Bartosz Markowski

Framework of conservation and restoration process with Kagan matzeva from Jewish Cemetery in Białystok, Poland

The matzeva was made in one piece of sandstone. The front surface was smooth grinded and then the letters and relief were carved. Some parts of the front surface were painted in black and yellow colours. The backside of the matzeva was originally left ungrinded, just with chisel marks and then another letters were carved.

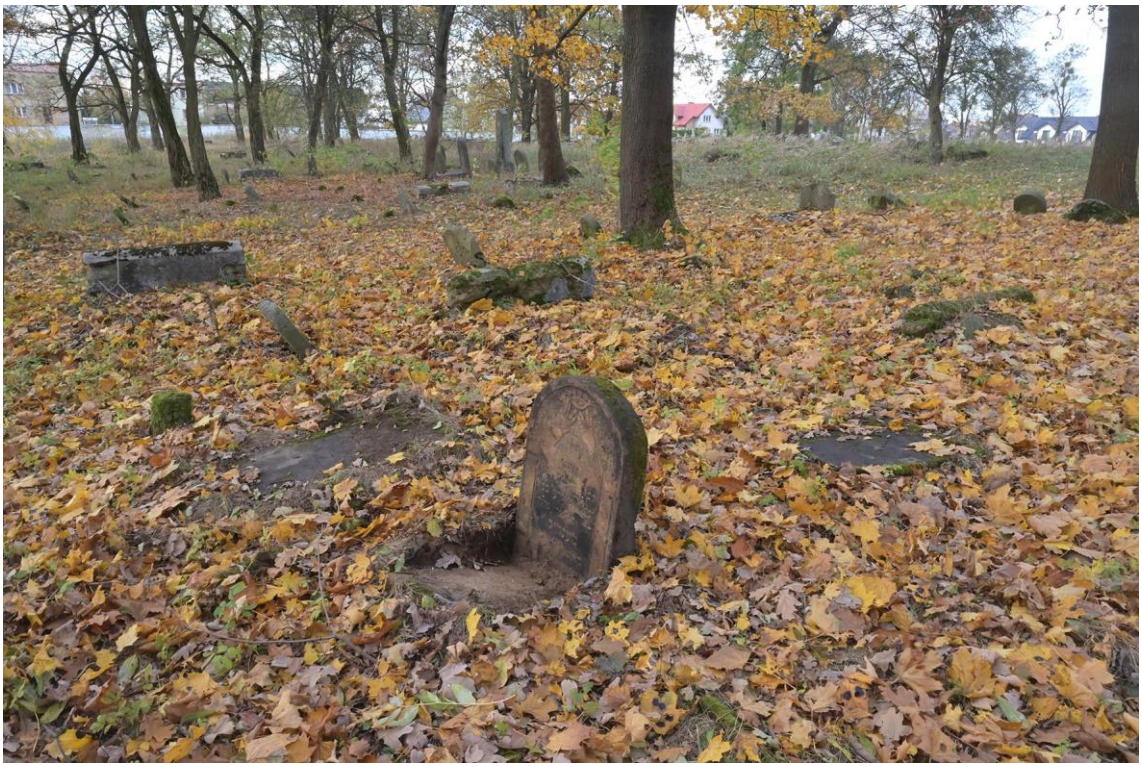
The matzeva was pulled down to the front and has been staying half-covered with soil for long time. The stone was penetrated with humidity and overgrown with moss. The file started to crack, stratify and separate along natural sedimentation layers. The yellow and black paint has flaked out in about 70%. There is some cement remaining on the down-backside, probably after some previous renovation. There are also many small mechanical damages, like broken edges, scratches, etc.

The main task of this conservation and restoration process is, on the one hand to restore the matzeva and achieve aesthetically satisfying result, on the other to keep and preserve all historical data and original layers. Each method will be firstly tested to be sure it doesn't damage the stone or the original paint in yellow and black colour. The following framework is not definitive and could be slightly modified according to result during the work progress.

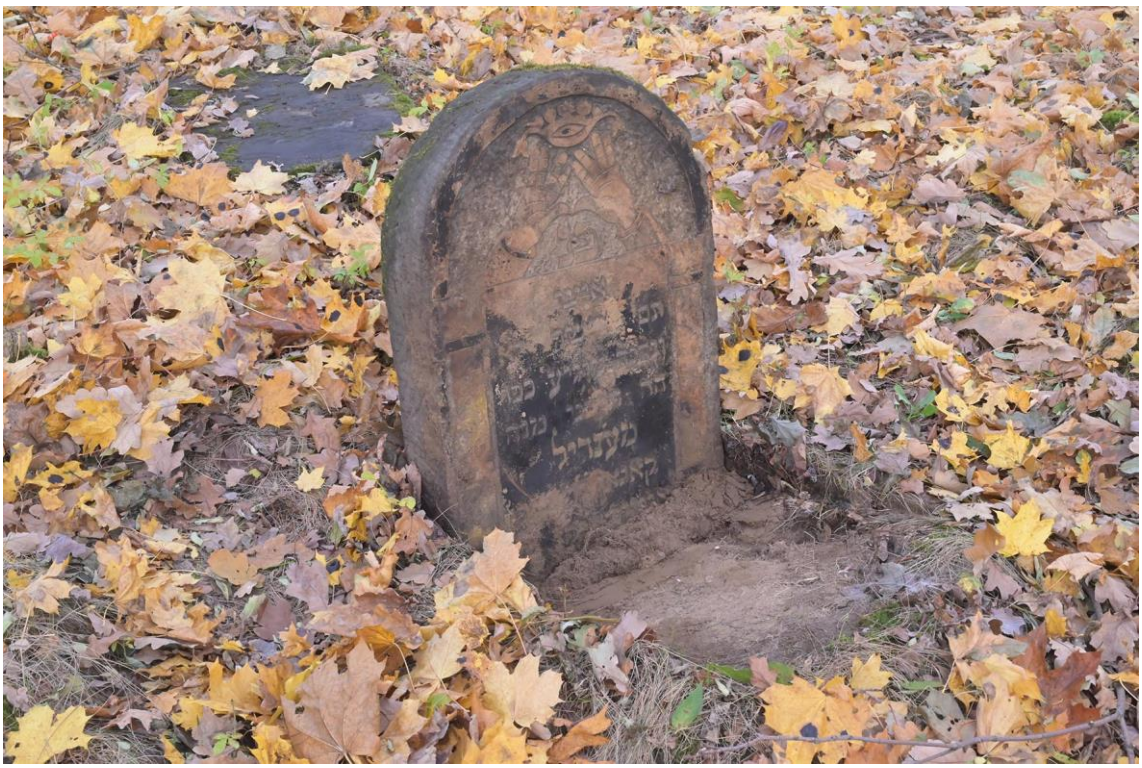
1. Dismantling and transportation of the matzeva to the studio
2. Taking documentary photographies before starting conservation works
3. Examination of the pigments in yellow and black colour
4. Preliminary cleaning of the matzeva from soil and moss
5. Removing of cement remainings (mechanical methods)
6. Disinfection of the stone (e.g. Preventol Ri80)
7. Cleaning of the stone with water-steamer and soft brushes without removing the yellow and black paint remaining
8. If necessary, continuing of cleaning process using selected chemicals, depending on the needs, always after performing tests.

