

## RESEARCH ARTICLE – VÝZKUMNÝ ČLÁNEK

## Diverse deathscapes: Insights from two Late Eneolithic Złota culture burials in Southern Poland

Rozmanité pohřební krajiny: Poznatky ze dvou mladoeneolitických  
pohřbů kultury Złota z jižního Polska

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*Late Eneolithic funerary practices in southern Poland reveal a complex interplay of tradition, adaptation, and local expression. The Złota culture (c. 2900–2300 BCE) exemplifies this variability, as shown by two burials (graves 23 and 25) discovered in 2012 at site 6 in Złota. Grave 23 was a deep circular pit originally used for storage and later adapted for funerary purposes. Its base was paved with sandstone slabs and stones, and the lower walls were reddened by fire. The grave contained a mature male laid on his left side in a flexed position with two ceramic vessels. Grave 25 was a trapezoidal pit, probably a niche grave, with a flat bottom partly covered by small stone slabs, containing a disturbed skeleton of an adult female missing the skull and much of the upper body. Despite disturbance, its construction reflects careful planning and symbolic arrangement. Both graves, though modest in inventory, demonstrate purposeful ritual behaviour. The coexistence of reused domestic features and newly built graves illustrates the flexibility of mortuary customs within the Złota culture. Comparison with the Globular Amphora and Corded Ware cultures highlights shared concepts and local distinctions, illuminating the social meaning and regional dynamics of Eneolithic funerary traditions.*

Neolithic – Eneolithic – Złota culture – burial – funeral rite – human skeletal remains – Sandomierz Upland

*Pozdně eneolitické pohřební praktiky v jižním Polsku odhalují složitou interakci tradice, adaptace a lokálního projevu. Kultura Złota (cca 2900–2300 př. n. l.) tuto proměnlivost dobře ilustruje na příkladu dvou pohřbů (hrobů 23 a 25) objevených v roce 2012 na lokalitě Złota, stanoviště 6. Hrob 23 byl hluboká kruhová jáma, původně sloužící jako zásobní objekt, později upravená pro pohřební účely. Její dno bylo vyloženo pískovcovými deskami a kameny a spodní stěny byly zčervenale žárem. Hrob obsahoval kostru dospělého muže uloženého na levém boku ve skrčené poloze se dvěma keramickými nádobami. Hrob 25 měl tvar lichoběžníkové jámy, pravděpodobně výklenkového hrobu, s plochým dnem zčásti pokrytým drobnými kamennými deskami. Obsahoval porušený skelet dospělé ženy bez lebky a většiny horní části těla. Přestože byl pohřeb narušen, jeho konstrukce svědčí o pečlivém plánování a symbolickém uspořádání. Oba hroby, i přes skromnou výbavu, dokládají záměrné rituální chování. Současný výskyt znovu využitých sídlištních objektů a nově zbudovaných hrobů ukazuje na flexibilitu pohřebních zvyklostí v rámci kultury Złota. Srovnání s kulturou kulovitých amfor a kulturou se šňůrovou keramikou zdůrazňuje společné ideové prvky i místní zvláštnosti a osvětluje sociální význam i regionální dynamiku eneolitických pohřebních tradic.*

neolit – eneolit – kultura Złota – pohřeb – pohřební rituál – lidské kosterní pozůstatky – Sandoměřská vysočina

### Introduction

The Eneolithic funerary landscape of south-eastern Poland reflects a mosaic of local traditions and supra-regional cultural influences. Among the communities active in the region during the transition from the late 4th to the early 3rd millennium BCE, the Złota culture

(Polish: kultura złocka, ZC) represents a culturally distinct group occupying the Sandomierz Upland and its surroundings. Despite being historically described as ‘ephemeral’ or ‘marginal’, recent archaeological, anthropological, and archaeometric studies have highlighted the complexity and internal diversity of this cultural phenomenon (Krzak 1968; 1976; Włodarczak 2008; Wilk 2013; Witkowska 2014; Włodarczak 2017; Bajka – Florek 2020; Rajpold 2025). The Złota culture reveals unique mortuary practices, architectural traditions, and material culture assemblages, which justify its distinction from neighbouring groups, particularly the Globular Amphora culture (GAC), with which it maintained multifaceted contacts (Wilk 2013; Witkowska – Włodarczak 2021).

The funerary customs of the Złota culture have attracted increasing scholarly attention in recent years. Several excavated cemeteries and isolated graves – such as those from Książnice (Wilk 2013), Sadowie (Pasterkiewicz 2021; Pasterkiewicz et al. 2025), Kleczanów (Bajka – Florek 2020), Święcica (Bajka – Sieradzka 2019), Sandomierz ‘Mały Rynek’ (Bajka et al. 2018), Sandomierz ‘Wzgórze Salve Regina’ (Buko 1983; Ścibior 1993, p. 199), and Złota itself (Krzak 1976; Bajka – Florek 2013) – reveal a number of consistent features. These include the construction of stone-built grave structures, complex treatment of the dead (often involving disarticulation and exposure to fire), and a distinctive repertoire of grave goods. At the same time, significant variability is observed in body position, composition of inventories, and architectural form, suggesting local adaptations and possibly chronological or social differentiation (Żurowski 1930; Witkowska – Włodarczak 2021; Pasterkiewicz et al. 2025). However, the relatively small number of documented burials, combined with their often fragmentary preservation, continues to limit broader interpretative frameworks.

The Złota culture was primarily distributed across the loess-covered Sandomierz Upland. Small enclaves of the Złota culture, for example near Książnice in the Nida Basin, were also located beyond its main range. The valleys of the Vistula and San rivers, bordering the Sandomierz Upland, connected it with the Małopolska Upland and the Carpathian Foothills to the south, as well as with the Volhynian Upland to the east. This location facilitated the movement of people, goods, and ideas. The impact of the Globular Amphora culture is especially evident, both in funerary and settlement contexts, indicating that Złota culture communities were in contact with GAC groups and aware of emerging Corded Ware phenomena (Pasterkiewicz et al. 2025). Shared elements include the presence of amphorae, animal offerings, and certain aspects of grave construction (Witkowska – Włodarczak 2021). Nevertheless, the Złota communities maintained distinctive funerary customs, reflected in their stone-built grave constructions, pottery, and treatment of the dead. These patterns point to a complex interplay of emulation, resistance, and local innovation within the Eneolithic cultural landscape.

Among the most informative finds associated with the Złota culture are two graves at site 6 in Złota (Sandomierz District), excavated in 2012 and 2013 during rescue campaign. Located on a prominent rise overlooking the Koprzywianka River valley, the site formed part of a broader settlement zone, within which funerary and domestic spheres appear closely interwoven (Fig. 1). Graves 23 and 25, although not exceptionally well preserved, offer a valuable point of entry for exploring the spectrum of burial practices associated with this cultural group. Their spatial arrangement, construction, and assemblages reflect key elements of the Złota funerary tradition, while also revealing departures from expected patterns. The mortuary features exhibit both adherence to shared cultural templates and

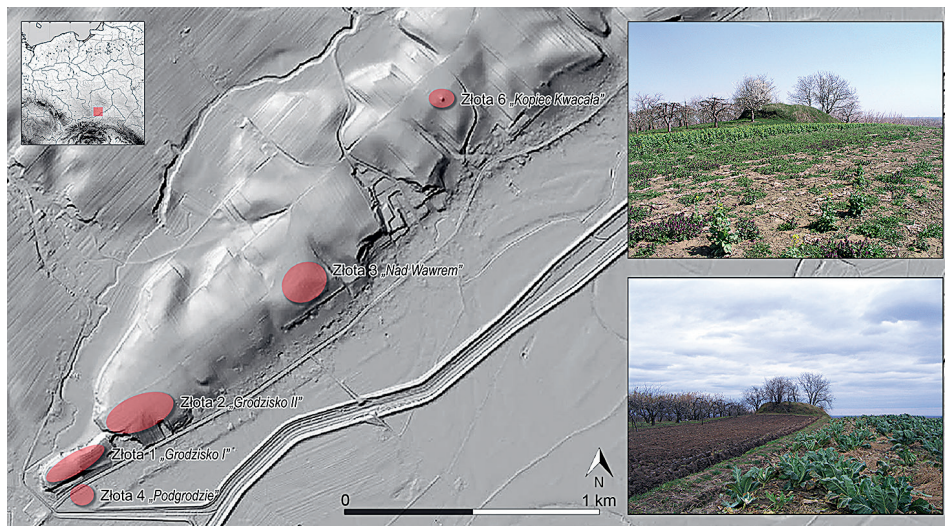


Fig. 1. Location of the archaeological sites in Złota shown on a Digital Terrain Model, accompanied by photographs of the 'Kwacala Mound' ('Kopiec Kwacala' in Polish) prior to the commencement of excavations, showing the SW slope of the mound.

evidence of situational or contextual variation. As such, they provide a compelling case through which to examine the negotiation of ritual practice in local settings, the embedding of commemoration within everyday space, and the meaningful selection of grave furnishings. These elements may reflect individualised strategies of remembrance or broader social and ideological shifts. Their investigation adds to wider discussions on the internal complexity of the Złota culture and its interactions with neighbouring groups, including the Globular Amphora culture.

