

UK Chapter SD Society Annual Gathering

Thinking about Learning to Think

(supporting emerging modellers)

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Thinking about Learning / Supporting Learners

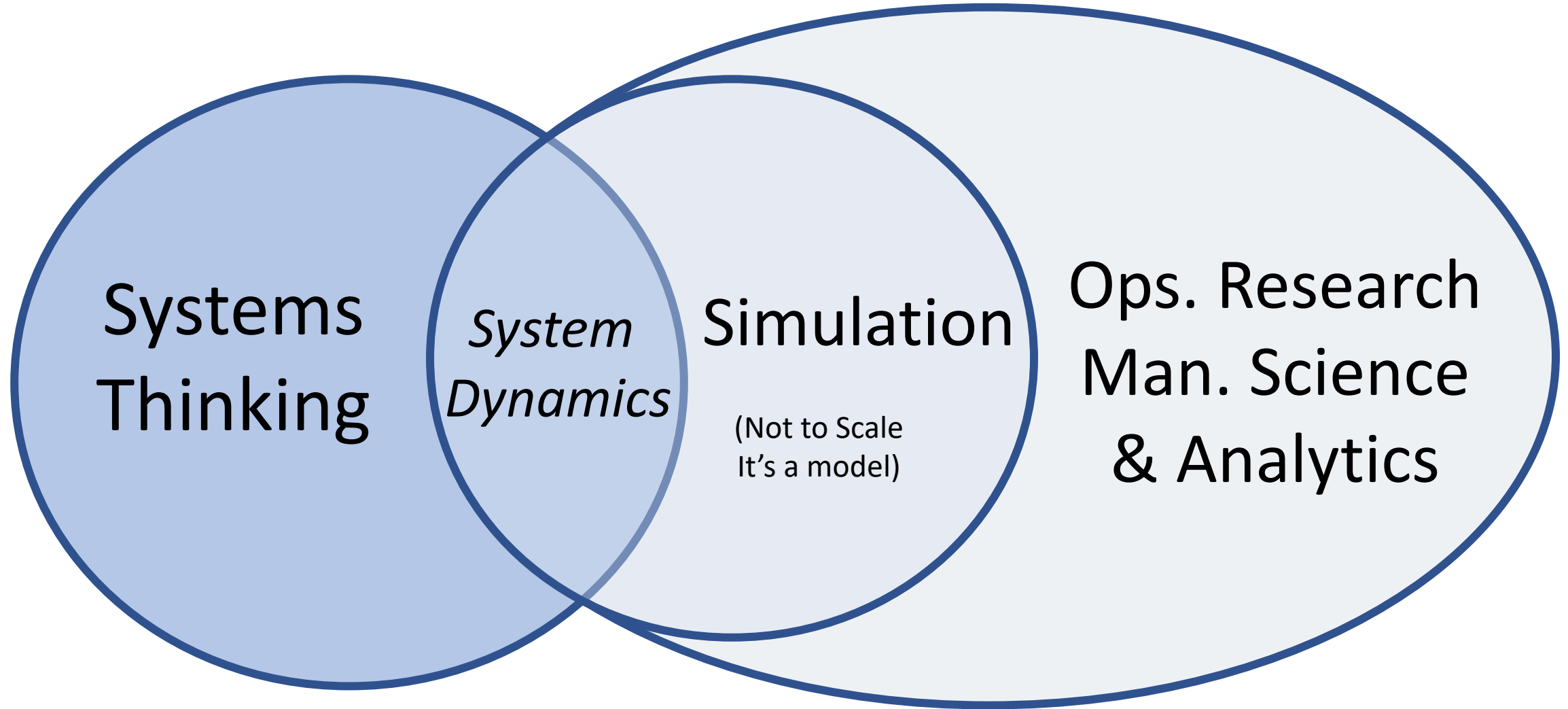
- What System Dynamics is or might be (in the shallows)
- Particular needs of, and expectations placed on
 - Analysts in the health and social care domain
- Mapping the SD Workforce
- Where learners come from
 - When and how did you learn?
- How do we
 - Develop the field
 - Support learners

“I am often asked by prospective clients, ‘What’s so great about System Dynamics? What will my organisation get that we can’t get from other, more familiar, methods of strategic planning and analysis?’ I tell them that System Dynamics is the one method that will allow them to

- make all of their assumptions explicit
- integrate them in a logical and testable way
- challenge the assumptions
- provide a broader perspective
- put clients in a better position to make decisions that will stand the test of time.”

Focus on System Dynamics Simulation

- Needs of health sector
- Particular focus on modelling practice using SIMULATION
- Not to say that other aspects of System Dynamics and Systems Thinking are unimportant, just that Simulation is currently what we are being asked for
- And clearly System Dynamics simulation needs to be combined with other skills and practices in order to reach its maximum potential
- (good facilitation, problem elicitation, data analysis and statistics, domain expertise, other parts of OR / Management Science, etc.)



Systems
Thinking

*System
Dynamics*

Simulation

(Not to Scale
It's a model)

Ops. Research
Man. Science
& Analytics

When Analysts Become Synthesisers

Data Analysis

- Start with data
- Data comes from what has already happened
- The truth is in there
- Manager asks me questions
- Manager delegates
- “Go on a course then come back and tell me the answer”

Modelling (Synthesis)

- Start with structure
- Structure tells us what data we might need
- The truth is out there
- I’ll ask the questions thanks
- Managers must engage
- Go on a course and return with greater curiosity

To put it another way

- Analysts analyse, look inside something and discover what it is made of
- Modellers synthesise, bring diverse kinds of evidence into a coherent whole, and try to reproduce or replicate key aspects of its complexity
- Importance of connections (including feedback)

Integration, Integration, Integration

- In Health and Social Care, Integration has been a theme for decades
- In England, the current way of doing this is through
INTEGRATED CARE SYSTEMS
(bringing health and social care agencies together)
- System Dynamics is an ideal way of helping achieve this
- System Dynamics models are actually Integrators
(as it happens)
- Focus on Integration and Coherence
- And helping people to think

<https://bit.ly/SDworkforces>

How Did You Discover System Dynamics? (when it became significant for you)

- Undergraduate study
- Postgraduate study
- Working in Academia
- Early career
- Mid career
- Late career

FLOW: Your Current Context

- Undergraduate study
- Postgraduate study
- Working in Academia
- Early career
- Mid career
- Late career
- Can you see yourself on the map?
- What sustains you as an SD modeller?
- What more would sustain you?
- What are the implications for people new to System Dynamics
- How to keep them flowing in and not flowing out?

Networking: Maybe not Stocks for a Moment

- In your current groups, allocate each person a number (1, 2, or 3)
- Tell your new colleagues something about
 - How you discovered SD
 - What sustains you as an SD modeller
 - What more could sustain you
- What new possibilities can you imagine?