Ralph Stacey - on Systems thinking and his notion of Transformative causality.

Causality of certainty vs. Uncertainity

- Certainty
  - Efficient.
  - Rational
  - Formative
- Uncertainty
  - Adaptionist
  - Transformative

Causality of certainty

- **Efficient Causality -** takes the if-then structure If X then Y

- **Rational Causality** – a person is free to make rational choices.

Causality of certainty

- **Formative Causality –** only things that are enfolded within the system can emerge. Eg. Flowers, seeds,

- Nothing novel can emerge.

Formative Causality

Causality of uncertainty

- **Adaptionist Causality –** similar to evolution. Unpredictable small changes in genes bring about new species.

Causality of uncertainty

- **Transformative Causality –** "entities are forming patterns of interactions and at the same time, that they are being formed by these patterns of interactions

Systems Theory

- "a set of interdependent parts that form a whole (Cummings and Worley 2008: 676)".

- According to Stacey, there are generally 3 ways of understanding systems theory:
  - General systems theory,
  - Cybernetic systems and
  - Systems dynamics.

General Systems Theory

- Systems tend toward
  - stability or adapted equilibrium.
  - Systems maintain their stability only if they are open to interactions with other systems through permeable boundaries (Stacey 2007: 35).

Cybernetic Systems Theorists

- Argue that systems are self-regulating, goal directed arrangements that adapt to their environments.
- They use examples like self-regulating heating systems, which detect the temperature outside the system and adjust to fill the temperature gap.

Systems dynamic Theorists

- systems are not necessarily self-regulating but may be self-sustaining or self-destructive (Stacey 2007).

Systems theories affect on Management

- Organizations are goal-seeking systems and it is these goals that drive their actions.
- Organizations are sub systems of supra systems.

Stacey's critique

- Within the context of Organizations these arguments use efficient and formative explanations to explain transformation.

Stacey's critique

- Refers to causality in which the interaction of local entities form wider patterns, while simultaneously forming the entity itself.
- For Stacey, only transformative causality is able to explain novelty and creativity (Stacey 2010).

Stacey's critique

- This bounded state implies that things outside this boundary do not affect processes within the boundary.

Stacey on bounded states of stability and instablity

- System theories automatically place organizations within a bounded state of stability or instability (Stacey 1985).

Reductionist assumption

- Leverage Points
- Stepping out the system.

Stacey on bounded states of stability and instablity

- Presents organizations as achieving some goal.

- Instead he proposes "thinking of a system 'as if' it were a system operating 'as if' it had a purpose (Stacey 2007: 30).

Systems and Organizations

- Stacey draws on Kant and argues that knowledge of reality was important but impossible.

- He upholds a 'both ..... and" perspective that knowledge was both real and reliable but knowledge of reality was impossible

THE END