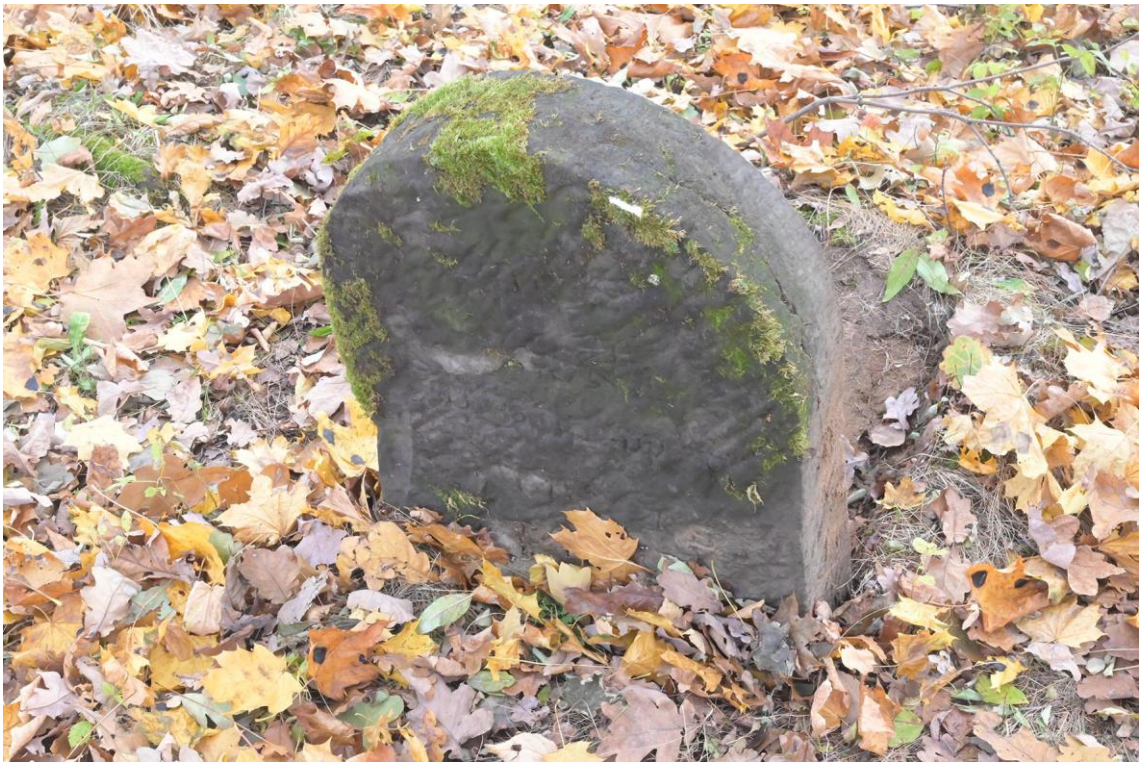
9. Desalting of the stone with cellucotton (lignin) and distilled water compress
10. Enforcing of the sandstone structure with organosilicon (e.g. Remmers KSE 300)
11. Injection of cracks in the stone with liquid epoxy resin (e.g. Akemi Akepox 5000)
12. Filling of the cracks and bigger losses with mineral mortar (e.g. Remmers Restauriermortar).
13. Partial reconstruction of the missing colour in yellow and black. The range of reconstruction will be limited, just to make the final result aesthetically balanced. The new paint will be chosen by colour (e.g. Keim Restauro Lasur)
14. Hydrofobic impregnation (e.g. Remmers Funcosil SL, Funcosil WS)
15. Installation of the matzeva back on the original place in the cemetery
16. Final report with photos and description of the process.

