## AN APPROPRIATE APPROACH FOR APPROPRIATE TECHNOLOGY

a.t. is presently going through a thorough shakedown test of its validity. We are being adopted by the very failed system from which we once broke. That adoption and testing seems to be proceeding in a way which points out the weaknesses of a.t. as it has been developed, substituting, in those weak places, elements of the failed system rather than new elements of the 'solid to the roots' approach of a.t. The claim that a.t. could serve as a new foundation for community and economy is what is at stake. If we continue to tolerate this kind of substitution rather than hold tight to the challenge of new synthesis, we invite the worst we have imagined.

My use of the word 'we' here is somewhat euphemistic. While I hold a very clear sense of being part of a group which was charmed and lead to its ideals, I have a real hard time, presently, trying to figure out who's on what side and who my leaders are. I can't see anyone anymore, present company included of course, who shouldn't be counted among the bozos on this bus. If a bunch of us bozos somehow manage to lead ourselves well, we'll not only probably regain a solid sense of identity but also probably discover finer things than we've dreamed of.

What is this a.t. thing that's being tested? To me a.t. represents a far broader scope of things than just elegant solutions to problems. To me a.t. might better be a.a., appropriate approach. It's a respect, a searching for deep rooted harmonies, a way of approaching relationships in general. a.t. is a discovery that the universe works better when you see it as made up of things constituted by their relationships to all other things, where things related are <u>both</u> distinct individuals and the same thing.

Once there was the notion that an object, such as a hamburger, was simply and exclusivly the object immediatly seen. Now there is a chance to see it as also being all its past and future relationships, all its supports and supportings, all its givings and denyings. Once there was an accepted notion that 'East is East and West is West and never the twain shall meet'. Somehow in this funny place called America, East and West seem to have met, importantly with the help of African musical roots. The old 'this is this <u>and that's that</u>!' just isn't there any more. What I see solidly growing here in the North is a Southern-Western-East, a musically-working-with. Neat, but how do you apply it? The working definition of a.t. which I find to be a useful tool is that a.t. is a way of seeing made of simultaneously attending to <u>both</u> the immediate objects of attention <u>and</u> the context which fully defines them. Whenever you don't have a full awareness of both the thing and it's context it should somehow serve as a trigger to look for it. Of course the trick to it is that the significant context is never limited, one's awareness is never complete and always is the time to build better awareness of it. Somehow when seen this way, things work better; somehow elegance of thought and action fall out, simply for having an interest.

What parts of the adoption of a.t., or a.t. itself, have or are falling into the trap of seeing the objects of attention without rich interest in their context? While this one personal perspective of a particular time, presented in words alone, is necessarily limited, there are a number of glaring examples which can perhaps be pointed out. What do we do about them? Simply see, see both the object of attention and its context. Some of these unbalanced approaches are probably dead ends, some will open out to other avenues. None, it seems to me, will continue for very long. The changes will probably be constructive if they accompany our seeing them clearly.

The following objects of attention are found in the context of words on a page of paper. and tend to focus more on detailing separations and alliding to connections as words on paper seem more suited for. The paper comes from certain times and places by many steps; so do the words. Behind the words are ideas and experiences, visions of intriguing possibilities and pointed frustrations, notions which have spontaneously arisen time and again and ones which have popped up here for the first time. Having these words grow is importantly from a context of both intense involvement and generous solitude. Having these words printed, for me, is a part of my need to express myself and ) is an offering of things found in a diverse world for ( and felt to be of interest. The context of these diverse chains of relationships produces a page in the hands of a reader who handls it in the context of the whole of their learning and experience, colored by their immediate interests and awareness.

