

LETTER.OZ

Dear Oz,

19 August, 1987

It was really beaut to hear from you .We had just finished our Saturday lunch with a bottle of Australian red. The news of your PhD capped off the lunch.

No, seriously, we had often wondered how you were going and hoping that the muck-up of SSS had not destroyed your chances. We are glad that Hassan gave you support at your defence. We did not wish to feel badly about him, so that was good news.

I hope you were amused by the article on sessile strategies of marine snails. It is good that such a simple, and common-sense strategy in a type V has an equally simple ground in probability theory. That is very much in keeping with the simple probabilistic arguments the I borrowed from Herb Simon and Schutzenberger for Types I and II.

Now that the Labor Party has won its third term of office we have some new targets. We came home just after they won their second term. Then we found ourselves pushed to the side-lines. The prevailing attitude of the new power men was that our job was done and they now going to carry the ball because they understood the politics and bureaucracy. Now they will probably try to innovate and we might get a break. There are two areas I have an eye on. First, the Industry Councils have practically all been put into place. They are, naturally, coming under attack as a form of corporate society. When we recommended these Councils in the Jackson Report on the future of the manufacturing industry we warned about this. Our solution, which we discussed ad nauseum in Phillie, involved the jury system and use of the search conference. Nothing has changed in that. It is just that the local politics may now enable the second part of the proposal to be implemented. Our small group here has discussed this and see it as just a part of a broad front strategy to get people to try selection by lot in the trade unions, producer co- ops (mostly agricultural in Australia e.g. canners, butter-makers), voluntary organizations and community bodies. A conference is laid on for Sept 18. Trevor Williams is bringing a bunch of officials over from his region. If they get interested we will repeat the exercise over at his centre.

The second area of interest was also central to our brief for the Washington Democrats - guidance for large corporate investments, private or public. There is a chance to move on this. The Australian Council of Trade Unions have produced their first ever national plan very much along the lines of our proposals. It is a bit far ahead of academic and business thinking in Australia so I guess we might stick an oar in.

Your observation that at the AMA there was a resurgence of interest in systems thinking triggered off a few things for me. It concerns my over-riding interest.

Trevor Williams reported a similar development in the computer science crowd in his University of Wollongong and I have noted it in a spate of new books on political 'science', Of course, unless people go to Eastern mysticism and the like, there is no place to turn but to the systems thinking paradigm suggested by Marx and Peirce. If we could make a contribution it would be, I think, to show that the choice between 'general systems theory' and Cartesianism is a false choice. General systems thinking, from Bertalanffy, through Churchman- Ackoff to Prigogine, Jaentsch and auto-poesis, has been an endless parade of intellectual transvestites. Without exception they have used new terminology, often taken from electrical and electronic engineering, to serve up the same traditional world hypotheses of Formism, Mechanism, and Organicism. Without exception they:-

a) map only L11, L12 and L21. L22 is not represented at the axiomatic level. L22 appears only as a barely disguised, ad hoc, specification of limits imposed by their 'theories' on L12 and/or L21. Whether they are aware of it or not these theorists take the epistemological position of idealism i.e. the real world is un-knowable, we must live with our constructions of what it might be. (How do we choose between constructions? Sacred texts, whatever works, whatever logical or mathematical construction is most coherent?). In stating the basis of 'systems thinking' (Emery, 1963) I laid it down that L11 cannot be characterized without characterizing L22. (I should have also explicated the point that L22 cannot be specified for any class of L11's without specifying the L11's. But, I guess that at that point in time I was pre-occupied with getting out of the 'personality box' and outside the skin to which the 'science' of psychology had condemned us). That was a commitment to epistemological realism. Contextualism was the only one of Pepper's world hypotheses that shared that commitment. Pepper's contextualism was Peirce, spelt clear.

b) All of these system concepts shared the same notion of a system as "a set of elements and their relations". (See Hall and Fagen's review of system definitions. GST Year Book 1956. An old review but they captured the feature). None of them confronted Angyal's point that 'no set of elements and their relation' will exhibit genuine system properties (ie properties other than those of aggregative, and/or or , properties that can only be precisely defined by ANALYSIS) unless there is a SYSTEM PRINCIPLE. For each system there can only be one governing system, the unitas multiplex. If there appear to be more than one such principle then it is clear that the matter involves more than one system or a hierarchy of systems. It was hard for those coming from a scientific background to accept Angyal's point. He was suggesting that system properties were in some sense immanent (innate, inherent) to the system. That notion was peculiar to the Organicist world hypothesis; reconcilable with Formism but totally irreconcilable with Mechanism. It has re-appeared from the Aristotlean- Thomist tradition (Roman Catholicism) as the theory of auto-poesis. Angyal's concept of a system has serious social implications. Thus, in an Hegelian frame of mind ,Churchman once postulated that wisdom was a property of the system , not some part thereof, such as the strategic planning department. This directly contradicts the fundamental assumptions of GST. From the assumptions of GST it follows that there is no constraint on external determination of the elements and kinds of relations between elements. If external forces determine that wisdom shall be located in a strategic planning unit, then so shall it be. The nearest that GST has come to recognizing the validity of Angyal's point is in postulating a role for organizational goals, missions, primary tasks and strategies. These formulations do not go beyond the limits of the L11, L12 and L21 parameters. The system principle that was being invoked by Angyal was 'a special form of interdependence between L11 and L22'. This relation determined what elements could play what roles with respect to each other within the system. Many combinations of elements in a multitude of relations could act to maintain this relation. The special relationship of interdependence with selected parts of the environment can, theoretically , be sustained despite limited variations in L11 and L22 (Sommerhoff,1950). Immanent system properties exist with those limits. Within those limits, and only within those limits, can we expect to observe genuine system properties- properties that cannot be grasped by ANALYSIS.

This last point is not trivial. Amongst the GST's there has been the constant war-cry that Synthesis replaces Analysis. This is put forward as the new paradigm for rational understanding. As we have shown this movement does not significantly differ from the logical positivists movement toward the unification of science. GST still claims that scientists can be in no business other than the construction of alternative realities. Given that starting point they could not accept Angyal's 'system principle' and hence they could not even begin to delimit the

areas where analysis had to be insufficient. They could only leave the choice of analysis or synthesis to personal preference, and ignorance.

So, my dear friend, you can see why I think there is a real job of work to be done if another wave of interest in systems thinking is emerging. If people like us cannot show the way then the wave will, once again, break to foam on old rocks like Ackoff.

What we are faced with is not just a matter for this year or this decade. If contextualism does not establish hegemony then I see no chance of displacing the institutions and cultural practices (including the practice of science) that have grown up in Western society since 1600AD. And spread through the education of the likes of you and, of course, colonialization and the imperialism of a world economy.

So much for all that.

Life is good here. I work hard for short stretches, get paid very well and have good long stretches when I do not have to worry about anything and can get on with my own work. It is what I have always dreamt of as a way of life. Funny but, I am no more adapted to this life of the independent scholar than I ever was. I miss it if I am not actively involved. Maybe I could get used to it in time, but I have been up to Scandinavia twice this year, expect I will have to go up again in October. I get the feeling\* that I am being sucked back into the life I am used to.

Merrelyn and Jo are very fit. Merrelyn is loaded with administrative duties but finds enough hours in the day, and week-ends, to churn out papers. Jo is a very independent young lady. Beautiful, but oh my.

We hope you can find a less wearing appointment.

Our regards and best wishes,