CHAPITRE 13
ANTHROPOLOGICAL ANALYSIS OF NEOLITHIC HUMAN REMAINS FROM TAHADART (MOROCCO)

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The human remains analysed were found during field survey in the Tanger region in 2002 by members of the Belgian-Moroccan-Polish archeological mission. The discovery comes from the location of Tahadart, about 30 kilometers south of Tanger (GPS data: N 35.96908/ W 005.98473). Numerous animal bones, as well as an agglomeration of human bones, were found. Based on C14 date obtained on a human bone shaft, the age of the skeleton is determined to be 4350 BC.

Bone Concentration

The human remains were situated on a hillside and were concentrated in a zone of about 200 x 80 cm. Bone tissue is very well preserved – the bones are hard rather than friable. However, the skeleton is quite incomplete, and the bones were mechanically damaged *post mortem* and preserved in small fragments (Photo 1). The position of the fractures on the bones shows that the damage occurred recently, the character of which is typical for surface discoveries. Within the concentration, the bones were mixed without anatomic articulation.

Analysis

The analysis was conducted according to procedures commonly accepted for this type of discovery (Buikstra & Ubelaker 1994, Piontek 1996, Ubelaker 1989.).

Skull remains

- parietal bone fragments with numerous parts of the sagittal suture, part of the coronal suture and part of the lambdoidal suture
- small pieces of occipital bone with lambdoidal suture
- lambdoid ossicle
- small part of temporal bone
- fragment of right part of frontal bone (supraorbital area) and small fragment situated near the *glabella* point with supraorbital foramen and part of brow arc
- small fragments from upper area of left and right orbit with parts of supraorbital margin
- almost complete left zygomatic bone
- left petrous bone
- fragments of mandible - small part of body of mandible, fragment of right mandible ramus with articular condyle
- two permanent teeth – first right upper incisor with broken crown (frontal lamella is missing) and premolar (crown and part of root)

Postcranial remains

- fragment of sternum body
- fragments of shafts from long bones: mainly fragments of femur and tibia but also of humerus, ulna and fibula
- shafts of three metacarpal bones
- shafts of two phalanges and two complete phalanges (medial and distal)

On the basis of anatomic-morphological analysis, it is possible to assume with great likelihood that all of the bone fragments belong to one individual.

Age at Death

All of the segments of the sagittal sutures of the skull are open, without to obliteration (Photo 3). In diagnosing the age, most important is the early presence of obliterated fragments of sagittal sutures, the state of which shows that, at death, the individual was less than 25 years old. The distal parts of 2 phalanges are closed and the fusion lines are not visible, which shows an age of less than 18-20 years. The degree of dental wear is very weak, suggesting an age of less than 20-25 years.

Taking into account all available fragments, the age at death of the individual can be estimated as between 18 and 25 years.

Sex

Considering the incomplete state of preservation of the skeleton and the diagnostically poor quality of most preserved fragments, it is difficult to determine the sex of the individual. The build of the skull cap and the long bones is moderately massive. Also, morphological analysis of the zygomatic bone and mandible fragments does not offer concrete information to determine the sex. The supraorbital margins are relatively thick and rather suggest a male. The preserved fragments of the frontal bones from the area above the eye orbit shows a typically male brow arch (strongly protruding, massive). The fragmented state of the preserved bones do not allow for a reconstruction of the height of the individual.

On the basis of the morphological analysis of the skeleton, the sex of the individual could be estimated to be male.

Pathology and Cause of Death

No pathological changes, traumas, or injuries were found. There is also no basis on which to determine the cause of death.

Context

The analysed bones are clearly the remains of a burial that was first located at a higher level, but slowly fell as the sand dune below was worn away by the wind. Because of post-depositional factors, the bones underwent fragmentation and movement, although they remained in one concentrated place. This suggests that the original burial site was not far away from the present location of the bones. The same conclusions can be drawn from observations of Neolithic ceramic sherds found near the human bone concentration, some of which also fit together (Zych, this volume).

The discovery of the skeleton took place during one short survey session, so, in anthropological terms, the terrain is not yet well known. It is possible that, in this region, additional burials will be found (see for example, Abdellaoui, this volume). It is necessary to note here that, during the course of research, information came to light about previous discoveries of human remains in this area. Unfortunately, this information is unverified to date.

