

Research on human remains from Polish excavations in Africa and the Near East

Abstracts
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Dental microwear analysis based on material from Egyptian part of skeletal collection in Duckworth Laboratory, Cambridge, and from excavations at Tell el-Retaba

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Dental microwear analysis was conducted in order to detect changes in cereal grinding methods in ancient Egypt. Dental microwear pattern was examined in samples of 93 individuals from the Duckworth Laboratory collection and 2 individuals from Tell el-Retaba. Skeletons from the Duckworth collection came from sites at Abydos, Sedment, Giza, Sakkara, Ramesseum, Hierakonpolis, Qurneh, Qau, Tarkhan and Nagada. The assemblage covers periods from pre-dynastic times to the Thirtieth Dynasty. Based on comparison of skeletons from different periods it is possible to determine whether cereal grinding methods changed in Ancient Egypt.

The state of bioarchaeology in Georgia

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This presentation relates the speaker's experiences of travelling and working as an archaeologist in Georgia in the summers between 2014 and 2016. The country's rich historic background and a plethora of undocumented archaeological sites offer, without doubt, immense possibilities for archaeological research. Nonetheless, it is important to draw attention to certain deficiencies concerning the state of bioarchaeology in the region. A limited number of publications within that field may be ascribed not only to poor bone preservation, but also to a lack of resources amongst local archaeologists. In an attempt to



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ensure preservation and further analysis of skeletal remains, the author will present their efforts to stimulate an interest in bioarchaeology in Georgia.

Gird-i Shamlu 2016: research aims and first results

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Gird-i Shamlu is located at Zagros foothills, next to Darband-i-Khan Dam Lake in Iraqi Kurdistan. Rescue excavation was conducted here in the early 1960s. The site had been occupied since the late 4th millennium and (then) abandoned at the beginning of the second millennium. Later, in the 18th - 17th c. BC it was repopulated. With new inhabitants, a new type of pottery was introduced, the so called Shamlu Ware, with analogies from Zagros Mountains. According to Janabi, who first classified and described the Shamlu Ware, the "Shamlu people" were semi-nomads who came down from mountains and settled in the area of Shahrizor. The project aims to investigate this hypothesis using interdisciplinary approach. The presentation reports the aims of the project and results of the 2016 season.

Stature estimation in the medieval population of Deir an-Naqlun

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Deir an-Naqlun (Nekluni) is an archaeological site, known also as Deir el-Malak Ghubriel, Monastery of the Archangel Gabriel. It is situated in the West Desert, about 16 km south of town of Fayum, and 120 km south from Cairo. It is one of the oldest still functioning monasteries in the Fayum oasis, dating back to at least the 6th–7th c. AD. Excavations at the site have been conducted since 1986 by the University of Warsaw, Poland and directed by Prof. Włodzimierz Godlewski. Between 1986 and 2000 from 130 burials the remains of 189 individuals were excavated of which 77 males and 34 females (111 individuals total) were preserved in state allowing measurements of long bones. The presentation discusses the stature of the adults from the Naqlun population, evaluating the dispersion of estimates obtained with commonly employed regression methods. Different heights calculated from separate long bones can shed light on body proportions of the researched population and thus indicate the best approach to the stature estimation of incomplete skeletons.



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Lives short lived: Child morbidity and mortality in the ancient region of Memphis, Egypt, in the Ptolemaic Period (332–30 BC), based on skeletal evidence from the Saqqara necropolis

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The Saqqara necropolis forms a central part of the extensive Memphite necropolis that served as a burial ground for the local population which had been occupying the nearby settlements for thousands of years. Archaeological evidence suggests that the area extending immediately to the west of the Step Pyramid complex had been in use for funerary purposes for 400 to 500 years following its construction (2667–2648 BC), and then again during the Ptolemaic Period (332–30 BC). Since 1994, the Polish Archaeological Mission to Saqqara has uncovered close to 700 burials that contained the remains of individuals of all age groups.

