

## **BNWS: A book review primer: ‘Thinking in Systems’ by Donella H. Meadows**

In the proceeding short book review (these three words can be correctly interpreted in at least two ways) it is important to bare firmly in mind the novel experimentation which is being carried out. An easily overlooked two-word phrase, ‘A PRIMER’, features front and centre beneath the books main title. Upon noticing, and having yet to finish the introduction, I wondered immediately: ‘Has anyone ever written a primer to an entire literature of book reviews?’ And so, quite simply, the world’s first book review primer was under way.

Donella H. Meadows, lead author of ‘Limits to Growth’, authored the scintillating synapse stimulation that is ‘Thinking in Systems’ in 1993. To take on the approach to the world as an endless web of interdependent processes is not without considerable prior efforts. Meadows superbly sketches a historical perspective which she summarises as a sort of ‘transcendence’, noting her influences from the likes of Einstein or E. F. Schumacher to the Sufis of the Middle East.

A natural question as one finishes reading the Author’s and Editor’s Notes to arise might be, ‘Fine, cheers guys, but what is it to think in terms of complex systems?’ Perhaps the following quote from the introduction, titled ‘Introduction: The System Lens’, might shed some proverbial light:

‘Managers are not confronted with problems that are independent of each other, but with dynamic situations that consist of complex systems of changing problems that interact with each other. I call such situations messes...  
Managers do not solve problems, they manage messes.’

— Russell Ackoff, operations theorist

Or, perhaps, for the ultimate primer to this book, a glimpse at how Meadows seeks to define a system: ‘A system is a set of things - people, cells, molecules, or whatever - interconnected in such a way that they produce their own pattern of behaviour over time.’ A simple definition, perhaps obvious, can give rise to a perspective not tied down by static and oversimplified interpretations of a dynamic and endlessly complex world.

I wonder, as we discuss simple questions in a massively oversimplified addressal of, for example, the macroeconomy, what might we have eroded away or perhaps never even bothered paying attention to in our attempts to understand such a powerful and fundamental system? How important might such eroded or ignored things be to its ever-developing structure?

So, before having finished reading the introduction to ‘Thinking in Systems’, I find myself beginning to think in systems.

I finish with a quote from Robert Pirsig, found in ‘Zen and the Art of Motorcycle Maintenance’:

‘If a factory is torn down but the rationality which produced it is left standing, then that rationality will simply produce another factory. If a revolution destroys a government, but the systematic patterns of thought that produced that government are left intact, then those patterns will repeat themselves...

There’s so much talk about the system. And so little understanding.’