Systems Thinking

TOOLS OF A SYSTEM THINKER
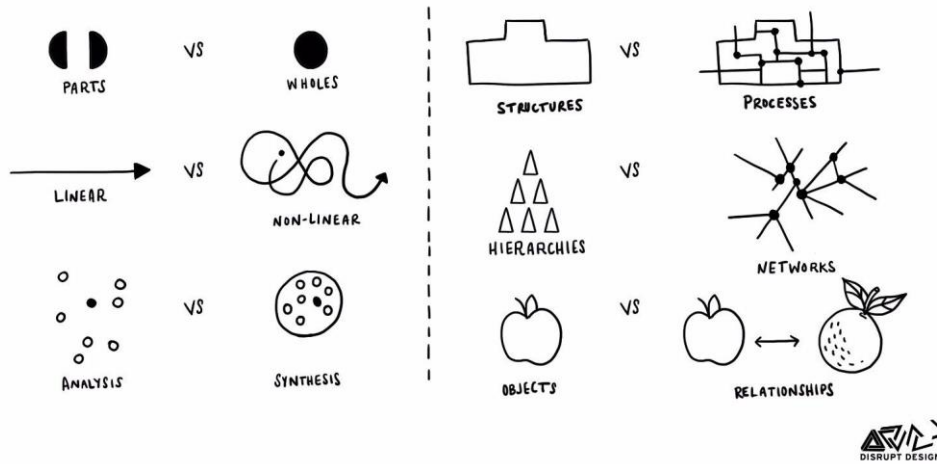
PARTS vs WHOLES

LINEAR vs NON-LINEAR

ANALYSIS vs SYNTHESIS

STRUCTURES vs PROCESSES

HIERARCHIES vs NETWORKS

OBJECTS vs RELATIONSHIPS

DISRUPT DESIGN

Contents

Welcome

This is our second communication, so we have learned a few things from our first go. Our electronic mailing stats showed we had 35.9% unique clicks. This is apparently good for a mailout, but we have a highly committed group of recipients, so we think we should be able to do better. We would also like to overcome ending up in junk mail or classified as spam (how ignominious!)

To assist, we have started a LinkedIn group to engage more effectively. We will gradually post elements of this newsletter over the coming period.   If you haven't joined already, you can go to the following link and request to join.   https://www.linkedin.com/groups/10508364/

In 'Classic Theory Discussion' we have a look at:
a. 2019 framework for how complexity/systems theory relate.
b. Soft Systems Methodology review (Peter Checkland & Poulter, 2006)

In the Systems Theory and Evaluation we have:
a. The necessary characteristics of collective impact using a systems change approach
b. Describing a system for evaluation

In the ideas section we chose common tools that are also part of SSM:
a. How to use Rich Pictures
b. Conducting Root Cause Analysis

Next time we will try another theorist on Brian Castellani's 2018 Map of Complexity Sciences
https://www.linkedin.com/feed/update/urn:li:activity:6622358795085549568

 Lewe
Ralph
Brian

PS. Dr Ralph Renger is conducting a systems workshop in Melbourne March 11, 2020. Use the following links if you are interested. This is a workshop he put on at the American Evaluation Association Conference in 2019. The content is geared toward novice and intermediate evaluators. If you have questions, about exactly what Ralph will be covering or topics you might like to have covered, contact him directly at ralph@justevaluation.com

- For the workshop flyer: https://hainescentreaustralia.com.au/wp-content/uploads/2019/12/Workshop-Newsletter-Ralph_eDM03.pdf

- Register here: https://hainescentreaustralia.com.au/registration/ ; Scroll to bottom of page to enter your details and then they'll send you a confirmation email and invoice.

Classic Theory Discussion

These are the foundation ideas. We have two classic theories, one new and one old, to cover the system temporal spectrum.

A. Complexity Theory/Systems Relationship (new)

In the last newsletter there was considerable discussion around systems theory versus the complexity sciences. However, integral to complexity theory is a 'systems' understanding of the situation. **Julie Elliott** has contributed a solution!

To bring the parties together, we are exploring the latest research (2019) from Collaborate CIC – a thinktank in England, and Newcastle Business School (Northumbria University). Collaborate CIC aims to help public services collaborate to tackle complex social challenges. Obviously very brave people.

