Numerous ethnographic and historical studies have firmly established that house type is conditioned not only by ecology and economy but also by the specific building traditions that might be preserved by certain ethnic groups over a long time. That is why the study of domestic architecture is of interest not only for economic reconstruction but also for investigating archaeological cultures and establishing their ethnic background.

The discovery of the sites of the Sintashta type (Fig. 58) that belong to the early period of the formation of the Andronovo culture has been one of the great success stories of Russian archaeology (Map 12). The traditional chronology sets them to the 17th–16th centuries BC while radiocarbon dating places them earlier to the 20th–18th centuries BC (Smirnov and Kuz’mina 1976; 1977; Kuz’mina 1984; 1998; Gening 1977; Anthony and Vinogradov 1995).

It was I. M. Batanina (1995; Zdanovich and Batanina 1995; 1999) who, after examining military aerial photographs, discovered about twenty fortified settlements, the so-called “land of towns”, that were situated about 40-70km from one other. They were found in the southern Urals in the basins of the European and Asian rivers, the Uy, the Ural, and the Tobol, in an area that runs 400km from north to south and 100-150km from east to west. These settlements are on small river banks, usually on promontories; they are oval, round or rectangular and are surrounded by defensive walls and ditches; in Ol’gino and Alandskoe the outer banks were strengthened by stone slabs. Associated cemeteries have been discovered near the settlements of Sintashta and Kuysak. The cemetery of Solntse II belongs to the settlement of Ust’e while Bol’shoy Karagan is associated with Arkaim. The sites are in areas rich in oxidized copper ores, malachite and azurite deposits that are easy to exploit. The Vorovskaya Yama mine belongs to the settlement at Kuysak and Kisenet is associated with the Ust’e settlement.

Archaeologists have excavated the settlements of Malokizil’skoe, Sintashta, Arkaim, Ust’e, Kuysak, Alandskoe, etc. (Gening et al. 1992; Zdanovich (ed.) 1995b; 1997; Zdanovich G. and D. 1995; Vinogradov 1995a; Malyutina and Zdanovich 1995).

At the settlement of Malokizil’skoe, over an area of 5,000 square meters, there was found a ditch, 1.1-1.4m wide and 1.4m deep, and part of a shallow rectangular house with post-holes and hearths/fireplaces. A child cremation burial was found in the house, executed victims and the burnt remains of people were found both on the square and in the ditch, and sacrificial deposits of cattle and pottery were found in the ditch (Sal’nikov 1967: 19-20, 35-38, fig. 3: 1-8). The settlement was probably destroyed by fire. Malokizil’skoe is the only settlement
in the “land of towns” that is assigned to the Abashevo culture; all others belong to the Sintashta-Petrovka types.

The fortification and layout of the settlements were deliberately planned in advance, taking into account the natural relief. Sites are surrounded by a ditch, 2.5-5m (Sintashta), 4.5m (Ust’e), and 5-7m (Kuysak) and 1.3m deep, with two rows of defensive walls, 1.7m and more thick, made of clay blocks and vertically erected pine logs 0.4-0.5m in diameter (Ust’e). Walls were also made of timber frameworks filled with earth; there was probably a timber palisade above them. The ditch was cut in steps and reinforced by logs.

The inner square of the fortresses revealed regular planning and was divided by radial and perpendicular roads, along which a cart or a chariot could pass. The roads led to entrance gates. The houses were situated between the inner and outer walls; they were rectangular or trapezoidal in form with sides measuring 20m x 13m x 17m (Kuysak) or 15.5-20m x 5-7m x 7.9m. Houses abutted the outer wall and shared a common roof with a pitch towards the center; entrances faced the central square; the house walls were indicated by post-holes. Wells and round surface hearths were found inside the houses. There are traces of slag and copper beads in every building (Grigor’ev 1994). For metal working, they employed furnaces, 0.5-0.9m in diameter and 0.3-0.6m deep, that were connected by a narrow trench, 0.3m wide and 0.7-1.2m long, leading to the well (Kuysak).

There were numerous ritual burials of children, dog, cattle, sheep and goat, especially kids’ sacrifices; vessels are found in defensive ditches. Traces of massive fires and destruction, apparently caused by warfare and demanding the rebuilding of the settlement, have been found on many sites.

The settlement at Kuysak is an irregular rectangle of outer walls, 122 x 96m, surrounded by a wide ditch. Inside the site there is an oval-shaped wall measuring 64 x 58m. The outer and inner walls are connected by three walls forming segments around a central square. In each segment were 6 to 9 houses (Malyutina and Zdanovich 1995).

Partially inundated by the river and covered by constructions of Alakul’, Fedorovo and Alekseevka types, the Sintashta settlement was originally of circular form, 136-147m in diameter, and surrounded by an earthen wall girded by a ditch. Habitations were of trapezoidal form that only partially adjoined the outer wall. There was probably a second badly preserved wall that surrounded the central oval, 60-65m in diameter (Gening et al. 1992).

The settlement of Arkaim presents a most impressive view (Fig. 58: 5). The area of settlement comprised 20,000 square metres and formed two concentric walls, composed of clay blocks, enclosing a central square, surrounded by a ring of habitations that adjoined the first defensive wall (85m in diameter). There was a circular street and outer circle of habitations abutting the more formidable outer wall (Zdanovich 1989: 181-182; 1997: 48-50, fig. 3). The diameter of the outer wall measured 143-145m and was 3-3.5m thick. It was composed of wood and clay with added lime; it was faced on the outside with clay blocks. There was a timber-faced ditch some 1.5-2m deep. The whole construction was divided by radial streets, which probably led to the gates. The western gates were 5-6m wide, others were labyrinthine. Logs and blocks were used to construct the trapezoidal houses. They consisted of a timber frame filled with soil. The habitation