

Common and Uncommon Reality

Physical reality, the commonly acknowledged reality,
our reality, is composed of nothing
but charges and charge fractions in motion
and the fields which connect them.

Mass or matter, atoms and molecules are constituted
of protons, neutrons and electrons.

These charge structures are made up
of “up” quarks and “down” quarks,
in the case of the protons and neutrons
and the electromagnetic parcels
made up of Planck’s constant increments.

This explanation of physical reality is organized
by proceeding from the general to the particular.
It is possible to alternatively recite a large array of particulars
and extract from those particulars certain common elements.
This is the process of abstraction.

One of the critical characteristics of these two processes:

- 1) generalization to particularization,
 - 2) particularization to generalization,
- is the underlying assumption
of there being free-standing elements
e.g. charges or charge fractions.

As Hermann Weyl has formulated it, there is no such thing
as one and the same increment of energy which constitutes a charge
at any two adjacent increments of time.

That infers or implies that energy is constantly
or continuously flowing into and out of every charge
or charge fraction.

Allowance for a flux of energy which flows into and out of
the charges or charge fractions has been acknowledged
by the term:

“and the fields which connect them”.

This counters the assumption of free standing existence.
Fields are forces which act within and through dimensions.

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Dimensions are sequence providing patterns
within which energy moves.

So, we are back to the commencing generalization,
able to be slightly expanded.

Charges, charge fractions and fields move within
and through the sequence providing dimensions
to constitute the commonly acknowledged reality.

Next, consider there may be rules of pattern
that determine where energy flows from
and where energy flows to with respect to any charge,
charge fraction or set of charges or charge fractions.

The ordering principles may be:
similarities e.g. uniformity or degrees of uniformity
and regularity or degrees of regularity and differences
e.g. uniqueness or degrees of uniqueness and complementarity
or degrees of complementarity.

Potentiality may even be defined as differences
or degrees of difference.

This can mean differences in quantity or quality (kind).

At this point, number, sequence, rate, duration, proximity, posture
and position can all be regarded as parameters
of dimensional relationship.

The familiar dimensions can be used
to understand these parameters.

We normally consider these dimensions of space:
above, below, in front of or behind and spatially, left or right.

We can see the sequence providing function
of these three dimensions.

Time, also exhibits sequential provision: past, present, future.
It is even possible to compound space and time in a continuum.

A kind of geometry of sequences is provided
by analytical geometry.

Algebra generalizes the parameter of number.