# Checkland: Soft Systems Methodology

Introduction

Checkland starts out with a fundamental notion that our perceptions of the world are mediated by our ideas and concepts of the world, which themselves arise from our experience of the world:

> "What is being argued is that we perceive the world through the filter of - or using the framework of - the ideas internal to us; but that the source of many (most?) of those ideas is the perceived world outside. Thus the world is continually interpreted using ideas whose source is ultimately the perceived world itself, in a process of mutual creation like that below. As human beings we enact this process every day, usually unconsciously. (p20)

Consider the following diagrammatic summary by Kenny on some of the similarities and differences in the constructivist/unfoldment paradigms[1]:
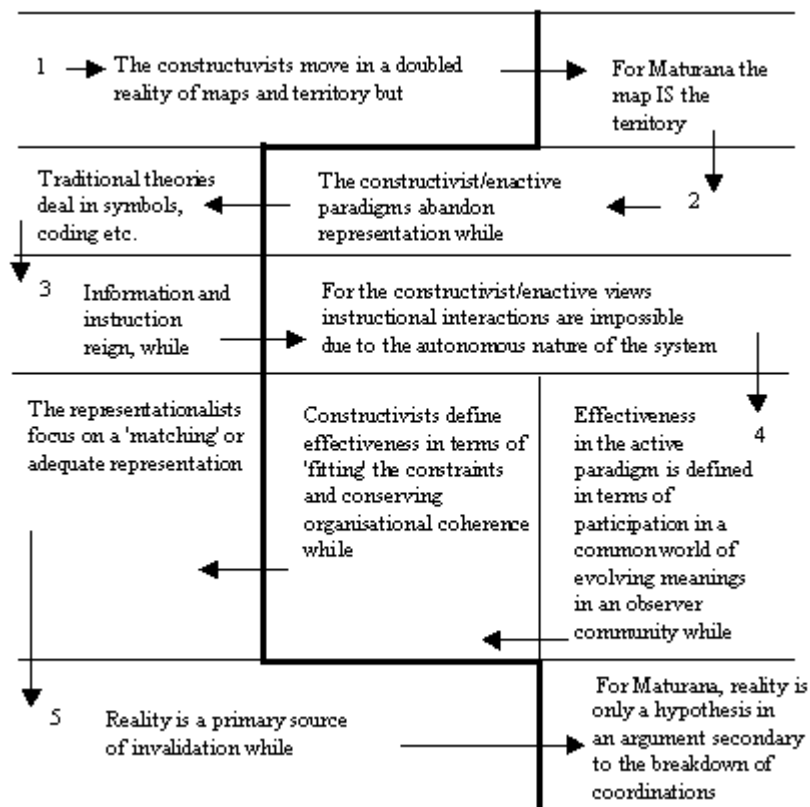
In these terms, Checkland is fairly clearly setting himself up as a representationalist:

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[1] From Constructions of Self-Organising Systems. Vincent Kenny and Georgianna Gardner. The Irish Journal of Psychotherapy, 1988, 9, 1, 1-24.
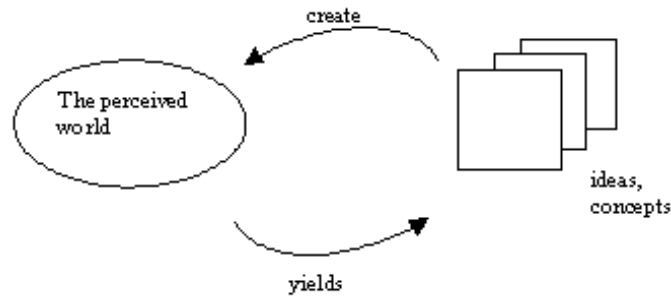
He goes on to say:

> "But if we now add the thought that thanks to our human nature we are able consciously to think about our own mental processes, we arrive at the figure below in which the ideas (x in the illustration) are used in some Methodology, M, to interpret perceived reality."

