

The Tovuzchay I necropolis (Azerbaijan)

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Abstract: This paper, providing a comprehensive research analysis of the Tovuzchay I necropolis, identifies grave types in the area, including those in the Tovuzchay I Necropolis, establishes the date and chronological range of the burials, contains comments regarding the diversity of burial practices and classifies the cultural material. The framing of the Tovuzchay I necropolis among the Late Bronze Age to Early Iron Age necropolises of the western part of Azerbaijan is based on the materials retrieved from the site. The Tovuzchay I necropolis is distinguished from other burial sites of the Tovuzchay River Basin and of the entire region by its size, by the burial practices and by the artifacts discovered. The Tovuzchay I Necropolis is located on a hill to the west of the Tovuzchay River, at KP 378 of the BTC ROW between Bozalganli and Alimardanli villages in the Tovuz District. The area is characterized by a series of undulations of the terrain starting from the river terrace. The Baku-Tbilisi-Ceyhan and South Caucasian Pipeline pipelines cut through the main part of the necropolis. It was this part of the necropolis that produced about 109 burials during the 2004-2005 excavations.

Keywords: Azerbaijan, Tovuzchay, Late Bronze Age-Early Iron Age, Khojaly-Gedabey archaeological culture, necropolis.

Necropola I de la Tovuzchay (Azerbaidjan). Lucrarea oferă o analiză cuprinzătoare a necropolei Tovuzchay I, identifică tipurile de morminte din zonă, inclusiv cele din necropola Tovuzchay I, stabilește datarea și intervalul cronologic al înmormântărilor, conține comentarii cu privire la diversitatea practicilor de înmormântare și oferă clasificarea culturii materiale. Încadrarea necropolei Tovuzchay I printre necropolele din perioada târzie a epocii bronzului - perioada timpurie a epocii fierului din vestul Azerbaidjanului este realizată pe baza materialul descoperit în complexele necropolei. Aceasta se distinge de alte necropole din bazinul fluviului Tovuzchay și din întreaga regiune prin dimensiunea sa, prin practicile de înmormântare și prin obiectele descoperite. Necropola Tovuzchay I este situată pe un deal, la vest de râul Tovuzchay, la KP 378 de BTC ROW, între satele Bozalganli și Alimardanli din districtul Tovuz. Zona este caracterizată printr-o serie de modulații ale terenului, care se îndepărtează de terasa văii râului. Conductele Baku-Tbilisi-Ceyhan și South Caucasian Pipeline au tăiat partea principală a necropolei, care a oferit aproximativ 109 înmormântări în timpul săpăturilor din anii 2004-2005.

Cuvinte-cheie: Azerbaidjan, Tovuzchay, perioada târzie a epocii bronzului - perioada timpurie a epocii fierului, cultura arheologică Khojaly-Gedabey, necropolă.

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Archaeological excavations in connection with the construction of the BTC (Baku-Tbilisi-Ceyhan) and SCP (South Caucasian Pipeline) pipelines were conducted prior to, and during the construction of these pipelines.

The Tovuzchay I necropolis was first reported to archaeologists by pipeline construction staff in May 2004 following topsoil stripping, which exposed pottery spreads in the upper subsoil layers of the site. The information was privately communicated to the IoAE archaeologist G. Agayev by one of the drivers working for the project. After surveying the site, G. Agayev established the presence of a Late Bronze Age to Early Iron Age necropolis in the area (Museyibli *et alii* 2008, p. 6-7).

Large-scale excavation at the necropolis was conducted in 2004-2005. Work was done on both the BTC and SCP sides of the pipeline easement. Excavations were carried out on a spur of high ground to the west of the Tovuzchay River, at KP 378 of the BTC ROW.

The Tovuzchay I necropolis is located on a spur of high ground to the west of the Tovuzchay River (**Pl. 1**), at KP 378 of the BTC ROW between Bozalganli and Alimardanli villages of the Tovuz District (Museyibli *et alii* 2008, p. 11). The area is characterized by a series of terrain undulations starting from the river terrace. The necropolis was situated on one of the hills forming the relief of the area. The vegetation cover of the site is of semi-desert type.

The area of the necropolis is 1.5 ha. The gravel- and pebble-rich soil is unfit for cultivation. Therefore, the land has not previously been ploughed and the burials had not been disturbed prior to beginning of the pipeline construction. The BTC and SCP pipelines cut through the major portion of the necropolis (Asadov, Agayev 2005, p. 438; Hajili 2006, p. 231-232). It was this part of the necropolis that produced about 109 burials during the 2004-2005 excavations. Upon consent of the BTC management, some of the burials were excavated outside the pipelines construction corridor. The reason was to define the edges of the necropolis and study undisturbed burials with fully preserved surface markers. The surface markers of graves in the necropolis were represented by spreads of stones on the land surface. One of the burials had a kurgan-type mound, while some others lacked surface markers altogether.

