**Abstract**

The article concerns archaeological research in plot 1 at the Jewish cemetery at 49/51 Okopowa Street in Warsaw (Wola necropolis). Thanks to simultaneous archaeological works and tombstone conservation, it is possible to examine the underground parts of the matzevot. Archaeologists present at the removal of matzevot for conservation have the opportunity to document the profiles of burial pits created during the demolition of tombstones. The information obtained in this way is very valuable in reconstructing the ways in which tombstones were made and decorated. Traces of polychromies are often preserved in the lower part of the matzevot covered with soil. Such observations are not possible during archaeological research, which is carried out at shallow depths, as recommended by the Rabbinical Commission for Jewish Cemeteries in Poland.

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**INTRODUCTION**

Limitations due to the compliance with Jewish law make it necessary to work in close cooperation with other specialists working at Jewish cemeteries in order to study burial customs in Jewish culture. A good example of such symbiosis is the work in the Jewish Cemetery at 49/51 Okopowa Street in Warsaw. It is only through close cooperation with conservators working on the protection and conservation of monuments that we can discover more. Like every cemetery, this Jewish necropolis has its own unique history and characteristics.

**JEWISH CEMETERY AT OKOPOWA STREET**

The Jewish cemetery, opened in 1806 in Warsaw at the end of the former Gęsia Street, was established on a nearly rectangular plan of approximately 180×100 m\(^2\) and was divided into two quarters: the men’s quarter (plot 1) and the women’s quarter (plot 2).\(^2\) As the number of Jewish inhabitants in Warsaw grew, the cemetery was expanded several times (today it covers an area of approximately 33.6 hectares). In the second half of the 19\(^{th}\) century, as a result of protests by progressive Jews, a new division of the burial plot was introduced: a conservative quarter, a regular quarter for Jews who did not identify as orthodox or assimilationists, a progressive quarter, and a children’s quarter.\(^3\)

The state of preservation of the entire cemetery, including plot 1, varies. The greatest damage

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\(^1\) Bergman and Jagielski 1990, 9-18.

\(^2\) Married and single men, maidens, married women, and those who died in childbirth were buried separately, Schiper 1938, 96.

\(^3\) Żołnierczyk 2019, 221-232.
occurred during World War II, when the most severe vandalism and looting took place, primarily during the ‘Easter pogrom’ in 1940, later when the buildings in the utility part of the cemetery and the synagogue were blown up in 1943, and finally during the defence of the Wola district cemeteries (6–11 August 1944) at the time of the Warsaw Uprising. Unfortunately, the condition of the cemetery was (and still is) affected not only by the war, but also by the densely growing trees, whose root systems destroy the burial chambers and whose trunks and breaking branches damage the monuments. Planting trees at the cemetery began in 1851. However, despite its turbulent history, in most places the cemetery has retained its original layout.

The eastern and central parts of the studied area have survived almost intact, with the only damage being the bullet marks visible on the monuments. In the north-western part of the surveyed area, a deep hole was dug for a mass grave during World War II, destroying the 19th century burials located there. Today, there are no matzevot or other stone memorial elements in the area of the mass grave and the adjacent area to the south. The southern part of the surveyed area has, apart from a few exceptions, has retained the original layout of the gravestones.

The area of plot 1, covered by the archaeological research, is delimited on the south by an external brick wall, while the northern end is marked by a contemporary pavement separating this part of the cemetery from plots 9 and 10. The western boundary is formed by the Mausoleum of Jewish Fighters for Poland’s Independence, while the eastern boundary is formed by a low transverse wall. It separated the area intended for burials from the space adjacent to Lubomirski’s trenches, incorporated into the cemetery before 1848.

The graves in the respective burial plots are oriented according to the east-west line and placed in rows running north to south. According to the magistrate’s order of 1851, 8 square cubits (or ells) were allocated per grave. As the cemetery was filling rapidly and lacked space for new burials, individual graves were placed very close to each other, often not maintaining the obligatory rule of keeping a six tefachim (handbreadth) distance between them.

**Types of tombstones**

The Okopowa Street cemetery, like other metropolitan cemeteries, is an example of exceptional Jewish art. In Central and Eastern Europe, tombstone sculpture flourished from the 16th century onwards and became increasingly diverse and unconventional, with a rich range of symbolic motifs. The assimilationist movement (haskala) that was spreading in Europe, including Poland, at the end of the 19th century had a great impact on social and religious life, including funerary rites and grave-stone art. This led to the emergence of monuments that referred in style and ornamental motifs to those known from Christian cemeteries. Many of them have decoration that imitates elements characteristic of ancient Egyptian art or Moorish art. These trends are also visible in the sepulchral art in the area of plot 1.

