The quality of logic models, or I’d prefer to say ways of modelling the logic of an intervention, that are commonly used in evaluation is mediated by several issues. These include:

- The paucity of models used by evaluators
- The tendency of “one size fits all” evaluators fitting the situation or intervention to the model rather than the model to the situation or intervention
- Unclear articulation of what a model is and what it does (e.g., predict, generate insight, is it a map, is it the territory, is it static, is it dynamic)
- The lack of any widely applied agreed criteria to judge “good” models from “bad” models.

My talk is really focused on the last point. However, the other three form an important context.

Firstly let me deal with the paucity issue. Generally speaking, evaluation uses three model frameworks:

- the four box model; often known as the United Way or Kellogg model
- the outcome hierarchy

and logframe
This paucity is further compounded by the narrow confines within which each model is used ... the four box is used primarily in North America, the Outcome Hierarchy is used primarily in Australia and New Zealand, and LogFrame is used primarily in the international development field. And furthermore if you explore the models carefully you will see that they come from the same field of modelling – largely management and project planning traditions. Yet there are dozens of different modelling traditions the evaluation field could draw upon.

This is compounded by the “one-size fits all” problem. There’s only one size available or even acceptable. How many of us here have been required to present a particular kind of logic model in as part of a Request for Proposal irrespective of the situation, the intervention or indeed the purpose of the evaluation? The situation is fitted to the type of model not the type of model to the situation.

Which is not to say there isn’t debate and discussion about ways in which we model the logic of interventions. Evaluators complain about logic models all the time. But there are occasions when I’m not convinced the debate is especially well informed about what models are and what they do. Many discussions seem blissfully unaware of the literature around models and modelling. For instance, few evaluators appear to know that there are two key distinctions made within some parts of the modelling tradition; models that generate insights and models that enable prediction. The former tends to be simple, the latter complicated. There is relatively little knowledge of the role and potential of dynamic rather than static modelling. Sometimes I even wonder if the difference between the map and the territory, or indeed the difference between a model and a framework are well understood. I think even widening these understandings would aid the debate.

However, I’m not convinced that tinkering with existing ways in which we model the logic of interventions would automatically improve their quality. It may be necessary but not sufficient. I suggest we step back a bit and consider more thoroughly what quality means when applied to evaluation oriented models.

There will probably never be a right or even generally accepted set of criteria to do that. But to get the conversation a started here are some ideas based on Leslie Cooksy’s framing of “quality” and my own experience of using systems approaches and systemic thinking. Leslie drew on Ernie House’s conceptualisation of quality; beauty, truth and justice. It’s a refreshingly untechnocratic framing of a notion that has become largely captured by modern management jargon. I think also it is a framing that fits well within concepts of systemic thinking and practice.

For me, thinking systemically, a model needs to provide insights into three things, inter-relationships, perspectives and boundaries.

Let me take them one at a time.

Beauty. What is beauty? For me beauty is not entirely about aesthetics (does it look good) but also about essence (does it capture and express what’s important). In systems terms does the model capture and express the most important inter-relationships between critical components?

In particular to what extent does it help make sense of:

- the essential nature of the interrelationships within a situation?
• the core structure of these interrelationships?
• the key processes between them?
• the patterns that emerge from those processes, with what consequences, and for whom?
• why those consequences matter? To whom? In what context?

Note that I said, “to what extent”. Like all beauty, we are not dealing with absolutes here.

But let’s look at two models drawn from the systems field that are, in their own way, beautiful. And how they can assist that sense making in quite different ways:

Systems Dynamics helps us understand how key structural elements of a problem or situation can interact in ways that are otherwise unpredictable. The key thing is that it doesn’t seek to model the entire situation, only that aspect that is of interest to us – usually a “problem” of some kind.

This is a beautiful model of a highly complex problem with a micro-loan scheme. Someone skilled in reading models like these could tell you very quickly what the problem was; violent swings in the popularity of the program that put stress on the means by which loans were processed that further compounded the swings in popularity. They could also begin to evaluate the various strategies that had been adopted by the micro-load scheme to resolve this issue.

Activity Systems has a model that is general rather than situationally specific. Without getting into the jargon it is a means of understanding how the performance of any intervention is determined by the motivations of those involved (the object) towards a goal or outcome. These motivations are mediated by the tools that people use (including language), formal and informal rules and norms, and division of labour (or roles) within the task. If you know how to use this model, it really is a beautiful thing.

The implications for evaluation are threefold:
• A wider use of models that more clearly express the dynamics of a situation or intervention
• Greater use of generic models such as the above example
• A clearer distinction of the purpose of modelling; especially the balance between insight and prediction.

Now truth. For me truth is the consequence of multiple perspectives; there are “truths” out there but they are mediated by multiple points of view and multiple framings. So truth and perspectives are closely aligned for me.

So what are the implications for logic models of seeking to be truthful by taking multiple perspectives? From a systems orientation we would consider to what extent the model helps us:

• Explore the different ways in which a situation can be understood
• Assess how these different understandings are going to affect the way in which people judge the success of an intervention
• Speculate how people’s different understandings (perspectives, framings, motivations) will affect their behaviour, and thus the behaviour of the situation, especially when things go wrong from their perspective? With what result and significance?

