

# Inertia In An Environmental Field

Let's talk about inertia," said the designer, "since I can sense you are dying to ask why environmental fields don't change more frequently and radically.

"Of course they do change regularly, but not very noticeably. We usually think of such changes as minor adjustments, repairs, remodels, maintenance and the like. We shoehorn a few more 'thingies' in, enlarge the sewer, replant, weed, add a room, paint a wall etc. And of course all compound organic things decay. Around here wood lasts from 20-25 years (unless it's heartwood) and people about three times as long.

"The author would tell you that all change in an environmental field fits on a continuum which ranges from an ephemeral shift in attitude to a major physical transformation. As you know, he likes his continua models. For example, he insists it is better to think of making as always a remaking, because no place is ever new

(except maybe to you) and there is always something going on."

But you haven't explained why they don't transform more rapidly than they do with so much, and so much that is hidden, so to speak, going on?

"delta = *i*,"

he said. "The *i* is inertia, the resistance to change in an environmental field.

"Since *i* is proportional to the scale and complexity of any potential transforma-

tion, delta, in an environmental field, the largest and most radical proposed changes, obviously, have the most inertia to overcome. So, if you wanted to make some rather extensive changes somewhere, you'd have a big group and a lot of issues you'd have to deal with in order to develop common ground."

Sounds more like politics.

"Well there are all scales of places. Not every project is a Pennsylvania Ave. with a national constituency or a Panama Canal, or a downtown, but you are essentially right. There are always social

## Environmental Field Equations

$$1. \quad \int_{\text{env.}} = \left\{ \begin{array}{c} i \quad o \\ | \\ v \end{array} \right\}$$

$$2. \quad \Delta = i$$

$$3. \quad \downarrow \left| F + d_{s,e,p,ph...} = D_a + V_a + c \right| \downarrow$$

and political dimensions to inertia in any valuing field.

“But there are important physical dimensions as well. It takes considerable outlays of energy, time, capital, material, labor and organizational skill to make large physical adjustments - which are inevitably disruptive and inconvenient.

The so-called practical difficulties are easily recognized factors in inertia, we agreed.

“The three most important factors, however, according to the author, are fear of change; dissatisfaction; and a desirable, shared vision of the future place. The first is a big negative and the next two he thinks need to combine in order to overcome the negative forces of inertia and move things along.

“Fear of change is a very serious matter. People tend to fear the worst, you know. ‘Better the devil you know...’ and all that. ‘If there’s any chance of failure, don’t try.’

“We all know it’s possible to adjust and adapt to less than satisfactory conditions and stick it out for a long time.

“Fear can mask a high degree of dissatisfaction unless there is also the belief that the envisioned something better is attainable. Designer’s perform an important service in helping people envision a desirable future and imagine what it would be

like to live in it.

So the negative forces are fear and the various difficulties, social, economic, political, physical, ecological, etc., and the positive forces are what you might call an adequate dissatisfaction, a commonly desired “end in view,” as John Dewey would describe it, and the belief that the change was not only desirable but achievable.

“The author says the same thing mathematically in his “field equations,” probably just trying to dress up the importance of his insight. They say he admired and drove a Maxwell.

Equation 3. describes the “turning” forces in an environmental field:

$$\nabla | \mathbf{F} + \mathbf{d}_{s,e,p,ph...} = \mathbf{D}_a + \mathbf{V}_a + \mathbf{c} | \nabla$$

where fear and difficulty are on the left and act as counterclockwise forces and dissatisfaction, vision and confidence act in a clockwise manner. When the right turning forces are large enough the equation tips and rolls and lights up all the hearts in the mind field. The field is then said to be...

Ripe?

“Yes, ripe.

“You should be able to see yourself in equation No.1, the general expression of the field because you are in it.”

$$\int_{env.} = \left\{ \begin{array}{c} i \quad o \\ | \\ \nabla \end{array} \right\}$$