This presentation will focus on the burials of children (≤ 12 years of age) dating to the Ptolemaic Period, which were uncovered during the 2007–2014 excavation campaigns. Out of a total of 151 burials, 29 (19.2%) contained mummified or skeletonised remains of children. Of these, 18 (69 %) burials were of individuals aged five years or under at the time of death. Generally good preservation and completeness of the skeletal remains allowed for detailed macroscopic examination; this revealed that porosities in the orbital roof was the most common pathological lesion observed in this sample. Carious lesions were also very common. Possible causes of child morbidity in the Memphite region, based on the skeletal evidence, will be discussed.

Looks can be deceiving: Fake and composite mummies from the Ptolemaic cemetery at Saqqara, Egypt

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Disposing of the dead in ancient Egypt was a highly ritualised and complex process instigated by religious beliefs that promised eternal life to those who could satisfy a number of specific requirements. The most important of these requirements was the preservation of



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the body. But what if there was no body to bury or the body itself was, for some reason, incomplete?!

A Ptolemaic Period cemetery extending westwards to the Step Pyramid enclosure at Saqqara has yielded more than five hundred burials since excavations began in 1996, among which were four suspicious-looking mummies. Detailed examination of these inhumations delivered surprising findings: the wrappings of one of the mummies (B. 519) contained no more than a few bone fragments commingled with scraps of textile and other materials associated with the mummification process, whereas the other three mummies (B. 415, B. 627 and B. 639) were each composed of skeletal elements that belonged to more than one individual.

The finding of composite mummies at Saqqara is not unique to ancient Egypt; evidence of this practice has been reported from other burial sites of the Graeco-Roman Period, including Hawara in the Fayum Oasis and Ismant el-Kharab in the Dakhla Oasis.

In this presentation I will explore the purposes and circumstances for making fake and composite mummies at Saqqara.

Stature of inhabitants of the Medieval Alexandria. A view from Kom el-Dikka

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Since 1985, when a study of stature of inhabitants of the Medieval Alexandria based mainly on data from Kom el-Dikka was published by E. Promińska, a significant progress has been made, both in the research methodology and in the field. To date, studies of the skeletal samples from Kom el-Dikka employed three different regression formulae. Choosing the best stature reconstruction method for a more comprehensive study of the necropoleis comprising all the anthropological data collected from site became a necessity.

Generally speaking, the more morphologically similar the population under study is to the sample used in creating the formulae, the more reliable the results of the stature reconstruction are. If special status of Alexandria is taken into account, the Medieval inhabitants of the city, biologically, could have had more in common with populations of other Mediterranean towns than with the rest of Egypt. As proved in case of pre-modern samples from Italy, the most consistent results were obtained when relatively old Pearson's



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regression formulae were employed. Therefore, in case of Alexandria the natural choice of more recent formulae, based mainly on the reconstructed stature of the inhabitants of the Old Kingdom, together with other less obvious choices, have been evaluated.

Refleksje na temat ludności dawnej i współczesnej Palmyreny

Some remarks on past and present Palmyrena inhabitants

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The area of former Palmyrena and today's city of Tadmur makes up an intriguing liaison between Levant and Western Mesopotamia. Therefore anthropological research of its inhabitants could largely contribute to the study of its history. Finds and analyses from the excavations conducted by the Polish Archaeological Mission to Palmyra were studied by the author in 1998 and 1999. They comprised mainly analyses of inhumations explored previously, but also, contemporaneously. Findings, although incomplete, lead to provisional remarks on the Palmyra population, as well as make one reflect on the role anthropology is to play in the Near East history study.

A Possible Cereal Grinder at Tell Arbid, Syria

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The skeleton of an osteoporotic mature adult female was discovered by the Polish-Syrian mission in the Middle Bronze Age strata at the site of Tell Arbid, Syria. Although the remains were highly fragmentary, a bioarchaeological analysis of the material was carried out. In addition to suffering from traumatic injuries and osteoarthritis, osteological indicators of activity were noted in the remains including enthesopathies and evidence of joint modification. The results of our investigation suggest that while difficult, the bony changes may be attributed to using a saddle quern in a keeling position to grind grains such as barley and wheat.



