Anthropology of the Late Bronze Age population of Southern Uzbekistan: Materials of the Buston VI necropolis. Nadezhda Dubova, Vladimir Kufterin (Moscow: Staryi Sad, 2015); pp. 186; ISBN 987-5-89930-148-3.

The book provides a detailed analysis of the skeletal remains found in the Buston VI (B VI) necropolis in Uzbekistan. These burials date to the Late Bronze Age and belong to the Sapalli culture (Molali and Buston stages), a population that lived in Central Asia in an area that corresponds to the historical territory of Northern Bactria. Excavations at the site were carried out between 1990 and 2008 under the direction of N.A. Avanesova. In 2010, a preliminary analysis of the materials from Buston VI were published.

The main text of the book is divided into three chapters, which are further subdivided into smaller sections. The first chapter, written by Dubova, provides a general description of the materials recovered at the Buston VI necropolis. In section 1.1., a brief overview of the archaeological and cultural contexts are provided, with some details concerning the development of the Sapalli culture between the 19<sup>th</sup> and 11<sup>th</sup> centuries BCE. According to the author, early on the Sapalli culture was characterized by a predominance of wealthy female graves, while later the position of men was strengthened based on the presence of metal products found in male burials. Gradually, a reduction in metal jewellery in the graves is observed, being replaced by bronze votive imitations. The author emphasizes that necropolis B VI reflects the processes of cultural transformation, as evidenced by the temporal changes in grave goods and their distribution.

According to Dubova, Buston inhabitants carried out cremation, inhumation, partial and secondary burial, and human sacrifice. Therefore, necropolis B VI may be considered a necropolis of fire worshipers of Northern Bactria, where fire had a high and mythologized status. In addition to the regular burials, symbolic burials were observed, which may suggest the site was a ceremonial centre for the administration of religious ceremonies and rituals. Podboini graves dominated, the lowest percentage of burials were found in the catacombs.

Section 1.2. provides a detailed description of the skeletal collection (from 103 graves), including the degree of preservation, age and sex determinations, and visible pathological conditions.

In section 1.3., an analysis of the demographic structure of the skeletal population is provided that includes 101 individuals (46 males, 41 females, 14 children under 14 years); two skeletons of uncertain sex were excluded from the analysis. More males were identified compared to females (52.9% and 47.2%, respectively). Subadult mortality was found to be low (13.9%), and is explained by the location of children's graves at the peripheral areas of the necropolis. The average life expectancy was calculated as 29.5 years (33.2 years excluding subadults). The author emphasizes a slow rise in male mortality and two small "jumps" in female mortality coinciding with the periods of 20-24 and 30-34 years. The percentage of individuals surviving to the age of 50 is negligible.

Section 1.4. provides data regarding the relation between sex, age-at-death, and the elements of funerary rites. The analysis includes data for 96 graves. The results ascertain the absence of a clear association between sex or age-at-death and the construction of the burial pit.

In the second chapter of the book, skeletal data are presented including osteometric data, intra-group craniological analysis, activity-induced musculoskeletal stress markers, and palaeopathological analysis. 35 males, 33 females, and 14 subadults were examined. The researchers aimed to define which of the three main craniotypes i.e., Tropids, Holarctids, or Pacifids (after Pestryakov) members of the group belong to. Comparison of the Buston series indicators with average data for craniotypes showed that the B VI individuals are almost equally distant from the three main craniotypes. Females from the Buston necropolis were shown to have more variability than the males. According to the authors this can be related to a greater "conservatism" of the female genotype. The craniometric coefficients change with age in males—it is observed in increasing height of the skull, frontal arc, chord, and frontal breadth. In females, seven measurements were correlated with age, the majority of which are related to the growth of bone in the latitudinal direction. When attempting to trace the link between craniometric indicators and the type of burial pit and funerary rite, selection was shown to be due to kinship ties. The authors suggest that families preferred to bury their dead relatives in a certain way. Comparison of the types of graves with age-at-death showed that it was preferred to bury younger males in pits, and older individuals in podboini graves or catacombs. Among males, the same pattern is revealed in a "special" type of burial with older age—more common are fractional, secondary, damaged burials; this pattern was not observed in the female graves.

