

THE FULLER RESEARCH FOUNDATION

BY R. BUCKMINSTER FULLER - 1950-51

The generation coming of age during World War I acquired an unprecedented range of direct information regarding the physical environment, much of which was unpredicted or even contradicted by that generation's pre-1917 formal education. The information was also contradictory to its informally inhibited concepts of reality factors in general concerning mores, politics, history, economics and philosophy! The flood of unprecedented information growing out of directly measured experience increased during the ensuing decade - 1919 to 1928. Outstandingly new was cognition of the accelerating magnitude of technical advantage over dynamic environment and conventionalized circumstance opening before man as an unforeseen, yet now integrating harvest, not only of two centuries of scientific discovery accretions but also involving the net and network of all knowledge of all history and its derivative technology.

Most important in respect to the present subject-activity--i.e. The Fuller Research Foundation, founded a quarter of a century later, 1946--were those direct experiences acquired in the "twenties" while first initiating development, production and distribution of complex-products and services, embodying the new degrees of post World War I technical advantage, both in direct design and as indirect changes within arts, economics, geographical and psychological patterns long thought to be beyond fundamental change.

Consequently new strategies governing (A) pre-enterprise-investigation and (B) technique-of-scientific-objectivity-in-complex-prototyping were inaugurated in 1927. The strategy and technique were referenced only to, and limited only by, the full array of basic data dynamically integrating by world-wide communication of direct experiment and measurement under itemized conditions.

"Trial Balances" taken by this new strategy and technique, within sub-complexes of the integrating major resource-and-advantage complex, were identified informally for the next nineteen years by the designation "Dymaxion"--a "word-portrait" of the enterprise and its philosophy, invented by a "name-smith" retained by Marshall Field & Company of Chicago on the occasion in 1928 of their being host to the public introduction of the enterprise, the designation being thereafter copyrighted and donated to the enterprise by Field's.

As a result of those first nineteen years' experience (1927-46) in frequently repeated "trial balance" initiations of prototype engineering; industrial logistics measurement and codification; trend-tendencies differentiation and overall measurement; progressive strategy reorientation; and self education and re-education, --the comprehensive undertaking was formally incorporated in 1946 (in Delaware, U.S.A.) as the Fuller Research Foundation and was clarifyingly dedicated to:-

1.

Implementing
 commonweal pertinent,
 individually conceived,
 intuitively urged, and
 spontaneously joined
 search, research, and enterprise--
 in the borderline realm of
 "just-not-impossibles"
 where transcendently, as
 alto-cumulus thought-cloud,
 orderly trending concepts
 tentatively accrue,
 differentiate and integrate,--
 or freely crystallize,
 regarding the furtive,
 future-furthering,
 overall significance
 of continuing experiences,--
 as possibly comprising a
 NATURAL FAMILY OF FACTORS
 integrating as a
constellation of potentials
 in new degree magnitude, of
 MAN IN DYNAMIC UNIVERSE ADVANTAGE

2.

teleologically polymerizing
 in degree of discernible significance
 proportionate to cumulative in-put
 magnitude, range and frequency
 of direct physical experiences,--
 as catalyzed by progressively derived
 awareness-growth, regarding
 "probable" existence of natural laws
 which,--though as yet unformulated by man-
 inexorably govern complex behavior, as
 EMPTY SETS OF PRINCIPLES
 GOVERNING ALL POTENTIAL INTERACTIONS
 AND EVOLUTING TRANSFORMATIONS
 (vectorially consequent to any set
 of specific cyclic-unravellings
 of time-energy 4-way minimum-involvements)
 the significance of which laws
 might, through competent
 COMPREHENSIVE DESIGNING
 be REALIZED
 IN IRREVERSIBLE PHYSICAL EVOLUTION
 TECHNOLOGICALLY EXTRAPOLATED AS
 EXTRA-CORPOREAL SIMPLEX OR COMPLEX
 OF MAN-PROCESS EXTENSION
 AND AUGMENTATION, thus

3.

cancelling out, as technically "obsolete",
 and therefore,--economically and politically as--
 "irrelevant",--
 the whole prospect of
 contemporary impasse and
 threatened total reversion to
 abhorrent destructioning; as consequence of
 lost temper of mentality-and-character alloy;
 of lost comprehension and understanding
 in the broadening horizons and;
 of lost man-competence
 in good will and mutual good faith,
 advantaged by intellect.

4.

But, The Fuller Research Foundation
 only reconnoiters
 in such searching, researching, and
 enterprise
 within areas of exploration as yet
 beyond the working budgetary scope,
 credulity, enthusiastic curiosity,--
 or conscious serious interest, of the
 two major conventional agencies for
 accrediting access to
 organized inquiry, experimental resource
 and facility in Man's formal undertakings, i.e.

5.