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History of and recent trends in bioarchaeological research in the Nile Valley and the Levant (*special lecture*)

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The earliest time frame of 1840 to 1929 witnesses the development of traditional skeletal studies with a focus on skulls and race, but also saw developments in statistics, age/sex determination, and the birth of paleopathology as an academic discipline. 1930 to 1963 saw slow improvements in the methods introduced earlier, but from 1964 to 1981 there was an explosion of books and articles introducing new analytical methods, the birth of bioarchaeology, and a focus on dietary reconstruction and the origins of agriculture. There was a great increase in sophistication of research methods as well as numerous technical innovations, but there was no change in theory beyond problems associated with ancient agriculture and increasing settlement sizes. Despite the growth in research and publications, the period from 1982 to 2006 was a period of technical maturation, while archaeology was incorporating many advances in social theory. Beginning in 2007 and continuing until today bioarchaeology has increasingly adopted much of the archaeological and social theory which produced another publication extravaganza on topics such as osteobiographies, health and care the sick, social identity, violence, and research employing ancient DNA. Speculation on the future of bioarchaeology follows these trends while focusing on the integration of social theory into the study of skeletons and the great strides that will be made in understanding the co-evolution of humans, cultures, and pathogens.

Diet and subsistence at Tell Arbid, Syria, in the Early and Middle Bronze Age

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Tell Arbid is a medium-size archaeological site in the heart of the Khabur Triangle, Northern Mesopotamia. It had been inhabited at least since the beginning of the Early Bronze Age until the beginning of the Late Bronze Age. Archeological excavations by teams from the University of Warsaw and the Adam Mickiewicz University in Poznań revealed several domestic structures, a small temple and more than 200 burials. From the total number of 311 skeletons, 47 bone and dentin samples were taken for the analysis of stable carbon and nitrogen isotopes. The collagen quantity and quality was sufficient in 27 samples and the



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analysis of $\delta^{13}\text{C}$ and $\delta^{15}\text{N}$ allowed some insight into diet and subsistence at the site during the Bronze Age.

Distribution of $\delta^{15}\text{N}$ values suggests that the intake of animal protein was variable both in the Early and Middle Bronze Age, but there was small, although statistically significant, shift in the $\delta^{13}\text{C}$ values between these periods (from c. -19.5‰ to c. -19.0‰ in average). It may be the effect of wider use of dry steppes with higher share of the C_4 grasses by the people representing the Khabour Ware culture. Similar effect has been observed at nearby Tell Barri, but dated to the transition between the Middle and Late Bronze Age, about half a millennium later. Evidence gathered shows that this transition in subsistence, leading to higher exploitation of dry steppes for pastures, was not a uniform process in the Khabour drainage.

Przypadek przyżyciowej trepanacji czaszki z neolitycznej osady w Khor Shambat (Sudan)

Intravital skull trepanation – a case from the Neolithic site of Khor Shambat, Sudan

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The case presented here regards a skull discovered during the 2016 excavation by archaeologists from The Institute of Archaeology and Ethnology PAN, conducted at Omdurman, Sudan Neolithic site, dated to the 5th – 4th millennium BC. The skull, dated to ca. 7th millennium BP, is one of the oldest examples of trepanation known from the north-eastern Africa.

The Monastic Cemetery (Cemetery 2) at Deir el-Ghazali, Sudan

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The monastic site of Deir el-Ghazali was inhabited from ca. 670 to 1270 CE and, along with Qasr el-Wizz and Old Dongola, is one of few known examples of monastic communities in Nubia. A large cemetery (Cemetery 2), associated with the monastic complex, is situated along the southern border of the preserved monastic structures. This sizeable cemetery is



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believed to have been used by the monks inhabiting Ghazali. Variations in grave types, ranging from simple pit burials to elaborate vaulted tombs, suggest a range of social variations among the individuals interred in the cemetery. Over the 2015/2016 field season 66 individuals were excavated from Cemetery 2, of which 64/66 were adult males. Burials conform to a typical Christian style having little to no grave goods, with heads placed to the west and individuals being wrapped for burial in shrouds. Skeletal investigation of these individuals suggests a relatively healthy population, with many individuals living beyond 40. Pathological conditions observed within this sample were typical to activity related osteoarthritis. At least two individuals had hip fractures, while numerous individuals were edentulous and showed signs of abscessing into the area of the maxillary sinuses. This presentation will address the nature of the lives lived by the monastic individuals at Ghazali through a discussion of burial variation, osteobiography, and palaeopathological analyses.