No significant changes in craniometric parameters were observed between the individuals from the Molali and Buston stages. Although there is some difference in the morphological appearance of these temporal subsets, the authors conclude that it is likely common stochastic intergenerational variability.

The entheseal sites of the proximal segments of limbs in males were more pronounced than those of the distal segments, and the entheseal sites of the lower limbs were more pronounced than those of the upper limbs. Right elements, except for the ulna and femur, had slightly more developed relief, though asymmetry is not expressed sharply. In females, relief in the upper limbs is more pronounced. The authors conclude that there was significant sexual dimorphism in the development of relief in the long bones.

The last section of the chapter includes a discussion of pathological conditions and stress markers together with a detailed analysis of the isolated teeth (by G.V. Rykushina). In this section apical abscesses and tooth loss patterns are analysed, and they were often recorded in females. In two cases degenerative-dystrophic changes of the temporomandibular joint were observed as well as traumatic damage to the C1 and P1. Cases of genetic tooth anomalies, such as the spacing of the maxillary teeth, crowding of the lower premolars, as well as reduction of the M3 (the latter was detected in two individuals, which provides grounds to make assumptions regarding kinship) are mentioned. In six cases hypodontia of M3 was observed.

According to the authors, in the Buston necropolis the frequency of genetic abnormalities of the skull and postcrania was rather low (except for septal apertures of the humeri, which were found in 16.3% of skeletons). The authors conclude that this indicates the absence of closely related ties between individuals. In addition, the population of Buston VI has a low level of traumatic injuries. Cranial lesions were detected only in males. Injuries to the post-cranial skeleton were located exclusively in the upper limb (humeral fracture with displacement of bone fragments, as well as two cases of fracture of the distal end of radius). In the spine Schmörl's nodes, spondylosis, spondylarthritis, and osteochondrosis of the intervertebral discs were recorded; no sex differences (five cases in men and five in women) were noted. In addition, new periosteal bone formation in the proximal end of the diaphysis of the left femur (male 30-40 years) and two foci of destruction of bone in a male skull (25-35 years) were recorded, the latter of which the author interprets as a possible effect of a secondary malignant neoplasm.

In the third chapter, the authors describe the anthropology of the Buston VI necropolis and the ethnogenetic situation in southern Uzbekistan during the Late Bronze Age. The researchers aimed to trace possible links between the population of B VI by intergroup comparisons with populations in other areas. Ninety nine cranial series of Neolithic and Chalcolithic periods were gathered (agricultural and pastoral populations of different regions of Central Asia and surrounding areas). In particular, the Buston series itself is placed among agricultural groups, but still close to the "borderland" with the steppe cranial series.

In the conclusion the authors present some ethnogenetic models concerning the Bronze Age population of south of Central Asia and also state the importance of anthropological data in tracing actual migrations of the population. The authors also argue that there were two cultural and historical regions during the Bronze Age in Central Asia: 1) the southern area, where the base of the economy relied on irrigation agriculture, and 2) the northern steppes, where pastoralism was practiced (which belonged to the area of the Eurasian steppe Bronze Age cultures). Regular contact between the people of these two regions gradually led to a blurring of the differences in their economic and social development, associated with trade exchange. Since the end of the 2<sup>nd</sup> millennium BCE, Central Asia had become an area with a developed civilization controlling crossroads of trade routes and cultural exchange between the Middle East, South and East Asian centers, and peoples of the steppe zone of Eurasia. It is worth mentioning that the author's conclusions in this section are a significant expansion of the main topic of the book (which is also stressed by the authors themselves) and that it fails to disclose details of some of the issues, which could confuse the reader.

The book contains several appendices. Annex 1 (by A.I. Nechvaloda and V.V. Kufterin) discusses burial 324 in detail. The burial includes two skeletons; one belonging to a mature male and the other to an 8-9-year-old child. The male was found on his left side with articulated limbs and the child's skeleton was articulated except for the thoracic area. In addition, the child's skull was separated from the postcranium, and positioned with the parietal part down. The text provides detailed drawings showing the position of bones and objects in the burial. The authors believe that the male's body was tightly wrapped in cloth. The child's skeleton bore no trace of pathological conditions or injuries, while the skeleton of the male is described as "outstanding" in terms of pathology. The male has a healed fracture of the left distal radius (most likely a Colles' fracture), powerful osteolytic destruction on the caudal surface of L5 (>50%), as well as general vertebral body deformities. The authors suggest that the vertebral destruction could have been caused by a tumor, which may have led to paraplegia and scoliosis, as well as to disfunction of the pelvic organs.