COMPETITIVE GRANTSMANSHIP: One of my most poignant disappointments in the past few years has been in the implicite role of government in cornering the market for active a.t. tradition development and research and in activly stifling innovation and sharing. You can't get a grant unless you can tell them in advance exactly (in numbers preferably) what your search will find. After you have painfully snipped off all the little puzzles and uncertainties from your basic interest (that are the substance of any search) and narrowed your purpose to a context simplistic enough for some unknown harried expert (with 20 times more proposals to read than they can possibly digest) to recognize as an appropriate spot to neatly type an (X), you then get (about a year later) barely enough money to present your results and apply for the next grant, let alone do the search you proposed. Not only do you end up working overtime at ruining you own efforts but by cooperating your relationships with others sharing your interest become so competative, your time becomes so consumed with hurry and frustration and your view so narrow that you fail to build the communication channels with other searchers that would have served to enrich your awareness, stimulate your genuine curiosity, balance your contribution and refine your methods. Competition may stimulate achievement when you clearly understand the objective but when you don't it's worse than useless.

This format not only applies to tinkerers like me but also to many others like the innovative social action and planning interests whose real effectivness is based on generating solid person to person involvement but whose recognition depends on the impact of some paper 'assessment'. The whole process seems abusive and feels like it aught to be junked.

What more healthful ways might grow? First we could recognize that the real opportunity is in furthering interests already begun rather than in interrupting natural curiosity to demand the creation of hon-existant products envisioned out of context. Directing that support (in dollars or in kind) could somehow be by means of, rather than at the expense of, the flow of communication among searchers. If supporting and tapping into that constructive communication were taken as the primary mandate for support then support directed in more particular directions would be better placed and more welcome. While such an approach has both the opportunity for being done well and poorly, at least innovations built from diverse relevance more than from limited analysis would be fostered.

Has the present innovation support process always been a failed process? Well it can't always have been because it hasn't always existed, and things don't come into existance and develop without yielding some sort of service. The time when it seemed to work was perhaps when it was arranged in somewhat the way I'm suggesting, the time when the support mechanism actually was part of the communication among innovators, when there was no one to direct it but the innovators themselves, back when things were at a smaller scale. The present failure for a.t. seems to come from arbitrarily applying an existing superstructure rather than growing one from it's roots, and, of course, the <u>big</u> hurry. When you apply the sudden power expectation of your standard high speed polyester storm-trooper to what's puttering in my side yard and bouncing around between friends, you get failure.

There are a variety of very substantial roadblocks to changing the process. Perhaps eventual learning will facilitate major change in the long run. Perhaps funding local interaction channels would be a healing step for the short run. I'll bet you that a lot more truly productive process would happen from free or cheap dinners and rap sessions than isolated proposal writing. THE LUXURY OF PARENTSMANSHIP: As contrasted from grantsmanship, parentsmanship has a very much more interesting context. Our parents, if you're between 10 and 50, are the first and last generation of folk to have at hand a cash bonus built from an exponentially expanding economy. It's rather interesting when that cash bonus is not being put into producing an ever multiplying economy machine but instead going to inventing a healing awareness. Again, the future changes the meaning of the past.

While I do wish I could stomach holding down a job at times, it's rather nice that in the absence of a good day's pay for a good day's work that there's something fruitful I can do and an occasional grand I can throw in some direction or other. It's quite possible, however, that our children won't have the same kind of luxury. I've been sustained a lot by the luxuries of the failed system. Not much but my friendships, hopes and dreams have yet been sustained by the luxuries of the healing one. it looking too far off into the future to ask whether the tight efficiency and conservation approach we seem to be pursuing will result in a world with luxuries in it for our children, perhaps different from, but as generous as our own? For me, the object of efficiency and conservation is only valid in a context of luxury. It would be truly conserving and efficient if we used the luxury of our parents one time accidental wealth to find luxury, to find that loose fit with the world rather than that ever tightening one.

ISOLATION TECH.: Generally speaking a.t. has developed on the fringe, in isolation, within places and circles of friends separated from but supported by mainstream activities. It has naturally developed specific ways and interests most suitable for its particular situations. Because it centrally involved creative, self-teaching individuals with a particular respect for nature's ways and little or no mental debt to the formalities of mainstream institutions and occured largely in humble settings in general and rural settings in particular, that's what it's discoveries are most appropriate for.

