# Futures, action research and change

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## **Abstract**

Recent initiatives in the futures literature have sought to enhance the action orientation of futures work by combining it with action learning or action research. To this combination we further add change agency, a set of concepts and processes which increase the potential for practical and detailed action. We label this threefold combination "critical futures praxis". As an illustration of how this can be done we describe one way of carrying it out. The example we provide integrates the futures technique of causal layered analysis with a cultural change process and with action research to attend to monitoring and learning. A step-by-step description of a futures-based change process concludes the paper.

# The integration of futures, action research and change agency

We write not only as a futurist with an interest in action research and an action researcher with an interest in futures. As labels those are not inaccurate, merely incomplete. For present purposes we write as practitioners with a pragmatic interest in bringing about change. We think of

this as actioning — action with a purpose, not merely action for the sake of action. We have positioned ourselves here deliberately and specifically.

Our thesis is that action research and futures complement each other well. We think of action research as a family of processes which pursue the joint objectives of change (the action) and understanding (the research), usually participatively. We regard futures as another family of processes with which users can design multiple hypothetical futures. Futures can thus provide a critical platform from which the present can be seen in a new light and enacted differently.

To this twofold combination we add change agency. We regard it as consisting of another family of processes which integrate participation, planning and implementation to bring about a certain type and quality of change.

These three families of processes overlap. Except when they are practised as a solitary activity all of them depend also on communication skills and (in most instances) facilitation skills. All three have a history of occasional borrowing from each other. We maintain they do so in the interests of effectiveness and action. Furthermore we suggest that their combination heralds the emergence of a new methodological synthesis that may be called futuring or critical futures praxis: see Fig. 1.

#### [Fig. 1 about here]

In what follows we explore in turn a rationale for a more actionable approach to futures, the relationship between futures and action research, the layers of analysis which can be found in both futures and change work, the

role of action research, and some particular ways of bringing critical futures praxis to realisation.

## 2. The need for informed action

Our interest here, therefore, is less in futures than in "futuring". In our usage it is not necessarily synonymous with future studies [1]. We define it as futures with an eye to an integrated and critical theory and practice — critical futures praxis, a combination of futures, action research and change agency. Both of us have been academics as well as practitioners. Here we wish to proclaim that this paper isn't only an academic exercise. It deals also with action. We see action research and change agency as useful processes and sets of tools for introducing more of an action orientation to futures work.

We think that the need for action is evident enough. It is clear that the world is in serious trouble. Among the many imperatives facing us are those brought about by terrorism, globalisation, degradation of the environment, technology, and many more. These imperatives require action and the ability to learn from it. They also require the transformative thinking which futures can bring. The required action is urgent. These issues are also complex and intertwined: uninformed action is unlikely to serve the purpose. Inflexible action is unlikely to be effective either, as the analysis of complexity by Kurtz and Snowden [2] makes clear. We don't believe that any one method of analysis or intervention is adequate.

As practitioners we try to facilitate informed action. In doing so we draw on many concepts and practices. As mentioned, they include the trilogy of futures, action research and change agency which comprise critical futures practice. They will provide our focus here, though in our work we draw on many disciplines and practices learned over a combined half a century of

experience. We believe in tailoring our actions to suit the situation and the intention. The "real world" does not observe the conventional boundaries of academic disciplines; it requires an eclectic approach.

In academia it is not too much of an exaggeration to say that truth is what appears in refereed journals. It is different in the world of practitioners. There, it is our experience that practice typically leads its literature by some years. Each of us draws on more understanding than we have documented. Some of it is tacit, and thus unable to be documented. "We know more than we can tell" [3]. By the time a practice or a concept finds its way into the literature it is not unusual for it to have been in use for some time. For example, the work of highly effective therapists such as Virginia Satir and Milton Eriksen was undocumented for years, partly because they weren't consciously aware of the ways in which they achieved their outcomes. It was not until their processes were studied and documented by Richard Bandler and John Grinder [4] that the tacit knowledge informing their therapeutic skills became known.

As Etienne Wenger [5] has argued, communities of practice are the medium through which this partly tacit knowledge is distributed.

Practitioners work together and talk together and learn from each other.