The soft systems traditions can give us some guidance. Any situation is a tangled mass of motivations, framings and perspectives. There is benefit in untangling these threads, exploring their individual significance using models for each framing and then bundling them back again. The soft systems tradition of modelling suggests you build a relatively simple model of each significant perspective or framing. Assess them and work out what that might mean when you bundle them back together again. So for instance in an evaluation of a project that was formally framed as improving the management of not-for-profit organizations undertaking government contracts we explored how alternative framings by program participants helped and hindered the “formal” framing. Four framings for the intervention were significant:

Improving the management and governance of the organizations
A means of testing of consultants to undertake retraining
A means of spotting organizations that are in trouble
The means by which organizations are supported by government agencies

We discovered that the success of the management and governance intervention could only be fully evaluated when considering the relationship between all four framings.

The implications for evaluation practice and for the way we model the logic of interventions is twofold.

Firstly we got a more truthful, accurate, understanding by framing – and modelling - the intervention in more than one way, more than one perspective.

Secondly we should not confuse stakeholders with stakeholdings (eg framings, motivations). Stakeholders can, and nearly always do, have more than one stakeholding in a situation. Any single stakeholder is capable of applying multiple perspectives to a situation. How they choose which framing to inform their behaviour will ultimately determine the behaviour of that situation. Think of why you are at this conference, and how that affects your decision whether to remain in this session or leave or check your iPhone. Multiply this up to 2500
participants, plus all the hotel staff, plus all the AEA staff and you may understand why things don’t go according to “plan”. Thus acknowledging multiple perspectives on a situation allows a richer, more truthful understanding of why a situation behaves the way it does.

Finally, justice. Some US evaluators of a certain age and disposition talk fondly of their youthful encounters with C West Churchman. Churchman was a giant in many fields and nominated for a Nobel Prize. His contribution to the systems and sociological fields was profound and widely acknowledged. He was fascinated by the ethical dimension of ways in which we manage situations. Here’s what he once had to say about the relationship between management and ethics – and justice.

“I suspect, and many agree, that the guiding ethical principle for a lot of human management is justice. Plato made justice central in his main management book, the Republic. So did Bentham in the Introduction to the Principles of Morals and Legislation, designed to help managers of the criminal justice system. So did Kant in the Foundations of the Metaphysics of Morals, which describes the interactive management of a human kingdom of ends. ……Can we make "objective" ethical judgments? In the first place, we should realize that "objective", from a managerial point of view, refers to the design of a group of investigators who are attempting to keep their observations under control in a language context where it is impossible to obtain exact agreement. The designs to date have not worked very well, even in the so-called exact sciences. ……So the question whether ethical judgments are objective is still vague, but it is a managerial question. The question is important because ethical judgments are important. Hitler judged that one subspecies of humans was ethically superior to others, and inferred that the ethically inferiors should be killed off. Can we prove him wrong? Who is the "we" that is supposed to design the proof?“.

Evaluation is in the management business. We seek to make judgements about the worth of management processes. According to Churchman the basis of those judgments should be concerned with justice. How can our models reflect this? Churchman argued that ethical behaviour was bound up in how we handled boundaries. Boundaries determine who or what is “in” and who or what is “out” – in evaluation terms what is “worthwhile” and what is “marginalised”. These boundary decisions are human decisions and management decisions and are thus ethical decisions. How stakeholders (including evaluators) handle these boundary decisions is assessed, in terms of quality, by the attention to justice.

Thus the systemic questions we pose of a model from a justice framework are to what extent to do they help us determine:

• Who is drawing what kind of boundary?
• What are the practical and ethical consequences of this boundary setting, and what do those consequences imply for the way in which we evaluate?

The critical systems field, pioneered by Churchman and further developed by Werner Ulrich and others identifies four major boundaries that need to be investigated and critically assessed:

• **Motivation**: Who will benefit from an intervention and how we determine and assess what “benefit” means. Thus this is a boundary decision about values
• **Control**: Who has decision-making authority over what? Thus this is a boundary decision about accountability and power over resources

Bob Williams  [http://www.bobwilliams.co.nz](http://www.bobwilliams.co.nz)
AEA Conference, San Antonio 2010
• **Expertise**: Whose expertise is acknowledged and valued. Thus this is a boundary decision about *knowledge*

• **Legitimacy**: What makes this the right thing to do relative to all the other possible uses of resources and knowledge? Thus this is a boundary decision about *worldviews*

So how well do the evaluation models we use reflect these four boundary decisions – and how we evaluate those decisions?

This is harder to illustrate visually since it is less about the model in any visual sense, and more about what insights the model can provide.

So to wrap up.

From a systems perspective it is important that the ways we model the logic of interventions richly reflect inter-relationships, perspectives and boundaries. That will enable our models have the qualities of “beauty, truth and justice”. I’ve drawn examples from the systems field of what I consider are models that reflect these qualities, that could be adapted and adopted within the evaluation field. However, I don’t think evaluators *necessarily* need to adopt models from the systems. As a first step I’d just like to see them pose these questions of the models they use.

To what extent does the model help make sense of:

• the essential nature of the interrelationships within a situation?
• the core structure of these interrelationships?
• the key processes between them?
• the patterns that emerge from those processes, with what consequences, and for whom?
• why those consequences matter? To whom? In what context?

To what extent the model helps us:

• Explore the different ways in which this situation can be understood
• Assess how these different understandings are going to affect the way in which people judge the success of an endeavour
• Speculate how people’s different understandings will affect their behaviour, and thus the behaviour of the situation, especially when things go wrong from their perspective? With what result and significance?

To what extent to do they help us determine:

• Who is drawing what kind of boundary; motivation, control, expertise and legitimacy?
• What are the practical and ethical consequences of this boundary setting, and what do those consequences imply for the way in which we evaluate?