By integrating data from these two features with broader regional evidence, this study seeks to contribute to the ongoing re-evaluation of the Złota culture as a socially and ideologically coherent formation. In doing so, it also addresses more general questions regarding cultural identity, mortuary ideology, and intergroup dynamics in the Late Eneolithic of Central Europe.

## Materials and methods

This study is based on archaeological, osteological, and isotopic analyses of two burials (graves 23 and 25) attributed to the Złota culture, excavated at site 6 in Złota, Sandomierz District (*Fig. 1*). The research integrates field documentation, human skeletal analysis, radiocarbon dating, and stable carbon and nitrogen isotope measurements to reconstruct funerary practices, biological profiles, and dietary habits of the individuals buried in these features. The excavations were carried out as part of a broader rescue investigation, while post-excavation analyses were conducted using established protocols in line with current standards in bioarchaeology and archaeological science.

### Fieldwork and archaeological context

Archaeological investigations at the foot of the Kwacala Mound (Polish: Kopiec Kwacala) began in the spring of 2002, following the discovery of human bone fragments and small artefacts – copper ornaments, shell beads, and horn objects – on the surface of a ploughed field west of the mound. According to local tradition, the mound is either the burial site of a knight named Kwacala (or Chwacala), said to have fallen in battle against Mongol forces in 1260, or a mass grave of Mongol invaders defeated by Polish knights under his command. Until the early 20th century, the site was also associated with seasonal folk rituals of pre-Christian origin, performed at the turn of winter and spring to ensure the fertility of the land and secure prosperity for the surrounding villages (Florek 2005).

Rescue excavations carried out between 2002 and 2004 revealed 23 archaeological features within an area of 290 m<sup>2</sup>. These included graves attributed to the Corded Ware culture (CWC) and Mierzanowice culture (MRC), settlement remains linked to the MRC, and redeposited Early Neolithic materials and Neolithic settlement objects (Florek – Zakosićelna 2005b; 2006; Florek 2006a). Limited coring and test trenching within the mound confirmed long-term, multi-period use of the site, beginning with the Funnel Beaker culture (FBC) in the Middle Neolithic and continuing through the Bronze Age, medieval, and modern periods (see *Online Supplementary Material 1*: Fig. S1).

Further investigations in 2012–2013 on the western slope of the mound extended the excavated area by an additional 400 m<sup>2</sup>. This campaign uncovered further settlement features associated with the Mierzanowice and Malice cultures, another MRC grave, and two burials (features 23 and 25) attributed to the Złota culture (Fig. 2; see *Online Supplementary Material 1*: Fig. S1). These two graves form the basis of the presented study.

The graves were investigated as part of a systematic research programme focusing on mortuary practices and stratigraphic integrity. Standard archaeological protocols, adapted to rescue excavation conditions, were employed. Prior to fieldwork, the site was mapped using a total station to ensure precise spatial documentation. Although 3D scanning was not available, all features were recorded through high-resolution photography, scaled hand drawings, and detailed field notes.

Excavation proceeded by manually removing stratigraphic units in controlled layers to preserve the spatial relationships between human remains, grave goods, and architectural components, particularly the stone constructions visible in both features. In the absence of organic materials such as wooden elements, emphasis was placed on documenting the layout and composition of the grave architecture. Special attention was given to the condition, articulation, and position of the skeletal material, allowing inferences regarding post-mortem disturbance and mortuary treatments such as disarticulation or repositioning.

### Artefact analysis

Grave goods recovered from features 23 and 25 were analysed with reference to typological frameworks relevant to the Late Eneolithic. The assemblages comprise stone and metal artefacts, fragments of pottery, and objects of organic origin. Each artefact was examined in terms of raw material and manufacturing technique. For the flint items, technological traces such as polishing, retouching, and edge wear were also recorded. The

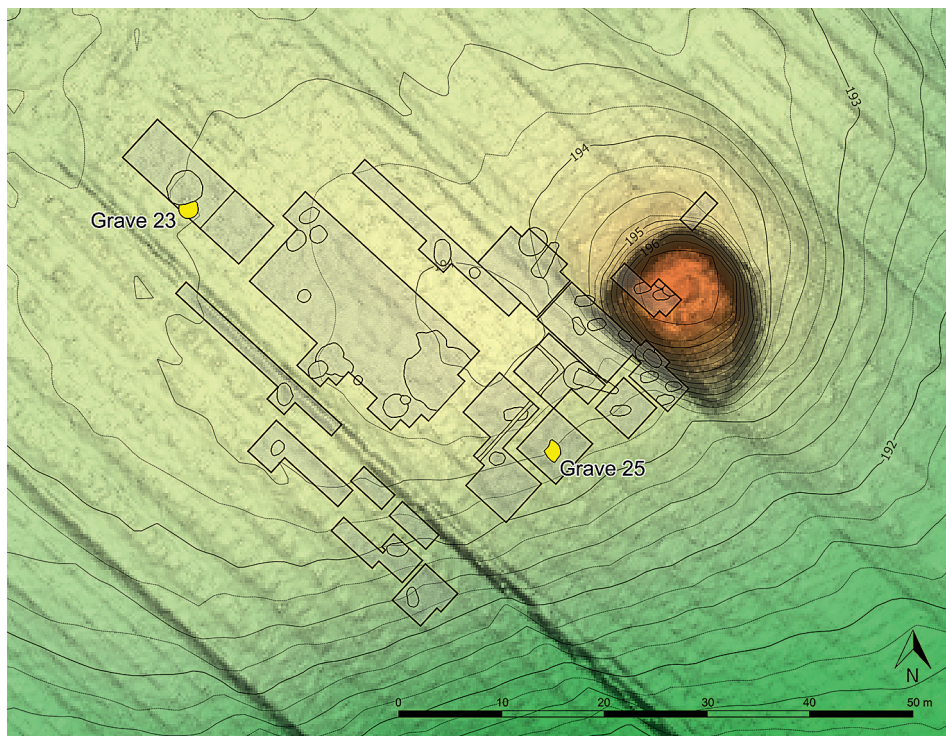


Fig. 2. Złota, site 6. Location of graves 23 and 25 of the Złota culture in relation to excavation trenches and other features, shown on a LiDAR-based Digital Terrain Model. The graves of the Złota culture are marked in yellow, while excavation trenches and other archaeological features are shown schematically in black. For detailed plans see *Online Supplementary Material 1: Fig. S1* (LiDAR base layer prepared with the assistance of M. Mackiewicz).

copper piercer was additionally subjected to microscopic use-wear analysis, carried out with a stereomicroscope (10–50×) and a metallographic microscope (50–200×). Observations focused on traces related to projectile impact, storage, and possible adhesive residues, identified through comparison with experimental and published reference materials (cf. *Mączyński 2018*).

### Osteological analysis

Human skeletal remains recovered from graves 23 and 25 were analysed according to standard anthropological protocols to determine biological profiles. Sex estimation was based on morphological features of the pelvis and cranium, as well as overall skeletal robustness and proportions (*Buikstra – Ubelaker 1994; White et al. 2012*). Age-at-death was estimated using a multifaceted approach incorporating dental eruption patterns (*Ubelaker 1978*), epiphyseal fusion (*Cunningham et al. 2016*), obliteration of cranial sutures (*Hunger – Rother 1978*), and morphological changes of the pubic symphysis (*Todd 1921*) and auricular surface of the ilium (*Lovejoy et al. 1985*).

Craniometric and osteometric measurements were conducted following Martin's technique (Martin – Knussmann 1988; Malinowski – Bożiłow 1997), based on which indices and cranial capacity (Martini *et al.* 2018) were calculated. Stature reconstruction was performed using long bone measurements and established regression formulae (Pearson 1899; Ruff *et al.* 2012). Pathological conditions were recorded (Aufderheide *et al.* 1998), providing insights into the health status and life history of the deceased.

### Radiocarbon dating

Radiocarbon dating was performed at the Poznan Radiocarbon Laboratory on two human rib samples from features 23 and 25 to establish a chronological framework for the burials. The samples were dated using the AMS  $^{14}\text{C}$  method. Calibration was carried out with OxCal v.4.4 software (Bronk Ramsey 2021), employing the IntCal20 calibration curve (Reimer *et al.* 2020).

### Stable carbon and nitrogen isotope analysis

Stable carbon ( $\delta^{13}\text{C}$ ) and nitrogen ( $\delta^{15}\text{N}$ ) isotope analyses were conducted on collagen extracted from human rib samples. Specimens were carefully selected to minimise contamination and avoid diagenetic alteration. Collagen was extracted following standard procedures (Longin 1971; Piotrowska – Goslar 2002; Dumoulin *et al.* 2017), and isotopic measurements were obtained using isotope-ratio mass spectrometry. The resulting data provide information on dietary patterns, including the relative consumption of terrestrial versus aquatic resources, the presence of  $\text{C}_3$  and  $\text{C}_4/\text{CAM}$  plants in the diet, and the trophic level of protein intake. These findings contribute to our understanding of the subsistence strategies within the Złota culture.

## Results

### Archaeological observations

During the initial field documentation, grave 23 was mistakenly interpreted as cutting into feature 24 (Florek 2012), owing to the visual similarity between the uppermost layer of the grave fill and that of the overlying pit. Subsequent re-examination of the stratigraphic evidence demonstrated the opposite relationship: feature 24, a large, round, trapezoidal-in-section settlement pit associated with the Mierzanowice culture (MRC), actually intruded into the northern part of grave 23, disturbing its upper fill to a depth of approximately 150 cm (Fig. 3). This stratigraphic relationship confirms that grave 23 predates the Mierzanowice occupation at the site.

