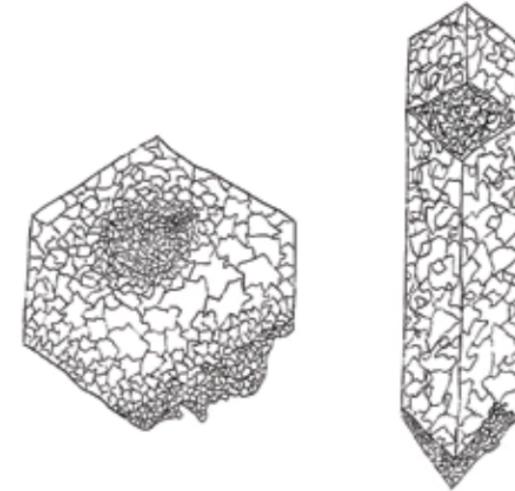
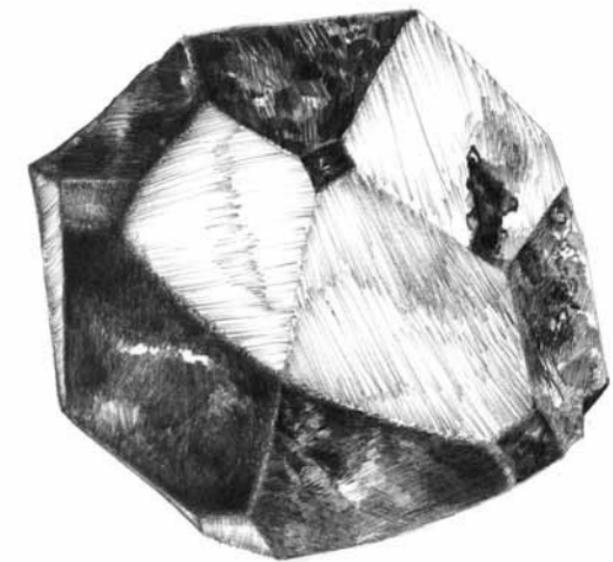


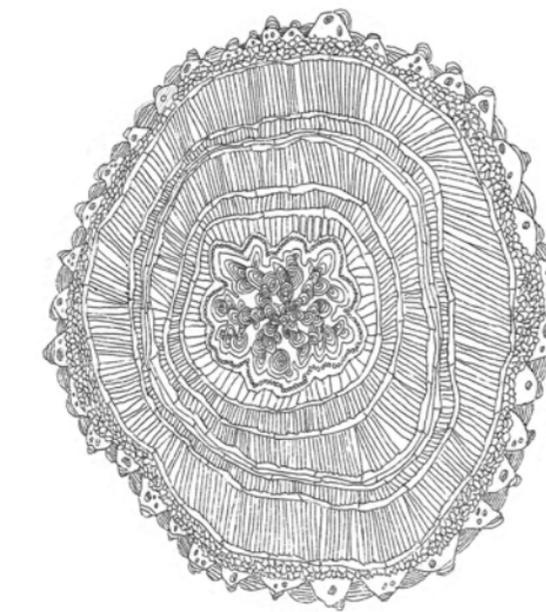
# WE FORM GEOLOGY



Erebus Crystals (from an Antarctic volcano)



The Subway Garnet - found on 35<sup>th</sup> Street  
between Broadway and 7<sup>th</sup> Avenue.



A Body Stone

# THE HARD STUFF

BY NICOLA WHITE

There's a dark grey fleck under the skin of my right knee.

It was once a piece of grit, a small stone that entered my leg during a skidding fall from my bicycle in 1969. Some forty years on, it's still there. The hardness of the stone is gone, but the shape and colour of it remain, as if my cells have been determined to remember the insult and reproduce it.

The bike accident took place in the small park in front of the Hayden Planetarium on West 81st Street, just across from the Excelsior Hotel where we lived then. The key locations in my nine-year-old world were:

- 1 My allowed portion of Central Park (an area decreed by my mother spreading fan-like from the 81st street entrance as far as the bridle path)
- 2 The museum and planetarium complex across the road (which I was told was the biggest museum in the world)
- 3 Our small apartment in the hotel.

There was school too, over on the east side, but I didn't like school, so it didn't count.

What counted were my weekend explorations, my solitary wanderings through dim exhibition halls and bright dusty parkland. Little girls were allowed a wider freedom then, or at least I was. And what luck that my allotted territory contained all the wonders of the world and beyond. Dinosaurs. Diamonds. Rooms and rooms of beautiful dioramas modelled with artistry and love – painted candy-colour sunsets, paw marks in perfect fake snow, the rippled surface of a pond rendered in glass with bullrushes poking right through it. Wildness was conjured – sabre-tooth tigers snarled, elephants stampeded, men with scarecrow masks raised spears – frissons without the danger. In Central Park, though, I was told to be wary – beyond my stomping ground, unnamed dangers prowled.