The Wola necropolis, like every Jewish cemetery, also has its own specificity and characteristic style of tombstones, which represent the majority of the known types.

The most common type of tombstone in plot 1 is the headstone stele. This term in the text will be used interchangeably with ‘matzevah’, understood

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4 Bartoszewski 2004, 73.
5 Schiper 1938, 97.
6 Wieczorek n.d.

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For a plan of the surveyed area with the results of the work, see the article by Lenarczyk and Kowarska 2023.
6 A hearse building, cemetery offices, and a grand synagogue with a pre-burial house were built on this plot, Zieliński 2011, 155.
7 Schiper 1938, 96-97.
8 Six tefachim is a distance of about 60 cm, Bis and Więckowski 2017, 111-112.
10 Krajewska 1989a, 27-44.
as a vertical stone or cast-iron slab, dug into the
ground on the eastern side of a grave pit. The
tombstones in the Wola cemetery have various
forms of crowning (or coping), which take the
shape of an arch or a rectangle, rarely of a triangle.
In the upper part of the stele, there is a relief dec-
oration, sometimes with an inscription consisting
of two Hebrew letters ‘pe’ and ‘nun’, meaning an
abbreviation of the Hebrew expression ‘here rests’.
A part of the stele is occupied by the proper led-
ger with an inscription field, usually in Hebrew (on
progressive/assimilationists’ monuments also in
Polish, German, and even Russian). The inscription
letters are mostly written in concave relief. The less
frequent convex letters are characteristic of the old-
er style of matzevah decoration, occurring until the
mid-19th century. The inscription field is bounded
on both sides by semi-columns, pilasters, or a dec-
orative border. The lowest part of the matzevah,
a plinth visible above ground level, usually features
a motif of a brick wall with a two-door gate, geo-
metric, floral, and zoomorphic designs, including
fantastic beasts, and sometimes an inscription. In
the 19th century, monuments made of cast iron start-
ed to appear on Okopowa Street.

An ornamental stele with a monolithic block is a
type of tombstone in which a stone or con-
crete elongated block is attached to the stele, with
a semicircular or rectangular coping, placed over
the entire burial chamber (Fig. 1). Its function was
to protect the grave area from above and to sup-
port the standing slab bound together with an iron
anchor. Such elements have been used since the
16th century. This is why the shapes, dimensions,
and designs of this type of tombstone vary. In plot
1, there is only one type of tombstone in the form
of a vertical stele attached to a plain undecorated
stone block with a uniform cross-section over its
entire length.

Stone box graves in plot 1 usually consist of a stone foundation on which stands a high, ob-
long, rectangular stone box covered with a flat slab and a high stele with an inscription on the eastern
side. The sides of the box are sometimes decorated
with carved circular pseudo-handles. These mon-
uments often have decorated iron fences (Fig. 1).

Monuments with the above-mentioned tomb-
stone structure are an intermediate form between
the stele-shaped tombstones with a monolithic
block and the stone box type. The visual effect
is similar to that of the monolithic block, but the
monolithic block is replaced by two rectangular
plates that form a support for the coping, usually in
the form of a half-cylinder. The shorter end of the
block is crowned with a lower stele, as in the stone
box types, which was probably intended to pro-
tect the free space created by such a structure (in
a few cases they have an inscription) (Fig. 2).

13 The typology published by A. Trzciński most closely re-

flects the types of tombstones found in the Wola necropolis, and
I will refer to it in this study, Trzciński 2018, 47-59. For informa-
tion on other types of tombstones see: Krajewska 1989a, 27-32.
14 Trzciński 2018, 47-55.
In plot 1, there are also non-traditional tombstones, which have small architectural and sculptural forms: an obelisk, a near-perpendicular tombstone, a free-standing column, often a broken, full-body sculpture in the shape of a broken trunk or felled tree, and a vase or urn standing on a pedestal or column.\(^{17}\)

More elaborate in architectural form are the ohels, i.e., rectangular buildings erected over the graves of tzadikim and rabbis to protect and distinguish the grave. The ohel created a space where visitors to the tomb could pray, leave kwitlech or light candles.\(^{18}\) There are four ohels in the surveyed area of plot 1, the most ornate of which is Ber Sonnenberg’s ohel from 1822 with bas-reliefs on the longer walls of the building.\(^{19}\) Although Ber Sonnenberg was a secular person, the chapel built over his grave to commemorate his achievements was called an ‘ohel’ by Ignacy Schiper, marking the word with inverted commas.\(^{20}\) Other ohels belong to the first Chief Rabbi of Warsaw, Shlomo Zalman Lipszyc, dated 1839,\(^{21}\) the rabbi of Warsaw’s Praga district, Jeshua Mushkat,\(^{22}\) dated 1866, and the tzadik of Serock, Aharon Katzenelenbogen, dated 1926.