The Tovuzchay I necropolis may have belonged to the Bozalganli settlement located in the nearby area (Najafov, Huseynov 2012, p. 92). The archaeological material recovered from the necropolis indicates that the site was used for 4-5 centuries.

Although the Tovuzchay I necropolis, characterized by a number of locally peculiar burial practices, differs from other burial sites of Azerbaijan, it manifests complete identity of its cultural material with that recovered from other sites.

The Tovuzchay I necropolis is not multi-layered. Not a single case of placing a later burial over an earlier one was recorded at the site. For comparison, the Zayamchay necropolis had one such burial (Museyibli, Najafov 2019, p. 18).

The graves at the Tovuzchay I necropolis were very densely spaced and each had an individual burial chamber (Danyalov 2005, p. 88; Taylor *et alii* 2011, p. 146). The difficulty in identifying the edges of burial chambers was related to a single factor – soil characteristics of the necropolis. The burial chamber dug in the natural gravel layer was backfilled with brought in yellow, clayey soil. Sometimes it was difficult to define the exact edges of the burial chambers backfilled with the same gravelly soil material. The graves at the necropolis were constructed on the same principle and covered, depending on the size of the burial, with river-washed stones, gravel rich and sandy soil layer (Hajili 2006, p. 231).

No regularity was observed with respect to the grave depth at the Tovuzchay I necropolis. The graves were unearthed at different depths. In some cases, the difference in depths may have been conditioned by soil properties and difficulty in digging (Guseynov 2009, p. 152). The majority of graves at the necropolis were exposed at depths between 50 cm and 120 cm.

Some burial chambers at the Tovuzchay I necropolis were large, but more modestly furnished; others were small, but richly furnished with grave goods. The presence of graves with abundance or scarcity of grave goods is considered to indicate the emergence of social organization and social stratification during that period. The beginning of division of society into classes in Azerbaijan in the late 2nd millennium – early 1st millennium BC was manifesting itself in the mode of life of early inhabitants of the Tovuzchay River Basin.

According to their structure, among the graves in the necropolis Tovuzchay I, 60 were earthen or soil graves and 42 were stone covered. It was not possible to determine the nature of the grave cover because the top cover of seven graves was destroyed by machinery.

Two burial types have been recorded at the Tovuzchay I necropolis – stone covered graves and earth graves. It is possible to distinguish between these two types of burials based only on the nature of the burial covering material. The covering of stone-covered graves is not a simple set of stones, but represents a kind of structure (Asadov, Agayev 2005, p. 438; Danyalov 2005, p. 88; Hajili 2006, p. 231). Covering a grave dug in the soil, sand or gravel-rich layer with river-washed stones should be understood as an important aspect of the burial practices employed.

Human skeletons were found in only 59 graves in the necropolis. Two skeletons were found in each of the five graves (graves 16, 46, 69, 76, 80) and one skeleton in the others. The total number of human skeletons found in the graves is 64.

Evidence of different burial practices was encountered at the Tovuzchay I necropolis. The bodies were buried in graves in a flexed or semi-flexed position on their right or left shoulders or face down (Museyibli *et alii* 2008, p. 174). In the majority of graves, the skeletons had a northwest-southeast alignment. Human skeletons were contained in most of the burials. Some graves had their sacrifice places. It was possible to determine the alignment, burial posture and sex (though tentatively) of all the skeletons discovered at the burial site. Some of the burials contained disarticulated skeletal remains (Pl. 8-10). Some graves represented the practice of burying people with animals (Museyibli 2007; Müseyibli *et alii* 2008; Guseynov 2009) (Pl. 6-7). Burial customs related to astral beliefs were manifested through the crescent shaped stone covers of some of the graves.

The archaeological material recovered from the Tovuzchay I necropolis can be divided into three groups, according to their function and work principle: domestic items, weaponry and jewellery. Domestic items are represented by pottery ware that includes differently shaped and sized platters, cooking-pots, jugs, small pitchers, kuzas, small pots (Pl. 5). Weapons are indicated by spearheads and arrowheads. Jewellery items (Pl. 11) are also numerous and varied. All these materials attest to a certain degree of development of crafts, including pottery making, metal-working and jewellery making in the life of early communities inhabiting the Tovuzchay River Basin. Pottery, weaponry and jewellery revealed by the excavations show mutual development of these crafts and serve as a source in dealing with economic research issues.

In addition to comprehensive knowledge related to social organization, the burial practices provide valuable information about the religious beliefs of early communities residing within the Tovuzchay River Basin.

From the archaeological evidence gathered, it could be concluded that this necropolis, rich in various types of burial monuments, exhibits some distinctive features in terms of the cultural material recovered and burial practices employed. However, despite the structural originality of the majority of graves and grave goods, the Tovuzchay burials have direct analogues with the Khojaly-Gedabey culture archaeological sites and are part of this culture.