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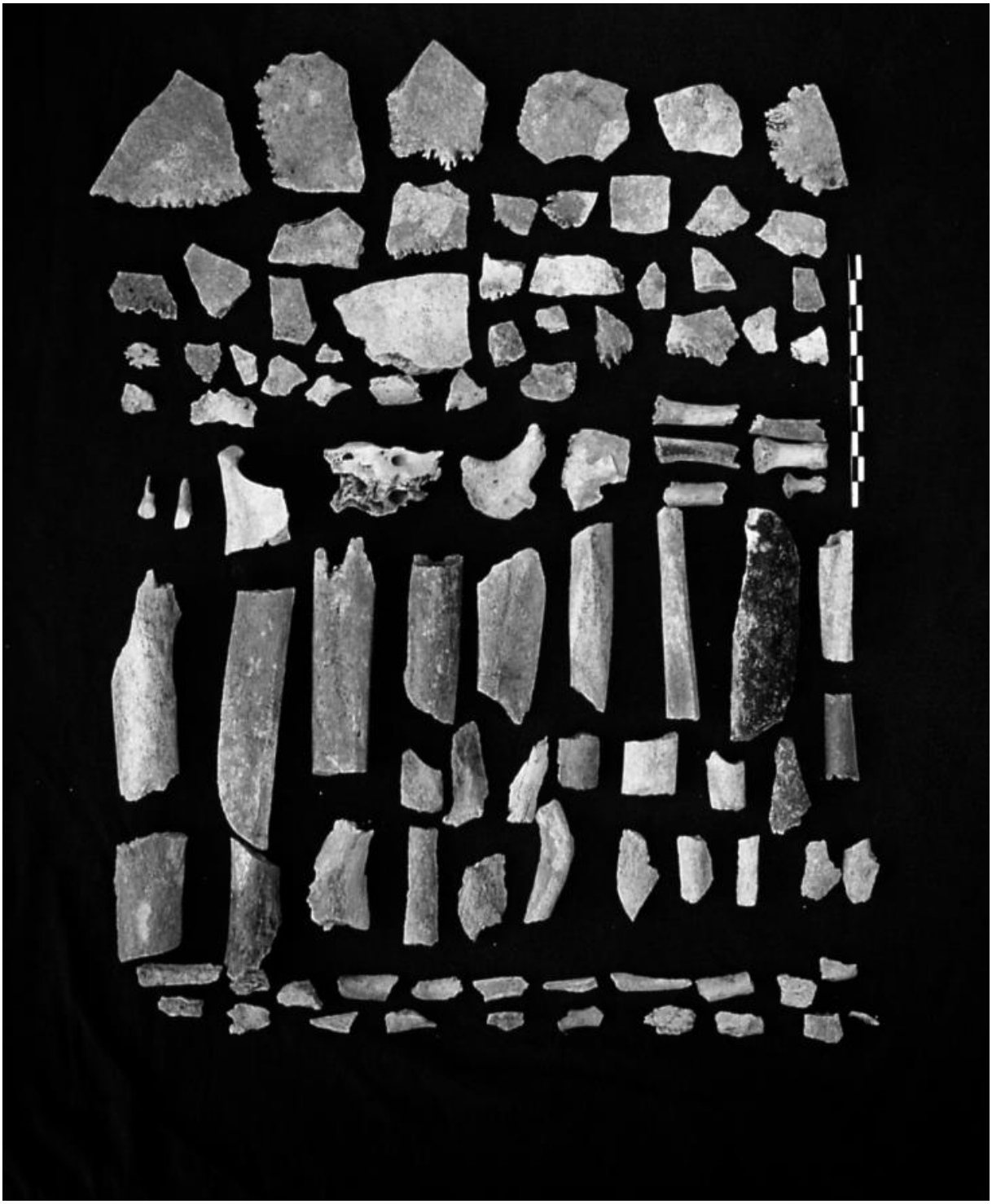

Photo 1. Remains of the skeleton from Tahadart.

Photo 2. The permanent teeth – incisor and premolar.

