

a geology breaks in half to grow

what qualifies limestone is its
high quantity of calcium
limy remains from fossilized marine debris
clams oysters crustaceans
gregarious in habit,
roll around and accumulate

the stone is abundant across the globe
but varies in texture, and slightly in composition
Oolite limestone, common in Florida,
comes from the greek "egg stone"—
tends to have thin concentric layers
analogous to tiny tree rings
but spherical instead of cylindrical

cumulative
they grow and form in regions where
currents are strong, forceful
needing to keep moving in order to keep growing
calcium ooze solidifies under weight
and if there's a major geological event
(a trauma)
the stone can crystalize into marble
(an un-feeling)
or it might deteriorate
(sentimental)

effervescing easily in any common acid
of all the caves, limestone is most common.
Formed by snowmelt and rainwater seeping into the ground
the water combines with underground carbon dioxide—
a product of decaying organic matter
which combines to create carbonic acid.
The acid eats away at the stone, creating channels
until the channels are large enough
to move through

what was buried there?

Limestone is known commonly
for its commercial importance
as a building material for flooring, building facades, monuments,

landscaping, something ubiquitous
its high fossil content has long fascinated researchers.
When heated to temperatures of 1,700-1,800 degrees C
its component parts are forcefully teased apart
in a process called dissociation
the stone is suddenly no longer a geology
but an industry

dissociation occurs largely to extract calcium carbonate
which has the ability to neutralize or reduce acids
to prevent corrosion, decay
a vital ingredient in the production of concrete, plant fertilizer, glass
archival paper, official documentation
the ingredients to build an empire and write its history

a combination of sand, soda ash and limestone
are cooked together at a high heat to create glass
soda ash speeds up the heating process but causes fragility.
When scientists tested a prototype of the atomic bomb
in the New Mexico desert in 1945
the explosion turned the immediate area of impact into glass
but without the addition of limestone the glass just
dissolves in water
limestone toughens the composition
holds the weight, takes new shapes
with the transparency of glass to learn from

when limestone deteriorates from natural acids
turning into a cave, or a system of caves,
this process is called dissolution:
The closing down or dismissal of an assembly, partnership, or official body
the dissolution of an empire
time-stamped in geology

In a long line of laborers, what happens when the line is pulled
hope and displacement
a catch and release kind of growth where
soda ash cooks the situation so fast we're left with glass—
a brief mirror reflecting a dream. My own?
tenuous because the stabilizing element is missing, held up
on the shore somewhere, in bureaucratic process

a dance where barnacles perform as county clerks sifting through
personal histories, data recounted, organized,
Then filed away or regurgitated as a mess of contingencies.
Our existential confusion quantifiable as water toxins
kicked and tongued, until the ache of desire and pain are entangled

“What is it like to be someone with many valences?”
Asked And, laying in the summer dark
maybe a coded way of telling me I’m opaque
“not at all” they say, going on to describe the anatomy of a cell

Valence → the potential for hydrogen bonding based on
how many atoms are a part of a cell’s structure
etymology of the word traces back to 1425, from Latin, *valentia*
meaning “strength and capacity” and from the German 1884, *valenz*
meaning “combining power of an element”

with more valences, maybe there are
more opportunities for connection
the nature of minerals as growth
magmatic or sedimentary

Dikes form when the earth splits
and new land forms in the open area
either slow and sedimentary (clastic)
or hot and magmatic
In both cases
a geology breaks in half to grow

Hanging suspended in the center of the installation is a black and white photograph of light illuminating two small points within a limestone cave. The print is 14 inches across and 21 inches tall, semi-transparent, and mounted on plexi-glass. On the floor, positioned directly below the print is a small pile of calcium carbonate (extracted from limestone). The print and calcium carbonate together are titled "the temperature of dissociation / the process of dissolution."