The Khojaly-Gedabey culture was the most widespread culture in the west of Azerbaijan during the late 2nd millennium to early 1st millennium BC. This culture is differently termed in scientific literature. At the end of the Bronze Age and the beginning of the Iron Age the Khojaly-Gedabey archaeological culture existed with geographic variations in the west of Azerbaijan, the north of the present Armenia and the south of Georgia (Kiselev 1957, p. 37; Minkevich-Mustafayeva 1962, p. 110; Guseynov 2011, p. 15-20; Museyibli, Najafov 2019, p. 96-97). The Khojaly-Gedabey Culture covers a large historical expanse ranging from the 14th century BC to the 9th century BC.

Like other archaeological sites located in the west regions of Azerbaijan, the Tovuzchay burials produced grave goods typical of the Khojaly-Gedabey Culture. This typicality is clearly discernible on domestic utensils, weapons and items of jewellery. The data gained through scientific analysis of the artefacts, along with the study of burial practices, supply good evidence for the presence of a genetic-chronological connection between various stages of the Late Bronze Age to Early Iron Age historical period.

To reiterate, the burials at the Tovuzchay I necropolis belong to the Khojaly-Gedabey archaeological culture and are characteristic of the late 2nd millennium-early 1st millennium BC. However, unlike the burials at the Zayamchay necropolis, the burials at the Tovuzchay I necropolis are of a slightly later date, possibly covering the 13th-9th centuries BC. The arguments concerning the chronological range of the Tovuzchay burial site is further supported by the results of radiocarbon dating of human and animal bones from various graves (Pl. 2-4).

A significant number of burial sites dating to the late Bronze Age to early Iron Age have been discovered and explored on the BTC, SCP and SCPX pipelines' routes. These were individual burials or large burial sites, such as Hasansu, Agilidere, Seyidlar, Tovuzchay II and Zayamchay necropolises (Huseynov, Najafov 2013; Museyibli *et alii* 2017; Museyibli, Najafov 2019; Najafov, Maynard 2020). Dozens of Late Bronze Age to Early Iron Age burials were investigated during excavations at these sites. These graves share similarities with those at the Tovuzchay burial site in terms of grave types, burial customs and grave goods placed in the grave.

Among the mentioned sites, the burials most similar to the burials at the Tovuzchay I necropolis are those excavated at the Zayamchay and Tovuzchay II necropolis. Although in strict chronological terms the Zayamchay burials are 1-2 centuries earlier, there were no differences observed between these two either in terms of burial practices or grave goods. The burials at both Tovuzchay I and Zayamchay necropolises had the same construction styles (Museyibli, Najafov 2019). Like the Zayamchay necropolis, the Tovuzchay I necropolis had either richly and poorly furnished common earth or stone-covered graves. No discernible variation in the depth and size of graves was recorded either.

All this suggests that the individuals buried at these necropolises were the carriers of the same culture and shared the same worldview. Mutual relationships and cultural identity of various kins and tribes that took up a permanent abode and lived on this land for millennia were the basis upon which the new Khojaly-Gedabey Culture was built.

Large-scale excavations had been carried out at a number of Late Bronze Age to Early Iron Age burial sites in various regions of Azerbaijan prior to archaeological excavations on the BTC project. Thousands of burial monuments – stone coffin

graves, earth graves, kurgans and cromlechs of this date – have been investigated in the Ganja-Gazakh, Agdam-Fuzuli, Guba-Gusar, Sheki-Zagatala, Garabagh, Mil, Mughan, Talish and Shirvan zones of the country and on the Absheron Peninsula (Djafarzade 1948; Kaziyev 1949; Khalilov 1959; Gaziyeu 1962; Muradova 1979; Aslanov 1980, p. 48-59; Akhundov 1993; Nagel, Ştrommenger 1999; Guseynova 2011). It should be noted that Late Bronze Age to Early Iron Age burial sites have been studied to a greater degree than settlement sites. Therefore, the majority of information on the economic and domestic life and social organization of Azerbaijan during the late Bronze Age to early Iron Age was gained from the material recovered from these burials.

The area's burial monuments of this date vary in type, mostly conditioned by natural and geographic factors. The Tovuzchay River Basin has fewer kurgans as compared to the Shamkirchay and Ganjachay River Basins. Stone coffin graves are more typical of the upper reaches of the Tovuzchay River, kurgans and earth graves are predominantly found in the Middle Tovuzchay valley, while stone-covered burials and earth graves are largely excavated within the lower Tovuzchay Basin.

The burials at the Tovuzchay I necropolis have a distinctive construction style. Similar to the Zayamchay Necropolis, two types of burials were recorded at this site: stone-covered graves and earth graves (Danyalov 2005, p. 88; Hajili 2006, p. 231; Guseynov 2009, p. 152; Taylor *et alii* 2011, p. 146). Based on some burial characteristics, primarily the height of the mound constructed of river-washed stones over the grave, the majority of stone-covered graves have thus far been classified by researchers as grave types that have no analogues elsewhere in Azerbaijan and the entire Caucasus (Museyibli, Najafov 2019, p. 40-41). Graves similar to those at the Tovuzchay I and Zayamchay necropolises are encountered at the Madnischal and Mtskheta necropolises – the sites from the beginning of the Late Bronze Age (14th-13th centuries BC) excavated in East Georgia (Tushishvili 1972, p. 167-168). It appears that stone-covered burials occupied a certain place in the burial practices of tribes residing in West Azerbaijan and the Middle Kura valley in East Georgia during the Late Bronze Age to Early Iron Age.