When we go to share the new understandings we've developed with our ailing world it's rather easy to forget that it wasn't made for them, that it's suddenly out of context. The direct reward cycles of exercising discoverer's passion are very hard to draw on in the world of rule and number passing. The things themselves, like tilted solar collectors, have less relevance in crowded dirty cities where cleaning, damage and space become real restrictions not part of the bucolic or laboratory settings. Personal attentivness to detail and do-it-yourself home care methods have less relevance in the kind of world where everybody (including 40% of mothers of pre-school children ) is away from their homes. Conservation and careful re-use of materials has great relevance where one is importantly self-sufficient but has considerable negative effect when whatever you conserve simply provides a larger resource for someone else to squander. Promoting expansion of waste with saving isn't real creative.

Directly sharing what we learned from coming to know some particular isolated setting in intimate detail is not the general solution. Applying, in new ways, the awareness that elegant healing solutions come from an intimate understanding of settings perhaps is. Perhaps we could, as we develop things in isolation, keep more in mind the ways of integration. Maybe those of us who get bumped up the ladders of organization and management could remember that it's not so much what we've learned that is of value but the proven opportunity to draw out understanding of whole systems by sharing awareness and intimate observation of our contexts.

SOLAR CONFERENCES: The presentation of three or four hundred person-years of puzzling, fiddling and figuring in neat consecutive fifteen minute segments amounts to an indigestible barrage, prevents the development of a sense of the whole and is inappropriate. It's like a once through trip at a crafts fair with four hundred booths; real easy to find yourself walking down the rows in a glassy-eyed trance. It's an impact contest not a sharing.

The central problem I see is that we've allowed ourselves to loose sight of the fact that each and every contributer is working on the same interest and have tolerated an implicite acceptance of the failed attitude that unlimited specialization is the key to success. While I wouldn't diminish the value or difficulty of arranging broad coherent exposure for burgeoning individual efforts, the bottom line to which we need to re-address ourselves is whether that presentation is comprehensible and relevant to both those in the room and in other rooms, both at the moment and for times later.

At the two conferences I attended in the past year I felt a special sense of disappointment as soon as each section in which I participated was over. It felt cut. From puzzling over that feeling I've wondered about the workability of some straight foreward adaptions. What if each subject area section ended with an on-stage, 20 minute, discussion among the several speakers, not just a Q&A period but a conversation among the speakers themselves regarding the relevance of each presentation to eachother. Perhaps then that group would select from its number a person to represent that area in discussions of broad relevance such as each interest's relevance to eachother, various building or development projects and general issues. perhaps such discussion would constitute the last day of the conference. Perhaps the projects and issues singled out for diverse discussion on the last day would be selected from the poster sessions by some process. The general conference sequence I imagin would flow from introductory plenary talks of general interest to special interest sessions with integration periods to plenary sessions of general interest. While I'm sure there'd be many kinks found when real conferences are looked at in this way (like how to appropriatly regionalize sharing), my hope would be that some such methodology would cull from fewer and less hurried presentations a far greater sense of the relevance of many more individual efforts to eachother.

APPRORRIATE SOLAR INNOVATION: Solar energy technology is the super duper 'in' thing these days. Unfortunatly, in many ways it seems to be a bandwagon which is rapidly filling up with garbage. A lot of accepted solar technology is grossly misleading or misused. It's not that things don't work; it's more that they work too well or that our society needs them too much. It's not that the simple personal methods with which the movement started aren't solid; it's that the hurried ways in which we and our society have built on them are slipshod. It's not that in a process of tradition building and experimentation one wouldn't expect a lot of goofy experiments and attempts in one climate which are more appropriate for another; it's that we don't seem to be very interested in learning from them, more in just proliferating. We seem only remotly interested in puzzles and wholly unaware of methods of successive refinement. No matter where you start or what numbers you play with, if everything you do is better than what you did before, you end up doing fantastic stuff. No matter where you start or what numbers you play with if you don't successively study and refine your work you end up as a proponent of gibberish.

