

DECEPTIVELY LIKE A SOLID

The conference is on Glass, in
Montreal. Wintry light declines
to penetrate windows, and soon
will be lit glass-enclosed glows
so that we may talk, talk into
the night (fortified by bottled
mineral waters), of the metric
of order trespassing on prevailing
chaos that gives this warder
of our warmed up air, clinker,
its viscous, transparent strength.

The beginning was, is
silica, this peon stuff
of the earth, in quartz,

cristoballite, coesite,
stishovite. Pristine marching
bands of atoms

(surpassing the names we give
them) build crystalline lattices
from chains, rings, of Si

alternating with oxygen,
each silicon tetrahedrally
coordinated

by O's, each oxygen
ion, so different from the
life-giving, inflaming

diatomic gas, joining
two silicons; on to rings
in diamondoid

perfection in cristoballite;
helical O-Si-O chains
in quartz, handed in

coiling, mirror images
of each other, hard, ionic
SiO₂.

There must be reasons for such
perfection — time lent to the
earth: then lava

flowed, the air blew thicker, still
no compound or simple eye
to fret defect

into the ur-liquid from which silica
crystallized. But in time we did
come, handy, set

to garner sand, limestone, soda
ash, to break the still witness
of silica. Heat

disrupts. Not the warmth of
Alabama midsummer
evenings, not your hand

but formless wonder of pro-
longed fire, the blast of air drawn
in, controlled fire

storms. Sand, which is silica,
melts. To a liquid, where
order is local

but not long-range. Atoms wander
from their places, bonds break,
tetrahedra

in a tizzy, juxtapose, chains tilt,
bump and stretch — Jaggerwalky.
The restive structures

in microscopic turmoil
meld to gross flow, bubbling
eddies of the melt.

Peace in crystal meshes, peace
in hot yellow flux. But the gloved
men who hold the ladles
get nervy volcanoes
on their minds. So - tilt, pour...
douse, so quench,

freeze in that micro lurch.
Glass forms,
and who would have thought it clear?

We posit that the chanced,
in its innards so upset, ought
not be transparent. Light
scattered from entangled polymer
blocks, adventitious dirt,
owes it to us - oh, we see it
so clearly - to lose its way,
come awash in black or at
least in the muddy browns
of spring run-off, another flux.

But light's submicroscopic
tap dance is done in place.
The crossed fields shimmer,
resonant, they plink
electron orbits of O and Si.
Atoms matter, their neighbors
less, the tangle of the locked-in
liquid irrelevant in the
birthing of color, or lack of it.

Optical fibers	Crystal Palace
The Worshipful Company of Glass Sellers	
recycled	Millefiori
prone to shattering	Prince Rupert's drops
Chartres, Rouen, Amiens	float
Pyrex	Vycor
network modifiers	glass wool
smoked for viewing eclipses	the Palomar mirror
lead glass	thermos
microcrack	
etched with hydrofluoric acid	spun
frustration	bull's eyes
borosilicate	annealed
	softening point

High winds on Etna or Kilauea
spin off the surface
of a lava lake thin fibers.
Pele's hair.
The Goddesses' hair,
here black.