

E.E.L., Inc.

might best be characterized
as a "post-industrial" laboratory.

It is dedicated to challenging
many of the precepts upon which the industrial
and scientific revolutions of the 19th and
early 20th centuries were based.

The challenge
is not one taken up simply for its own sake,
but rather has become inevitable and obligatory
as a result of the advance of the "information sciences".

Prior to the technological development of
"self-organizing systems" the benchmark of scientific
validity was the demonstration that a measurement could
be repeated or that a process could be performed ---
quite irrespective of the purposes
to which the measurement
or the process
might be put.

Truth was thought something to be established
and it existed in some "holy, high, eternal noon".
Searchable.

But somehow irrefutable.
Analysis became enshrined as the first step to anywhere
and when a research effort failed it was assumed that the
analysis had been inadequate.

Upon this rock the social
sciences almost foundered until statistics were brought
to bear so that results could fit the ordained mold.

But
even there dissatisfaction lurked because the individual
was asked to fit his purposes to the average or pay the
price of custom tailoring.

The price was high.
Because the machines
Which science had so lovingly invented
Were unable to adapt
Their products to the individual.
Mass production was good!
Wasn't it?

Not for its own sake it isn't, although it was for people
who had need of things --- for people who hungered.

We are
not hungry now but we have appetites, and appetites arise in
wanting something that responds to us.

THE PRINCIPAL ACTIVITY AT E.E.L. IS THE SEARCH
FOR RELEVANCE.

Consider for yourself:
 what kind of clothes you buy
 what kind of transportation
 what kind of office do you work in?
 what foods do you consume?

How much of your daily time and effort is involved
 either in adapting the above to your purposes
 or in tolerating their unrelenting permanence?

Consider transportation.
 Oh sure, you can select the car you want from among 200 models!
 Then get behind the wheel.
 Where can you go in backed-up traffic?
 You may be waiting for the highway department to widen

and lengthen
 and make safer
 and cleaner

the roads you drive on.

But let us be quite clear on this:

Every step which makes driving more convenient proliferates
 the future use of more automobiles than it will serve.

This foregoing concern illustrates our attitudes
 as ecologists.

Consider, though, another aspect of our cars.

One great advantage of the horse was that he learned your
 most accustomed routes, and could proceed along it without
 further attention on your part.

The automobile, however.....

What E.E.L. can demonstrate is that self-organizing systems
 can take over redundant, repetitious matters
 and let you operate
 in a manner more suited to your talents.

It is not our goal to isolate the operator from
 his performance.

Far from it.

We want instead to allow him the freedom
 to remain in touch
 with those parts of the process
 where the maximum of information lies that is
 of relevance to him.

We don't want to throw out TV.

We would rather make it more relevant to the viewer
 by changing itself in a manner that depends upon
 where he is looking.

We don't want to eliminate telephones.

We merely have come to distrust the reliance of western man
 on totally verbal communication.

And adding a TV picture to the process does not improve
 communications all that much. It is simply the western way.

E.E.L. is ready to develop a system which would allow you
 to hold hands at a distance. We call it Telegrasp.

Or Communicouch.

E.E.L.'S INTEREST IN COMMUNICATION IS THAT OF THE
 TOTAL ECOLOGY OF HUMAN DIALOGUE.

How did E.E.L. come to where it is at present?
 Was it planned?
 Did it follow a program?
 Where did the money come from?
 What return on the investment was promised or expected?

The roots of E.E.L. go back in time a few years but can best be summarized as arising from the ideas and personal associations of a common mentor: Dr. Warren S. McCulloch, one of the fathers of the field of Cybernetics. It was he, directly or indirectly, who introduced most of us to each other, and who gave us the confidence that the ideas we wanted to work out in some form of embodiment had the timeliness we hoped for, and had the momentum of history behind them.

Another individual, who must remain anonymous by his own request, saw the potential for the ideas that were on their way to becoming concrete and provided the capital for a one-and-one-half year "all out" effort of a half dozen people to commit themselves solely to the project.

No return commitment was demanded although if the "next round" of E.E.L. is successful, there is a built-in return to the original investor which would hardly allow more than a break-even.

The loft space at 33 Lewis Wharf was obtained in late 1967 and two computers and an avalanche of tools and materials were brought together there. The initial effort was not so much terminated as interrupted in July of 1969 and a period of metamorphosis was entered upon to promote a reassessment of the intrinsic and extrinsic value of the various projects which had been pursued and to look outward toward industry and other sources of funds for a continuation of the laboratory.

During the active period of the laboratory's operation a considerable amount of film footage was exposed showing laboratory people and projects in process --- both in "real time" and in speeded-up "time-lapse" photography --- and a 20-minute digest with sound track was edited from it.

The results do not necessarily yet speak for themselves.

One of our big problems to date is the essential difficulty of setting into verbal or visual form what we consider to be expressible only in some as-yet-to-be-invented direct language of experience. It is, in fact, toward an implementation of such a language that we have been working.

If we had at hand working prototypes of the devices about which we talk so much, we would not have to talk. The ability to connect another person in to a complex, interactive, responsive system would convey the message. He would walk away perhaps also unable to name it; but now he would "know". He would truly have "grasped" rather than merely having been touched.

Many of the devices we talk about have worked in some prototype form at one time, only to have been torn down immediately for the process of evolving into the next device. Some were so complex or tenuous in their initial embodiments that they "worked" only briefly and only recognizably to the inventor.

We do not apologize for that.
The devices and their erstwhile working have become our "words" for describing the processes of exploration and evolution.

Those that are relevant can be made to work again, and work better than before.

The range of applications to which we would like to put our emergent technology is vast and touches everywhere that man would like to have a closer communication with his world.

We want to put him into control of responsive dialogue with perceptual grasping of communication about

himself inside and outside and in time and space "grains" larger and smaller than he has had access to formerly.

his living spaces: on earth and in houses
under the water
in his clothes
at his job
outdoors

his communication with others

his understanding of cultural flow and change

his transportation systems

his reuse and recycling of waste materials

his potential for communication with other species

his potential for high-information exchange: verbal

non-verbal

physical

metaphysical

with technology

without technology

his understanding of how complex systems work by being able to plunge his hands or himself into a facsimile or computer-based model and thereby become part of that system; such embodiments require on-line, real-time application of a "dedicated" computer.

We at E.E.L. claim that the realization of the above-mentioned projects in workable form is well within the current state-of-the-art and that in fact we already have the necessary components developed.

We invite inquiry: ENVIRONMENTAL ECOLOGY LABORATORY
33 Lewis Wharf
Boston, Massachusetts 02110
(617)-523-6167