The following diagram gives an outline:
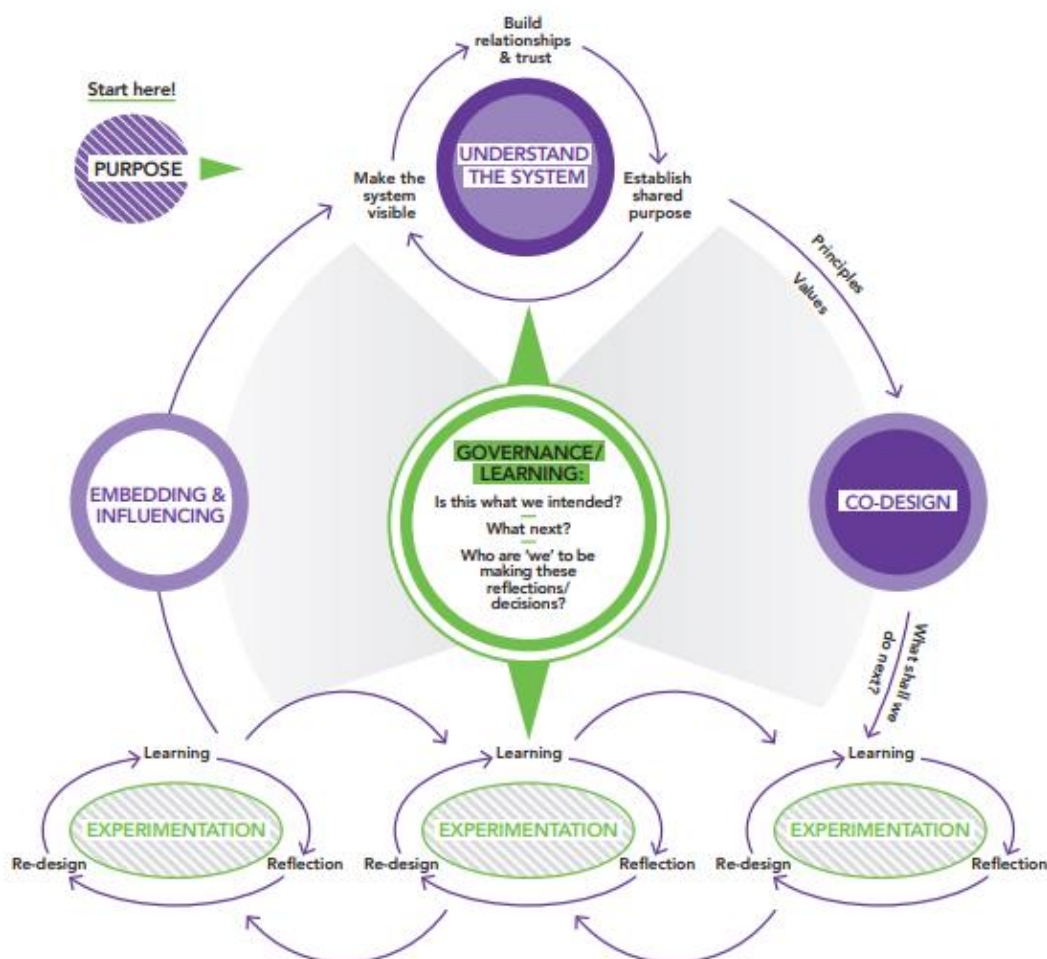
Lowe, T., Plimmer, D., "Exploring the new world: Practical insights for funding, commissioning and managing complexity" 2019
http://wordpress.collaboratei.com/wp-content/uploads/1.-Exploring-the-New-World-Report-MAIN-FINAL.pdf

Each circle (except for 'purpose') is a system itself. If you want to dive further, the links are above.

B. Soft Systems Methodology (old) - SSM

The two main people involved in the development of this methodology are Peter Checkland[1] and Brian Wilson[2]. They used 'action research' to identify and solve 'ill-defined' problems.

A summary of the methodology is given below:

Source: https://www.burgehugheswalsh.co.uk/Uploaded/1/Documents/Soft-Systems-Methodology.pdf
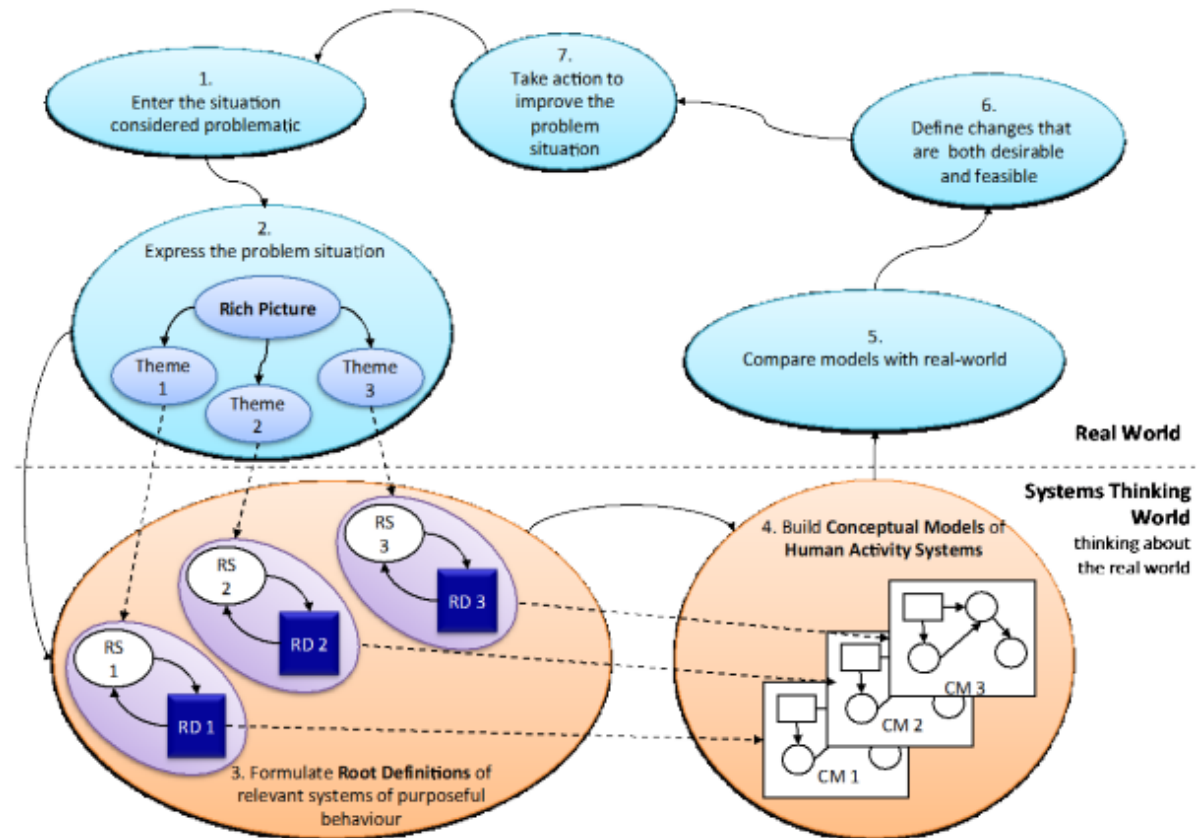
The three elements we will explore further in the newsletter are rich pictures, root cause and building conceptual models of Human Activity Systems.

The following link is to an easy explanation of SSM, and it only lasts for about 8 minutes. https://youtu.be/TWctDGpefOM.

If you want to try more depth, a deep dive is provided in "Soft Systems Methodology: A Thirty Year Retrospective" see at the link below.

http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.395.556&rep=rep1&type=pdf

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[1] Checkland, P.B. & Poulter, J. (2006) Learning for Action: A short definitive account of Soft Systems Methodology and its use for Practitioners, teachers and Students, Wiley, Chichester. ISBN 0-470-02554-9

[2] Wilson, B. and van Haperen, K. (2015) Soft Systems Thinking, Methodology and the Management of Change (including the history of the systems engineering department at Lancaster University), London: Palgrave MacMillan. ISBN 978-1-137-43268-1.

Systems Theory and Evaluation

A. Collective Impact

Dr Lewe Atkinson, from Brisbane, is the Chairperson of Kelvin Grove Community Commerce Association (amongst many other things). He is passionately interested in collective impact.

He uses a systems approach to answer these questions:
   a. How can communities most effectively achieve collective impact?
   b. How do open living system characteristics deepen this understanding?

Lewe takes five characteristics necessary for collective impact, then links these to twelve characteristics of open living systems.

If you are about to evaluate collective impact, this is a great place to start.

https://i2insights.org/2019/05/21/collective-impact-and-open-living-systems/

B. A Framework to Describe Systems

The two models in 'Classic Theory' above both outlined a step of 'understanding the system' and 'building a model of conceptual systems'.

Dr Ralph Renger has provided a simple way to do just that. He has written an article which provides a guiding framework for evaluators to conduct systems evaluation. This was published in the Evaluation Journal of Australasia at the end of 2015.

"Systems evaluation theory (SET): A practical framework for evaluators to meet the challenges of system evaluation" [3] v15, issue: 4, pp 16-28
https://journals.sagepub.com/doi/abs/10.1177/1035719X1501500403

I couldn't find a non-paying copy online. I am sure Ralph will be happy to send you a copy. Contact him directly at ralph@justevaluation.com

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[3] Renger, R.,(2015) "Systems evaluation theory (SET): A practical framework for evaluators to meet the challenges of system evaluation" v15, Issue 4, pp 16-28

Ideas

A. Rich Pictures

The second step in SSM is understanding the situation using 'rich pictures'. This approach is used because pictures and diagrams can pack more information into a smaller area. This makes visibility of the system clearer.