**Archaeological works and renovation of tombstones**

The aim of the archaeological investigations in the area of historic plot 1, carried out by Szymon Lenarczyk’s company Wykop na Poziomie in cooperation with the Faculty of Archaeology of the University of Warsaw, on behalf of the Cultural Heritage Foundation (Fundacja Dziedzictwa Kulturowego), was to thoroughly survey this part of the site and expose the historic ground level.\(^{23}\) The work was carried out in accordance with the regulations on the protection of cultural heritage and Jewish religious law. The excavation methods followed the guidelines of the Rabbinical Commission for Jewish Cemeteries in Poland and were carried out under the close supervision of its representative.

... According to Jewish tradition and law, the human body is sacred even after death and remains so until the Day of Judgement. Therefore, the bones of those who have passed away remain sacred and inviolable. Tradition says that the soul and the body remain connected even after death, so if one violates the bones here on earth, the peace of the soul in heaven is also violated. (…) Judaism explicitly prohibits interfering with the structure of the earth in Jewish cemeteries because of the danger of disturbing the bones of the dead. Consequently, only non-invasive methods of research are compatible with Jewish tradition. (…) Archaeological research is permitted only in exceptional cases, in consultation with the Commission and under the rabbinical supervision of a delegated Commission employee.\(^{24}\)

The constraints of conforming to the guidelines of the Rabbinical Commission for Cemeteries do not allow us to obtain information on the construction and possible variety of forms of burial chambers. The lowest parts of the tombstones, which – as these parts are buried underground – conceal the well-preserved polychromes, are also rarely accessible for research.

Before the archaeological work began, the area of plot 1 was overgrown with tall grass and low bushes. For this reason, the work started with removing the foliage and raking up leaves and broken branches. Then, after a preliminary survey of the site, permission was obtained to remove about 10 to 20 centimetres of soil, which is how much humus was usually deposited up to the ceiling of the burial chambers. Once this was removed, it was discovered that some of the graves had a burial chamber

\(^{17}\) Trzciński 2018, 57-58.
\(^{18}\) Bielawski n.d., 97-98.
\(^{19}\) Nowogórski and Kowalska 2000, 277-288.
\(^{20}\) Schiper 1938, 118.
\(^{21}\) Bielawski n.d., 105.
\(^{23}\) See: Cultural Heritage Foundation Project.
\(^{24}\) Rabbinical Commission for Cemeteries, Commission’s Guidelines for the Protection of Jewish Cemeteries in Poland.
ceiling lined with bricks. In no case was the use of planks for shoring the burial chamber observed at this level as attested in many Jewish cemeteries, e.g. in Węgrów, Wyszogród, Maków Mazowiecki, Krasiczn, and Warsaw’s Bródno district.25

In most cases, the outline of the burial chamber has been lined with the shorter sides of the bricks facing each other (the so-called header face) and the matzevah, while the end of the burial chamber is accentuated by the brick(s) laid perpendicularly to the longer sides (Fig. 3). Less frequently, bricks are laid facing each other with their longer sides (the so-called stretcher face) in relation to each other and to the matzevah. In a few cases, the centre of the resulting chamber is lined with bricks, presumably to reinforce the ceiling of the chamber, on which a rectangular stone slab was sometimes placed.

From the outset, the investigations on plot 1 demonstrated the scale of the destruction, so a rescue programme was developed for the oldest and most damaged or endangered tombstones.26 A thorough restoration and conservation of the selected monuments sometimes requires intervention in the soil. In such cases, damaged monuments are excavated and the area is cleared and reinforced for the resetting of the restored tombstones. By participating in conservation work, we have the only opportunity to look deeper without disturbing human remains.

