

Lloyd Fell, David Russell & Alan Stewart (eds)
[Seized by Agreement, Swamped by Understanding](#)

Greenhouse Climate Change

David Russell

The genius of modern science *is* its technological embodiment. In saying this I want to stress that modern technology has its own momentum and is only rarely "applied" science or a derivative from science. There is a slogan that sums it up pretty well: "*science owes more to the steam engine than the steam engine owes to science.*"

The proposition that I want to put to you today is: that there is a risk that our techno-science will unwittingly be seduced by the hubris inherent in our cultural beliefs about how humankind relates to Nature. Should we be won over by this seduction, then our exploration of the relationship between climate change and social change will be severely limited as will be our actions to effect useful change.

It was in the picking up and development of instrumentation for experiment, that the entire seeing and experiencing of the world changed. It revealed to us micro-worlds and macro-worlds not even dreamed of by the imaginers of the pre-modern science cultures. It has also generated and subsequently named the unexpected and unwanted problem of a threatening climate change.

The rise of our technology dominated culture has inevitably resulted in the quasi-religious belief that sees technology as socially salvific; for whatever problems we might have in society, there will be a new technological solution just around the corner that will save us from the threatening peril.

It is important to demythologise this near absolute belief so as to break the vicious cycle of technology being the dominant vehicle for producing progress (and some unforeseen associated problems), and that in order to have progress, there will always be an acceptable cost. So often one hears the stated hope: "There will be new technology that will address these problems" - the belief being that the path of progress will only temporarily be thwarted.

At the heart of this worldview, which I believe is vigorously fostered by institutional technology and readily accepted by the majority of the community, is the matter of faith. It is a faith in authority institutions - i.e. institutions whose knowledge has somewhat the status of 'truth' - with the consequent disempowerment of the individual. The modern culture of the past two hundred years has done its best to encourage this faith.

Science, however, has experienced a significant shift this century and is increasingly a reluctant handmaiden of a dominating technological culture. More about this in a moment. Right now I would like to tell you a story. This is a folk tale from China and like all cultural stories that are passed from generation to generation, it contains some ancient wisdom that we would neglect... *at our peril!*

A Chinese village is besieged by drought and unless there is rain quite quickly, the village is going to starve to death. They have tried everything they know. They have tried all their local people so they finally decide to send, at a great distance, for the famous rainmaker. (Have you ever noticed that all wise people come from very far away... it seems to be one of the essentials of wisdom that it be brought from a very great distance.) The great rainmaker is summoned from a very great distance; he consents to come. He comes to the village and he asks immediately: Please build me a straw hut outside the village and give me enough food and water for five days ... and don't disturb me! They do this quickly. The little hut is built and he disappears into it and on the fourth day it rains, just in time to save the village.

The villagers went to the hut, they drag the rainmaker out of the hut blinking into the light, give him his fee and pour all of the gifts that they can upon him. An enormous outpouring of gratitude for he has indeed saved the village.

One man came to him and said: How do you do it? What is the ceremony that you do that makes it rain? The rainmaker said: Oh! You must understand ... you see when I came to your village, I was so out of sorts inside myself that I had to put things right inside myself and I never got to the rainmaking ceremony. And the import of the story is; that if you put things right inside, they will come right outside without any further ceremony. And that is the power of the story! [\[1\]](#)

My purpose in telling this story is not to suggest that we should ignore all outside influences and naively trust only one's personal views as if they were in some sense *absolute*. Rather, it is to invite you to consider it as a metaphor ... a metaphor for *information transfer*, or more accurately, for the impossibility of our simplistic notion of information transfer. When we talk of communication we usually refer to getting the message right; getting it packaged appropriately; or getting it worded persuasively. All of these images suggest, that if we can tell people - in as persuasive a manner as possible - that the impact of the impending climate change will be this or that, then they will believe us and act accordingly.