Photographies

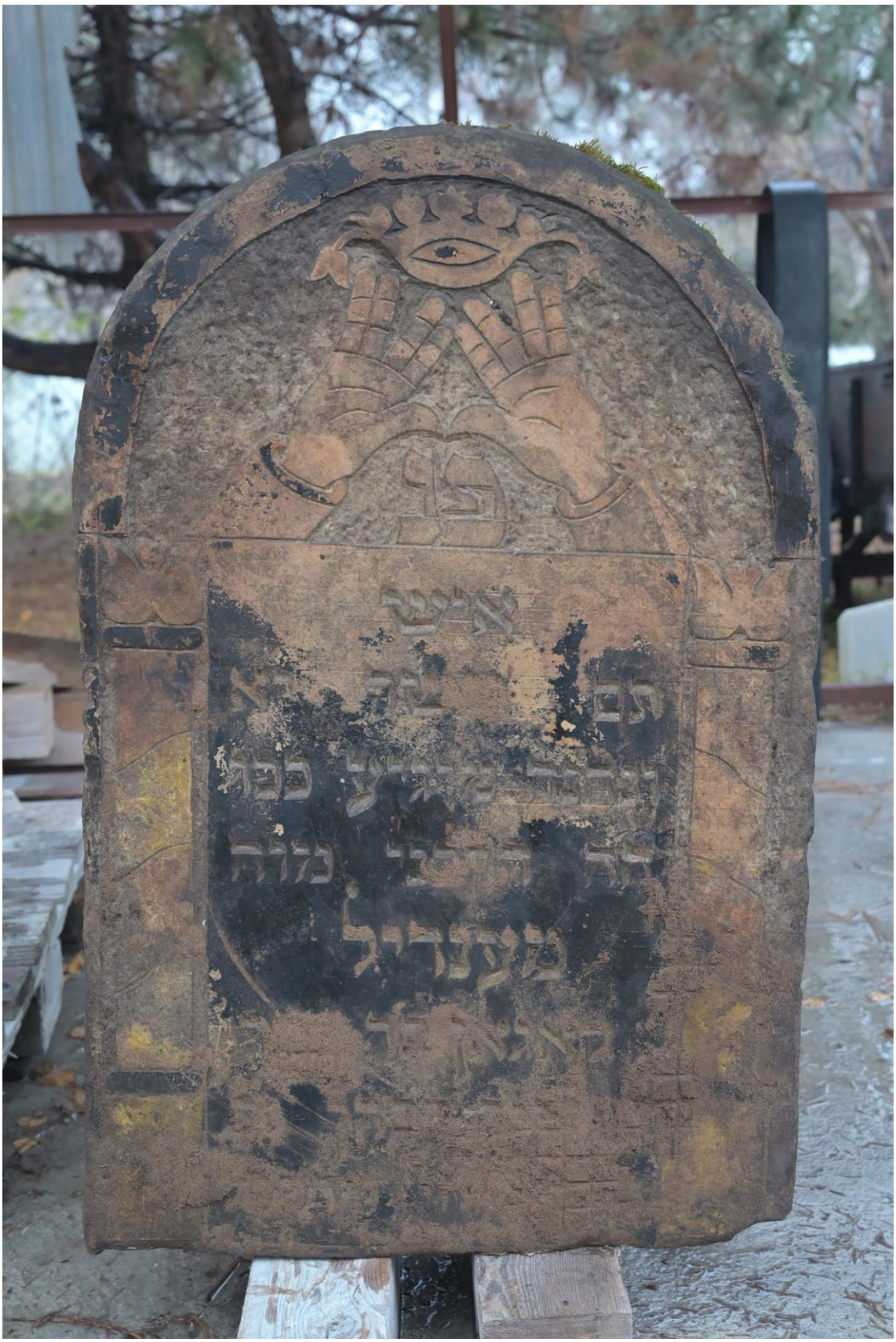


Matzeva *in situ*, at the cemetery



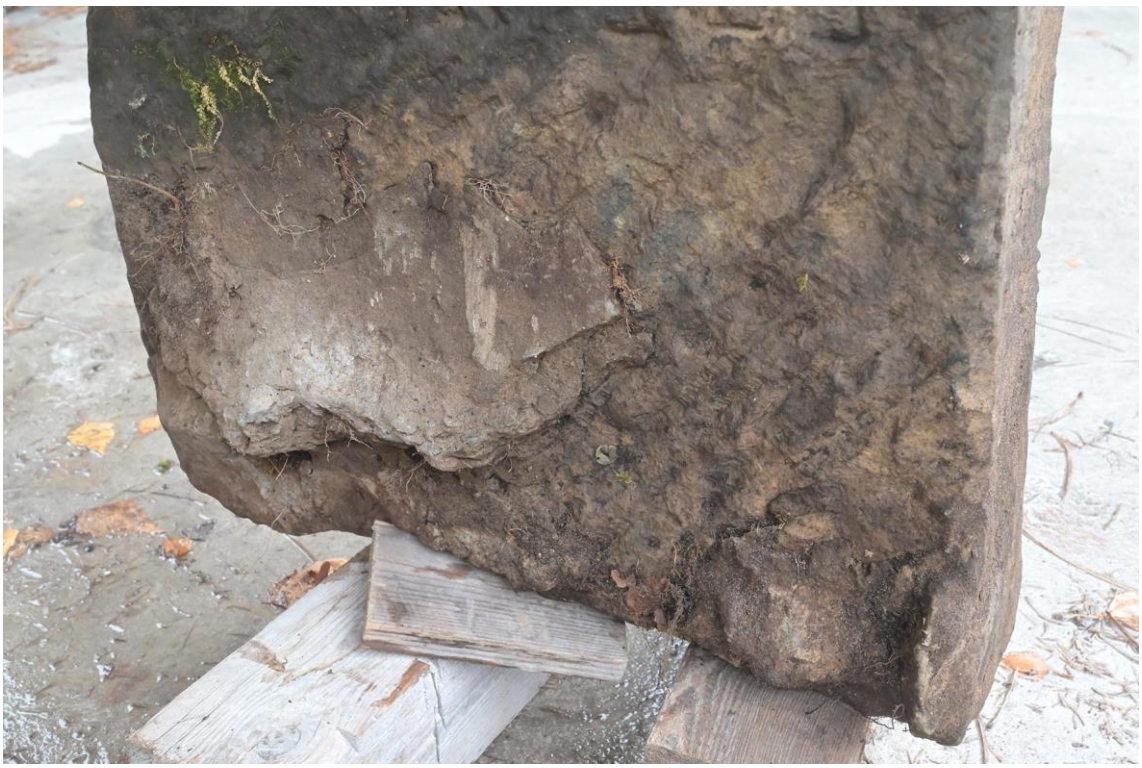