It is the same basic set-up, except that the ideas are now codified by a Methodology:

Checkland's move is now to make the framework of ideas and concepts of the
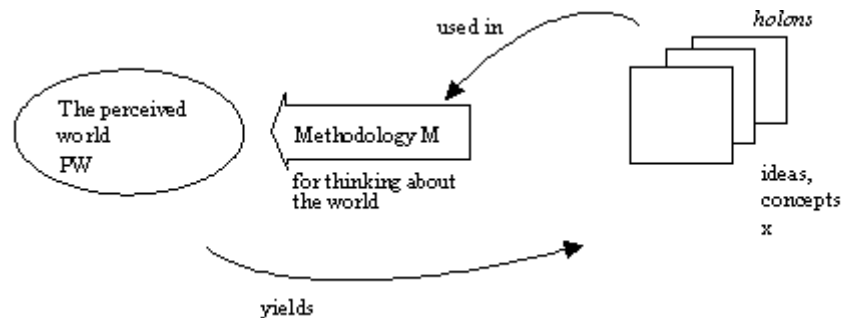
observer, insofar as they describe a whole, holons, to distinguish them from "systems" which are to be found in the perceived world (PW). This then results in two schools in the systems movement:

- that which takes the world to be holonic ('hard systems thinking'); and
- that which creates the process of enquiry as a holon.

Checkland then goes on to say:

> "The whats and hows of the improvement will all need attention, as will consideration of through whose eyes 'improvement' is to be judged. The situation itself, being part of human affairs, will be a product of a particular history, a history of which there will always be more than one account.... We are not indifferent to the logic of situations, but are concerned to go beyond it to enable action to be taken in the full idiosyncratic context of the situation, which will always reveal some unique features."

The approach, then, is not only concerned with comparing the models of perceptions of the part of the real world being examined. These comparisons serve to structure a debate about change. What is looked for in the debate is the emergence of some changes which could be implemented in the real world and which would represent an accommodation between different interests. In terms of the following table, SSM is aimed at opening up a dialogue about what is inside the box, constrained by the real world:

Priority to the PW	Priority to the M	Priority to the observer
hard systems thinking	soft systems thinking	cultural analysis

This makes it possible to use SSM as part of a constructivist/enactive paradigm.

But does the way in which M faces two ways make this easy? If we remember Maturana's representation of an autonomous system,

and the notion of languaging as a 3rd order closure (operational and cognitive being
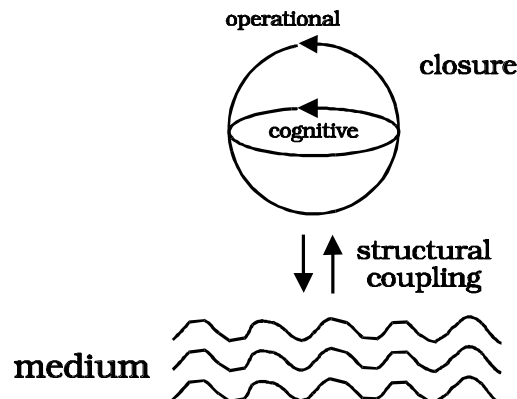
1st and 2nd order) defined in relation to the "co-ontogenic drift" of such systems in relation to each other,
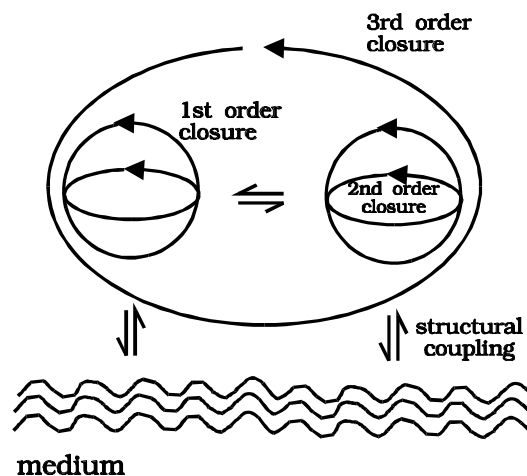
then this separation between M and the observer is less radical than the approach of Maturana, which would make M constitutive of the observer-position itself - an intervention on languaging[2].

So two questions arise:

- does M have a methodological bias towards facing one way more than the other[3]; and

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[2] rather than vice versa. The notion that M is constitutive of the observer is the reverse of Checkland's schematic, in which the observer constitutes M.

[3] i.e. towards 'reality' rather than towards problematising the observer.

- what are the implications of seeing SSM as an intervention on languaging and the constitution of the observer-position itself?