They borrow each others' processes and models and approaches. Both of us meet regularly, individually and jointly, with practitioner peer groups. In these we learn as colleagues describe the problems they face and the way they deal with them. We then import their solutions into our own practice.

In most cases these colleagues have little interest in publication in the formal academic sense of articles such as this. Instead they prefer, as we both do, to distribute their ideas through their communities of practice. They use

the "grey literature" of case studies and reports, "how to" publications and self publishing.

Ultimately, good practice is a performing art. It is acting with spontaneity in the present moment while drawing on all the experience and understanding we can bring to it. It is shaping the future with a critical eye on our own praxis and on the big picture. Critical futures praxis integrates theory and practice. It aims to escape the assumptions of the status quo. When it is directed at shaping the future it becomes what we call artificing [6] or futuring [7]. The contribution of action research is to combine action and critical reflection within an ongoing cycle. This allows us to act mindfully in the moment. We return to this later.

## 3. Futuring

Many conventional approaches to "near-in" (short term) futures studies occur as part of strategic planning. They deal with extending the options of the system under examination: adding horizontal options, so to speak. Futuring seeks to bring to awareness the layers of meaning tacitly embedded in the researchers and the research situation. It adds a depth of meaning — the vertical dimension, as Inayatullah [8] puts it — to the project outcomes.

Conventional action research focusses on the present and the near future. When futures and action research are combined the time horizon of action research is potentially extended. Faced with a five or ten year time horizon participants typically work as if the future is knowable. They develop their plans as if the rest of the world will be stable. Extend the time horizon "far out" to 20 or 30 years or more and these assumptions become untenable. The need for flexibility becomes inescapable.

It is not that a combination of futures and action research is entirely novel. Visioning, documented by Emery [9] and Weisbord and Janoff [10], has been a regular part of action research and change agency for many years, as French and Bell [11] demonstrate. (We should note that "visioning" covers a great variety of processes, as O'Brien and Meadows [12] point out.)

Processes which were initially used for forecasting have been pressed into service for other purposes. Delphi, an early forecasting technique [13] and still considered part of the forecasting tool kit [14] provides an example. It can be used whenever disparate views, common in participatory processes such as action research, are to be converged. This is really to be expected. Action research practitioners tend to be pragmatists, taking their processes from wherever they can find them.

Similarly, futuring has borrowed from action research, particularly in recent years. Using the label "anticipatory action learning" Tony Stevenson [15] has spoken of the virtues of high levels of, and depth in, participation. He recommends taking the future into account in present planning by backcasting from a vision. Sohail Inayatullah [16] has used the same label in a similar endeavour, arguing for "layered questioning" (see below) to deepen understanding. Robert Burke [17] talks about "future sense" combining action learning and futures. Colin Russo [18] offers a further example, combining Inayatullah's causal layered analysis with action learning.

Certainly, at its best futuring can be informed by good theory and enabled by good processes and good relationships. But it is when spontaneous creativity combines these in the heat of the practical moment that good things are most likely to happen. We shall argue that action research and change agency add specific tools which help in this. Action research recommends participation, for instance. With a few exceptions it is the change agency

literature which provides tools for deciding who to involve and how to involve them.

There are constraints on this creativity, of course, some self-imposed. External constraints include those that arise from the increasingly interconnected world. Compliance in one aspect prevents change in another. As well, human activity systems [19] (to borrow Checkland's term from soft systems methodology) deal with problems by developing innovative solutions. Often the innovations are followed by well-meaning attempts to capture them in procedures and rules. The unintended result is to lock us as system members into dealing with the present through compliant use of the practices of the past. Further, there is an increasing load of bureaucratic and compliance requirements to the point where creative and innovative action is often inhibited.

The consequence of these and similar constraints is a slow rate — often a profoundly slow rate — of social innovation. It is then easily outstripped by technological innovation. From a critical futures praxis point of view, these constraints are obstacles for creativity to overcome.

The key point we wish to make here is that futures, action research and change agency are complementary. Integrated, they are more effective for our purposes than any one of them is by itself. Futures processes and concepts provide an unfreezing which helps new understanding to emerge. Action research involves other stakeholders, increasing the likelihood that understanding will be expressed in action. Change agency provides more specific tools for guiding the processes of both futuring and action research. Action research provides a mindset which allows flexible in-the-moment action to be enriched by critical reflection.