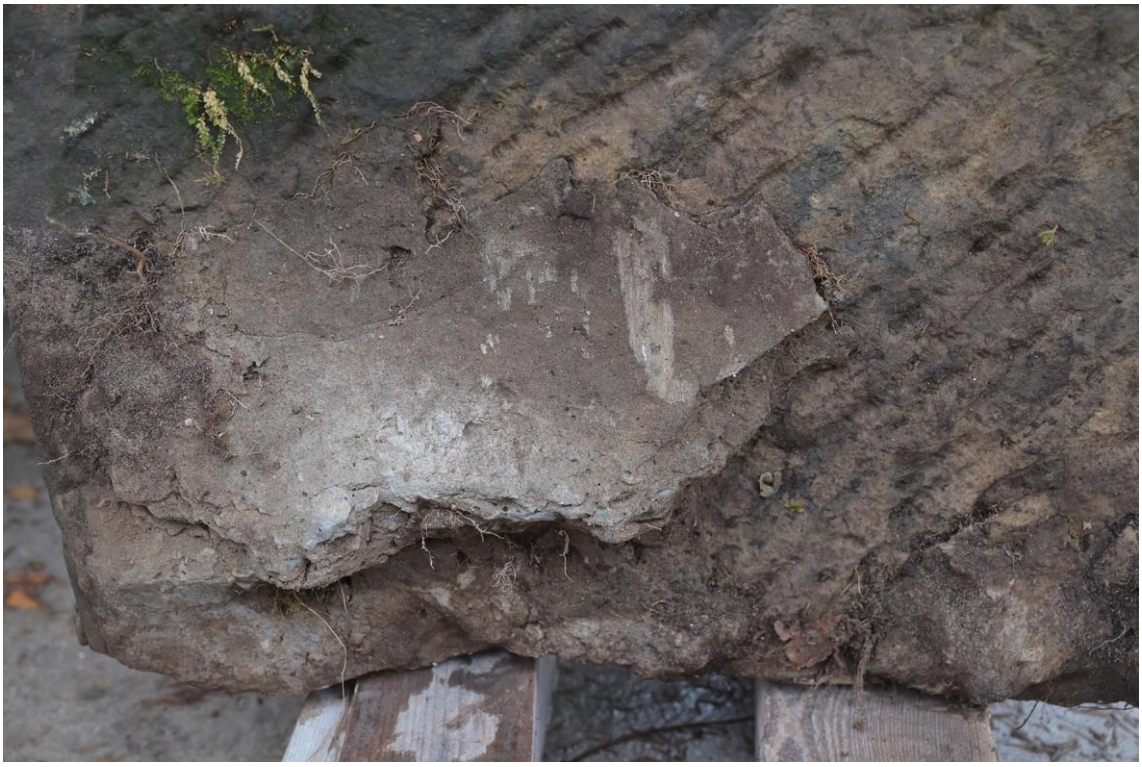
Matzeva *in situ*, at the cemetery



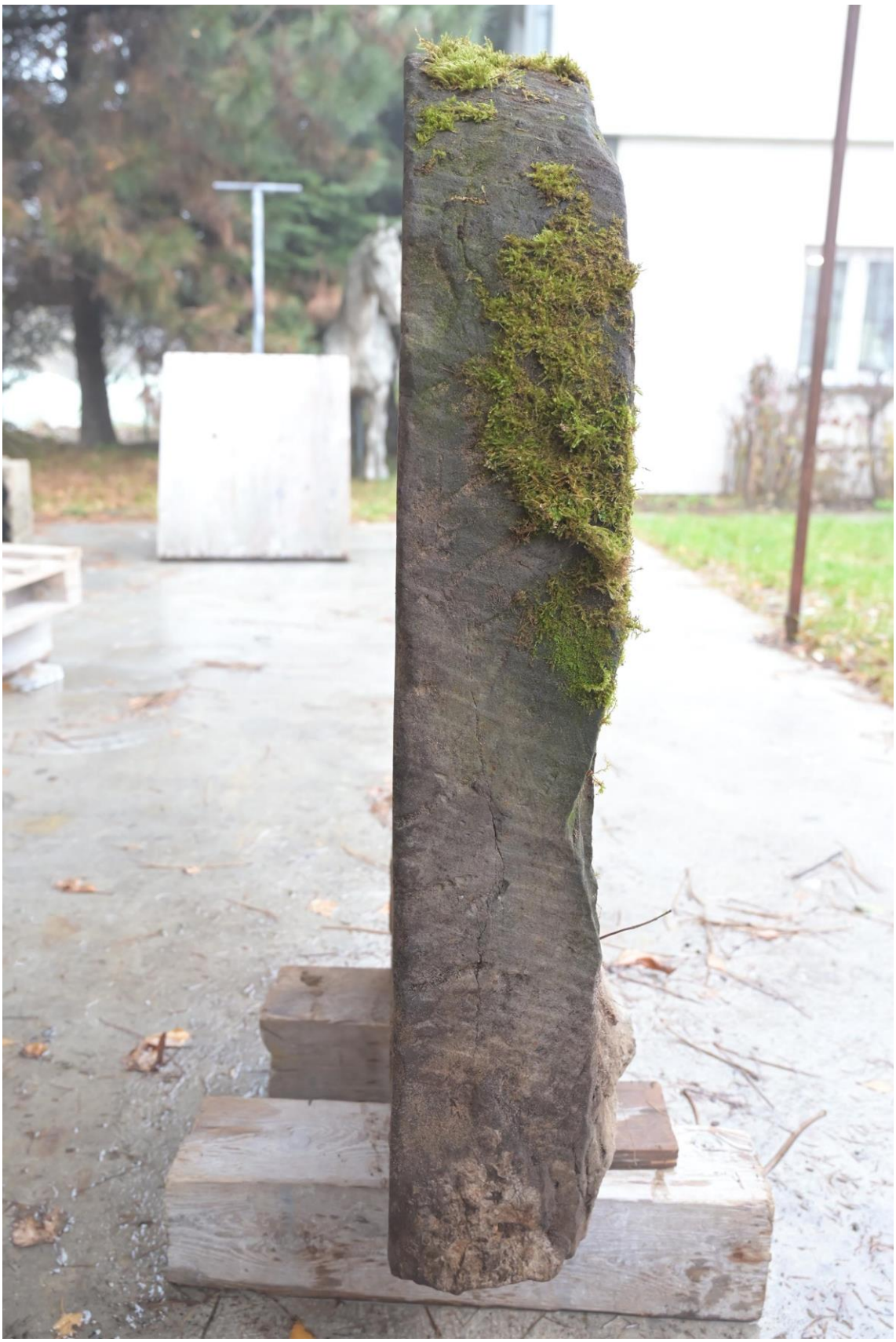
Matzeva in the studio