25 Bis and Więckowski 2017, 113.
26 The restoration work on plot 1 is being carried out by: Font-Art Damian Pisarski.

Graves no. 428 (1843) and no. 427 (1847)

The extensive damage to tombstone no. 428 in the form of a broken matzevah lying next to it and a shattered stone pedestal collapsed into the centre of the burial chamber required rapid conservation intervention. The restoration of the entire site (Figs. 1 and 7) required a deeper intervention in the ground. In order to remove all the stone...
elements, the soil had to be removed to a depth of approximately 50 cm. At this level, after cleaning the excavation trench, a carefully laid brick ‘floor’ measuring approximately 80×160 cm was discovered. The eastern part, where the matzevah is placed, consists of two parallel rows of bricks (stretcher face), and is located 5 cm lower than the western part. In the western part, the outline of the pit was lined with bricks with shorter sides (headers) facing each other, forming a casing. The centre was filled with brick rubble, tightly filled with lime mortar (Fig. 4). Assuming that the grave should have a depth of between 6 and 8 te-fachim,27 i.e. about 60–80 cm, it can be assumed with certainty that this is the ceiling of the burial chamber containing the remains of the deceased. Above this brick ‘floor’ was a layer of sand about 10 cm thick, on which was laid a horizontal slab of sandstone also about 10 cm thick (Fig. 5). The slab supported a structure of an intermediate form, consisting of two rectangular stone kerbs along the longer sides of the chamber and a smaller slab enclosing the space to the west, on which rested a half-cylinder coping. The vertical stele was set on a separate, larger carefully shaped plinth.

When cleaning the trench we discovered that on the south side, grave no. 428 closely adjoined grave no. 427 from 1847. This provided us with a view of the side wall of the chamber of grave no. 427, which shows different features. The chamber was lined with at least 5 layers of bricks, laid with their shorter sides (header faces) towards each other, in a Flemish bond. On top of these, just below a thin layer of litter, was a horizontally laid stone slab. The matzevah was dug into a depth of approximately 60 cm and its sides that were buried in the ground have not been thoroughly dressed and bear chisel marks (Fig. 6).

27 Bis and Więckowski 2017, 112.
Graves no. 683 (1831), no. 684 (1835), and no. 685 (1839)

Graves nos. 683, 684, and 685 are located in the western part of the studied area and their state of preservation was poor. They all had broken matzevot, with 1/3–1/4 of their height preserved in situ (Fig. 8). During the archaeological work, the shattered elements were removed from the surface of the chambers so as to obtain information about their construction. In the case of all three graves, a stone slab, or a fragment thereof, was overlying an undetermined brick structure. When removing 10 cm of soil from the area in front of the face of the matzevot, we discovered fragments of yellow polychrome on the matzevah belonging to grave no. 685. The plinth of this matzevah is divided into two parts. The visible fragment of the upper part consists of three panels and the central panel bears an inscription with the date of death and a wish for eternal life, and the surrounding cymatium, a fragment of which was previously buried below the surface of the ground, has retained its intense yellow colour (Fig. 9). During the conservation work, i.e., the unearthing of the entire matzevah, the second part of the plinth decorated with a bas-relief in the form of five bannisters was discovered, which retained a white polychrome and the space between them an intense blue colour (Fig. 10). Below ground, the matzevah of grave no. 683 retained its two-part plinth. Its upper part is divided into three sections – the middle one is decorated with three fully preserved bannisters and two are preserved only partly. The side panels are in the form of rectangular pedestals for the bases of Doric columns. The lower part of the plinth in the form of a brick wall has preserved polychrome...
in green and black (Fig. 11). After cleaning the resulting section of the burial chambers, we obtained information about their construction. Grave no. 685 has three layers of bricks covering the entire (?) space of the chamber, with another stone slab placed on top of an approximately 5 cm layer of sand. The neighbouring grave no. 684 has a slightly different structure: four layers of bricks along the outline, with their headers facing the matzevah, and in the free space, inside the chamber, there is brick and stone rubble. A stone slab was placed directly on top of the bricks. Grave no. 683 had only two layers of bricks along the outline, overlaid by a fragment of a stone slab (removed in preparation for the dismantling of the matzevah). Below the brick foundations was yellow sand without visible pits or cuts (Fig. 12). An analogous situation was observed in other parts of the cemetery.

Two further examples of monuments selected for conservation are single matzevot. The preparation for conservation consisted only of digging the matzevot up from the east and removing them from the ground. After removing and cleaning the matzevot, we gained access to the eastern sections of the burial chambers.

**Grave no. 20 (1817)** (Figs. 13 and 14)

In this case, the burial chamber has no brick framing and there are no visible remains of wooden structures.

**Grave no. 433 (1847)** (Fig. 15)

The burial chamber has bricks only in the ceiling section. From the top, the entire space of the burial chamber was lined with two layers of bricks, each layer consisting of three rows of bricks laid with their shorter sides (headers) to the matzevah; below, the chamber pit was secured with two layers of bricks laid only along the outline.