The archaeological materials recovered from the Tovuzchay burials are representative of the Khojaly-Gedabey culture and encompass the entire East and Central Caucasus (Guseynov 1989; Guseynova 2011). Similar artefacts are encountered in the Samtavro and Tli Cemeteries in Georgia (Chubinishvili 1955; Munchayev 1975; Tehov 1981) and Lake Goycha Basin in the present Armenia (Pogrebova 2011), Mugan Plain and foothills of the Talish Mountains (Mahmudov 2008), Shamkirchay and Ganjachay River Basins (Narimanov 1958; Khalilov 1959; Muradova 1965; Guseynova 1989; Kirichenko 2017; Museyibli, Najafov 2019), old Gushchu (Kasamanli 1999), Saritepe (Narimanov, Khalilov 1962), Sarvantepe

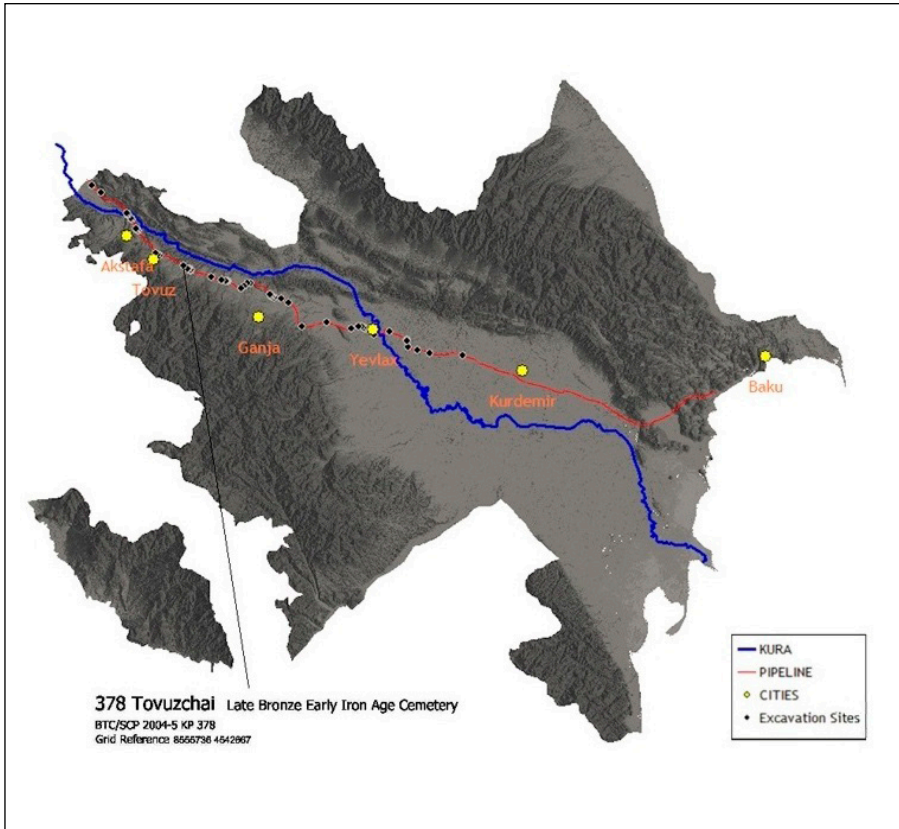
(Nadjafov 2018), Yastitepe settlements and Gazakhbeyli cemeteries (Gaziyev 1962), Absheron (Djafarzade 1948), Gobustan (Muradova 1979), Mingechevir (Kaziyev 1949), Khachbulag, Agjabedi, Gabala (Gaziyev 1965), Dashkasan and Gedabey (Aslanov 1980; Kasamanli 1999) districts. Some of the pottery ware from this site is similar to the Middle Asian, Iranian, Turkish and Syrian ceramics.

All the above discussion shows that the results of excavations carried out at the Tovuzchay I Necropolis are important for the study of aspects of the material culture of the west of Azerbaijan during the Late Bronze Age to Early Iron Age.