Matzeva in the studio, backside view

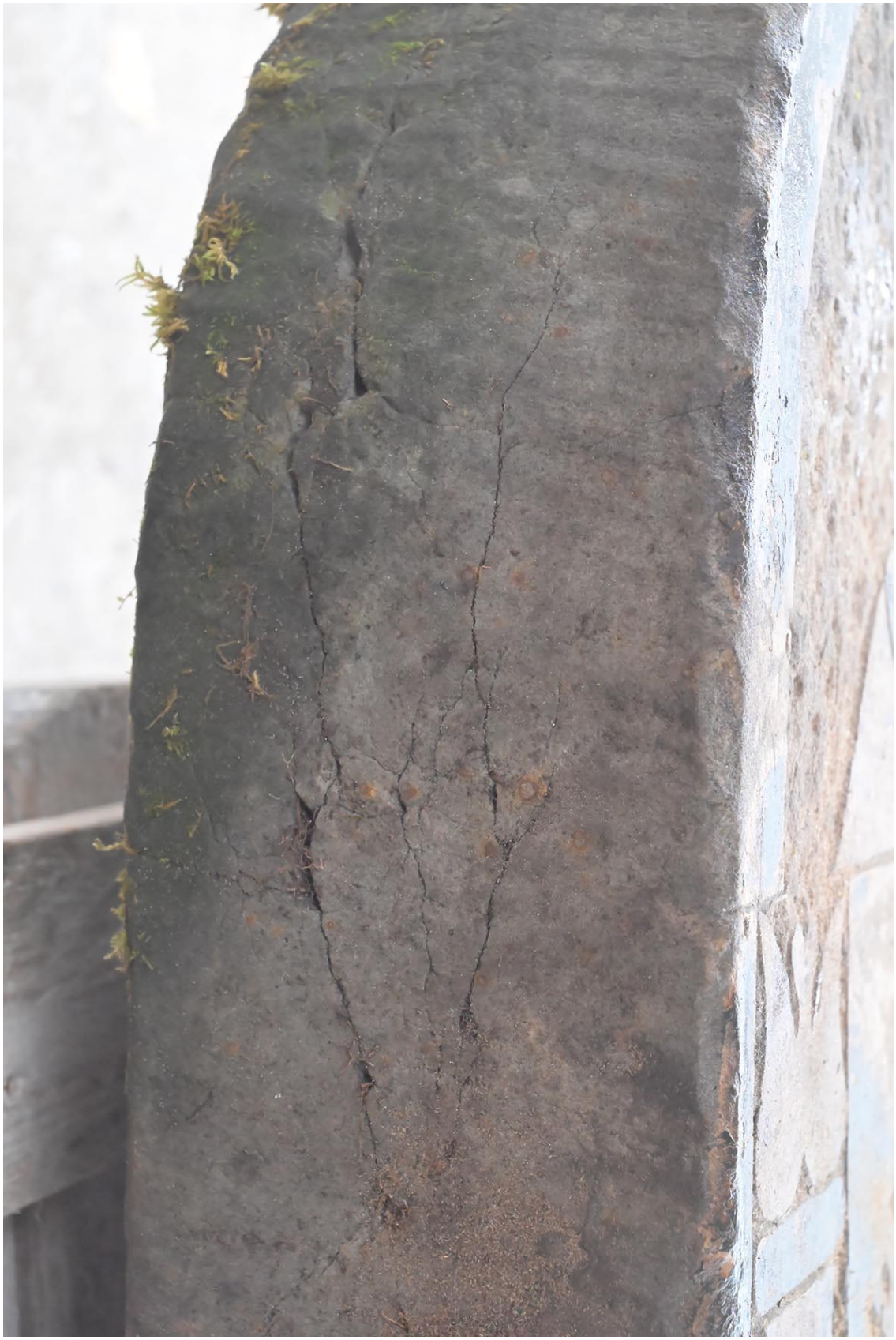




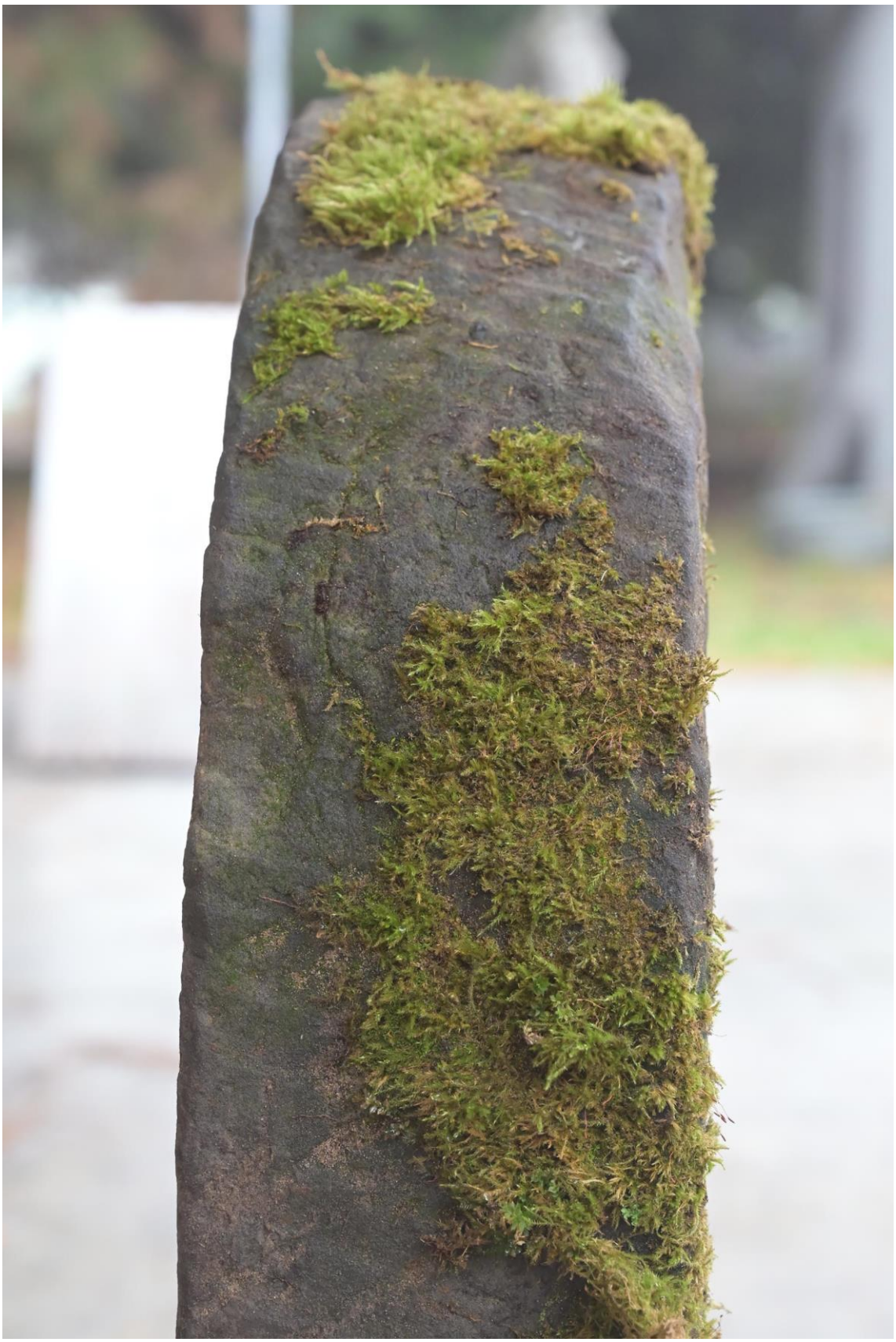
Matzeva in the studio, bottom-down