Three Poems: The Lorenz Transformations, Rotating the Strange Attractor to Find the Principal Components, The Sieve of Eratosthenes

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Three Poems

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The Lorenz Transformations

What is it like, shifting frames?
To step from the riverbank
into the river and be carried away?
To hop on a beam of light
with a slight lift, the way
the trapeze artist grabs
the swing and lifts off,
and out, over our heads–
or the way we open a book
and surrender to words?
Time, place, life shifts–
the aerialist still in the center
of her swinging arc, high
above–but now a split-second
exchange of movement and trust
and she swings from the wrists
of her partner, frame shifted
again;
   or the way our eyes
lift to the sports bar screen,
lock into flashflood sweeping cars
and people away as we drink
our beer while we cheer
a tackle in a football game,
slowed thump of brain
against skull; and that constant
trickster, light, links us faster
than the speed of thought–
we are older than what we see:
the half-time score, the Dow Jones Feed,
the faces of families in Brazil's
mudslides searching for family,
the houses in Brisbane under water,
the trapeze artist, once aloft,
suddenly airborne, caught, dropped
bowing now, grounded again
on our spinning earth as we cheer.

Rotating the Strange Attractor to Find the Principal Components

Disaster engulfs us, puncture wound,
    and we watch the ongoing bloom
    on TV like volcano plume
under pressure so deep we would freeze
    collapse in the crush
    in dark so dark we can see
only by the smallest robotic searchlight–
    how it bubbles out still
    around the mile-thin straw
of the sipping tube and no ship with stomach
    large enough to drink it all–
    do, do, do something we scream
at the screen, switch to the volunteers
    hosing off sludged pelicans,
    shoveling tarballs off the beaches,
turn to the newspaper, listing the global
    ownerships and outsourcing
    and the island the size of a football field
whose impoverished regulations
    govern the drilling platform
    and there it is, the absence of law,

no blowout preventer on the money flow,
    no slow bureaucratic check
on an ecological impact plan
    affecting walruses, no mention
of the easy out of bankruptcy erasing
    our pension plans or Britain's economy,
no coverage of that other Gulf disaster,
    years in the making–
where are the cameras trained on the Dead Zone,
    larger still than the spill, where
our midwestern nitrogen flows from the mouth
    of the Mississippi to fertilize a killing zone
of toxic algal bloom? But that's old news,
    and we own the ethanol, the soda pop,
    the midwest's green dreaming fields.

The Sieve of Eratosthenes

He was an ancient Greek
looking for primes,
those whole numbers divisible
only by 1 and themselves,
those new arrivals on the block,
fresh additions to the stock
of indivisibles spilling through
future time (for what is time
but a number line?).

If we look at his method we see
what's cut out of possibility–
strike out the future multiples of 2,
of 3, then 5, then 7, and so on
for every new prime encountered
in the list-leaving in your wake
only 1 and those happy catches, big fish,
or rare islands of prime real estate–

or invert your metaphor to think
of primes not as rare finds
but as mutant genes, deadly
rogues in evolution's flow,
knocking out all their future
progeny, leaving only the last
relics of dead-end starts
on a watery earth
spinning around a minor star,

wobbling a little but not yet spun
out of its local neighborhood,
out of its run of evolving lives–
naturally selected, yes,
survival of the fittest, yes–
but it's mutual attraction
and multiplication
that fills in all the rest.