**Grave no. 289 (1836)**

This is an example of a matzevah with elaborate and polychrome architectural decoration referring to the appearance of the temple façade. The area where grave no. 289 is located is characterised by more destruction, with all the matzevot and monuments in the area largely damaged. It is difficult to determine today whether this is the result of the activity of the densely growing trees or the result of warfare. For the most part, the matzevot in this area have been preserved up to 1/3–1/2 of their original height (Fig. 16), while the rest

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28 The conservation is taking place at the Academy of Fine Arts in Warsaw, where the matzevot are still located.
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of the broken fragments lay buried in the ground next to the graves. The archaeological work was limited only to the removal of the overlying litter on the stone rubble. The selection of grave no. 289 for conservation involved the removal of most of the stone elements and the excavation of the lowest part of the matzevah. The pedestal of this matzevah is richly decorated with floral motifs, while the cornice and architrave are finished with a cymatium. The body shows a convex inscription field delimited by pilasters and semi-columns in Doric style. The plinth is divided into two parts — the upper part contains five panels decorated with floral and geometric motifs (this part was intended to remain above ground) and the excavated lower part of the plinth is decorated with a motif of a wall with buttresses. Carved in the middle of the wall is a gate with a semicircular top passing into pilasters on either side. The right door has a rectangular key-hole lock (Fig. 17). The polychrome is preserved only in the part of the plinth that until now was buried underground: the colour red on the brick wall and on the dividing line of the gate, green on the door, and black on the lock. The uniqueness of this matzevah is evident not only in the preserved polychromes but also in the use of the door motif. The gate motif (sometimes with a padlock) is a common decorative motif on Jewish graves, as evidenced here in the Warsaw cemetery on Okopowa Street. It is usually found below the epitaph in the above-ground part of the plinth or on the reverse side of the gravestone. In this case, however, the door was intentionally buried below the surface of the ground, as appears to be evidenced by the unfinished sides of the matzevah up to the height of the rustication on the pedestal, and by irregular streaks and splashes of paint on the undressed lower section of the plinth and the lower section of the back.

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Kurczyński 2022, 72.
Krajewska 1989b, 55.
After conservation, the matzevah of grave no. 289 was deliberately buried so that the polychrome elements remain above ground.

**Grave no. 846 (1831)**

An interesting example of a completely different form of matzevah is that placed on grave no. 846 in plot 9. It was made of natural fieldstone, which was smoothed only on the side intended for inscriptions.\(^{31}\) It is an example that relates in style to the oldest matzevot. Although it was not selected for conservation, its interesting ornamentation and polychrome were discovered thanks to the conservation and construction work carried out during the erection of a new memorial to the two 1942 mass graves on the west side of the monument. As can be seen in the photograph (Fig. 18), the top part of the stone covered with green lichen protruded ceiling of which has been secured with three parallel rows of bricks. Unfortunately, we will not find out whether grave no. 846 also had such a structure. The area to the west of the matzevah was destroyed during the digging of the pits for the mass grave in 1942.

\(^{31}\) In plot 1 there is also a matzevah of this shape, which also dates from 1831. In the case of plot 1, the grave has a smaller, undressed stone enclosing the burial chamber, the
above ground level, while its lighter part below was cleaned off during the archaeological survey (approximately 15 cm), and the lowest part with visible polychrome was discovered during work on the construction of the memorial. Raspberry-coloured dye is preserved on the bases of the columns, fragments of blue polychrome on the columns, and white colour on the stylobate. The middle step of the crepidoma is filled with raspberry colour and painted ornamentation in the form of black dots, while the lowest step is decorated with alternating black and raspberry dots.

**Summary**

In the course of the research work, questions arise that we cannot answer unequivocally: do burials where no bricks were found at the exposed level not have a brick chamber and correspond to a more modest, traditional burial form? Or, in such cases, is the burial, and thus the brick chamber, placed much deeper underground? Or do they have other forms of chamber protection, such as boards placed at a much deeper level?

Unfortunately, due to the guidelines prohibiting us from exceeding the designated depth of exploration, this cannot be checked. At this point, only during conservation work is it possible to verify the above-mentioned research questions. We can hope that thanks to the cooperation between archaeologists and art conservators our knowledge about the forms of burials, decorative techniques, and the colouring of gravestones will increase with each joint research.

**Disclosure statement**

No potential conflict of interest was reported by the author.

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