backside view with cement remaining



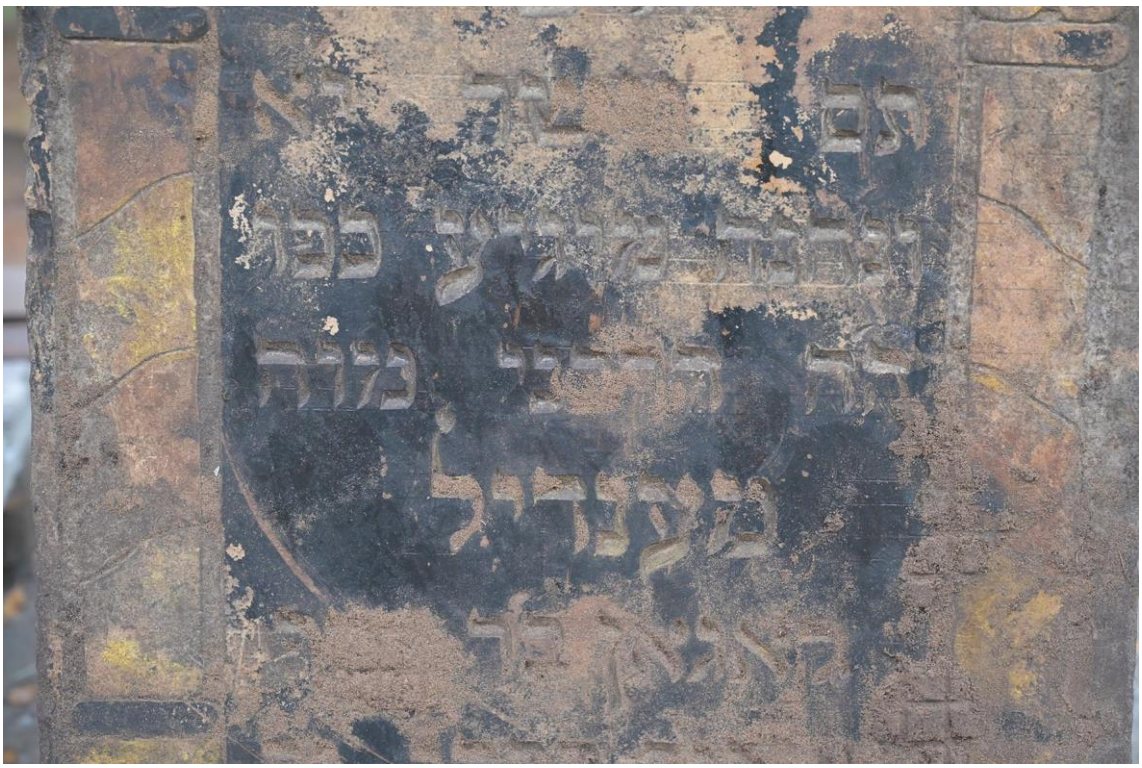
Matzeva in the studio, right-side view, cracks of the stone visible

