement dating back to the end of the Bronze Age (period V) and to the early Iron Age. In older literature (Kaszewski, 1975) based on surface findings this site was dated to the late phase of the Hallstatt period (HaD).



**Fig. 1.** Lusatian culture fortified settlements in the basin of the upper Prosna and Warta rivers.

Much more information is available about the fortified settlement at Strobin (Fig. 3) which was explored in 1965 (H. Wiklak) and 1974-86 (Z. Kaszewski). During the investigations carried out by Z. Kaszewski an area of 10,925 m<sup>2</sup> was excavated. However, due to the

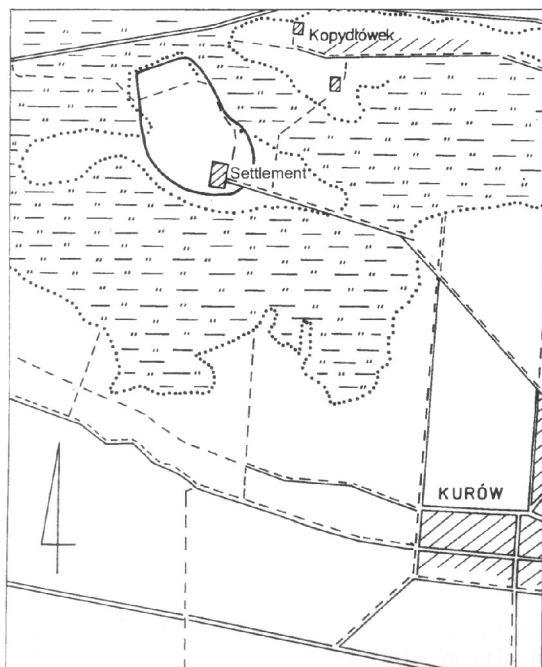


Fig. 2. Kurów, com. Wieluń. Location of the castle, according to B. Abramek (1994).

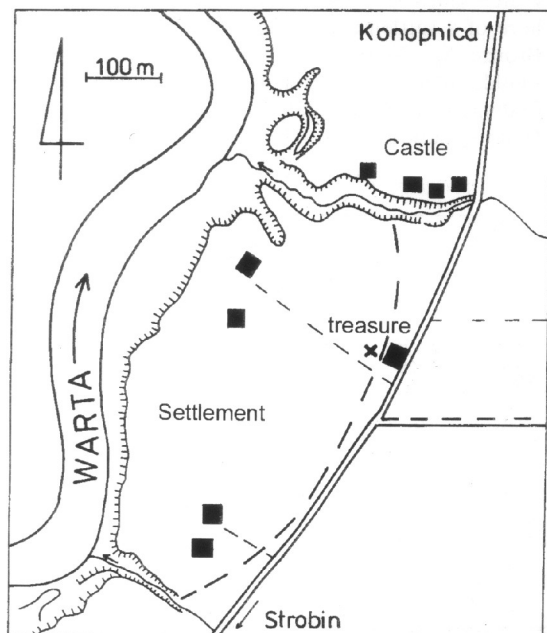


Fig. 3. Fortified settlement at Strobin, com. Konopnica according to B. Abramek (1994).

lack of publication of the complete results of the investigations it is impossible to establish the type of the fortifications (Kaszewski, 1980). Supposedly it was a rampart having a box construction which was almost 7 m wide at the bottom. The western part had a rust construction (?). In its ruins traces of a violent fire were visible-buried clay, cindered pottery and charred beams (*Informator Archeologiczny*, 1974-1984). In the north western part of the maian on an area of about 10,000 m<sup>2</sup> traces of numerous buildings were uncovered. They concentrated especially in the vicinity of a rampart, at a distance of about 15-20 m from it (*Informator Archeologiczny*, 1975, 1976, 1978). According to Z. Kaszewski (*Informator Archeologiczny*, 1985) the oldest materials found at the site belong to the Bronze Age V (see also Kaszewski, 1985), while the youngest are attributed to the HaD and early La Tene periods. According to the same researcher the fortifications of the settlement were destroyed at the end of the HaD period (*Informator Archeologiczny*, 1974). The discovery of a hut half buried in the ground (*Informator Archeologiczny*, 1975) situated in the southern part of the fortress indicates that after the destruction of the fortifications an open settlement still existed there. Z. Kaszewski roughly dates the period of the functioning of this fortress to the HaD and early La Tene periods (550-300 BC).

The fortified settlement at Wieruszowice-Podzamcze (Fig. 4) investigated by H. Wiklak (1966) and I. Jadczykowska (1983) in 1973-1977 belongs also to relatively well-explored sites.

During the second archaeological excavation work an area of more than 1500 m<sup>2</sup> was excavated. It was found that the rampart built originally as a rust construction (Wiklak, 1966) was destroyed by a fire. It was later reconstructed in a form of a sand mound with layers of stone and reinforced by a wooden construction. The number of functioning phases of the rampart reconstructed after damages is not clear. H. Wiklak (1966) says about four phases while I. Jadczykowska (1983) only about two. Based on a cross-section published by H. Wiklak (1966, see Fig. 3) one can rather presume that there were three phases. The phases I-III distinguished by Wiklak and related to the construction of a rampart in an apparent phase fourth seem to be destruction levels of an older rampart. The remark of I. Jadczykowska (1983) that the final destruction of the fortifications took place in a natural way seems also to be justified.

