## APPENDIX 1

# EXAMINATION OF HUMAN BONES FROM BANGANARTI AND TANQASI, 2007 

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## SKELETAL REMAINS FROM BANGANARTI

## 1. SECTOR IV

(For the location, see below, contribution by M. Drzewiecki, page 345-346, in this volume).
Fragment of the post-cranial skeleton of a late subadultus individual, the sex indeterminable owing to transitional build of the pelvis. Preserved right femur and tibia, fragment of the humerus, ulna, pieces of ribs, feet and upper part of the body of the first sacral vertebra [Table 1].
Intrusive in this context, shaft of the left humerus of an infans I/II, 120* long.

Animal remains found in context with the human bones: four fragmentary pig teeth (including one from a young specimen),
epiphysis of the long bone of an immature individual identified as an ovicaprine, patella of a donkey(?), fragments of the femoral bone of a mature pig and a few minor pieces difficult to identify.

## 2. SECTOR VIII (ROOM 17)

(For the location, see below, contribution by M. Drzewiecki, page 357 in this volume).

Right pelvic plate, rather female. Adult individual, fairly low height. Also fragment of the talus, rib and metatarsus, most likely from a single individual.

Moreover, fragment of the shaft and distal epiphysis of the right tibia of another adult individual, tall(!), most probably also a female.

Table 1. Long bone measurements for material found in Sector IV at Banganarti (2007)

|  | h/l | tr | sg | bic | ob | remarks |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| clavicula $s$ | 116 | - | - | - | - | no epiphysis |
| ulna $d$ | 237 | - | - | - | - | without distal socket |
| femur $d$ | $417(393)$ | 20 | 23 | 70 | 413 | (without distal socket ) |
| tibia $d$ | 334 | 19 | 26 | - | - | shaft only |

$d$ - right; $s$ - left; $\mathrm{h} / \mathrm{l}$ - maximum height/length; $t r$ - transverse midshaft diameter; $s g$ - sagittal midshaft diameter; bic - bicondylar breadth; ob- oblique (bicondylar) length

## BONES FROM THE BURIAL AT TANQASI (TNQ 1/07)

Skeleton of a man, maturus, rather late. Most of the bones are damaged: the skull is well preserved, less so the vertebrae and long bones, and pelvis (Tables $2-5$; for the archaeological circumstances of the discovery, see above, 335).

The skull is fairly big, massive with hypertrophy of the left mastoid. No trace of compensative asymmetry indicates that the hypertrophy occurred rather late in life, especially as there is no asymmetry also in the post-cranial skeleton. Atrophic cribria orbitalia in the left eye socket.

Dentition: some roots and the front teeth have been preserved. Numerous

Tables 2-5. Cranial indices, craniometry, cranioscopy (Michalski-Wierciñski-Piasecki scale [Piasecki 1992]) and long bone measurements for the male burial from Tanqasi (TNQ1/07)
Legend:
*- burdened with a measurement error in excess of the standard
d - right side
$s$ - left side

## Table 2. Cranial indices

| Cranial Length-Breadth | $64.4^{*}$ |
| :--- | :---: |
| Cranial Length-Height | 90.6 |
| Cranial Breadth-Height | $140.5^{*}$ |
| Frontoparietal | 78.0 |
| Kolmann's Upper Facial | 54.1 |
| Virhoff's Upper Facial | $72.0^{*}$ |
| Total Facial (morphological) | 82.7 |
| Orbital | 75.9 |
| Nasal | $52.0 d$ |
| $\mathrm{~m}_{2}$ | $157.0^{*}$ |
| $\mathrm{~m}_{3}$ | $162.3^{*}$ |

fistulae and strong reduction of the alveolar process. Alveolar processes in the mandible have been completely obliterated in place of lost teeth, the narrowing of the arch advanced. Slight rotation of the mandible ramus.

Post-cranial skeleton: vertebrae partly damaged and incomplete. Three vertebrae of the lumbar part with osteophytic changes. Backbone geometry undisturbed. Degenerative changes of the vertebral core in the neck section. Degenerative changes of the articular surface of the right patella.

Table 3. Craniometry

| g-op | 191 |
| :--- | :---: |
| eu-eu | $123^{*}$ |
| b-ba | 173 |
| au-au | $123^{*}$ |
| zy-zy | 133 |
| zm-zm | $100^{*}$ |
| ft-ft | 96 |
| n-ns | 50 |
| n-pr | 72 |
| n-gn | 110 |
| mf-ek | $41.5 d$ |
| h.orb. | $31.5 d$ |
| apt-apt | 26 |
| go-go | $124^{*}$ |
| kdl-kdl |  |

## BANGANARTI

SUDAN

Table 4. Cranioscopy (MWP)

| 1 | 11 | 15 | 2 |
| :---: | :---: | :---: | :---: |
| 2 | 5 | 16 | 3 |
| 3 | 4 | 17 | 2 |
| 4 | 3/4 | 18 | $5 / 6 d$ |
| 5 | 4 | 19 | 4 |
| 6 | 1 | 20 | 2 |
| 7 | 2 | 21 | 4 |
| 8 | 3 | 22 | 4 |
| 9 | 3 s | 23 | 3-4 |
| 10 | 6 | 24 | - |
| 11 | 6 | 25 | 2 |
| 12 | 2 | 26 | 2 |
| 13 | 1/2 | 27 | 3 |
| 14 | 1/12 | 28 | 3 |

Table 5. Long bone measurements

|  | h/l | tr | sg | bic | ob | remarks |
| :--- | :---: | :---: | :---: | :---: | :--- | :--- |
| axis, dens | 17.5 | 11.5 | 10.5 | - | - |  |
| sacrum | 95 | 99 | - | - | - | - |
| patella $d$ | 43 | 44 | - | - | - |  |
| humerus $s$ | 335 | 17 | 19 | 62 | - |  |
| humerus $d$ | - | 17.5 | 20 | - | - |  |
| radius $s$ | 273 | - | - | - | - |  |
| radius $d$ | 273 | - | - | - | - | (crista) |
| femur $s$ | 459 | 25 | $31(33)$ | - | $-\quad$ (crista) |  |
| femur $d$ | 449 | 24 | $28(31)$ | - | - | - |

$d$ - right; $s$ - left; h/l - maximum height/length; $t r$ - transverse midshaft diameter; $s g$ - sagittal midshaft diameter; bic - bicondylar breadth; ob - oblique (bicondylar) length