In the case of grave 23, the deceased was placed within a feature that had previously served as a storage pit (Fig. 4). The feature had the form of a circular, downward-widening pit dug into the loess. Its diameter at the top measured 1.6 m, at the base approximately 2 m, and its reconstructed original depth was around 2.5 m. The base and the lower part of the pit walls were fired to a height of about 0.6 m, probably to protect the interior from moisture.

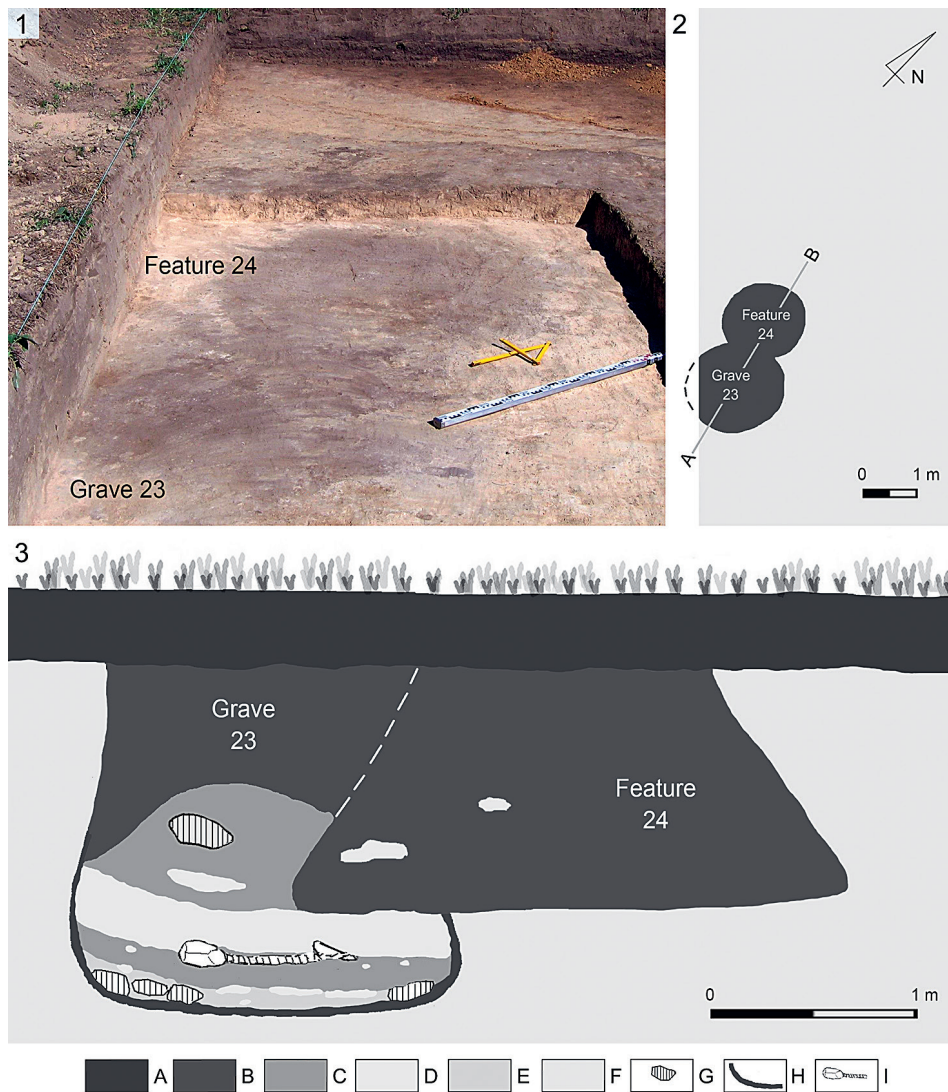


Fig. 3. Złota, site 6, features 23 and 24. 1 – view of trench 15 at the level of the natural subsoil surface showing grave 23 and feature 24; 2 – plan of trench 15 at the natural subsoil surface level, indicating the location of the profile SW-SE section line A-B through features 23 and 24; 3 – stratigraphic section along profile line A-B through features 23 and 24. Legend: A – plough horizon; B – black-grey soil; C – dark grey soil mixed with yellow loess; D – mixed light yellow loess; E – grey soil mixed with burnt loess; F – natural loess subsoil; G – stones; H – burnt loess blocks forming the pit walls; I – skeleton.

At the bottom lay several irregular sandstone slabs and stones of various sizes, among which two grinding stones were identified. During the period when the pit served a storage function, a roughly 10 cm-thick layer of soil accumulated at its base, containing various types of refuse such as fragments of animal bones, mollusc shells, sherds of broken pottery, and small flint flakes. When the function of the pit changed from storage to funerary, this

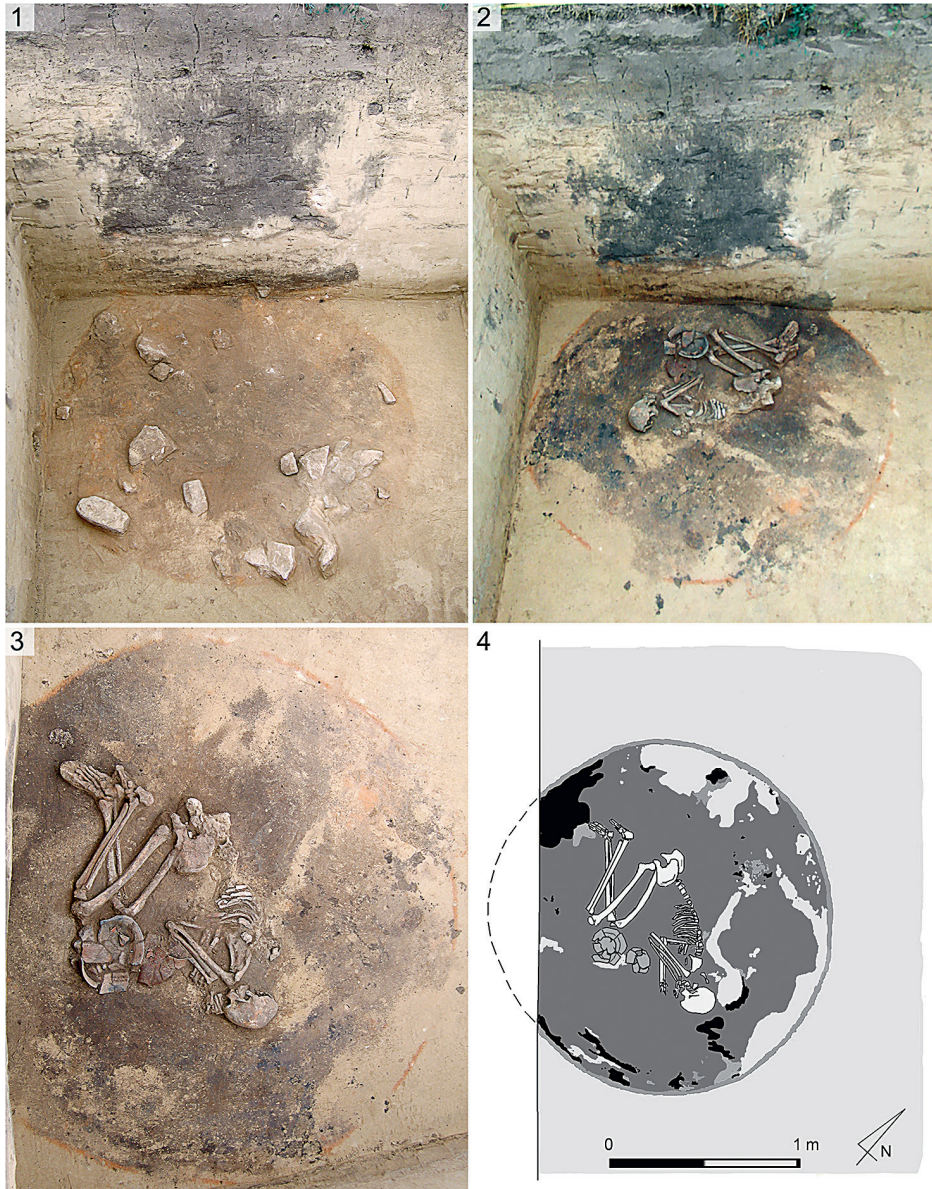


Fig. 4. Złota, site 6, grave 23. 1 – NW profile of grave 23, showing the burial pit base with a stone layer; 2–4 – view of the human skeleton at the base of the feature.

layer was levelled. The deceased was placed in the central part of the pit, lying on the left side with flexed legs and bent arms, the hands positioned near the face. Two vessels were deposited with the body, placed between the knees and elbows of the deceased. The corpse was then covered with a layer of clean loess about 30 cm thick, after which the remaining part of the pit was filled with soil collected from its surroundings.