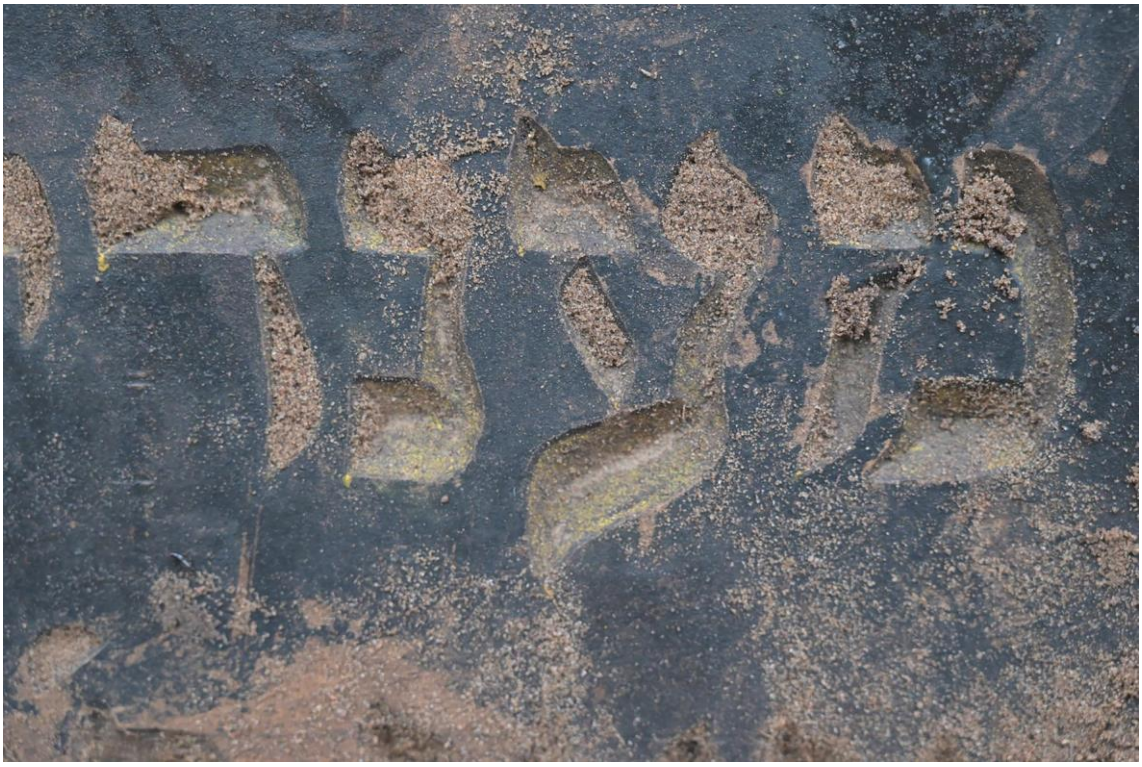


Matzeva in the studio, left-side view, cracks of the stone visible

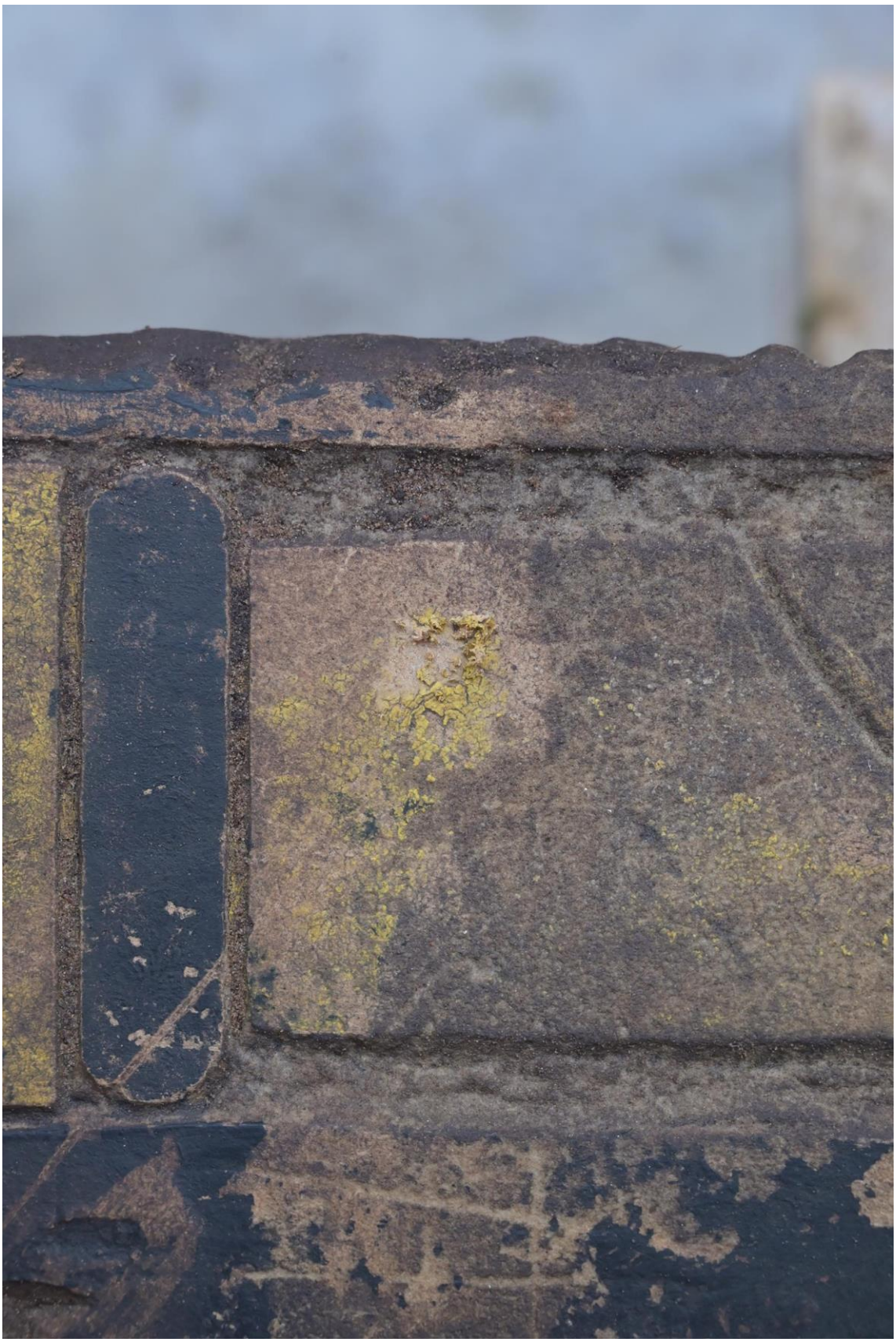


Matzeva in the studio, right-side view, moss overgrowing visible