We now illustrate some of the ways in which these three often separate bodies of knowledge and practice complement each other. We begin by comparing a model from cultural change with the futuring technique of causal layered analysis. (Of course not all change is cultural change. We could have chosen other aspects of futuring. However, we believe that much of the change required in the world at large *is* cultural.)

## 4. Layers of analysis

Fig. 2 shows a model of social culture, the culture sphere, from the field of cultural change in communities and organisations. The layer labels are those used by Dick and Dalmau [20] based on work by John Sherwood [21]. <sup>1</sup>

[Fig. 2 about here]

The circles are to be thought of as spheres. They depict an organisation or other social system. It is assumed that, as with an onion, the outer layers can be peeled away to reveal inner layers. At each level certain questions can be asked. Eventually the core, the system's sense of identity and unity, remains. This is where system members find the answer to the existential question "Who are we?".

More importantly, there are processes to reconstitute the system from the core outwards. Identity and unity are reasserted by recalling and celebrating

In the form in which Sherwood used it, it consisted of a grid of the growth and decline of organisations, known as the "change grid" and developed in the late 1960s. Sherwood attributes the model to Robert Hoover, at the time apparently at the University of Cincinnati. As far as we have been able to ascertain Hoover did not publish it, and its use spread through Sherwood's work.

important events in the system's shared history, particularly its achievements. Visioning then follows to define a shared and anticipated future. Detailed action plans define how the vision might be achieved. In implementation, actual behaviour within actual relationships bring the plans flexibly to realisation.

Compare this to Inayatullah's causal layered analysis [22] or CLA (Fig. 3). It begins with the litany of everyday events and objects. These are revealed in conversation and in the mass media. CLA then accesses socio-economic systems, for instance through an examination of op-ed pieces and the analyses and reports of institutes. This level seeks to provide a first explanation of the litany. Probing further, there are patterns to be found in the second level. There are paradigmatic meanings (often taken for granted) which constitute a worldview or, in the language of postmodernism, a "grand narrative". This is accessible, though not easily, from a critical analysis or a deconstruction.

#### [Fig. 3 about here]

Below that again is to be found the mostly-unconscious level of myth and archetype. As in night vision it is difficult to examine directly. <sup>2</sup> It is unlikely to be found in academic analyses. People such as artists and fiction writers who work at the outer reaches of their intuition are more aware of it. Its

There are no minimal-light receptors at the retina's point of focus. This has the consequence that in night-adapted vision in very low light situations, a dimly-seen object disappears if you look directly at it. People who are accustomed to minimal-light situations learn to examine an object in peripheral vision. They look past it rather than at it.

presence colours myth, story, painting, and other unconstrained expressions of conscious and unconscious together.

In our own practice we can use futures work to deepen our understanding. The present looks different when it is viewed from the perspective of the future. Futures work can plumb the successive depths of causal relationships, structures, and the current mythology. Futures techniques typically operate over a longer time horizon than do action research and change agency. Together they establish as it were a "categorical imperative" for both exploration at deeper levels and action in the day-to-day world. You could say that it's "turtles all the way down", <sup>3</sup> probing below surface appearances to the underpinning meanings.

If this is to serve some practical purpose the understanding must then be converted to action. As mentioned previously the culture sphere of Fig. 2 suggests processes for doing this — turtles all the way up. By combining the two it is possible to work down and up, as Inayatullah recommends [23]. Fig. 4 summarises the process.

[Fig. 4 about here]

<sup>3</sup> Stephen Hawking (A brief history of time, 1998, Bantam, p1) begins with an anecdote. 'A well-known scientist (some say it was Bertrand Russell) once gave a public lecture on astronomy. He described how the earth orbits around the sun and how the sun, in turn, orbits around the centre of a vast collection of stars called our galaxy. At the end of the lecture, a little old lady at the back of the room got up and said: "What you have told us is rubbish. The world is really a flat plate supported on the back of a giant tortoise."! The scientist gave a superior smile before replying, "What is the tortoise standing on?"! "You're very clever, young man, very clever," said the old lady. "But it's turtles all the way down." This represents, as it were, a cycle of ever deepening analysis or intention. We have sought to propose in this paper, as in Fig. 4, that it's also turtles all the way up again, representing synthesis or extension in action in our day-to-day world.