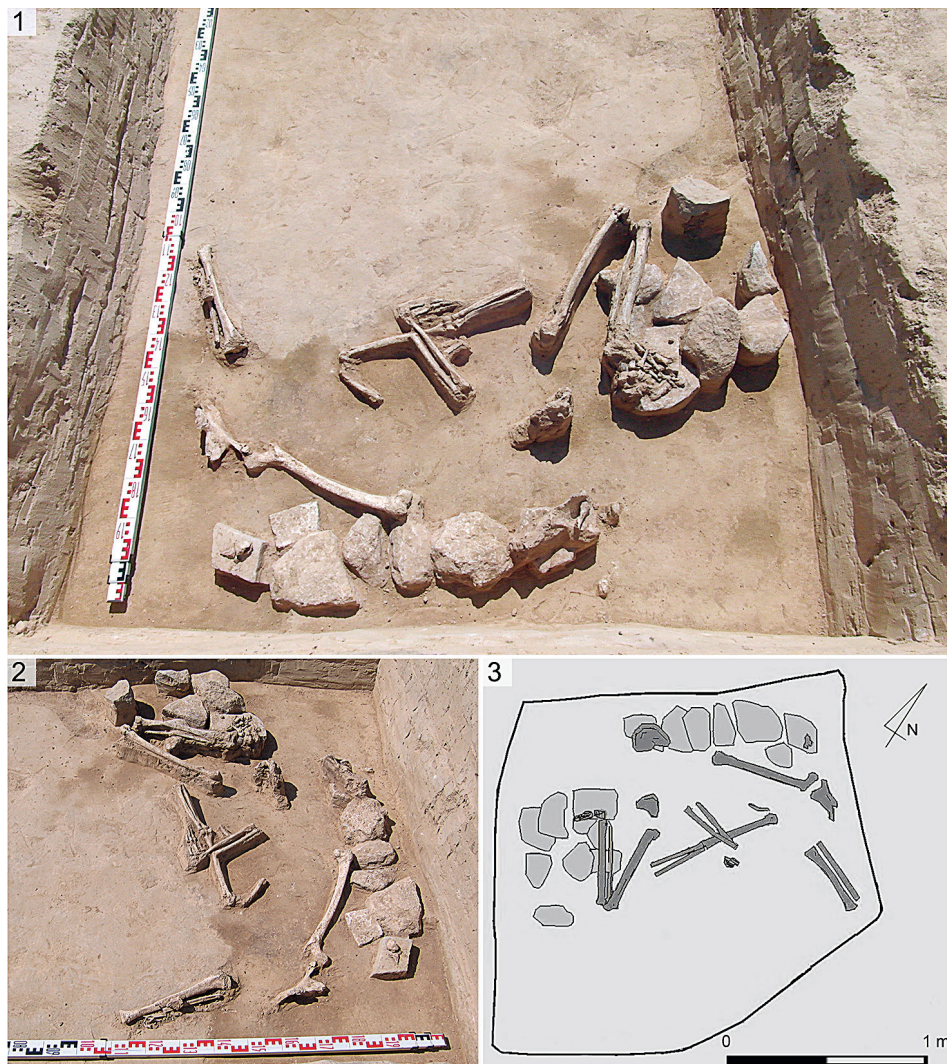


Fig. 5. Złota, site 6, grave 25. 1–3 – view of disarticulated human skeletal remains and elements of the stone construction at the base of the burial pit.

Particular attention should be paid to the deliberate covering of the deceased with a layer of clean loess, which may have served as an isolating layer separating the body from the upper fill composed of mixed soil containing organic remains and domestic refuse. This procedure, together with the careful positioning of the body and the inclusion of pottery vessels as grave goods, clearly indicates that this was not a simple disposal of a corpse by placing it in an abandoned storage pit and covering it with earth, but an intentional burial performed in accordance with funerary rites, although not within a grave pit excavated specifically for this purpose but within a sunken feature that had originally served a storage function.

Grave 25, in terms of its form, may be regarded as a probable niche grave of the Złota culture (Fig. 5). The pit had a trapezoidal ground plan with sides measuring approximately  $180 \times 160 \times 140 \times 210$  cm. In the section, the sidewalls were slightly sloping. The preserved depth of the pit was 80–95 cm, but we estimate that originally, it likely reached 150–180 cm. The flat bottom, particularly in the north-western part, was covered with an irregular pavement of small stone slabs forming a compact but uneven surface. The disturbed human remains, represented mainly by the lower limbs, pelvis, and parts of the upper limbs, were missing the skull and most vertebrae. Their disarticulation indicates post-depositional disturbance, but the pattern observed does not correspond to damage caused by agricultural activity, especially given that the burials laid below the plough zone at a depth of 80–95 cm (see *Online Supplementary Material 1*). Although no clear traces of intentional disarticulation were identified on the bones, such a possibility cannot be entirely excluded. The trapezoidal plan and partial stone pavement indicate that the feature most likely functioned as a niche grave, comparable to other Złota culture examples recorded at Sandomierz ‘Mały Rynek’ (Bajka *et al.* 2018), Kleczanów (Bajka – Florek 2020), Złota ‘Grodzisko I’ (Krzak 1961; 1976), and Książnice Wielkie (Wilk 2013).

Although the grave’s form falls within the standard range of funerary structures associated with the Złota culture, its poor assemblage and the incompleteness of the skeleton are unusual. Even by the standards of Złota culture funerary practices, where skeletal disarticulation and partial burials are relatively common, the quantity of human remains in this grave is exceptionally small.

### Artefact assemblage

The funerary assemblage from the two examined graves reflects distinct but complementary aspects of the material culture and ritual practices of the Złota culture. Grave 23 contained a carefully arranged and culturally significant set of grave goods (Fig. 6: 1–2; Fig. 7: 1–3), primarily two ceramic vessels placed intentionally between the knees and flexed arms of the buried individual. These vessels, a tall bowl and a smaller beaker, exemplify the characteristic pottery tradition of the Złota culture through their specific forms, decoration, and manufacturing techniques (Fig. 6: 3–4).

The bowl (Fig. 6: 3) is a tall vessel with a vertical neck and a slightly rounded carination located approximately halfway up the body. It has a flat, slightly marked base and a rounded rim. The neck is decorated with six double wavy bands impressed with a bipartite cord, framed above by two and below by one double horizontal band executed with the same technique. The shoulder is decorated with a horizontal band of vertically arranged rectangular stamp impressions. Both the inner and outer surfaces are roughly smoothed, showing visible temper grains. The fabric consists of orange-grey clay tempered with crushed pottery.

The accompanying small beaker (Fig. 6: 4) has a gently S-shaped profile, a high, slightly flaring neck, and a rounded rim. Below the rim runs a band of short vertical and slightly oblique notches, while at the neck-body junction there is a row of vertical rectangular stamp impressions. The neck is ornamented with four irregular double wavy bands and one double horizontal band, all impressed with a bipartite cord. Both surfaces are roughly smoothed, with visible temper grains. The vessel is made of orange-grey clay tempered with crushed pottery, showing darker patches on the surface. Both vessels correspond closely



Fig. 6. Złota, site 6, grave 23. Preserved human skeletal remains and ceramic vessels at the base of feature 23. 1 – skeleton in a flexed position lying on the left side; 2 – detail of ceramic fragments in situ; 3 – bowl; 4 – beaker.

to the Złota culture ceramic tradition, particularly to examples from Sandomierz ‘Salve Regina’ (Buko 1993), Złota ‘Grodzisko I’ and Złota ‘Nad Wawrem’ (Krzak 1976).

In contrast, grave 25 contained a small assemblage of utilitarian items, including a copper piercer and two flint blades (Włodarczak 2006; Wilk 2013; Fig. 7: 4–6). The three artefacts were found next to the left shank bones, most likely originally deposited together in an organic container. The copper piercer, square in cross-section and tapering at both ends, was initially misidentified as a flint retoucher (Florek 2012) but later correctly identified through microscopic use-wear analysis as a metal implement, showing characteristic surface striations and polish typical of copper tools. It was probably used for piercing or engraving soft materials such as leather, wood, or bone. One of the blades (Fig. 7: 6), made



Fig. 7. Złota, site 6. Selected ceramic fragments, flint tools, and copper artefacts recovered from graves 23 and 25. Artefacts from feature 23: 1 – ceramics from the fill above the burial; 2 – ceramics from the layer below the burial; 3 – stone grinding tools from the pavement at the base of the feature. Artefacts from feature 25: 4 – copper piercer; 5 – chalk flint flake; 6 – chocolate flint flake (drawing with the assistance of M. Bajka).

of chocolate flint and struck from a repurposed polished tetrahedral axe core, shows traces of polishing and fine micro-retouch. The other (*Fig. 7: 5*), an apical fragment made of chalk flint bears slight edge wear resulting from short-term use or storage (*Balcer 1983; Mączyński 2018; Niezabitowska-Wiśniewska – Wiśniewski 2018*).

Unlike grave 23, grave 25 lacked ceramic vessels and other symbolic grave goods, which may indicate variation in funerary customs or social differentiation within the Złota culture community. In grave 23, the careful placement of ceramic vessels near the knees and arms of a mature male individual (*Fig. 6: 1–2*) suggests a ritualised, symbolic meaning, possibly related to status or beliefs concerning the afterlife.

By contrast, grave 25, with its trapezoidal form, partial stone paving, and disturbed inhumation, corresponds to burial practices documented within the Złota culture – particularly those involving deep or irregular pit graves with stone architectural elements. Its layout suggests a transitional form, probably representing a variant of a niche grave rather than a fully developed example. Comparable structures have been recorded at sites such as Sandomierz “Mały Rynek”, Sandomierz ‘Salve Regina’, Kleczanów, Złota ‘Grodzisko I’, and Książnice, indicating shared architectural principles within the regional Złota culture tradition.