Annex 2, the last section of the book, is written by G.V. Rykushina and provides odontological data for the 57 individuals from the Buston VI population. In addition to identifying several pathological conditions and dental wear, the author aimed to find trends in the ethno-cultural relations of the population. In conclusion the author suggests that the Buston population belonged to the circle of southern Caucasians—more gracile than in the eastern part of the area. Particular features of the observed pathological conditions and dental wear reflect a mixed type of nutrition under the dominance of animal husbandry. The author concludes that the population of Buston VI came and lived in this area for a short time.

Appendices 3-5 contain tables with data on individual measurements of the skulls and long bones, as well as the metric characteristics of the teeth from the Buston VI necropolis. Appendix 6 provides photos of some skulls.

Both the archaeological and cultural contexts are explained and the skeletal analysis is presented clearly in the book, however an index would have been helpful. The large number of tables within greatly simplifies the perception of information.

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Bones and Identity: Zooarchaeological Approaches to Reconstructing Social and Cultural Landscapes in Southwest Asia. Edited by Nimrod Marom, Reuven Yeshurun, Lior Weissbrod and Guy Bar-Oz. Oxbow Books, 2016; pp. 352, £38; ISBN 978-178570-172-6.

This book is an outcome of the joint venture of the participants in the 11th Meeting of the Archaeozoology of Southwest Asia and Adjacent Regions, held at the University of Haifa, Israel, in 2013. It includes seventeen chapters, together with the preceding overview of each paper provided by the editors. The volume is a typical post-conference publication, including research from a wide geographical area (from Greece, through the Levant and Caucasus, and into northern India) whose chronology spans from the Pleistocene to the Middle Ages. The studies included in this book can be further subdivided into three primary categories: (1) zooarchaeological reports from different archaeological sites, (2) original studies that address more specific questions (e.g. about the approach of using commensal species as the indicator of an early sedentism (Chapter 2, by M. Belmaker and A.B. Brown) or analysis of butchering marks preserved at a flooded assemblage (Chapter 5 by H. Greenfield, T. Cheney and E. Galili), and (3) review papers, which summarize and/or discuss previously conducted research (e.g. Chapter 6, written by O. Bar-Yosef, provides an alternative explanation of the role of "desert kites"). The chapters are presented according to the sites' chronology (i.e. from the oldest to the more recent). However, the topics presented in this volume are so variable, that even this structured chronological ordering does not diminish the impression that the book is slightly inconsistent. There is no cohesion even in applied standard zooarchaeological methods. This volume is also hampered by a few editorial errors (e.g. in Chapter 1 and Chapter 17 several of the figures provide captions for items that are not depicted in the accompanying images).

Among zooarchaeological reports, the works of L. Bartosiewicz and C. Pickard, concerning animal (Chapter 7) and molluscan (Chapter 8) remain analyses from Tell

Aqab, a northern Syrian site, are outstandingly precise. Several publications of particular note are presented in this volume, include the review of cynophagy (practice of eating dog meat) cases from Bronze Age Attica by A. Hadjikoumis (Chapter 11) and the study of cuisine "Romanization" in Late Roman Egypt by P.J. Crabtree and D.V. Campana (Chapter 15). The latter study tracked diet changes through animal remains and was additionally buttressed by the discovery of Roman paintings in the villa in the same excavation area. This, according to the author, might indicate the owner's attachment to imperial lifestyle.

The majority of chapters presented in this volume are highly specialized and assume that the readership has a level of background knowledge about Near East archaeology. Hence, this volume might be particularly useful for archaeologists who would like to learn more about particular archaeological sites depicted within, or the specific problems and challenges which zooarchaeology of the Fertile Crescent and the adjacent regions has faced. However, as in cases of many post-conference publications, this volume does not have one leading topic, but rather is comprised of a number of papers on diverse topics relating to the overarching region of southwest Asia. Therefore I would not recommend this publication as a basic textbook, but it may be a valuable addition to more advanced, detailed studies.

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