

The 1,100 Calorie Vote

In a world swelling with urgencies, how can research help?
What is the contribution science and technology can make
to the immediate and intermediate problems we face?

Man consumes, on the average, in a modern industrialized society,
about 2,700 calories a day.

His mere perpetuation requires about 1,600 of those calories each day.

He has 1,100 calories of energy he can provide as work.

What can his effort yield?

What can happen as a result of each man's existence?

If this 1,100 calories worth of energy can be used
to control the flow and application of a larger stream of energy,
by means of machines or tools,

each man can yield an enormous output!

The productivity of an individual well equipped is enormous.

Technology equips man to steer a very effective stream of energy.

Research derives the possibilities.

Development applies research to the needs of life.

We can no longer apply this aptitude of man
to man's needs as an entity separated from the whole of life's scheme.

The parcels of discovery are inevitably large.

The manifold streams which form from a single discovery
can frustrate the map maker who tries to record the patterns of flow
which erupt from a single spring of discovery.

Research cannot decide what it will discover.

Research can only decide the questions it will ask.

It may be able to ask those questions with penetrating perception,
using the augmentation to man's senses
which instrumentation provides.

What does the discoverer do about his discovery?

Oersted discovers the field associated with electrical
and magnetic interaction.

He describes it. Faraday reads the description.

Faraday expands upon the discovery and describes his expansion
and enlargement of Oersted's findings.

The 1,100 Calorie Vote

Faraday introduces other components
which supplement the first discovery.

The efforts of Oersted and Faraday combine.

Eventually mechanical motion is produced
by the ongoing efforts Faraday made.

Who did anything about the discovery which yielded a motor,
a machine, a way of doing work, a controllable flow of energy
which man could apply and by that application enlarge the yield
from his 1,100 calories of daily work?

When and how was this sequential stage of advance reached?

The 19th century produced dynamos, motors, mechanisms
of great ingenuity.

During that century what was the link between Faraday
and the technologist?

What was the link between the technologist and the industry
which applied the technology?

What was the link between the industry and the society
which benefited?

The discoverer, Oersted, the colleague in discovery, Faraday,
the technologist, the industrialist, the marketer, the consumer ...
where is the initiative?

Who is the prime mover in such a world?

Is it the compulsion of curiosity which drives the researcher?

Is it the delight which stirs such as Faraday?

Is it the advantage which accrues to the technologist?

Is it the power which is gained by the industrialist?

Is it the propulsion of enterprising spirit of the marketer?

Is it the need of the consumer?

Where is the initiative? Who is the prime mover?

Is it life itself which stirs the mind of each and all?

Is it civilization which operates through the breeding of cultures
and species which destines such sequences?

Is evolution the extrapolation of the permutation of 23 genes
donated by each member propagator of the human race?

The 1,100 Calorie Vote

All the discoverer does is inquire of forces that have operated
long before he elucidated the pattern of their interaction.

All the discoverer does is observe and situate the forms
and substances, the forces and motions which display behaviour
established by laws nature keeps
no matter who or what legislated them.

There are forms and substances, forces and motions
which situate themselves without man's consent.

There are the laws nature keeps which operate with
or without the cooperation of man nor the observation
of his discoverers.

Man may manipulate the 1,100 calorie vote
in some kind of democracy of nature,
but the motion of the moon moves the tides of the oceans.

The seasons follow in their sequence
regardless of the 1,100 calorie vote which man may cast
in a two billion majority against the winter or fall.

It comes because the vote the sun makes combines with the vote
of the planet's motion and the length of the days relentlessly change.

Earth, what is man that you are mindful of him?

Man, who construes to his immediate advantage every resource
which does not evade or resist his dominion;
man, who compels the member forms and substances of his domain
to bend to his will;
man, who heedlessly displaces the member forms
and substances of his domain into patterns
which nature's law keeping does not honour. .

Earth, what is man that you are mindful of him?

Is he a plight and predator?

Is he a composer and architect?

Is he a vagrant and an alien? Is he a sentinel and protector?

Is he an enemy and adversary? Is he an ally and compatriot?

The 1,100 Calorie Vote

Earth, which in ongoing millennia orders and patterns
the member substances and forms into always more living patterns;
Earth which accrues in eons, riches *offered* in welcome
to habitants she shelters, she succors, she hosts ...

There is a time, a season great, infrequent within eons,
which draws near the present in which we live.

This time, the season great, brings with it the ballot count.

It is the justice of these ages.

Man casts 1,100 calorie votes through lifetime after lifetime,
day by day.

How few votes remain for us each to cast!

The law we have proposed and have heeded
takes too much advantage for man
and affords too few rights for every other form and substance.

Only those who cast their votes with the greater plan,
the plan the discoverers elucidate, have any possibility
of abiding this election of the fittest, fit by their accountability
to the greater scheme and their upholding of it.

The will of man which wields the 1,100 calorie vote,
the daily effort we each make, must take its place, not submissive,
not overwhelmed, but as an initiative which can combine effectively
in collective efforts which cooperate with the will of nature
and the law she keeps.

The discoverer is our guide.

The initiative lives in accountability to discovery through each link.
The legislative bodies of man's society, the agency of collective effort,
must make itself accountable to discovery and discoverers.

Research cannot distribute its findings in spite of its relationship
with the agency of collective effort.

Research cannot even sustain its investigation, its exploration
which is even now desperately needed.

Man will and can be a composer, heeding enough of the forms
and substances, the forces and motions of his habitation.

The 1,100 Calorie Vote

Man can be an architect welcomed by the forces of nature
and the laws she keeps supplementing the energies of great enormity
with the steersmanship, the cubernetikos, the cybernet, man.

Man can be a sentinel watching for the irresponsible advantage
which overwhelms and takes his part apprehending such advantage.

Man can be a protector against hostile forces
which want and need guidance, which would not act in blindness,
but are undirected.

Man can be an ally and compatriot of nature
by making the kind of effort he makes
combined in comeliness with the efforts of other men
and the forces amidst which he lives.