The absence of a visible shaft is characteristic of ZC trapezoidal graves, where the entrance likely collapsed prior to backfilling. The presence of a copper artefact and flint blades parallels other ZC burials with selective grave goods and suggests links with Globular Amphora and early Corded Ware metallurgical traditions.

### Skeletal analysis

The analysed skeletal material comprised the remains of two adult individuals: a male aged approximately 50–60 years from grave 23 and a probable female aged 30–40 years from grave 25 (see *Online Supplementary Material 2*). The preservation of the two skeletons differed markedly (*Fig. 8*). The skeleton from grave 23 was moderately preserved and found in anatomical position (*Fig. 4*). In contrast, the remains from grave 25 were partially disarticulated and incomplete (*Fig. 5*); the bones of the right lower limb and part of the pelvis were displaced towards the northern part of the pit. No traces of intentional human intervention (e.g. cut marks or dismemberment) were recorded. In both individuals, numerous post-mortem pseudopathological changes were present, resulting from post-depositional plant root activity (*Knüsel – Robb 2016*).

The skull was preserved only in the male individual from grave 23 (*Fig. 9: 1*). Craniometric measurements (*Tab. 1*) indicated a dolichocranic form, characterised by an elongated shape of the cranial vault, along with a broad frontal region (cf. *Hatuszko 2019*). Non-metric traits included lambdoid and coronal ossicles, parietal foramina, a mastoid foramen, and a nutrient foramen on the medial part of the supraorbital margin. Hyperostosis protica was observed on the parietal bones and the occipital squama. The dentition was incomplete but showed advanced attrition – stages H-I on the Lovejoy scale (*Lovejoy 1985*). Probable shallow fistulae were noted around teeth 12–14.

Postcranial skeletal elements included varying sets of long bones in both individuals. In the male from grave 23, preserved bones included humeri, ulnae, femora, tibiae, fibulae, clavicles, scapulae, vertebrae, pelvic fragments, hand and foot bones (*Fig. 8: 1*). In the female from grave 25, the postcranial remains included humeri, ulnae, radii, femora, tibiae,

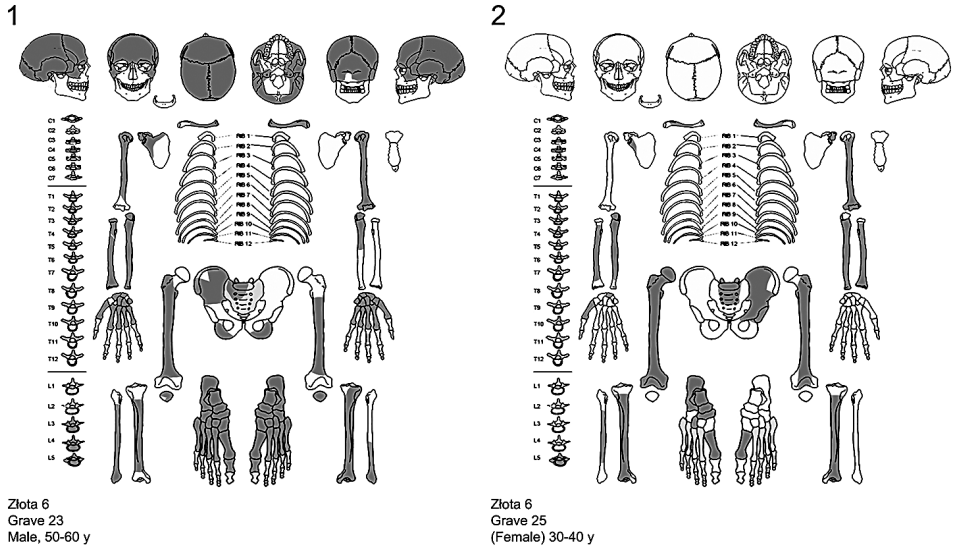


Fig. 8. Inventory of preserved skeletal elements of individuals from graves 23 and 25 at site 6 in Złota. 1 – male individual from feature 23, estimated age at death 50–60 years; 2 – probable female individual from feature 25, estimated age at death 30–40 years. Based on the ‘INTERPOL DVI Post-Mortem (Pink) Form, Unidentified Human Remains – Appendix 800 Series’ (modified by A. Hałuszko).

fibulae, fragments of the scapulae, vertebrae, pelvis, and selected elements of the hands and feet (Fig. 8: 2). A supratrochlear foramen was observed in the left humerus of the male (Fig. 9: 2) and in the left humerus of the female. The right ulna of the male individual showed signs of an antemortem fracture to the styloid process (Fig. 9: 3) and pseudo-pathological surface changes.

Long bone lengths, including the maximum length of the femur, tibia, and humerus, were measured with precision (Tab. 2). These measurements were used to estimate stature using widely accepted anthropometric regression formulae. The male individual from grave 23 was estimated to have stood approximately 163.9 cm (Pearson 1899) to 171.2 cm (Ruff et al. 2012) tall, while the female individual from grave 25 was estimated at approximately 161.3 cm (Pearson 1899) to 165.9 cm (Ruff et al. 2012). These values fall within the expected range for prehistoric populations in the region.

Despite differential preservation, both skeletons provided sufficient osteological data to reconstruct key aspects of biological profile, including sex, age-at-death, and general morphological characteristics.

### Radiocarbon dates

The radiocarbon sample from grave 23 (Poz-174480) yielded a conventional age of  $4075 \pm 35$  BP, corresponding to 2857–2476 cal BCE (95.4% probability) (Fig. 10; Tab. 3). The sample, taken from a human rib, fits well within the established Late Eneolithic chronology of the Złota culture (Włodarczak 2008; 2013; Wilk 2013; Włodarczak – Przybyła 2013; Włodarczak 2017; 2019).

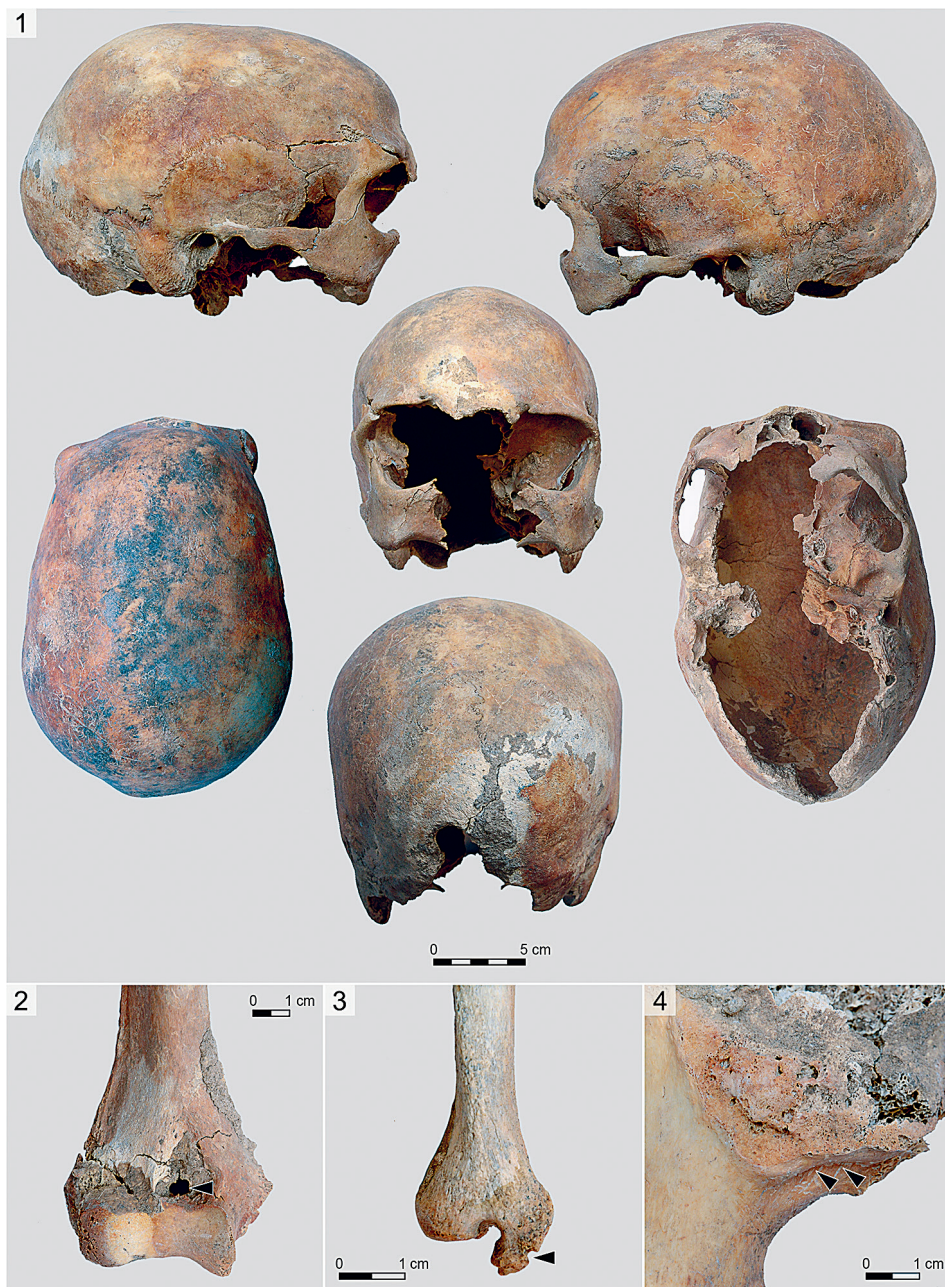


Fig. 9. Złota, site 6, grave 23. Skull and bones of the postcranial skeleton. 1 – calotta presented in various planes; 2 – right humerus with a supratrochlear foramen; 3 – right ulna showing paleopathology of the styloid process; 4 – fragment of the right ilium with a preauricular sulcus.