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Pl. 1. The location of the Tovuzchay I necropolis in the territory of Azerbaijan
Pl. 1. Localizarea necropolei Tovuzchay I pe teritoriul Azerbaidjanului

CALIBRATION OF RADIOCARBON AGE TO CALENDAR YEARS

(Variables: C13/C12=-18.5;lab. mult=1)

Laboratory number: **Beta-218210**

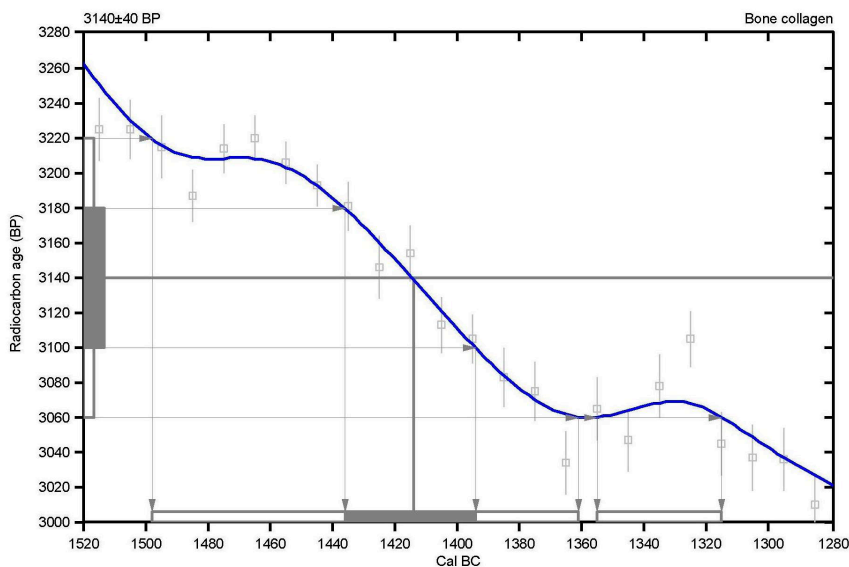
Conventional radiocarbon age: **3140±40 BP**

2 Sigma calibrated results: **Cal BC 1500 to 1360 (Cal BP 3450 to 3310) and
Cal BC 1360 to 1320 (Cal BP 3300 to 3260)**

Intercept data

Intercept of radiocarbon age
with calibration curve: **Cal BC 1410 (Cal BP 3360)**

1 Sigma calibrated result: **Cal BC 1440 to 1390 (Cal BP 3390 to 3340)**
(68% probability)



References:

Database used

INTCAL98

Calibration Database

Editorial Comment

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INTCAL98 Radiocarbon Age Calibration

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Mathematics

A Simplified Approach to Calibrating C14 Dates

Talma, A. S., Vogel, J. C., 1993, *Radiocarbon* 35(2), p317-322

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Pl. 2. Tovuzchay I Necropolis, burial No. 42, radiocarbon data
Pl. 2. Necropola Tovuzchay I, mormântul nr. 42, dată radiocarbon

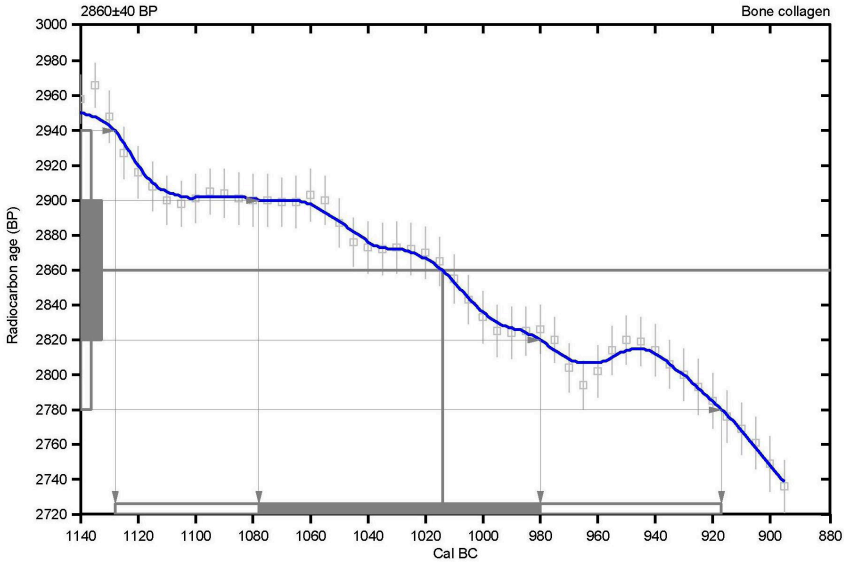
CALIBRATION OF RADIOCARBON AGE TO CALENDAR YEARS

(Variables: C13/C12=-18:lab. mult=1)

Laboratory number: **Beta-232333**
 Conventional radiocarbon age: **2860±40 BP**
2 Sigma calibrated result: Cal BC 1130 to 920 (Cal BP 3080 to 2870)
 (95% probability)

Intercept data

Intercept of radiocarbon age
 with calibration curve: Cal BC 1010 (Cal BP 2960)
 1 Sigma calibrated result: Cal BC 1080 to 980 (Cal BP 3030 to 2930)
 (68% probability)



References:
Database used
 INTCAL04
Calibration Database
 INTCAL04 Radiocarbon Age Calibration
 IntCal04: Calibration Issue of Radiocarbon (Volume 46, nr 3, 2004).
Mathematics
 A Simplified Approach to Calibrating C14 Dates
 Talma, A. S., Vogel, J. C., 1993, Radiocarbon 35(2), p317-322