There were two meteorites in the foyer of the planetarium. One resembled a frozen wave, the other was full of holes as if it had been poured molten over some long-gone blocks of ice. Both seemed unlikely objects to have dropped from outer space. The label on the second meteorite said the holes had been formed by rusting. When no one was looking I knocked at it with bare knuckles and there was a dull ring. I didn't know that stone could also be metal.

In a basement area of the museum that year, we queued with hundreds of others to see a small rock in a glass case that had not fallen from space, but was carried back from there by the astronauts of Apollo 11. A piece of the moon. It was small – the size of a fat arrowhead – and glittery in the lights, unexpectedly glamorous given the dull news from the landing – nothing but dust and craters. The glass case gave off a tense, high-pitched buzz.

During our years in New York, many parts of the museum were closed for construction. I never expected them to finish, but one day I found myself at a doorway that hadn't been there before. As in a dream, I walked through it to find myself at the top of a staircase, looking down into a murky void ringed by plate glass windows behind which fins and tentacles glimmered. In front of me was a tail, a vast delta of muscle leading to the arc of a full-sized blue whale hanging miraculously in this new hall, seeming somehow larger than the space that contained it. I hurried downstairs to stand beneath it, to where its belly dipped closest to the ground. Unreachable. I walked to the side to try and look into its small black eye. I could scarcely breathe. It was a kind of love I experienced, a connection between its immensity and my smallness, like how you were supposed to feel about God.

There were rocks in the park, smooth gray mounds emerging from the patchy grass, humpy, like a school of whales that had been swimming through the island and become petrified. The nearest to the 81st street entrance lay on the other side of the bridle path and I visited it regularly despite it being beyond my boundary. I could lie on the hot stone and look down on the few horses that galloped past or turn over and imagine myself on the back of the blue whale, travelling, carried safely through the world. Or we would lounge there in a gang, loosely allied children of the park, who never saw each other's homes or had last names.

One day a small tent appeared among the trees between the bridle path and the playground. A woman crouched outside it, bony and scowling. She looked older than my mother, though I don't know for sure. Crowds of pigeons scabbled on the ground around her. When we tried to befriend her, she said plainly that she didn't like kids, which made her all the more compelling. I brought her bags of Wonder Bread crusts for her birds.

Her tent was made from plastic sheeting and cardboard. It was just big enough for her to lie in. I would sit on a log nearby and she would talk, more to herself than to me, about her troubles and the lowlife snakes at the welfare office. One day she let me look inside her tent. She showed me what she kept beside her blankets – a long cold pole of metal, maybe a railing torn from its mooring. She drew it out and let me hold it. So heavy it made my wrists sag.

"If any man brings me trouble, I can deal with him," she said, and I didn't doubt her. But in my bed I would lie awake and pretend to be her, the hard earth under me, the walls of the tent shifting and one hand on my iron bar, listening.



*Ilana Halperin* was born in New York and now lives and works in Glasgow. Through the course of her career as an artist, she has boiled milk in a 100 degree Celsius sulphur spring in the crater of an active volcano; transformed a mattress into an iceberg through embedding refrigeration coils in its springs; made a bathtub into a geyser; celebrated her 30th birthday with a volcano born the same year; talked about rocks over coffee with geologists on the crest of an erupting volcano; formed sculptures in caves and hot springs; spent time with geology collections formed inside the body and held the Allende meteorite, the oldest known object in the solar system, in her hands.

[geologicnotes.wordpress.com](http://geologicnotes.wordpress.com)

*The Travelling Gallery* is a contemporary art space inside a big beautiful bus. Its purpose is to bring high quality art exhibitions and events to schools and communities throughout Scotland.

*We Form Geology* is an installation by Ilana Halperin which explores geological and mineral phenomena formed inside and outside the body, from Scotland to Iceland and beyond. The interior of the Travelling Gallery is transformed into a miniature hall of gems and minerals incorporating geological specimens from National Museums Scotland alongside geologically inspired films, prints, drawings and sculptures by the artist.

[www.travellinggallery.com](http://www.travellinggallery.com)

## THANKS TO

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## IMAGES

**Cover** Egyptian art: Fragmentary Head of a Queen, c. 1352–1336 BC. New York, Metropolitan Museum of Art. Yellow jasper, H. 5 ½ in. (14 cm). Purchase, Edward S. Harkness Gift, 1926. Acc.n.: 26.7.1396. Photo: Bruce White © 2012. Image copyright The Metropolitan Museum of Art/Art Resource/Scala, Florence

**Page 3** The Harry Frank Guggenheim Hall of Minerals, 1976. Image #2A11626 American Museum of Natural History Library

**Page 5** The Harry Frank Guggenheim Hall of Minerals, 1976. Image #2A11627 American Museum of Natural History Library

**Page 11** The Morgan Memorial Hall of Gems, 1976. Image #66095-06 American Museum of Natural History Library