

'The most radical thing any of us can do at this time is to be fully present to what is happening in the world.' (Joanna Macy)

The pledges to reduce greenhouse gas emissions that have been made so far by countries ahead of the COP20 climate change summit are not sufficient to avoid dangerous global warming of more than 2 degrees centigrade, according to an analysis published by the Grantham Research Institute on Climate Change and the Environment, and the ESRC Centre for Climate Change Economics and Policy at the London School of Economics and Political Science.

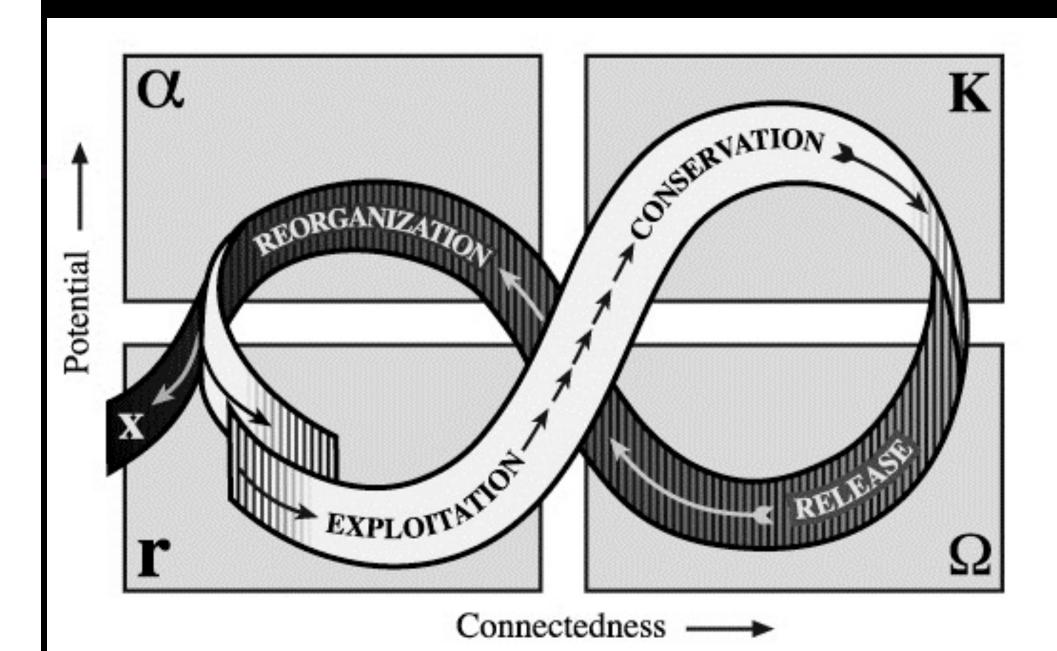
A paper describing the analysis concludes that the intended national determined contributions that had been submitted by 20 July 2015, by 46 countries, to the secretariat of the United Nations Framework Convention on Climate Change, would lead to annual global emissions in 2030 of 56.9 to 59.1 billion tonnes of carbon dioxide equivalent.

While this total is much less than a 'business as usual' pathway that would mean emissions reach 68 billion tonnes of carbon dioxide equivalent by 2030, it is much higher than the 36 billion tonnes that the United Nations Environment Programme has indicated would be consistent with having a 50 to 66 per cent chance of avoiding a rise in global average temperature of more than 2 degrees centigrade above its pre-industrial level.

## Resilience as different aspects of stability

- Engineering
- Efficiency
- Constancy
- Predictability
- $\blacksquare$  Control
- Fail-safe design
- Optimal function
- Near equilibrium
- Resist disturbance
- Recovery

- Ecological
- Persistence
- Change
- Unpredictability
- Adaptability
- Variability
- Evolutionary
- Far from equilibrium
- Flip to another regime