The above mentioned researchers rather agree as to the chronology of the Wieruszowice-Podzamcze fortress (Wiklak, 1966; Jadczykowska, 1983). Its construction has been attributed to the HaC period and its decline to the HaD period, rather to its beginning. The investigations carried out by I. Jadczykowska showed that buildings in the fortress had been constructed in a zone shaped as a belt about 55 m wide which stretched at a distance of about 35/50 m from the rampart. The central part of a maian was free.

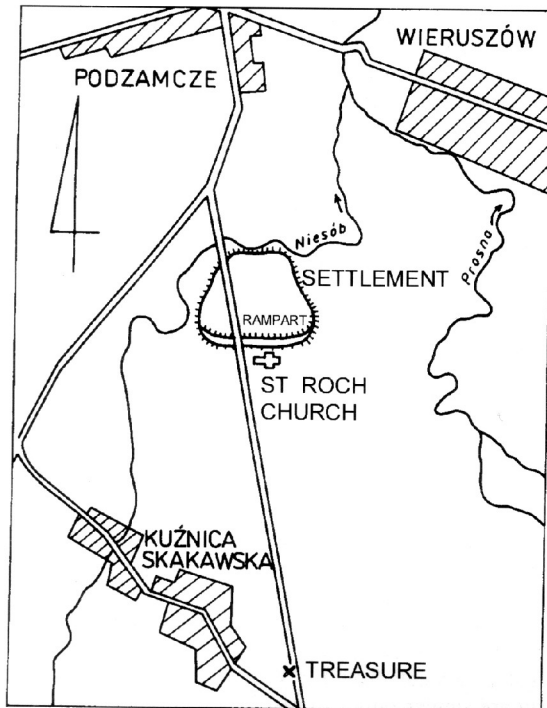


Fig. 4. Wieruszów-Podzamcze, com. Wieruszów. Location of the fortified settlement, according to B. Abramek (1994).

The investigations performed so far at the above sites have not answered as yet to vital research questions concerning the history of their development and decline and the role they fulfilled in the social and cultural structures of their time. The lack of the solution to the chronology problem is especially disturbing. Without firm dating any attempts of reliable establish-

ing the historical role that these sites played in prehistoric processes are inutile. At the present stage of the studies the conclusions can be formulated rather as general suggestions not based on convincing evidence. Material excavated during the studies (mainly pottery) was a basis to relate the development of the fortified settlements discussed here to the late phase of the so-called Lusatian culture which dates back to the HaD period (traditional archaeological dating is 500-400 BC: Kurów-HaD, Strobín-HaD – beginning of the La Tène period, Wieruszów-Podzamcze – end of HaC-beginning of HaD). At the present state of the knowledge only one fact is generally accepted: these fortresses at a given moment of their history were violently destroyed (maybe even several times) by a fire. The timing of this event and the evaluation of its historical context would be much more difficult. On the other hand there are practically no data (including published stratigraphic results and their reliable evaluation) on the time of building these fortifications.

### 3. ABSOLUTE DATING RESULTS

In this situation of special interest are two radiocarbon dates obtained recently in the Kiev Laboratory for charcoals from a burned rampart constructed from wood and earth in the Kurów fortified settlement (Fig. 5). The samples were taken from the trench IV/1997 at the depth of about 1 m. They were taken from the remains of burned beams which probably belonged to the construction reinforcing the inner side of a rampart (Fig. 6).

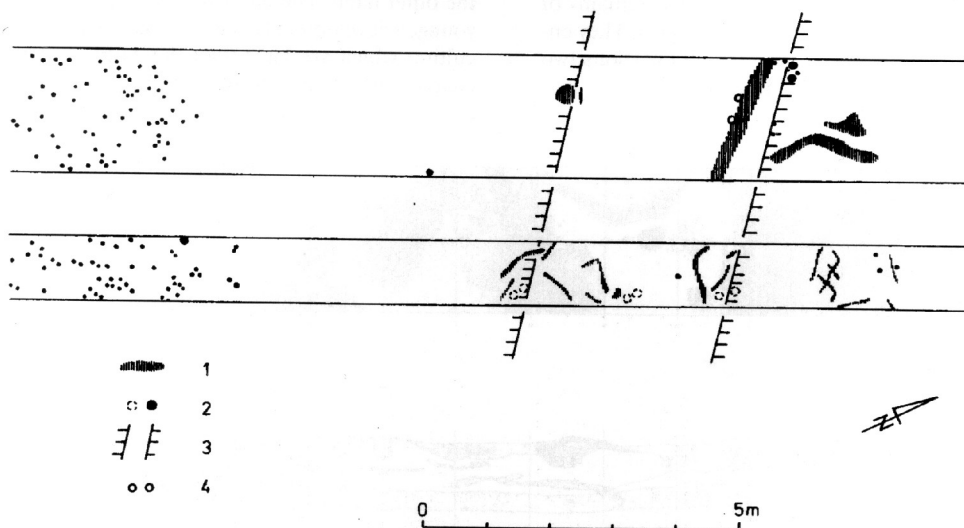


Fig. 5. Kurów-Grodzisko, site1. Supposed layout of rampart in the III/1996 and IV/1997 trenches and the place of collecting coal samples: 1 – grey sand with clusters of charcoals, 2 – traces of poles, 3 – supposed layout of rampart, 4 – place of collecting coal samples.