Description	Measurement/formula	Grave 23
Maximum cranial length	g-op	190
Maximum cranial breadth	eu-eu	127
Minimum frontal breadth	ft-ft	93
Maximum frontal breadth	co-co	111
Breadth between asterions	ast-ast	99
Mastoid breadth	mst-mst	82
Cranial vault arch	po-b-po	291
Horizontal circumference	HC	504
Bizygomatic breadth	zy-zy	109 (?)
Zygomaxillary breadth	zm-zm	72 (?)
Cephalic index	$(eu-eu / g-op) \times 100$	66.8
Frontal index	$(ft-ft / co-co) \times 100$	83.8
Cranial volume	$68 \times HC + 27 \times g-op - 2472$	1468.2

Tab. 1. Cranial measurements [mm], indices and cranial volume [cm<sup>3</sup>] of the male individual aged 50–60 years from burial 23 at site 6 in Złota.

Notes	Measurement	Grave 23 Male; 50–60 y	Grave 25 (Female); 30–40 y
Femur length	M1	–	453
Tibia length	M1b	–	351
Humerus length	M1	322	–
Estimated stature (acc. <i>Pearson 1899</i> )	Male: $2.894 \times \text{Humerus [cm]} + 70.714$ ; Female: $1.945 \times \text{Femur [cm]} + 73.163$	163.9	161.3
Estimated stature (acc. <i>Ruff et al. 2012</i> )	Male: $2.89 \times \text{Humerus [cm]} + 78.10$ ; Female: $2.47 \times \text{Femur [cm]} + 54.10$	171.2	165.9

Tab. 2. Long bone lengths [mm] and estimated stature [cm] of individuals from burials 23 and 25.

Feature	Grave 23	Grave 25
Individual	Male; 50–60 years	(Female); 30–40 years
Sample	Human skeletal remains; rib	Human skeletal remains; rib
Lab no.	Poz-174480	Poz-174481
Age <sup>14</sup> C BP	4075±35	4130±35
Calibrated date (calBC, 68.3%)	2837–2818 (7.7%) 2667–2570 (51.9%) 2519–2500 (8.7%)	2860–2806 (22.8%) 2754–2721 (13.8%) 2703–2627 (31.7%)
Calibrated date (calBC, 95.4%)	2857–2807 (13.6%) 2751–2722 (4.8%) 2701–2554 (61.1%) 2546–2487 (15.5%) 2482–2476 (0.5%)	2872–2798 (27.7%) 2782–2580 (67.7%)
C%	50.9594	53.0914
N%	18.4588	19.2855
(C:N) <sub>at</sub>	3.2	3.2
%coll	2.3	4.0
δ <sup>13</sup> C (‰)	-21.3	-21.9
δ <sup>15</sup> N (‰)	10.2	9.9

Tab. 3. Radiocarbon dates and carbon (δ<sup>13</sup>C) and nitrogen (δ<sup>15</sup>N) isotope values obtained from human bone samples from graves 23 and 25 at Złota, site 6.

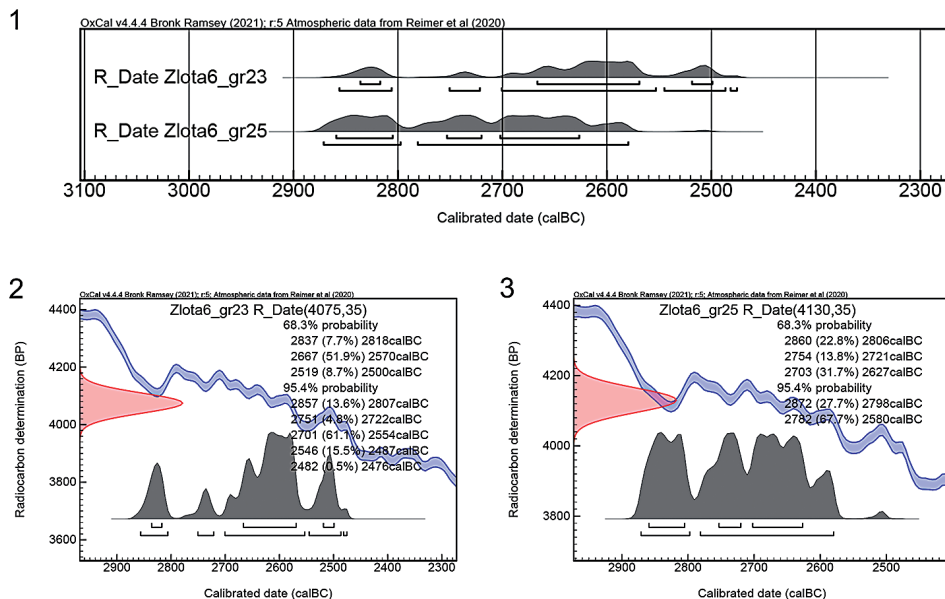


Fig. 10. Calibrated radiocarbon measurements of human bone samples from site 6 in Złota. 1 – calibration plot of radiocarbon dates from graves 23 and 25; 2 – calibration of the radiocarbon date obtained from a rib of the individual from grave 23; 3 – calibration of the radiocarbon date obtained from a rib of the individual from grave 25.

The bone sample from grave 25 (Poz-174481) produced a conventional radiocarbon age of  $4130 \pm 35$  BP, calibrated to 2872–2580 cal BCE (95.4% probability) (Fig. 10; Tab. 3). Although slightly older than the date from grave 23, this result also falls within the chronological range of the Złota culture and overlaps with the late phases of the Globular Amphora culture and the early stages of the Corded Ware culture in the region (Włodarczak 2006; 2008; Florek – Witkowska 2021; Rajpold 2025). The cultural attribution of grave 25 is further supported by its trapezoidal form and the treatment of the human remains, both consistent with Złota burial practices.

Taken together, the radiocarbon results and stratigraphic evidence confirm that both burials belong to the Late Eneolithic horizon, preceding the Early Bronze Age Mierzanowice culture, and thus firmly support their attribution to the Złota culture.

### Stable carbon and nitrogen isotope analysis

Isotopic data derived from bone collagen provided valuable dietary insights (Fig. 11). The  $\delta^{13}\text{C}$  values ranged between  $-20.5\text{‰}$  and  $-19.0\text{‰}$ , indicating a diet predominantly based on  $\text{C}_3$  plants and terrestrial animal protein (Reitsema – Kozłowski 2010; Grześkowiak et al. 2016; Mnich et al. 2020; Pospieszny et al. 2021). The  $\delta^{15}\text{N}$  values varied between  $9.5\text{‰}$  and  $11.0\text{‰}$ , suggesting a significant consumption of animal-derived protein, consistent with a mixed farming economy.

No marked differences were observed between the two individuals, implying similar subsistence strategies within the community. When compared with published datasets for

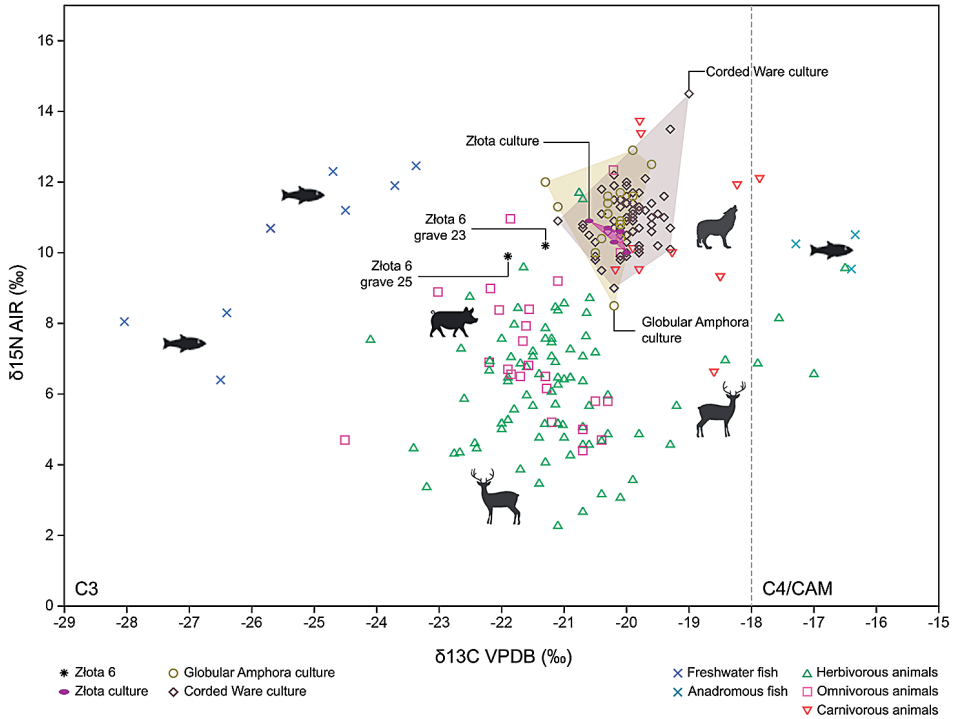


Fig. 11. Scatter plot of stable carbon ( $\delta^{13}\text{C}$ ) and nitrogen ( $\delta^{15}\text{N}$ ) isotope ratios in collagen from human bone remains from site 6 in Złota, compared with reference data from human bones of the Złota, Globular Amphora, Corded Ware cultures and animal samples from archaeological contexts.

the Złota, Globular Amphora, and Corded Ware cultures, the Złota 6 individuals plot at the margins of these groups. Their slightly elevated  $\delta^{15}\text{N}$  values and relatively low  $\delta^{13}\text{C}$  values suggest that they form a somewhat distinct isotopic signature. This divergence may reflect real dietary differences or simply the very limited number of comparative samples available for ZC and GAC (Włodarczak *et al.* 2021; Szczepanek – Jarosz 2022; Pasterkiewicz *et al.* 2025).