Photo 3. The skull cap remains.

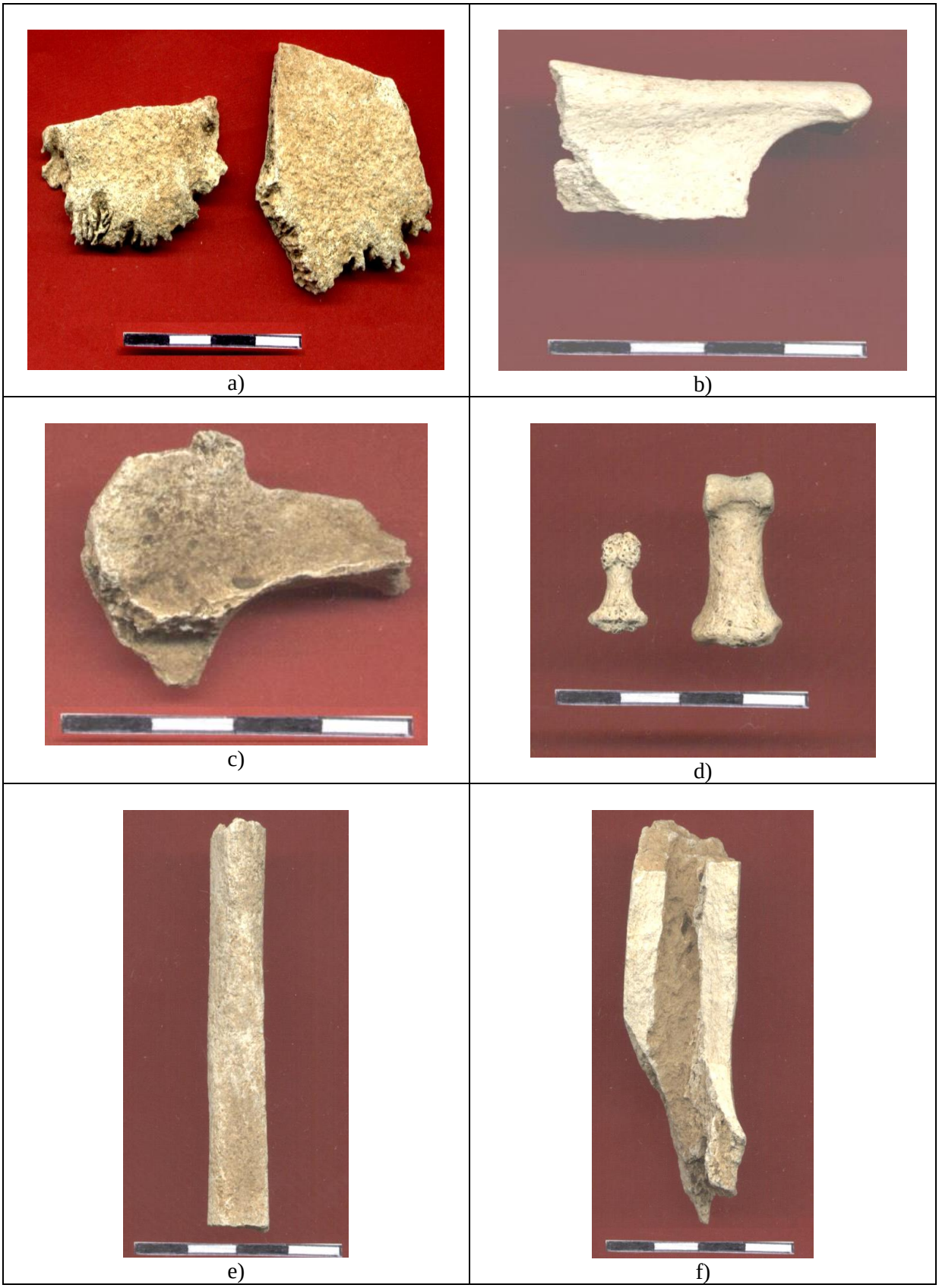

Figure 1. Tahadart human remains. a) Cranial fragments showing the sutures. b) mandibular branch. c) left malar bone. d) phalanges. e) fibula. f) femur.