Pauli Matrices With Scaling Factors

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Identity, σ_0

$$\sigma_0 = \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix}$$

$$I = C_0\sigma_0$$

$$I = \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix}$$

$$C_0 = 1$$

An electron from a complex molecule
in a Rydberg state
sees itself as a hydrogen atom
with a rapidly rotating core structure.

Far from home
a tendency to simplify
the old home ground arises
while the past holds presence.

The present holds heartbreak,
an incidental product of excited separation
across a well-defined boundary
and the measurement of time.

Identity can be defined
as the distance between
perception and measurement.
Interferometric precision comes from the cold.

Ex, σ_x

$$\sigma_1 = \begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix}$$

$$A = C_1\sigma_1$$

$$A = \begin{pmatrix} 0 & -1 \\ -1 & 0 \end{pmatrix}$$

$$C_1 = -1$$

An atomic physicist told me
"disarmament is the sign of a mature civilization"
and that any worthwhile measurement
is worth measuring twice.

The two classical idioms assume
measurement does not irrevocably alter the state
when even the suspicion of WMDs
may lead to regime change.

As troops surround the nation
where all my grandparents lived
I watch Maria win a Nobel prize for her attempts
to achieve "a peaceful transition" to democracy.

She shares the name of an ex-girlfriend who gave
me an oversized sweater for winter mornings
before the border crossing and the breakup.
When I grew into the sweater, how disarming it was.

Why, σ_y

$$\sigma_2 = \begin{pmatrix} 0 & -i \\ i & 0 \end{pmatrix}$$

$$M = C_2\sigma_2$$

$$M = \begin{pmatrix} 0 & -mi \\ mi & 0 \end{pmatrix}$$

$$C_2 = m$$

Lightning bugs produce circularly polarized light.
In northwestern Venezuela the Barí peoples claim
lightning storms come from the ancestors
who return to the earth as celestial fireflies.

Grief is also circular. I remember fireflies
and dancing with abuelita when the Aurora arrives.
In Cree, the Northern Lights are "wâwâhtêwak,"
or "kâ-nîmihitocik," they who dance in a circle.

This year I learned
cyclic variables depend on the reference frame
and the life cycle of a relationship
depends on whether it survives a migration.

If entangled observables
are translation independent
why does a lightwave collapse upon measurement
with no memory of previous states?

Rest, σ_z

$$\sigma_3 = \begin{pmatrix} 1 & 0 \\ 0 & -1 \end{pmatrix}$$

$$T = C_3\sigma_3$$

$$T = \begin{pmatrix} e & 0 \\ 0 & -e \end{pmatrix}$$

$$C_3 = e$$

Mistranslation is an art form
amplified by notation.
To the one who split the atom
entropy's arrow becomes death.

Semiclassically, cooling bosons to a phase space
density that produces a new state of matter
requires the removal of the most energetic elements
in an atomic ensemble following a MB distribution.

Evaporative cooling carries
a macroscopic analogy:
eight million Venezuelans left the country
including every major opposition leader.

How could I translate the dream
of returning to a forgotten home
when the precisely defined energy levels lead
to greater uncertainty in the destroyer of worlds?

$$\mathbf{I} = \mathbf{AMTi}(\mathbf{me})^{-1}$$