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Pl. 3. Tovuzchay I Necropolis, burial No. 78, radiocarbon data
 Pl. 3. Necropola Tovuzchay I, mormântul nr. 78, dată radiocarbon

CALIBRATION OF RADIOCARBON AGE TO CALENDAR YEARS

(Variables: C13/C12=-18.3:lab. mult=1)

Laboratory number: **Beta-232332**

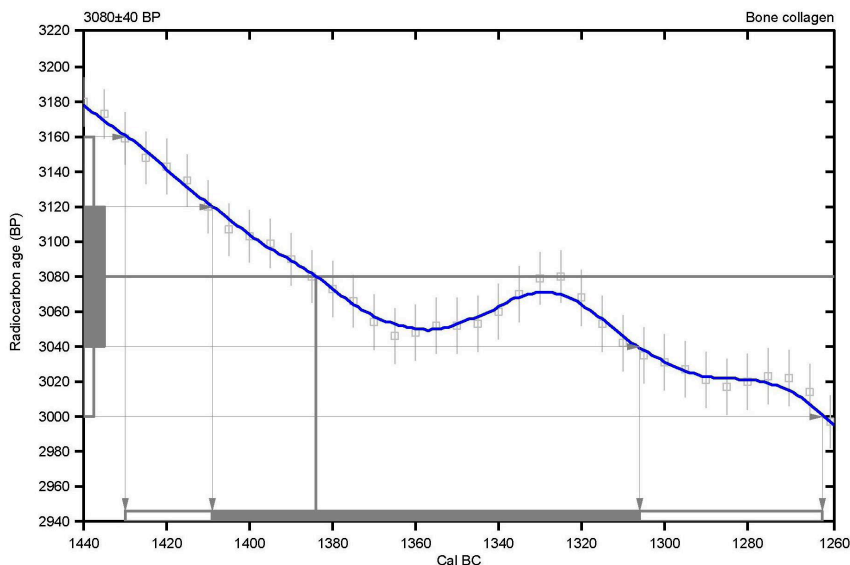
Conventional radiocarbon age: **3080±40 BP**

2 Sigma calibrated result: Cal BC 1430 to 1260 (Cal BP 3380 to 3210)
(95% probability)

Intercept data

Intercept of radiocarbon age
with calibration curve: Cal BC 1380 (Cal BP 3330)

1 Sigma calibrated result: Cal BC 1410 to 1310 (Cal BP 3360 to 3260)
(68% probability)



References:

Database used

INTCAL04

Calibration Database

INTCAL04 Radiocarbon Age Calibration

IntCal04: Calibration Issue of Radiocarbon (Volume 46, nr 3, 2004).

Mathematics

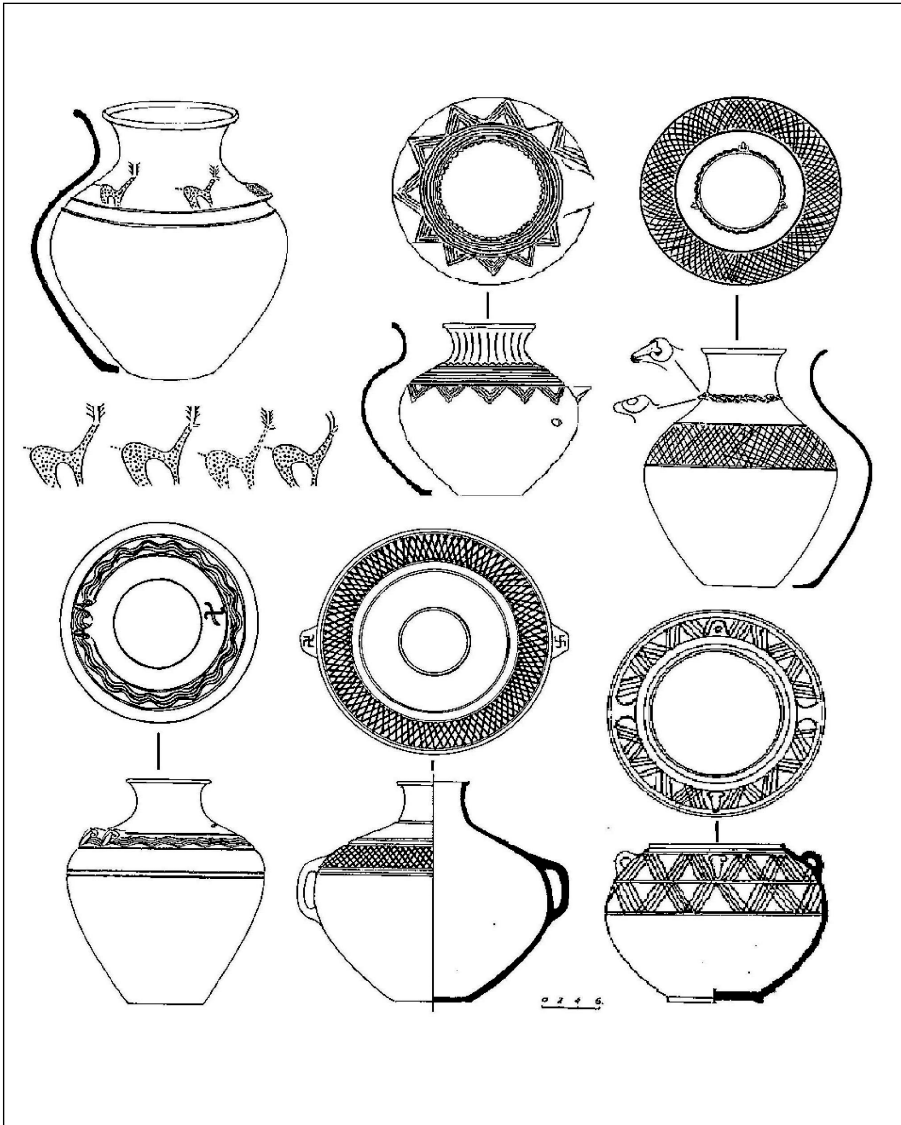
A Simplified Approach to Calibrating C14 Dates