The results of radiocarbon analysis performed for these samples are as follows:

Kurów-fortified settlement, site 1, trench IV/1997

#### Sample 1

17.12 m from the N profile  
and 0.60 m from the W profile

Ki-6459 2770±50 BP

Calibrated ages (Stuiver and Reimer, 1993):

(1σ) 980-966 BC, 932-836 BC

(2σ) 1006-814 BC

#### Sample 2

17.20 m from N profile  
and 1.00 m from the W profile

Ki-6460 2620±60 BP

Calibrated ages (Stuiver and Reimer, 1993):

(1σ) 844-762 BC, 628-598 BC, 570-562 BC

(2σ) 908-754 BC, 696-532 BC

The differences in the BP dating may result from the fact that the samples originated either from two beams which were not of the same age or from different portions (inside and outside) of the same beam. The second possibility becomes also acceptable when one takes into account the value of a standard error. Whatever the case, the calibrated BC dating yields mainly X-VIII century and seems to indicate that the fortresses under discussion are much older than it was assumed so far. Although single datings are not enough to solve the problem they encourage to undertake more extensive studies until there still exist the remains of the fortifications surrounding the settlements. They encourage also to pursue several research questions two of which seem to be specially intriguing:

- problem of dating of wood used to build the fortifications as compared to the time of occupation of the settlement and of its destruction,
- problem of the criteria used for dating archeological material uncovered in fortified settlements: usually pottery sherds (the so-called “kitchen pottery”) which represents a typological-functional group other than grave ceramics, so it may not be subject to the dating criteria developed basing on sepulchral findings in most cases.

#### 4. DISCUSSION

Establishing firm and reliable chronology of great fortified settlements in the basin of the upper Warta and Prosna rivers has significant historical implications. From the point of view of their size and structure (huge refuges with scarce planes buildings inside) they differ from defensive settlements more characteristic of the HaD period (including for example the “Biskupin-type” sites). These latter represent the so-called phase III of development of fortified settlements distinguished once by A. Niesiołowska-Wędzka (Niesiołowska-Wędzka, 1974) for the discussed period of prehistory. The fortified settlements from the Warta and Prosna rivers basin are similar rather to vast “Silesian-type” fortresses as Wrocław-Osobowice (Szańce Szwedzkie, Raschke, 1929; Gediga, 1976) or Lubowice (Chochorowski, 1976, 1977) which are also known from the Wielkopolska region (Śmigielski, 1993). Their appearance is dated to the late Bronze Age (period V), i.e. sometime between X and VIII century BC. A new dating of 738/737 BC proposed for the Biskupin site (Ważny *et al.*, 1994) does not change anything here because radiocarbon dating suggested for Kurów (X-VIII century BC) is still relatively older. There are also style differences between findings uncovered on one hand in the “Silesian-type” fortified settlements and the “Biskupin-type” ones on the other hand. The latter represent findings typical of younger development phases of the so-called Lusatian culture which are later than the cultural phenomena characteristic of the Bronze Age V.

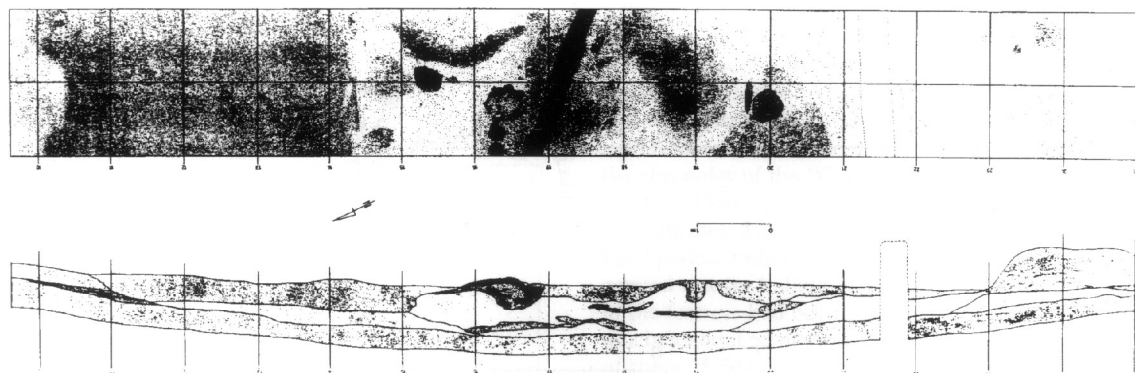


Fig. 6. Kurów-Grodzisko, site 1. Plan and cross-section of the IV/1997 trench with marked remains of charred wooden construction of a rampart.

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