### 5. The role of action research

Action research has at least three distinct contributions to make to this overall cycle. Most obviously it provides the monitoring of the action. In Fig. 4 this is the upper right hand entry. The person implementing the action checks the action plan to decide if it is still appropriate. The actions are carried out. The implementer then checks if the intended outcomes have been achieved. If not, the plans are modified and again implemented.

In serving this purpose action research can operate over several time spans. At its briefest it may occupy only seconds or minutes: an actor develops an intention, immediately acts on it, and notes the results. A cycle of the same form may operate over days, months or years, up to (or even beyond) the overall time frame of the plan.

In this use action research monitors the *implementation* of the plan which has been developed. It can also serve to monitor the *methodology* whether that methodology is futures, change agency, action research or some combination. That is, action research can serve as a meta-methodology. It allows us to refine our methodologies at the same time as we improve our practice.

These two uses correspond approximately to what Zuber-Skerritt and Perry [24] call the "core research" and the "thesis research" in thesis and dissertation work. They also correspond to two of the three elements of research which Peter Checkland and Sue Holwell recommend [25]. In research, they suggest, the researcher operationalises an epistemological framework **F** as a methodology **M**, which is then applied to an area of concern **A**. In the course of doing this one learns about *and modifies* **F**, **M** and **A**. As it is part of our purpose here to challenge the usual epistemological framework

we would add to this. We would include **C**, the cosmology or overall belief system within which the epistemological framework makes sense, to form a **CFMA** model.

The third use features prominently in the action research literature. Much of that literature argues that at its best action research is *highly* participatory. Some authors such as Morwenna Griffiths [26] and Ernie Stringer and Bill Genat [27] provide guidance on achieving this. Others such as Davydd Greenwood and Morten Levin [28] argue that high participation is one of the defining characteristics of action research. Involving participants in the research widens the available information. It also generates commitment both to the planned outcomes and to the actions necessary to achieve them.

## 6. Critical futures praxis in practice

In short, a futures analysis can assist this by unfreezing the system. By challenging existing worldviews it allows longer term and more profound change. By asking participants to take a longer term view it encourages a more systemic approach. It can probe for a deeper understanding of the system and its operation. The processes of change agency then allow the understanding to be developed into action plans. Then, because "no plan survives the first contact with reality", <sup>4</sup> action research builds in the flexibility and commitment to fine tune the action on the run until success is achieved.

Critical futures praxis — the combination of futures analysis, action research and change agency — can extend the depth and reach of planning. It

<sup>4</sup> A civilian version of the military adage "No plan survives contact with the enemy", usually attributed to 19th century Prussian general Helmuth von Moltke.

does this without sacrificing flexibility and responsiveness to the situation. Done participatively it generates commitment to the plan.

Critical futures praxis maintains that "contact with reality" requires unique adjustments to shape a suitable outcome. Otherwise the unexpected features of actors and situation are not taken into account. Such an approach recognises both system structure and participant agency as factors. CFP can provide both moment-by-moment monitoring and flexibility and the ability to shift longer term direction. It does this through its cyclic process of intention, action and reflection, with a strong emphasis on enactment and flexible "contact with reality".

We have said that the world faces unusual challenges for which a narrow or reductionist approach is unlikely to be effective. <sup>5</sup> We believe that an approach such as the one described here can extend futures studies beyond its often academic application. It can become more practical. It can have more impact on the world. It can do this in a way which adds to the other approaches which attempt to change the world for the better.

For a combined half century or more we have been trying to bring about change in the systems in which we worked. We were often able to change our immediate environment but successes in the wider system have often been meagre. We have had little more success into attempting to change them from outside. In both instances the constraints of the larger system have acted to maintain the status quo. More recently we have sought ways of acting more locally on systems which we can influence. We have given more attention to the integration of theory and action. This has often enabled us to create a counter-culture which displays an alternative to the prevailing culture.

Historically in Australia the closest we can identify to this path less traveled is a person called a "bush mechanic" — see http://www.hotfutures.net.au/bm/.