The story tells us that this is not so. Without being that explicit - folk stories never are - it tells us that experts (and other wisemen summoned from a very great distance) will not be able to make the impact that they would like and change our behaviours by trying to convince us that they know better because they have a better ceremony - the magic ceremony of scientific knowledge. It corroborates what recent neurobiology is telling us: that meaning is made from within, and is not dependent on information from outside gaining entry into the nervous system. For one thing, it simply can't get in! Our nervous system

does not function like computers communicating with one another. In a situation, characterised by freedom, one human has no ability to change another human's mind - even though we would desperately love to. All that we can do is engage in communication and by this process, when it is freely entered into, trust that the meaning that we each make, will have socially and ecologically responsible outcomes.

When one person dominates another which may occur if there is a dominant authority class (such as experts, priests or prophets), then sure enough, people will do as they are told - to a greater or lesser degree. But they will respond due to the fear engendered by their belief in positions of authority - people in positions who have power over them. n

Arguing that we depend on the global ecology for our physical existence, and if we ignore this fact, we will die (or at least suffer), is an argument based on fear. It is this argument which is most often made explicit, and made most prominent in this climate change debate, perhaps because it is 'hard' argument, which can be pitted against 'hard' economics, or 'hard realities'.

Today we have a growing consensus within the scientific community that we have a *problem*. There is a reality - to do with impending climate change - of worrying proportions that is gaining the status of a 'fact'. This is a particular case of a social construction of knowledge within the scientific community. In no way am I wishing to question the scientific validity of this knowledge, rather I am proposing that such facts cannot be transferred to other language communities - like the general population - simply by explaining the logic of the argument. A good, even compelling argument is just a subtle form of domination and can only influence behaviour through the emotion of fear. But fear is a loose cannon which at best, leads to further dependency on technical solutions (from a great distance) and at worst, leads to freezing, panic, and immobility, or to denial, or resignation.

The scientific community which has identified and named this climate change problem is now acting with responsibility and is doing what it can to take appropriate action. The general community however, does not share in the ownership of the problem and thus cannot be blamed for not acting with corresponding responsibility.

No longer do the scientists have the position of power which is, as I have said, inherently based on fear, which they might have had earlier in this century (neither do the priest or the prophets I might add). Generating messages of fear will be no more than whistling in the wind for the majority of the population. The only people who will respond to fear will be those who have a history of experiences which have been reinforced by the release from the frightening dictates of authority figures.

If our neurobiological science (see Maturana & Varela, 1980; 1988) is correct in showing us that we cannot influence other people in any predetermined way with our messages, our information, then what does it suggest that we can do?

Not only neurobiology but the other new sciences of cognition (von Glaserfeld, 1987) and human communication (Luhmann, 1990) are insistent that the focus needs to be on our relationships and our languaging. The two are intrinsically braided together, one informing the other.

What are these relationships, and the business of languaging, that I am referring to?

The first relationship has to do with the deep cultural/philosophical webs with constitute the context in which the debate occurs. As long as nature is experienced as being an object to be instrumentally utilised for the benefit of humankind, in the mode of our current dominant mythology with all that follows from this mythology, there will probably not be sufficient motivation for change. Neither instrumental arguments nor aesthetic ones - particularly since in modern culture aesthetics always takes second place to utilitarian positions - will sway sensibilities.

The next has to do with our relationship with technology. Scientists could lead the way in encouraging the use of networking the entire globe using various existing technologies. Using the first person ... We are doing *this* to ourselves by *this* much every minute of the day! The scientist doesn't reside outside of the problem, the scientist like everyone else, **is** the problem! The language community of the scientist, opens itself by inviting the wider population to join it. Let's stop trying to instruct people by trying to dominate their thinking.

Thirdly, there is the relationship of language itself. Out of the principle of self-reference in science and philosophy, comes the need to find a new language and a new relationship with our ecology. By seeing nature, not a lesser-kind compared to our human-kind, but as the equivalent to our *lover*, the one with whom we share an equal and mutual relationship, then a new language will emerge. Without this language there will be no relationship and there will be no respect sufficient to motivate change.

