From One – dimension for the research and innovation to Two – the role of sustainability considerations

Uno Svedin,

Professor, Stockholm University

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ON ANALOGIES

- The TRL (Technology Readiness Levels) scale and what issues you can deal with under that dimension (1-9).

- Innovation ripeness

- Technology perspective

- Instrumental need – e.g. evaluation

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- What about a sustainability dimension added?

A SUSTAINABILITY DIMENSION

- Why?
- What more can you see if you introduce such a variable and expand the landscape from one to two dimensions – a perceptual landscape.
- The greening challenge of bioeconomy.
- On issues that are importantT

THUS TO COMBINE – 2 DIM.

- The concern for the degree of maturity of innovation solutions

- With

- Concern for a focus on sustainability considerations

- i.e. a thematic and normative concern dimension

THE SUSTAINABILITY SCALE

- Fully SD oriented as main objective
- Developed with SD concerns as integrated part of the concept
- Oriented towards SD in principle, but not developed
- Not specifically targeted towards SD, but optional and possible in principle
- Not oriented towards SD, but SD neutral
- De facto SD antagonistic, although not as aim, but more as non concern (e.g. res on coal burners for energy purposes)

THE INSTITUTIONAL LANDSCAPE – 2 DIM.

- High SD

    - Low innovation ----------------------- High innovation
      maturity/focus   maturity/focus

- Low SD

What can we see in this landscape of institutional characterisations ?

- Aims of institutional operations (business idea) (research – practical application)
- Maturity of solution issues
- Considerations of directions of interest (as NASA technology aims vs. water systems for the poor in Africa)
- Degree of green SD concerns
- Possible development paths/understanding of such dynamics

OBS IMPLICIT UNDERLYING ASSUMPTIONS

- On directions of interest

and

- Process understanding (e.g. how to understand the linear innovation model in such a scheme…..)

WHY COMPLICATIONS?

- SD is not sufficiently important?
- SD dimension different than maturity of innovation dimension – difficult to mix?
- SD has not perhaps yet stabilized an operational profile – criterias?
- The interdisciplinary/trans-disciplinary nature of SD
- The normative nature of SD
- Quality/quantity differences
- Systems and elements treated differently

SUGGESTION

- Different knowledge communities have very different traditions

- Different world views

- Different ways of applying focus

- Different ways of mixing conditionalities and posing systems boundaries

- Different operational purposes