Let us sum up the ways in which futures, action research and change agency complement each other:

- Futures is intergenerational; its long time horizon complements the immediacy of AR and change agency.
- Where action research and change agency tend to take much of the situation for granted, a futures approach challenges conventional interpretations of time and causation and meaning.
- A futures perspective encourages moving beyond the specific and local to the abstract and overarching; action research and change agency convert the abstract to specifics.
- Through giving new perspectives on the present, futures can expound the new culture. In operationalising the new culture action research and change agency can at the same time model it. "Be the change you wish to see in the world." <sup>6</sup> As we said earlier, these processes are both technique and performing art, helping people to turn new understanding and dreams into reality.
- Action research provides a flexibility which allows plans to take into account the understanding which continues to grow after the plan is developed. It allows the change implementation to respond to the ongoing changes in the world, as it must if it is to be appropriate.
- Action research increases learning by deliberately settling out to make the tacit more explicit and therefore more contestable.
- As we have said, change agency provides the detailed skills and processes which allow futures and action research to be operationalised.

## 7. Conclusion

To conclude, we present an overview of the shape that a futuring process based on critical futures praxis might adopt:

- 1 Identify and involve as equal partners those people who have a stake in the analysis, the planning and the implementation.
- 2 Establish relationships with these people and agree with them the sorts of communication processes which are relevant.

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<sup>6</sup> Source uncertain. Sometimes attributed to Gandhi.

- 3 Set up communication mechanisms so that those not directly involved may be kept informed.
- 4 Use futures processes (we chose CLA as an example, though others could be used) to serve the multiple functions of
  - a challenging the status quo and the worldview which sustains it
  - b broadening and deepening the present understanding of the situation
  - c building commitment to a shared vision of the near and distant future.
- 5 Use the processes and models of change agency to turn the shared vision into a detailed and implementable action plan. Ensure that the action plan
  - a is developed by those who have to make it work in practice
  - b has regular monitoring built into it and
  - c builds in regular times for critical reflection on the methodology as well as on the action and its outcomes.
- 6 Implement the action plan, using action research to provide the ongoing flexibility and responsiveness to the actual situation and people.
- 7 In a final reflection, make explicit the learning which has emerged, and perhaps document it.

In final summary, we are interested in the overlap between futures, action research and change agency. We call this combination critical futures praxis — acting now to influence the choice between alternative futures. In it we seek to combine a practical action orientation with intentionality and critical reflexivity.

## **References**

- [1] Cornish E. Futuring: the exploration of the future. Bethesda, Md.: World Future Society, 2004.
- [2] Kurtz CF, Snowden DJ. The new dynamics of strategy: sense-making in a complex and complicated world. IBM Systems Journal 2003; **42**(3):462-483.
- [3] Polanyi M. The tacit dimension. New York: Doubleday, 1966. [Reprinted Gloucester, Mass.: Peter Smith, 1983]
- [4] Bandler R, Grinder J. Frogs into princes: neuro linguistic programming. Moab, Utah: Real People Press; 1979.

- [5] Wenger E. Communities of practice: learning, meaning and identity. Cambridge University Press, 1998.
- [6] Wildman P. Artificer learning through the demiurgic field of dreams. Brisbane: Prosperity Press, 2004.
- [7] Wildman P, Cundy L. The esoteric thesis: making inner sense of the ineffability of knowledge obtained during the exoteric research process. ALAR (Action Learning and Action Research) 2002; 7(2):3-21.
- [8] Inayatullah S. Causal layered analysis: poststructuralism as method. Futures 1998; **30**(8):815-829.
- [9] Emery M. Searching: the theory and practice of making cultural change. Amsterdam: Benjamins, 1999.
- [10] Weisbord MR, Janoff S. Future search: an action guide to finding common ground in organizations and communities, second edition. San Francisco: Berrett-Koehler, 2000.
- [11] French W, Bell, CH. Organization development: behavioral science interventions for organizational improvement. Englewood Cliffs, NJ: Prentice-Hall, 1973 [sixth edition 1999].
- [12] O'Brien F, Meadows M. How to develop visions: a literature review, and a revised CHOICES approach for an uncertain world. Systemic Practice and Action Research 2001; 14(4):495-515.
- [13] Dalkey NC. Delphi. [Presentation to the Second Symposium on Long—Range Forecasting and Planning, Almagordo, New Mexico, October 11-12, 1967.] Santa Monica, Ca.: RAND Corporation, 1967.
- [14] Gordon TJ. The delphi method. In Glenn JC, Gordon TJ, eds. Futures research methodology, Version 2.0. Washington, DC: American Council for the United Nations University, 2003. Paper 3. Retrieved August 2004 from http://www.acunu.org/millennium/FRM-v2.html
- [15] Stevenson T. Anticipatory action learning: conversations about the future, Futures 2002, **34**(5):417–425.
- [16] Inayatullah S. Questioning the future: futures studies, action learning and organizational transformation. Taiwan: Tamkang University, 2002.
- [17] Burke R. Organisational future sense: action learning and futures. Journal of Futures Studies 2002; **7**(2):127-150.
- [18] Russo C. The CLA questioning methodology. Journal of Future Studies 2003, 7(4): p. 73-82.
- [19] Checkland P. Systems thinking, systems practice. Chichester, UK: Wiley; 1981.