## Discussion

The funerary practices of the Złota culture are situated within the broader Late Eneolithic horizon of Central Europe, spanning the late 4th and early 3rd millennium BCE, and reveal a complex and varied approach to burial customs and social organisation. While generally characterised by stable mortuary traditions, some archaeological finds display atypical features that challenge simplified reconstructions of these practices. Such variability calls for a contextualised interpretation of Złota funerary customs within both local and regional frameworks. The two graves uncovered at Złota, site 6, in 2012 exemplify this complexity, providing valuable insights into the diversity of burial forms and social dynamics within the culture.

Chronologically, the Złota culture fits within the Late Eneolithic and was contemporaneous with other major Central European cultural groups (Krzak 1968; Włodarczak 2013; Furmanek 2019; Florek – Witkowska 2021; Włodarczak et al. 2021), particularly the Globular Amphora (GAC) and Corded Ware (CWC) cultures. Recent studies demonstrate that the Sandomierz Upland functioned as a contact zone where Złota, GAC, and early CWC traditions coexisted and interacted within a relatively short time span (Wilk 2013; Pasterkiewicz et al. 2025; Rajpold 2025). Stratigraphic and radiocarbon evidence indicate that Złota settlements and funerary sites were embedded in a dynamic landscape shaped by overlapping cultural influences. This broader context of interaction and social complexity is crucial for interpreting the variability observed at Złota, site 6 and for situating these graves within the wider Late Eneolithic milieu.

The Złota culture is generally associated with well-defined cemeteries. Noteworthy examples include the burial grounds at Złota ‘Grodzisko I’ and Złota ‘Nad Wawrem’ (Krzak 1976), where well-preserved sequences of burials reveal consistent patterns in grave orientation, funerary architecture, and characteristic grave goods (Krzak 1961; 1976). These and other cemeteries, along with individual graves, illustrate the degree of social organisation and the distinctive funerary practices characteristic of the Złota culture (Krzak 1961; Machnik 1979; Bajka – Florek 2013; Bajka et al. 2018; Bajka – Sieradzka 2019).

Cemeteries of the Złota culture are frequently situated on elevated or liminal parts of the landscape, serving as burial grounds used over extended periods by communities representing different cultural traditions, both predating and following the Złota culture. Such a situation is observed, for example, at the Złota ‘Grodzisko I and Złota ‘Nad Wawrem’, as well as at Wilczyce sites 10 and 90 (Florek – Zakościelna 2005a; Włodarczak 2019), and at Sadowie (Pasterkiewicz 2017). A similar pattern is evident in the case of the described graves 23 and 25 of the Złota culture at site 6 in Złota. The area appears to have been first used for funerary purposes by the Funnel Beaker culture, which constructed a large earthen barrow over an earlier Early Neolithic settlement. The surviving remnant of this structure is the so-called Kwacała (Chwacała) Mound. Its surroundings subsequently became a burial area for communities of the Złota, Corded Ware, and Mierzanowice cultures, and at the same time formed the periphery of settlements belonging to the latter two groups, where various storage or domestic features were located (Florek – Zakościelna 2006; Florek 2012). The two Złota culture graves (23 and 25) from site 6 at Złota, while conforming in general to the standard funerary practices of this culture, also display a number of distinctive traits indicating internal variability or differentiation, which probably reflect divergent social or ritual logics.

Grave 23 was located in a large, deep pit that had originally served as a storage feature or cellar for foodstuffs. Comparable in both form and size are storage pits of the Złota culture, such as features 54 and 215 from the site of Złota ‘Nad Wawrem’ (Krzak 1976, fig. 24: a, c). After an unspecified period, the pit lost its original storage function and began to be filled with soil containing various types of refuse. At a later stage, an adult male was interred within it, laid on the levelled refuse layer in accordance with Złota culture funerary rites. Burials within storage pits located on settlements are known both from the Neolithic, for example within the Funnel Beaker culture (Florek 2006a; 2006b), and from the Early Bronze Age, within the Mierzanowice culture (cf. Jarosz et al. 2018, 59–62, with further references therein).

However, such burials have not previously been recorded from Złota culture settlements, although it should be noted that these sites remain very poorly investigated. The decision to place the deceased within a reused feature may reflect specific social or ritual significance, or household-level commemorative practices that complemented or coexisted with formal community cemeteries. Two ceramic vessels, a bowl and a small beaker typical of Złota ceramic traditions, were placed in the grave, indicating adherence to cultural norms despite the atypical setting. The presence of these grave goods confirms the cultural affiliation of the burial, while its location within the settlement area may imply a closer, more personal connection between the deceased and the living community.

Grave 25 was a probable niche grave, typical of the Złota culture, containing a partial burial but lacking characteristic grave goods. Its cultural attribution is supported by the grave's form and the arrangement of the human remains. Similar or nearly identical grave plans, including irregular pavements covering only parts of the grave bottom, are known from the Złota culture. Direct analogies include graves discovered in several locations in Sandomierz: at "Mały Rynek" (*Bajka et al. 2018*, 140–141), Kościuszki Street (*Rajpold 2025*), and on the 'Wzgórze Salve Regina' (*Ścibior 1993*). Further analogies come from the grave excavated in Kleczanów, Sandomierz district (*Bajka – Florek 2020*, 286–287), several graves at Złota 'Grodzisko I', Sandomierz district (e.g. nos. 4, 10 and 39; *Krzak 1961*, 16, 90; *1976*, 46–47), and graves from Książnice Wielkie, Pińczów district (e.g. nos. 1, 2, and 4; *Wilk 2013*, 312–320).

Niche graves, consisting of a usually vertical shaft leading from the surface and an adjoining hewn niche forming the actual burial chamber in which the deceased and grave goods were placed, occur in the Złota culture and the Corded Ware culture (*Krzak 1976*, 171–178, *Włodarczak 2006*, 53). Leaving aside the issue of the origin of this grave form, which was probably polyphyletic in nature, it should be noted that such graves could only be constructed in specific environmental conditions, particularly in areas with loess or similarly soft deposits that allowed the easy cutting of shafts and niches. In Złota culture niche graves, the bottoms often feature more or less regular pavements of flat stone slabs, or at least clusters of stones of various sizes, upon which the deceased were laid (*Krzak 1976*, 160–171; *Ścibior 1993*; *Wilk 2013*; *Bajka et al. 2018*; *Bajka – Sieradzka 2019*, 245–253; *Bajka – Florek 2020*, 286–289). The use of stone, especially slabs, in graves is probably a tradition inherited from the Globular Amphora culture. In contrast, stone pavements were not employed in Corded Ware culture niche graves (*Włodarczak 2006*, 53–58). The partial and disarticulated nature of the burial in grave 25 can also be linked to funerary traditions derived from the Globular Amphora culture, within which such practices are common (*Krzak 1976*, 161–178; *Włodarczak 2017*, 300).

Assuming that grave 25 belongs to the Złota culture, the sparse assemblage of its grave goods is atypical. Graves of this culture are generally richly furnished, most commonly with between one and several pottery vessels, and in some cases also with ornaments and dress accessories such as bead necklaces and pendants made of shell, bone, antler, animal teeth, amber, and occasionally copper. Stone and flint artefacts are frequent, while those made of bone, antler, or clay are less common (*Krzak 1976*, 177–178). In grave 25, however, no vessels or even pottery fragments were found. Only a copper awl and two small flint flakes, one made of chalk flint and the other of chocolate flint, were found with the deceased, perhaps originally placed together in a small container. The chocolate flint flake, broken post-depositionally, had been struck from a reworked four-sided polished axe of

chocolate flint. Axes occur only sporadically in Złota culture inventories, and none made of this raw material are otherwise known. Polished four-sided axes, predominantly made of banded flint, are typical of the Globular Amphora culture, with only a few chocolate flint examples attributed to that culture. These include specimens from graves at Polówka, Włocławek district, Kuyavian-Pomeranian Voivodeship (*Balcer 1983*, 211), Puławy-Włostowice and Końskowola, Puławy district, Lublin Voivodeship (*Mączyński 2018*, 360; *Niezabitowska-Wiśniewska – Wiśniewski 2018*, 268–272), and a less certain stray find from the site “Zełe” in Wierzbica, Radom district, Masovian Voivodeship (*Balcer 1983*, 211). Similarly, only a few chocolate flint axes are attributed to the Corded Ware culture, with just three known from the Kraków region (*Włodarczak 2006*, 21).