To a large extent, the answer to the first question will lead us to formulate the terms in which the second question can be asked.

The SSM methodology

The 'logic-based' enquiry comes 'off' either a primary-task system, or an issue-based system. Again this echoes the distinction between:

- primary task (closure conserving task); and
- primary anxiety (experience of the possibility of the loss of fit)

and their dual nature within the Maturana-esque approach to systems. The special importance attached to naming the system in terms of a root definition anchors the SSM definition of the system to the observer. Here the emphasis placed on a core purpose being defined in terms of a transformation process also anchors the definition in relation to the PR. the full root definition is in terms of CATWOE:

- Customers   the victims or beneficiaries of T
- Actors   those who would do T
- Transformation process   the conversion of input to output
- Weltanschauung   the worldview which makes this T meaningful in context
- Owners   those who could stop T
- Environmental constraints   elements outside the system which it takes as given.

Putting these back in terms of the earlier definition of SSM, we get the following:

Priority to the PW	Priority to the M	Priority to the observer
hard systems thinking	soft systems thinking	cultural analysis
	CATWOE	Weltanschauung

In finally describing the process of comparing models with perceived reality, the approaches of scenario writing and modelling provide a means of checking for Type I and Type II errors:

| Error	Description	Model	Situation	Operation
Type I	Inconsistency	✓	✓	✗
Type II	Incompleteness	✓	✗	✓
Type III	Inappropriateness	✗	✓	✓

This leaves us with two questions:

- But how does the process pick up on a Type III error?
- How does the Weltanschauung affect the basis of the cultural enquiry?

The Cultural Enquiry depends on users achieving a level of comfort with the SSM methodology so that "rich pictures" begin to emerge as characterisations of the effects of applying different Weltanschauung's. Considering the intervention in terms of the impact on different roles is also suggested:

- the client
- the problem-solver
- the problem owner

Interesting here is the importance attached to using the language of SSM with "unusually careful rigour". Now we are beginning to get back to the same problems we were discovering with Schein in terms of consultants, client systems and sponsors:
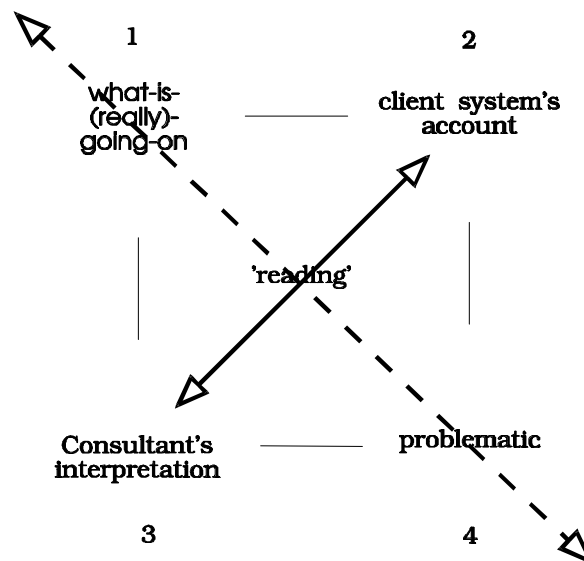
with the problem owner qua sponsor holding the ceiling on the problematic, the consultant in the place of problem-solver, and the client system as client. The careful rigour in this assumes that the problem-solver is able to establish a degree of obedience (power) to the methodology.....

At this stage, SSM is getting to be an increasingly 'black' art:

- Analysis 2, looking at the interactions of Roles, Norms and Values, is effectively seeking to elaborate the specific incarnation and effects of the Weltanschauung; and
- Analysis 3, looking at the politics - the currency of power in the organisation:
  - ° What are the commodities through which power is expressed in the situation?
  - ° How are these commodities obtained, used, protected, preserved, passed on, relinquished?
  - ° Through what mechanisms?

To try and answer the question concerning the bias of the methodology: the way in which it is articulated is very much biased toward the PR/Analysis 1. In effect, Analysis 2 and Analysis 3 are referring to 2nd and 3rd orders of systems, but the nature of these higher orders of analysis are not dealt with explicitly.

As an intervention of languaging, it seems to be very much a 2^0 intervention - the guru position in which the language of the consultant qua M is privileged. It is the same conclusion as we reached with Schein.