What this language will be like we can only guess at. However, given that our guesses will be based on our existing understandings and prejudices (pre-judgements) this would be a pretty futile pursuit.

Recognising and accepting the need for a new language and a mutually beneficial relationship with our ecological world (which is as much us ourselves as the context within which we live), is seemingly the necessary first step.

What this relationship will *mean* is something that we can usefully speculate on. At its most basic it will mean that I (and others in the community) will accept responsibility for our actions. Problems will be created when I don't accept responsibility for what I do and say and will not be projected 'out there' in search of either the source or the solution.

Technology and science (science understood as a way of knowing) are then nothing other than *amplifiers* (Hooker, 1991) of our actions and values. It does

not help our social well-being to give it an existence independent of us. We *are* technology! Our contemporary belief in the instrumental worth or otherwise of techno-science is a product of our dominant instrumental worldview, the division between humankind and ecology and the subsequent valuing of humankind *over* ecology.

I can only raise these issues through offering an invitation to join with me, and with each other, in an on-going conversation. I have no answers to the big questions as to what should be done because if I did, I would be wanting to convince you by the compelling nature of my argument. In doing this I would be trying to dominate your actions.

Inviting you to join in conversation, in languaging, and in relating with each other and with our ecology - in a way that fosters mutual respect and mutual valuing - is the most that I can do. It is both the source of our dilemma of felt powerlessness (given our dominant cultural mythology) and the source of our yet to be conceived actions.

This invitation - made in language and in relationship - is both our structural limitation (in biology) and the only means we have of creating more responsible (response-able) societies.

At the heart of this new relationship with our ecology is *meaning*. This is so for all communication that takes place in the non trivial sense. And the function of meaning does not lie in information. If a message or piece of news is repeated, it loses its information value, but not its meaning. Meaning is not a selective event, but a selective relationship between person and person and person and ecology. (Luhmann, 1990)

The need for new *meaning systems* - arising out of our new ways of relating and languaging with each other and with what we currently understand as our ecology - will give rise to new ways of thinking. All this has been said before by many but the import of the message has not found a fertile field in the psyche of our culture. I will conclude with a passage from a letter to prominent Americans, written by Albert Einstein in 1946:

"our world faces a crisis as yet unperceived by those possessing the power to make great decisions for good or evil. The unleashed power of the atom (*we could generalise this to the unleashed power of all modern techno-science* [2]) has changed everything save our modes of thinking, and thus we drift towards unparalleled catastrophe . . . a new type of thinking is essential if mankind is to survive."

(In Nathan and Nordin, 1960, p.376)

There are grounds for optimism that *a new type of thinking* is gradually unfolding in today's world. There is a level of sensibility that can be found in most fields of endeavours: ever so tentatively it appears in poetry and art; in ecological and biological enquiries; and particularly, in the everyday speech of

the general population. It is as though we have finally come to accept that: We know a lot, but we understand very little.

Notes

[1.](#) This story was one often told by the Swiss psychologist Carl Gustav Jung who held that it expressed his deepest psychologist insight.

[2.](#) The inclusion, in italics, is the author's.

References

Hooker, C.A. (1991), *Value and System: Notes towards the Definition of Agriculture*. A paper presented at the Conference on Agriculture, Environment and Human Values, University of Western Sydney - Hawkesbury, October 9-11, 1991

Luhmann, N. (1990), *Essays on Self-Reference*, New York: Columbia.

Maturana, H.R. & Varela, F.J. (1980), *Autopoiesis and Cognition: The realization of the living*, Boston:D.Reidel.

Maturana, H.R. & Varela, F.J. (1988), *The Tree of Knowledge: The biological roots of human understanding*, Boston:Shambhala.

Nathan, O. & Nordin, H. (eds) (1960), *Einstein on Peace*, New York:Simon & Schuster.

Von Glaserfeld, E. (1987), *The Construction of Knowledge: Contributions to Conceptual Semantics*. Salinas, CA:Intersystems.