- [20] Dick B, Dalmau T. To tame a unicorn..: recipes for cultural intervention. Chapel Hill, Qld.: Interchange, 1998.
- [21] Sherwood JJ. Leadership: the responsible exercise of power. Cincinnati, Ohio: Management Design Inc., 1977.
- [22] Inayatullah S. Causal layered analysis: poststructuralism as method. Futures 1998; **30**(8):815-829.
- [23] Inayatullah S. Causal layered analysis. In Glenn JC, Gordon TJ, eds. Futures research methodology, Version 2.0. Washington, DC: American Council for the United Nations University, 2003. Paper 26. Retrieved August 2004 from http://www.acunu.org/millennium/FRM-v2.html
- [24] Zuber-Skerritt O, Perry C. Action research within organisations and university thesis writing. The Learning Organization 2002; 9(4):171-179.
- [25] Checkland P, Holwell S. Information, systems, and information systems: making sense of the field. Chichester, UK: Wiley, 1998.
- [26] Griffiths M. Action for social justice in education: fairly different. Buckingham, UK: Open University Press, 2003.
- [27] Stringer E, Genat WJ. Action research in health. Upper Saddle River, NJ: Pearson Prentice-Hall, 2004.
- [28] Greenwood D, Levin M. Introduction to action research: social research for social change. Thousand Oaks, Ca.: Sage, 1998.

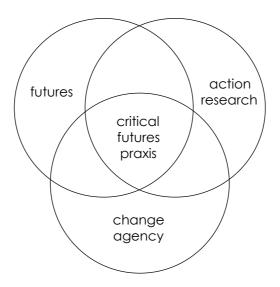


Fig. 1. Critical futures praxis: an integration of futures, action research and action learning.

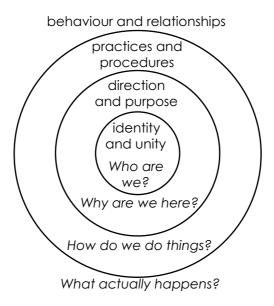


Fig. 2. The culture sphere: layers of meaning in a social system.

Level	Label	Nature
1	litany	visible trends and problems, for instance as revealed in news media
2	socio-economic	economic, cultural, political, etc. systems with attributed causes
3	paradigmatic	social, linguistic and cultural structures
4	myth	pervasive and collective archetypes, often unconscious

Fig. 3. The levels of causal layered analysis.

Level	CLA		Culture sphere
1	identify the litany: the surface evidence	<b>←</b>	build monitoring, innovation and learning into the action plans and implement them using action research
	$\downarrow$		<b>^</b>
2	identify economic, cultural, political and historical systemic causes		develop action plans using change management concepts and techniques
	$\downarrow$		<b>^</b>
3	explore the deeper paradigms and worldviews which support the levels above		project a desirable future with long-horizon visioning techniques
	$\downarrow$		<b>↑</b>
4	find the deeper origins in archetypes, the mythic and the metaphorical	$\rightarrow$	assert the identity of the system by celebrating its history

Fig. 4. Combining CLA, change management and action research