You'd think that after ten years of experimentation with attached solar greenhouses we would have discovered that direct gain thermal storage always serves to reduce the amount of energy entering the house (it soakes up heat and keeps it in the coldest place for the night). You'd think that we would have developed some understanding regarding what sorts of houses, in what sorts of climates that is appropriate for, but no, a solar greenhouse just isn't a solar greenhouse without those damn drums and so their individual participation in an individual energy dance can't be considered. As far as I can tell the only time you put direct gain storage in a solar collector (w/ or w/o plants) is when the collector is oversized for the thermal handling capacity of in-house storage or when the collector is to be used as a living space. In most situations in-collector storage serves as a way to reduce the effective glazing (and planting) area. In some climates there's too much sun and a desire for big comefortable greenhouses and so it's appropriate.

My impression is that this kind of oversight (and there are many) has to do with the dominant fantasy that energy is a number and

can only be considered with computers and equations. Energy is not a number; it is a behavior and is highly amenable to consideration by means of direct observation. Partly because most of the research issues have been co-opted into the engineering- specification-grantsmanship-BTU's/Buck-bureaucracy-number-waving thing and partly because original innovators don't get to do it much when they're pressed into talking and writing all the time, the basic task of innovation from a developed direct awareness of the elegance and interconnection of natural behaviors seems to have been overshadowed if not abandoned. Actually the biggest problem is possibly that the equasions were developed from rigidly controlled laboratory settings and are often irrelevant to uncontrolled natural behavior settings (but that's another story).

When energy is considered to be a number, one of the things that happens is that if whatever you're talking about isn't a number then it can't possibly be energy. That sort of broadside rejection out of ignorance was apparent quite a bit at the inception of solar innovation and it seems to be continuing full force but with general confusion as to who's on what side. That we're now slowly finding that nearly every building in the modern world might have, with similar overall effort, methods and materials plus attentivness to natural behavior, been built to be self-sufficient for it's heating and cooling necessities suggests how deeply resistant we are to considering our own roll in the natural energies context of which we are a part. Our split with healing awareness just might go deeper than any of us have yet reached or realized.

CONCLUSION: In looking back over the subjects which I've approached here, it seems that what I've been focusing on is not so much a.t. in general but appropriate change and the dramatic difference between the approach of nurture-selection and that of control. In nurture-selection you see what's growing, observe what it's growing from and what it's good for, nurture some and plant some other seeds and see what responds well to your nurture to see what your seeds and nurture are good for. Then as you keep an eye out, you find what insists on growing whether you wanted it to or not and in studying it and its place you find out what it's good for. And on, and on.

In Control you methodicly prohibit anything from growing other than the one thing you imagine to be making grow. Whether or not your intent fails or succeeds your awareness is so consumed with your fixation on non existant 'B-B-B-B-Billions of Bushels of BTU's',or whatever, that you fail to develop an awareness of what you're participating in. You never get to notice that as everything is part of nature's nurture and selection that even your controll interests grew by nurture-selection. Control consciousness runs very deep. It's been here a long time; it must have some sort of natural service. It's modern fit in the world is rather questionable however. Its present fit in nature seems to be how we ended up with odd things like the western cities built for ever growing energy consumption, of endless packed rows of little houses each envisioned to be gracefully resting alone on the desert-prarie, each surronded with attempts at English gardens. I wonder what they're truly good for. The illusion of control also seems to have been the source of the notion of teaching as filling empty heads with information and planning as the stipulation of future events and our beloved corps of engineer's attempt to command the path of every drop of water. What all that stuff isn't good for seems easy to see, but I truly wonder what it is. One thing anything is always good for is in focusing our broadening of awareness of its and our context.

Well, do I painttoo difficult a picture or appear too heavyhanded or too sharply focused? I hope not. I hope only to be seen as being a little bit radical in the true sense. The only reason these things reach my attention and get me going is that there seem to be these wellsprings of free-for-thetaking richness and luxury which we may be passing over in the big hurry.

On the other hand, am I overly optimistic? Will the future show me to be living in a past that never really existed? Who knows? While that may be, there are those futures which can never exist without thinking about them.

I do feel that if we only look, simply look, to all the connections of which we are a part and renew our commitment to freeing ourselves from the failed attitude of looking only at the separations, we're very likely to find that free new world; the one well founded on that bright promise of a musicallyworking-with. If we could also discover the way of looking that lets that problematic failing other one vanish into thin air, to avoid having it come crashing down about our ears, now that, would be really something!