CHAPTER ELEVEN

VERIFICATION OF THE HYPOTHESIS

Anthropological evidence

Anthropology provides an absolutely independent and extremely useful source of information for testing a hypothesis. The close relationship between the western Andronovo population and the Timber-grave people in the contact zone stretching from the Volga to central Kazakhstan is demonstrated by anthropological materials recovered from burials at Tasty-Butak, Tursumbay, Khabarnoe, etc. (Debets 1954: 489-492; Ginzburg 1956a; Durnovo 1970; Alekseev 1964b: 22, 23; 1967; Rud’ 1981). At the same time a more massive type of Europoid (the so-called Pamir-Fergana or Andronovo type), predominated across most of Andronovo territory in the Urals, across all of Kazakhstan, in Fergana, and as far as the Sayan-Altay and Minusinsk Basin (Debets 1948; Levin 1954; Ginzburg 1957; 1962a; Alekseev 1961a, 1961c; 1967; Trofimova 1962a; Gokhman 1973; 1980; Rykushina 1976; 1979). In Siberia this type appears as a result of migration from the west, from Kazakhstan (Debets 1948: 70, 76; Dremov 1973; 1997). On the northern periphery of Andronovo territory one encounters Europoid skulls with a slight admixture of Mongoloid features, probably due to the participation of Siberian peoples (Dremov 1972; 1997; Shevchenko 1976; 1980).

The Saka of Kazakhstan and Central Asia were formed on the basis of the Andronovo type (Ginzburg 1951; Rychkov 1964; Alekseev and Gokhman 1984: 21, 27, 35; Ismagulov 1963; 1970; Tot and Firshtein 1970; Gokhman 1973; 1980). Thus, anthropological data confirm the conclusion that the Iranian Saka and Sauromatians succeeded the Andronovo, which was also demonstrated by the retrospective method. Anthropological materials also show the closeness and interrelationship between the Timber-grave and Andronovo populations in the large contact zone and the mixed character of the bearers of the Tazabagyab culture which has been established from the cemetery of Kokcha 3 (Trofimova 1957; 1959; 1961; 1962) as well as the succession of the Saka population of the Aral Sea region with tribes of the Bronze Age (Itina and Yablonsky 1997: 80,81).

As far as the anthropological type of the Timber-grave culture is concerned new material confirms the direct genetic succession between the Timber-grave and Poltavka populations of the Lower Volga and shows that west European ties were decisive in the formation of the Catacomb and especially the Abashevo cultures (Shevchenko 1989: 129-130). This conclusion is of great significance for resolving the problem of the formation of the Sintashta and Potapovka populations of the 17th–16th centuries BC. Skulls from Potapovka burials belong to the massive proto-Europoid type and are similar to the earlier Catacomb and
genetically follow the Timber-grave and west Andronovo, but differ from Abashevo (Yablonsky and Khokhlov 1994: 189).

In the 2nd millennium BC a population different in origin coexisted in Central Asia. In the south, in the foothills of Turkmenia, in Margiana and Bactria (Sapalli), as well as in Fergana (Chust, Dal’verzin) was a land dominated by agriculturalists; according to V. P. Alekseev (1990) this was a territory genetically connected with the Near East and Iran (Capprieri 1973) and also partially with north-west Hindustan, as in the steppes of Central Asia there was a merging of different populations. Skulls from the Andronovo cemetery at Muminabad are assigned to the east Mediterranean type (Khodzhaiov 1977: 9) and are close to Zaman-Baba, the steppe component of the Chust and Dal’verzin populations (Ginzburg and Trofimova 1972: 77). A skull from the late Andronovo cemetery of Vuadil’ is analogous to material from Kokcha (Trofimova 1960: 114; 1964: 11), i.e., already mixed; another skull resembles Afanas’evo ones (Ginzburg 1956b).

Other materials provide unquestionable evidence that steppe populations advanced to the south of Central Asia: skulls from mixed Timber-grave and Andronovo cemeteries at Patma-say and Karalemata-say in Turkmenia and from a burial on the settlement of Takhirbay 3 are proto-Europoid with Timber-grave and Andronovo features (Ginzburg 1959a: 105-206). A. Isakov made a significant discovery in the cemetery of Dashti-Kozi whose materials combine elements of the Andronovo (Fedorofo type), and Mollali cultures: of twelve skulls, three are male and belong to the Andronovo type (Isakov and Potemkina 1988). This confirms the conclusion about contacts between aboriginal farmers and northern pastoralists.

The further advance of the steppe-tribes to the south-east is demonstrated by the cemetery at Qäwrighul/Gumugou on the shores of Lopnur in Xinjiang, where skulls are close to Andronovo and Afanas’evo (Han Kangzin 1994; 1998).

Cranial analysis by B. Hemphill and A. Christensen (1994) from the Bactrian cemeteries of Sapalli and Jarkutan have shown that the Bactria-Margiana Archaeological Complex (BMAC) was formed from a population migrating from north-west Iran, and its creators did not migrate afterwards into the Indian subcontinent. This excludes the hypothesis of A. Parpola (1988) who suggested that the creators of the BMAC were Indo-Aryans who migrated to India. They also showed that the BMAC began to interact with the northern steppe tribes thus supporting my hypothesis.

A migration from the north of groups of pastoralists is confirmed by data from Shortughai in Afghanistan. Here were found burials of the Bishkent culture, whose skulls, according to L. Bushe, belong to the same type as those found in the early cemetery of Tulkhar in northern Bactria and which have no analogies in the south (Francfort 1989: 211-223). T. P. Kiyatkina initially suggested that the Tulkhar population belonged to the broad-faced Europoid type of the steppe zone of Eurasia; however, later she rejected this, stressing a unique Tulkhar series for the 2nd millennium BC (Kiyatkina 1976: 16, 17, 61).

The progress of pastoralists to the south, into north-western Hindustan, can be traced in the cemeteries of Gomal and Swat, whose culture reflects the interaction of Bishkent and Andronovo components (Mandel’shtam 1968; Litvinsky 1981; P’yankova 1982b; Kuz’mina 1972a, b; 1975). Skulls from the