The picture creation means discussion on differences of interpretation, agreement to be reached, and inspiration around what systems could be modelled.

We found the following outline (see link below). This is related to a business analysis, but is easily applied to understanding an evaluation situation.

https://www.youtube.com/watch?v=39Wc5ACx5v4

Rich pictures in evaluation is discussed in some depth in the following e-book.

http://pragmatica.nz/wp-content/uploads/pragmatica-nz/sites/326/150716-Rich-pictures-in-evaluation-vxx.pdf

B. Root Cause Analysis

In this context of the theories in this newsletter, Root Cause Analysis is great for getting to the essential systems central to the situation at hand.

In the SSM model, this fits in around step 3-"Formulate Root Definitions of relevant systems of purposeful behaviour". In the framework for Complexity Theory/Systems Relationships, Root Cause Analysis save effort in understanding the system. You get to the critical ones, and diminish the importance of the rest.

The article "Using Root Cause Analysis For Evaluating Program Improvement"[4] illustrates the application of root cause analysis in evaluating program improvement.

You can access it at the following, really, really long, link (and its free!):

https://moodle.publichealth.arizona.edu/pluginfile.php/1890/mod_resource/content/0/Coskun%2C%20R.%2C%20Akande%2C%20A.%2C%20%20Renger%2C%20R.%20Using%20Root%20Cause%20Analysis%20for%20Evalu....pdf

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[4] Coskun, R., Akande, A. & Renger, R., "Using root cause analysis for evaluating program improvement" Evaluation Journal of Australasia, Vol. 12, No. 2, 2012, pp. 4–14

Here are some recent articles:

These are both readily accessible (eg. click through to read):

Nelson, A et al (2019) 'Using a complex adaptive systems perspective to illuminate the concept of evaluation capacity building in a network', American Journal of Evaluation, V 40(2) 214-230.

https://journals.sagepub.com/doi/pdf/10.1177/1098214018773877

Lowe, T., Plimmer, D., "Exploring the new world: Practical insights for funding, commissioning and managing complexity" 2019 http://wordpress.collaboratei.com/wp-content/uploads/1.-Exploring-the-New-World-Report-MAIN-FINAL.pdf

These articles are hot off the press, and **Julie** is still at the forefront as part of her research.

Controversy Corner

"I'm still finding much of the systems research to which evaluators point as basically useless, because no one is showing me how they applied whatever theoretical construct they purport to be the systems rosetta stone in actual practice. A lotta of yada yada yada (https://en.wikipedia.org/wiki/The_Yada_Yada).

I've repeatedly asked for concrete examples and no one has provided me an example of where they applied it an evaluation they did.

Knowledge acquired through research is only useful if we can use it. I would like to see examples of where evaluators who espouse systems walk the talk. If such examples do exist then I would suggest we as a group pull them together, each write a chapter about how we applied systems concepts/theory/thinking in practice, and submit a special edition for publication."

(Ralph Renger, January 2020)

Biographies and gossip

These are the people contributing to the first newsletter:

i.   Julie(Elliott)

Julie is best known as Executive Producer on the zombie apocalypse movie "Me and My Mates Vs the Zombie Apocalypse" (2014).

Julie Elliott is also a PhD student at the School of Media and Communication, RMIT University. Her research project is 'Developing Complexity-congruent evaluation theory and practice.'

Contact: julie.jcelliott@gmail.com

ii.   Greg(Masters)

Greg describes himself as a scary bald bloke. He couldn't contribute this time…something about holidays!

Greg also runs Nexus Management Consulting (Sydney). This very successful consulting firm specialises in strategic planning, program evaluation and management review to help organisations change for the better.
Contact: gmasters@nexusmc.com

iii.   Lewe (Atkinson)

Lewe likes to wear Hawaiian shirts and play the banjo.

Lewe is also the powerhouse behind Haines Centre for Strategic Management (Brisbane). He lives and breathes systems thinking – and is always working towards the practical application of system thinking principles to business (and government) sustainability.
Contact: lewis@hainescentreasia.com

iv.   Ralph (Renger)

Ralph's daughters refer to him as 'the arrow' because of his hair style.

Ralph has published over seventy articles in academic journals, and taught systems for more years than he can remember. For the last thirty years he has presented to conferences around the world.

Contact: ralph@justevaluation.com

v.   Brian (Keogh)

Brian has recently found out his name is most well-known as a dog's name because of bravery during WW11. The book '**The Amazing Adventures Of Bing The Parachuting Dog"** was published in 2012 (they changed Brian's name to Bing!!!)

He has a company 'Cobalt59' with a lovely person called Julieanne, and he likes working with the people above.
Contact: briankeogh@icloud.com