

AN UNUSUAL STATE OF MATTER

In the beach sands of Kerala,
abraded from the gneiss,
in the stream sands of North Carolina
one finds monazite, the solitary
mineral. In its crystalline beginning
there was order, there was a lattice.
And the atoms - cerium, lanthanum,
thorium, yttrium, phosphate - danced
round their predestined sites,
tethered by the massless springs
of electrostatics
and by their neighbors' bulk.
 They vibrated,
 and sang
 in quantized harmony.
to absent listeners, to me.

But the enemy is within.
The radioactive thorium's
nervous nuclei explode
in the random thrum
 of a hammer
 of no Norse god.

The invisible searchlights
of hell, gamma rays,
flash down the lattice.
Alpha particles, crazed nuclear
debris, are thrust on megavolt
missions of chance destruction.
The remnant atom, transmuted, recoils,
freeing itself from its lattice point,
cannonballs awry through
a crowded dance floor.
There are no exits to run to.
In chain collisions of disruption
neighbors are knocked from their sites.
The crystal swells from once limpid
long-range, short-range order
to yellow-brown amorphousness.
Faults,
defects,
vacancies,
dislocations,
interstitials,

undefine the metamict state.