While small flint artefacts are commonly found in Złota culture graves, copper artefacts are extremely rare and usually represented only by simple ornaments or their fragments (*Wilk 2013*, with further references therein). Isolated copper tools interpreted as awls, perforators, or intermediates are known from several Corded Ware culture graves (*Włodarczak 2006*, 77 and pl. XXVII: 1–9).

The sparse assemblage of grave 25, by Złota culture funerary standards, particularly the lack of pottery and the presence of only a disarticulated skeleton missing the skull, ribs, and all but one vertebra, may be interpreted in several ways. The burial may reflect a distinct social status of the deceased, the existence of differing ritual traditions within the Złota culture community, or chronological variability expressed in changing mortuary customs. Alternatively, the grave may have been looted in prehistory, most likely during the Late Neolithic or Early Bronze Age. Such cases are not isolated in the Sandomierz Upland. Evidence of the probable intrusion into a Złota culture niche grave to retrieve artefacts has been identified at Kleczanów, Sandomierz district (*Bajka – Florek 2020*), while the looting of Corded Ware culture niche graves, probably by Mierzanowice culture groups, has been recorded at the cemetery in Mydlów, Opatów district (*Bargiel 1991*, 22). The disarticulation of the skeleton and the absence of many bones may likewise be explained as the result of such disturbance, with some skeletal elements possibly removed for ritual or magical purposes.

The diversity of burial forms within a single site highlights the heterogeneity of funerary practices in the Złota culture and suggests that this community engaged in multiple mortuary traditions, probably influenced by individual status, social roles, or temporal changes. The contrasting characteristics of graves 23 and 25 may also reflect broader patterns within the Złota culture burial landscape. In addition to large, well-structured cemeteries such as those at ‘Grodzisko I’ and ‘Nad Wawrem’, smaller burial grounds and isolated graves have been documented in several locations, including Sandomierz (*Ścibior 1993*; *Bajka et al. 2018*), Stary Garbów (*Bargiel – Florek 1990*), and Wilczyce (*Florek – Zakosińska 2005a*).

Comparison with the Globular Amphora culture, which overlapped both spatially and chronologically with the Złota culture, enriches the interpretative framework for understanding these burials (*Przybyła et al. 2013*). The Globular Amphora culture is known for its wide range of burial forms, including pit graves, cist or stone-chamber graves, single trapezoidal graves, and collective burials, often accompanied by characteristic ceramic and stone assemblages (*Włodarczak et al. 2021*). Niche graves occur only sporadically, such as those documented at Malice (*Witkowska et al. 2021*).

The funerary practices of the Globular Amphora culture are marked by considerable variability in grave forms, grave inventories, and the treatment of human remains. Within this context, the structural diversity of Złota culture burials appears equally significant. The practices employed suggest that Złota culture communities continued and reinterpreted various Neolithic funerary traditions, selectively adopting, transforming, or symbolically reworking elements from neighbouring groups, particularly those associated with the cultural horizons of the Globular Amphora and Corded Ware cultures (Krzak 1961, 19; 1976, 197).

The funerary practices observed at site 6 thus illustrate a continuum of burial modalities, ranging from structured and normative to *ad hoc* and individualised (Furmanek 2019). Grave 23 may reflect household-based commemorative behaviour, maintaining a close spatial and symbolic link between the dead and the living. This proximity may have reinforced ancestral presence and territorial identity, blurring the boundary between life and death. Conversely, grave 25's modest niche burial may represent a simplified yet ritualised funerary practice, possibly linked to changing social circumstances or to individual characteristics such as age, gender, or status.

Such variability can be understood against the backdrop of broader Late Eneolithic transformations (Włodarczak 2016). This period witnessed significant changes in funerary behaviour, reflecting evolving ideas of identity, kinship, and community. The gradual shift from collective cemeteries to individualised burials marked a redefinition of the relationship between individual and society, a process observable across Central Europe.

In many regions, including the Lublin Upland and Sandomierz Basin, transformations within the GAC illustrate this complexity (Witkowska 2014; Włodarczak 2016). The emergence of single pit or niche graves with reduced inventories indicates a move from monumental to more personal expressions of mortuary identity. This shift did not signal a loss of ritual meaning but rather a reconfiguration of symbolic frameworks surrounding death and commemoration.

Within this wider context, the Złota culture appears to have shared in these ideological and social developments. Graves such as feature 25 from Złota may exemplify local adaptations of these wider changes, where emphasis moved from collective remembrance to more domestic or kin-based commemoration. The simplified construction and limited assemblage nonetheless signal continuity with tradition and an awareness of emerging social realities. These burials can thus be seen as local expressions of the broader Eneolithic transition towards increasingly differentiated and personalised funerary practices.

The isotopic signatures of individuals associated with the Złota culture from Sadowie in south-eastern Poland (Pasterkiewicz *et al.* 2025) and Złota 6 reveal important dietary and potentially social or population-level distinctions (see Fig. 11). The two individuals attributed to the ZC exhibit notably low  $\delta^{13}\text{C}$  values ( $-21.3\text{‰}$  and  $-21.9\text{‰}$ ) and moderate  $\delta^{15}\text{N}$  values ( $10.2\text{‰}$  and  $9.9\text{‰}$ ), suggesting a diet strongly based on  $\text{C}_3$  plants resources and limited reliance on animal protein. In contrast, individuals from Sadowie show slightly higher  $\delta^{13}\text{C}$  values ( $-20.0\text{‰}$  to  $-20.6\text{‰}$ ) and  $\delta^{15}\text{N}$  values ranging from  $10.0\text{‰}$  to  $10.9\text{‰}$ . This may indicate a more varied diet with greater dependence on animal-derived protein, and potentially different subsistence strategies or access to food resources (cf. Hałuszko *et al.* 2022).

These isotopic differences could reflect broader cultural or environmental factors, but may also point to underlying social or population-level diversity (Tykot 2004; D'Ortenzio

*et al.* 2015; *Pospieszny et al.* 2021). While both groups are archaeologically related and broadly contemporaneous, individuals from Złota 6 were buried in the Sandomierz Upland, whereas the Sadowie samples originate from a region further south, closer to the Świętokrzyskie Mountains (*Pasterkiewicz* 2021). This geographical separation, together with the dietary contrasts, raises the possibility of distinct community traditions, ecological niches, or even different origins and migration patterns. These distinctions, while certainly cultural, might also extend to the biological level, potentially reflecting different population histories, gene pools, or degrees of interaction with surrounding groups (*Schroeder et al.* 2019; *Pasterkiewicz et al.* 2025).

When placed in a broader comparative framework, the dietary signatures of individuals from Złota 6 stand out in contrast to those of contemporaneous groups (*Włodarczak et al.* 2021; *Pasterkiewicz et al.* 2025). Data from the Globular Amphora culture, particularly from the site of Koszyce in southern Poland, and from the Corded Ware culture (*Szczepanek – Jarosz* 2022) show  $\delta^{13}\text{C}$  and  $\delta^{15}\text{N}$  values that broadly overlap with those of the ZC individuals from Sadowie. This suggests that the dietary patterns observed in Sadowie were more in line with those dominant in neighbouring or interacting communities, characterised by a somewhat greater reliance on animal-derived protein and a more diversified subsistence base.

In contrast, the markedly plant-based diet of the individuals buried at Złota 6 may indicate a more localised or conservative subsistence model, possibly shaped by ecological constraints, but also by cultural preferences or social boundaries. The dietary distinctiveness of these individuals – especially when considered alongside their atypical burial contexts – may further suggest that they occupied specific roles within the community. Such roles could have involved symbolic food restrictions, different access to resources, or specialised social functions, all of which might be reflected in their nutritional profiles.

The location of these burials at the foot of the ‘Kwaczała Mound’, adds another dimension of meaning. It may have held symbolic or ritual significance, shaping a locally specific funerary tradition diverging from standard Złota practices. The integration of isotopic, archaeological, and spatial data thus reveals a complex interplay between diet, identity, and mortuary behaviour. In this light, the graves at Złota 6 do not merely represent anomalous cases, but rather embody meaningful variations that reflect the dynamic and heterogeneous nature of Late Eneolithic communities in this part of Central Europe.

## Conclusions

The graves from site 6 in Złota illustrate the internal diversity and contextual flexibility of funerary customs within the Złota culture during the Late Eneolithic. While both burials conform to the broader chronological and cultural framework of the ZC, their distinctive features – particularly in terms of location, construction, and inventory – deviate from standardised mortuary models. These differences, especially between graves 23 and 25, reflect variability in social roles, ritual practices, and spatial organisation of burial activity within the community. The presence of isolated or atypical burials within settlement contexts, rather than in formal cemeteries, underscores a locally specific approach to death and remembrance, possibly influenced by social status, household structure, or symbolic

associations with the landscape. When viewed in relation to contemporaneous groups such as the Globular Amphora culture, the findings highlight broader processes of cultural interaction, selective adaptation, and boundary negotiation. Overall, the evidence from Złota 6 supports the interpretation of Late Eneolithic mortuary behaviour as dynamic and heterogeneous, shaped by both local traditions and regional cultural currents. Future interdisciplinary research integrating bioarchaeological, spatial, and environmental data will be essential for refining our understanding of social complexity in prehistoric Central Europe.

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