Talma, A. S., Vogel, J. C., 1993, Radiocarbon 35(2), p317-322

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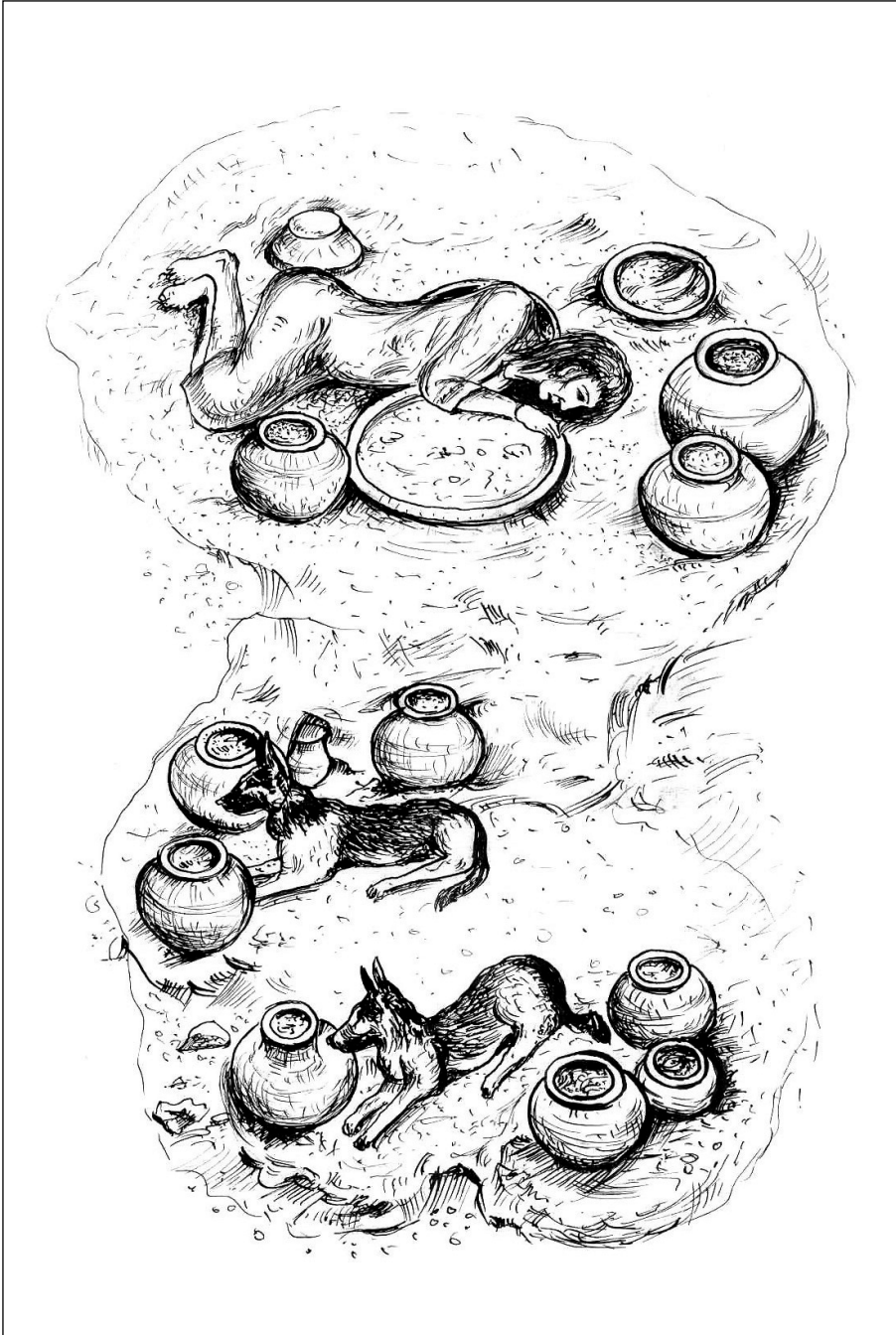
Pl. 4. Tovuzchay I Necropolis, burial No. 56, radiocarbon data
Pl. 4. Necropola Tovuzchay I, mormântul nr. 56, dată radiocarbon