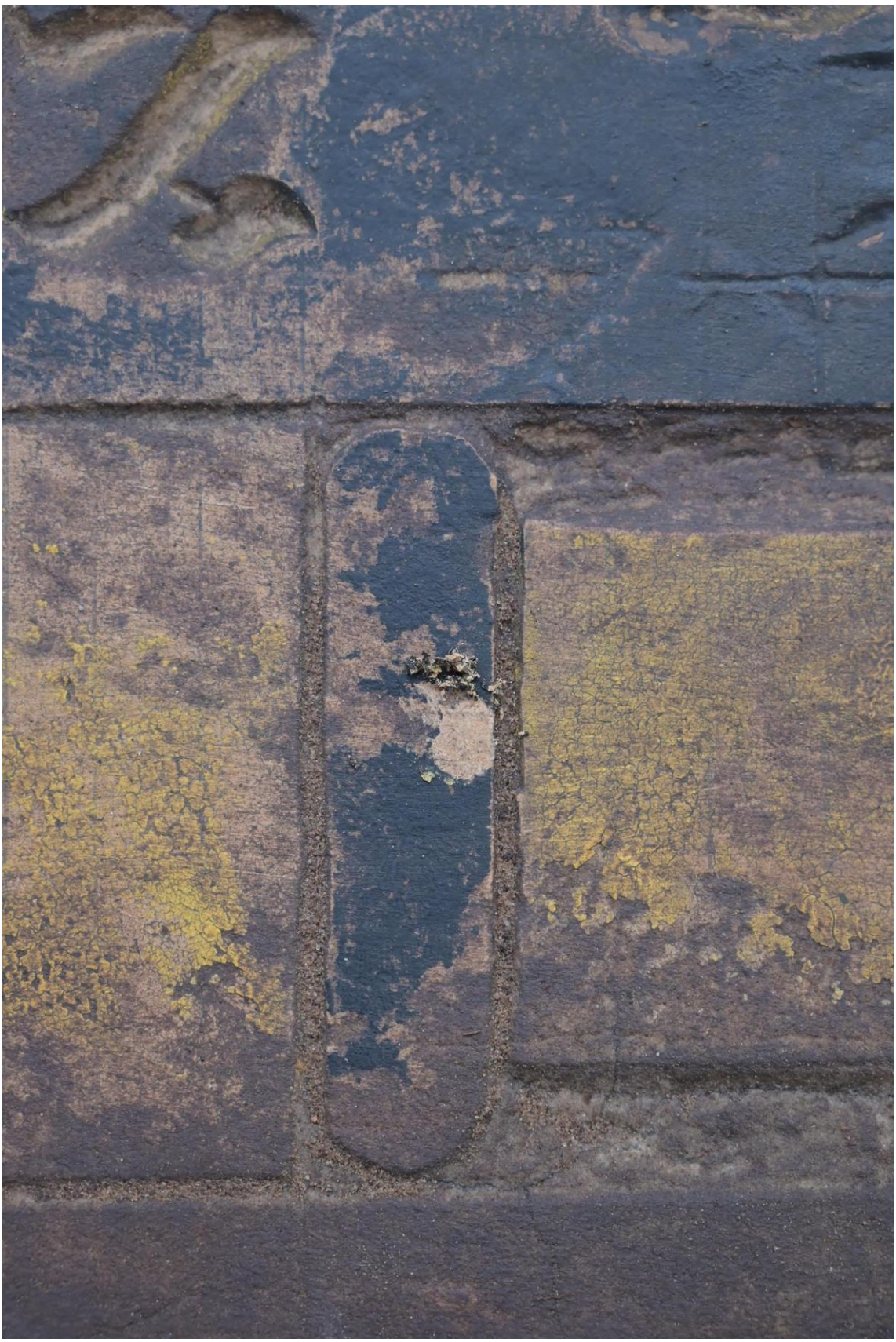




Matzeva in the studio, front view details



Matzeva in the studio, taking a sample of yellow pigment



Matzeva in the studio, taking a sample of black pigment