Business--
 Independent variable X
 and Government--dependent variable,
 function y,--
 only in respect to which latter's
 maxima-minima limits
 the independent variations of X have
 significance,
 as each operates relatively and
 inseparably in the first derivative phase
 of dynamic objectivity, i.e.- REALIZATION
 of the integral and differential
Logistics of Industrialization

(Though often provoking comments of "stimulating" or "fascinating" by men of business and of government alike, and though frequently patronized for purposes of developing new publishable "angles", or simply for conversational refreshment, Fuller Research Foundation undertakings are 24-hour, year-round, all-out efforts, ever and again, unexpectedly receiving serious encouragement of the "hard heads" of both "theoretical" and "practical" going affairs of men. The undertakings have been supported to date, entirely by voluntary workers' efforts and the "plowed-back" direct income of "windfall" earnings of its principals; for Fuller Research Foundation undertakings are:

Businesswise

outside the scope of
justifiable pertinence to
strict budgetary expediency
in commercial survival strategy, governing
regenerative profit secretions,
extractions or reinvestments;--
as managed by wisdom, prerogative,
and latitude of minority integrity;--
and as articulated
by private corporations'
initiative, self disciplining,
good-will-pleasure,
urge of responsibility,
competence and timeliness, and as manifested
by inauguration of pilot plant research
in undertakings so new that,
despite scientific classification as
"probable", are as yet commercially
"untried" and therefore classified
by business as "only possible",
and though "clearly needed";--
do not come up
for consideration in
these commercial-industrial-research categories,--
at least not until after years
of preliminary processing by F.R.F.

Fuller Research Foundation
undertakings are also,--unbudgetable
Businesswise even as measures of "protective cover"
for their routine processing of, as yet "scarce",
proprietary "probables", though
the latter business ventures are constantly hazarded by unpredicted
velocities of accelerating-acceleration
in the morphology "sports"
generated by specialization's expediency polevaulting
with the unexpected moment to moment increments
of integrating technical advantages
of competitive evolution; for the following negative reasons

As the "routine probables" of Business
and the "approximate certainties" of Government
both fail to materialize on schedule
or are hazarded by unheralded complications
arising out of NEW total interactions,
compounding by comprehensive nature,
beyond either the considered or the predictable reaches
of specialization's self limiting
"practical intelligence frames",--
the unexpected complications are frequently
blamed by y upon x, and vice versa,
as "ill attended and obvious" responsibilities
within long accepted and now obsolete
categories of cause and effect "affairs".

However the dynamically responsible factors "not-impossibly" may be the "cumulus
of unheeded transcendental integrating" of new patterns
with which F.R.F. is professionally concerned,--
and regarding which it may furnish
concepts and experimental data, and implications
conducive to renewed understanding
and basic industrial strategy advance.

And that meager one in one million chance that
F.R.F. may be able to furnish this service to society
appears to justify its existence.

(and Fuller Research Foundation undertakings are)

Governmentwise
as yet invisible to public policy making
because as yet lacking the
approximately "certain" quality
and "acceptable significance"
of common focus, characterizing
problems of public convenience,--
as for instance inherent
in dealing with the "obvious"
common concern with "weather"
or with temporary abundances here
and shortages there, or in the public
irritating momentums of
regulations for emergency
extended beyond emergency.

And because F.R.F. projects must of necessity
reexamine word tools employed in description
of new and more comprehensive data,
and must frequently impose precise limits
on some words and phrases
and at other times generalize previously limited designations,
its undertakings also tend to lack

the communicable meaning
essential to everyday and everywhere
vocabulary classification,
and to idea packaging for popular discussion,
debate, majority conviction, enactment
and subsequent administration.

Communicable meaning becomes obvious
only after years of "non-obvious", yet persistent,
intrusion of trends as "annoying problems"
whose increasingly familiar phrasemaking
is repetitiously resounded either in denouncements
or in rejustification by legislators or civil servants
for continuing public support:-
either of comprehensive subsidy,
or of subsidy for complementary functions
of industrial gestations,--
obviously of commonweal benefit,
yet inherently inaccessible to,--
or beyond the economic ability limits of
private means and maintenance,
as for instance dredged and buoyed
harbors for ships, or
built and maintained highways for vehicles, or
airways and airports for planes
or developed and policed clear channels
for radio broadcasting systems; or--
in other government relegated subsidy function
as for instance covering the
industrial senilities, where
public necessity but profitless risk
relooms in the deteriorations and
economic inadequacies,--extensive as
actuarially unexpected increments, which
being "unexpected" and
uninterestingly profitless have been
sorted improperly into non-priority
categories, rather than being attended to
as possibly embodying new and majorly important trends,--
which with increasing frequency,--
because improperly diagnosed, burst
out of their routine service
reframing, within the pro-and-con clichés
pulled out and dusted off from out
yesterday's "precedented" or "enacted" frame storage.