Pl. 5. Pottery vessels from Tovuzchay I necropolis
Pl. 5. Vase de ceramică din necropola Tovuzchay I



Pl. 6. Grave No. 53
Pl. 6. Mormântul nr. 53



Pl. 7. Grave No. 53, graphic reconstruction
Pl. 7. Mormântul nr. 53, reconstrucție grafică



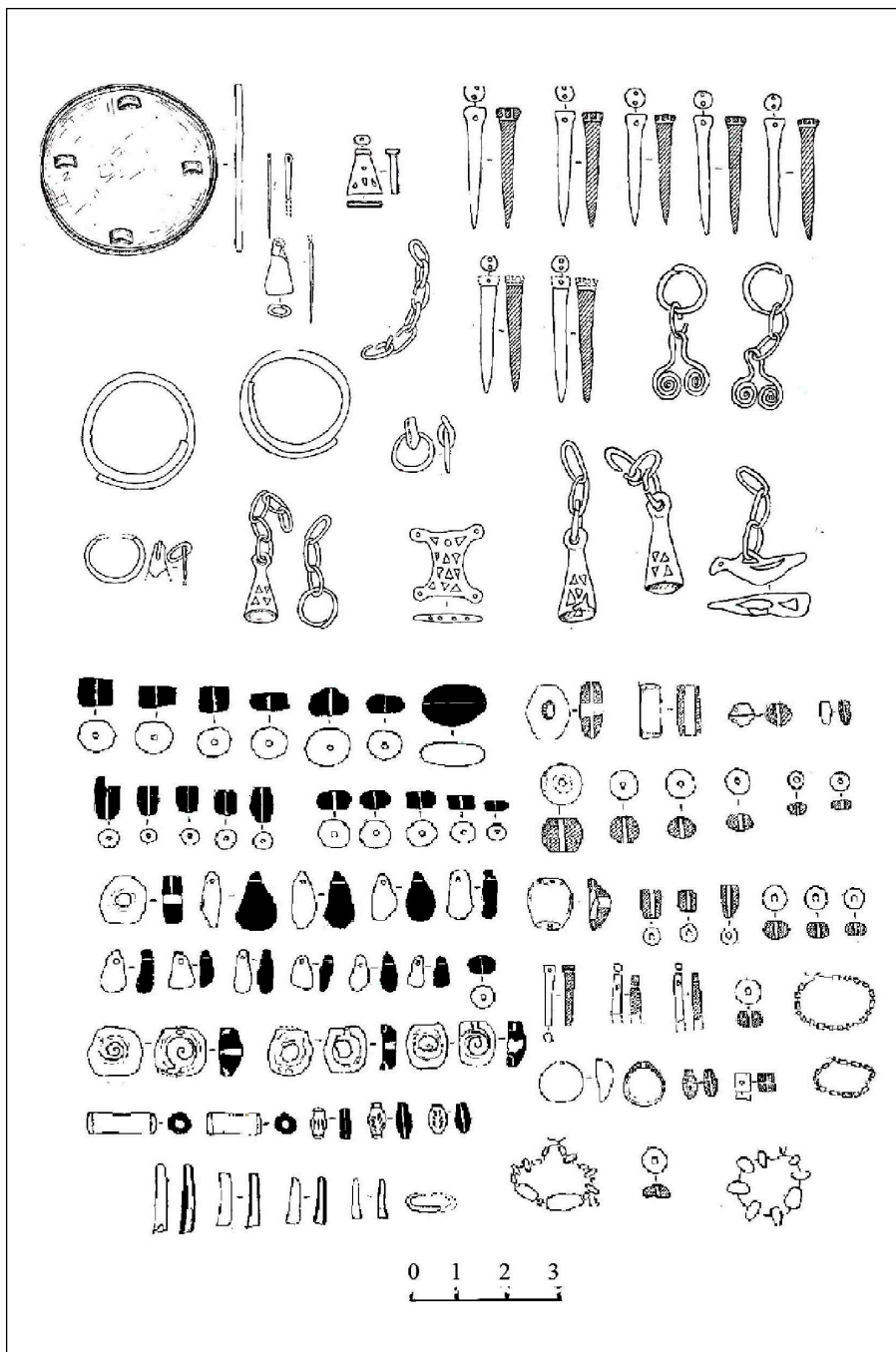
Pl. 8. Grave No. 76
Pl. 8. Mormântul nr. 76



Pl. 8. Grave No. 76
Pl. 8. Mormântul nr. 76



Pl. 10. Grave No. 82
Pl. 10. Mormântul nr. 82



Pl. 11. Bronze decorations & beads from Tovuzchay I necropolis
Pl. 11. Podoabe din bronz și mărgelile din necropola Tovuzchay I