

THE BABY AND THE BATH-WATER: What is what in the current criticism of Science?

Two particular questions have been raised about our expressed views on the limitations of scientific methodology, the pseudo religion that seems have built up around science and our suggestion that the ideal Truth may be in the process of being displaced by an ideal of Nurturance.

These questions are:

- (1) are we throwing the baby out with the bath-water, or at least, aiding and abetting others to do so?
- (2) “just how do I reconcile writing things like *On Purposeful Systems* and then urging participative design workshop?”. That is entrench myself as an expert one day and the next day negate the role of the expert.

Many times over the past I have been challenged on the second matter. Perhaps this is because I spend a lot of time in the field working with managers who have tertiary education. Their curiosity leads them to look up my publications and there they find a degree of abstractness that is strangely in contrast with the practical matters on which we are working together.

It is only lately that I have encountered the first question. I think this may be because the great post-Sputnik days are over. Science is having difficulties with funding and recruitment, and feels besieged by cranks and by turn-coats. The latter being scientists who seek to meet the popular demands for ‘relevant science’ by theories and practices that are little more than quackery and charlatanism. Charles Fair, in his book *The New Nonsense* (1974), has presented us with a closely argues statement of the historically demonstrable dangers for our civilization that inhere in this process of de-bunking Science. The Mumford’s, Marcuse’s and Leing’s are, by his standards, the pre-cursors of the barbarians. I guess I would fit into this category.

By answering the first question I think I can answer the second.

The fundamental criticism I have made of science in my published works has been of the attempt to impose the assumptions of the physical sciences on the study of animate matter.

In order to create an appropriate set of *scientific* assumptions I was led into the work of Sommerhoff on goal-seeking systems, to work with Ackoff on purposeful systems and to continue more or less on my own with problems relating to ideal-seeking systems. In the field of methodology, I was led into new forms of multi-variate analysis based on graph theory in order to link systems theory with empirical data on systems.

Parallel to that criticism I have criticised the apeing of the institutionalized structures of the physical sciences and of their preferred modes of tuition. In both I have felt there was an elitism based on the so-called 'gifted' and the purity of pure science that was inappropriate to science that has to work *with* their subject matter, not *on* it.

I do go further than that in my criticism of where the scientific establishment has drifted in this century. I am as worried as Eisenhower and Khrushchev about the emergence of the scientific-military-industrial complexes in the super-states, and the lesser but the lesser but industrialized states. When scientists act to throw a guise of rationality over political decisions I think it is time to criticise. We will, no doubt, see more of this in Australia's own debate on uranium mining.

Summing Up.

I think the role of science in our civilization is enhanced if we find better assumptions on which to study the behaviour of the teleological systems and if the institutionalized forms of science direct their efforts to helping in the pursuit of human ideals rather than earthy power.