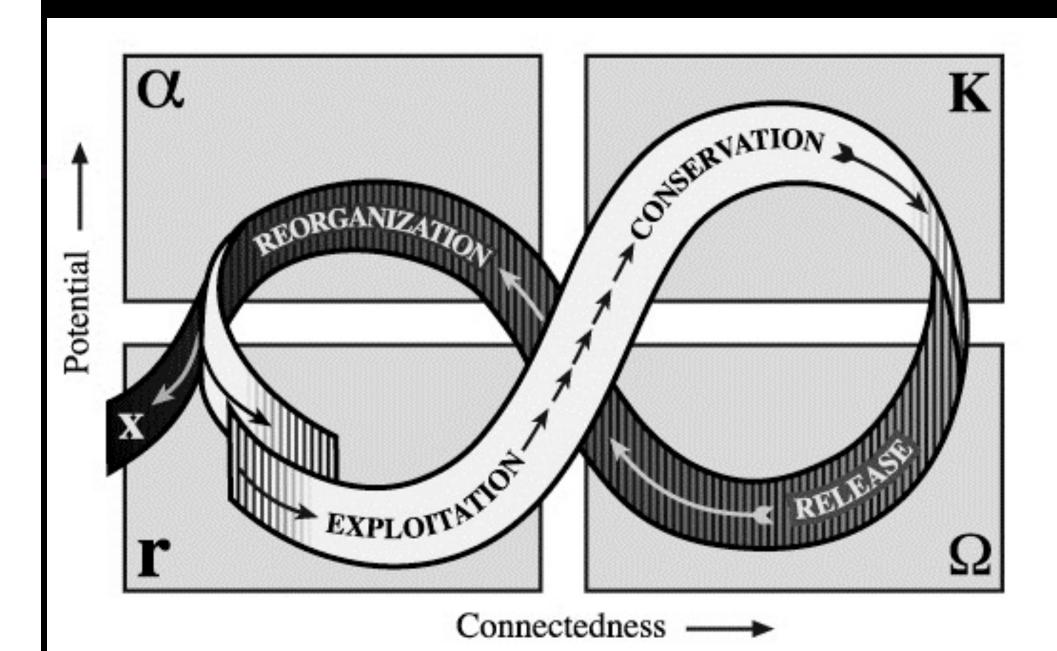


Source: Panarchy, 2002, p. 34.

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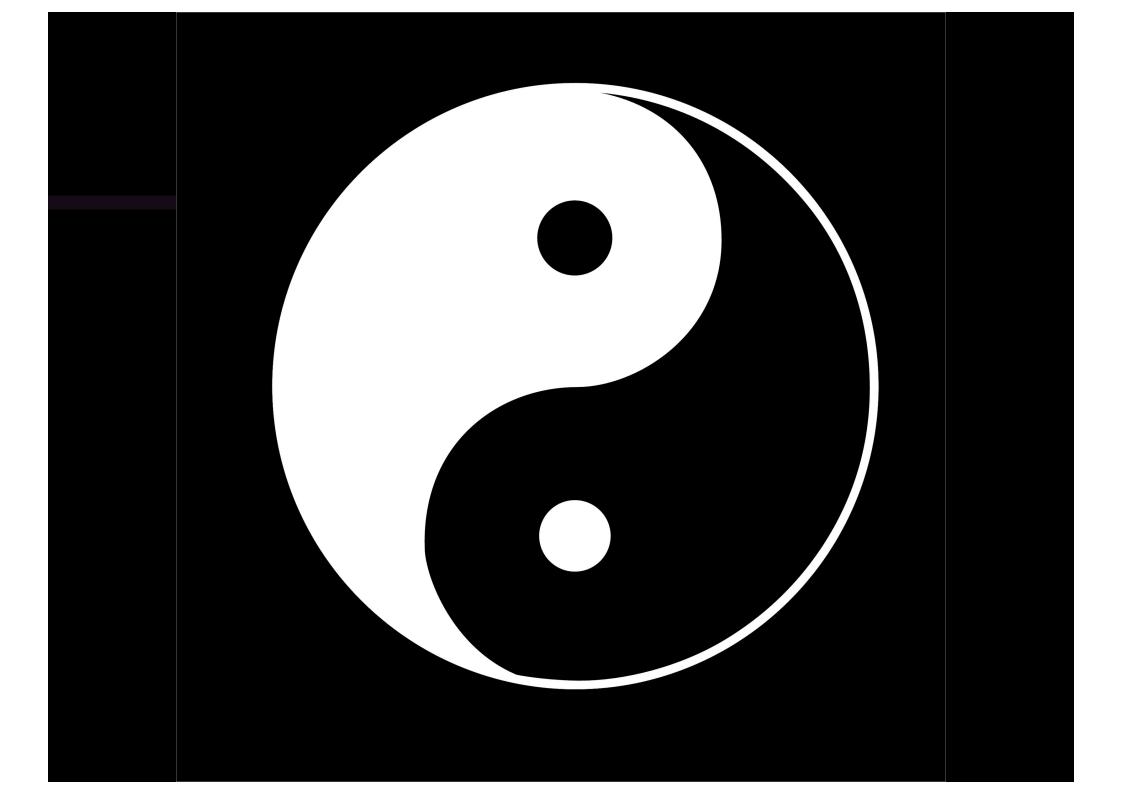
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The most moral act of all is the creation of space for life to move onwards' (Robert Pirsig)

• Rta: the dynamic process, by which the whole cosmos continues to be created virtuously.



## Making space for life The most moral act of all Time to move onwards