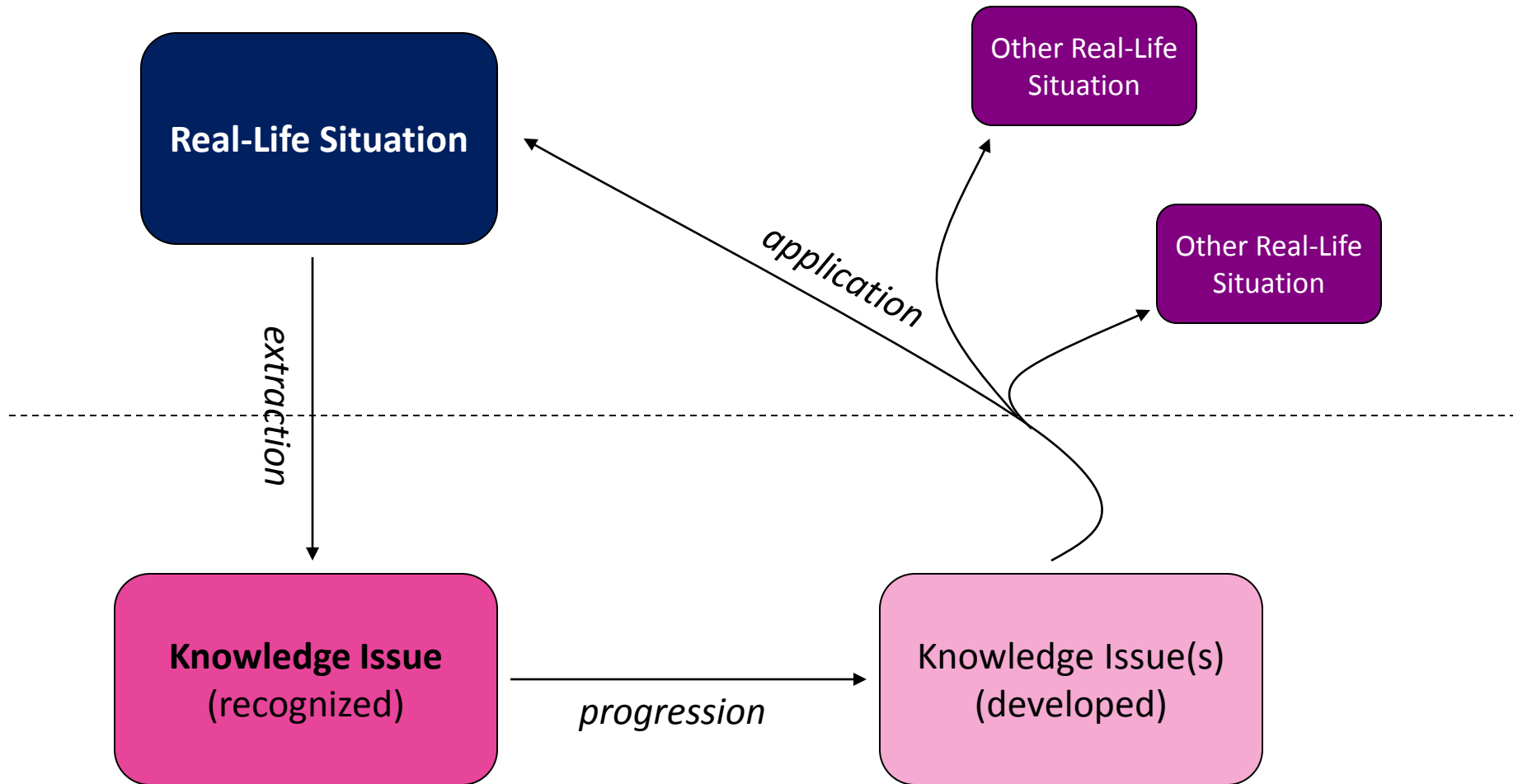


Theory of Knowledge

Presentations

Theory of Knowledge: Presentation Structure



Presentation 1

SCIENCE AND PREDICTION

Presentation 1: Science and Prediction

REAL LIFE SITUATION

**The 2004 Indian
Ocean tsunami and
the location of
its epicentre**

Presentation 1: Science and Prediction

REAL LIFE SITUATION

The 2004 Indian Ocean tsunami and the location of its epicentre



KNOWLEDGE ISSUE

To what extent does prediction test the validity of a scientific theory?

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Extraction

Presentation 1: Science and Prediction

REAL LIFE SITUATION

The 2004 Indian Ocean tsunami and the location of its epicentre



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General nature of scientific theory

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Geology: tectonic theory as an explanation for continental drift

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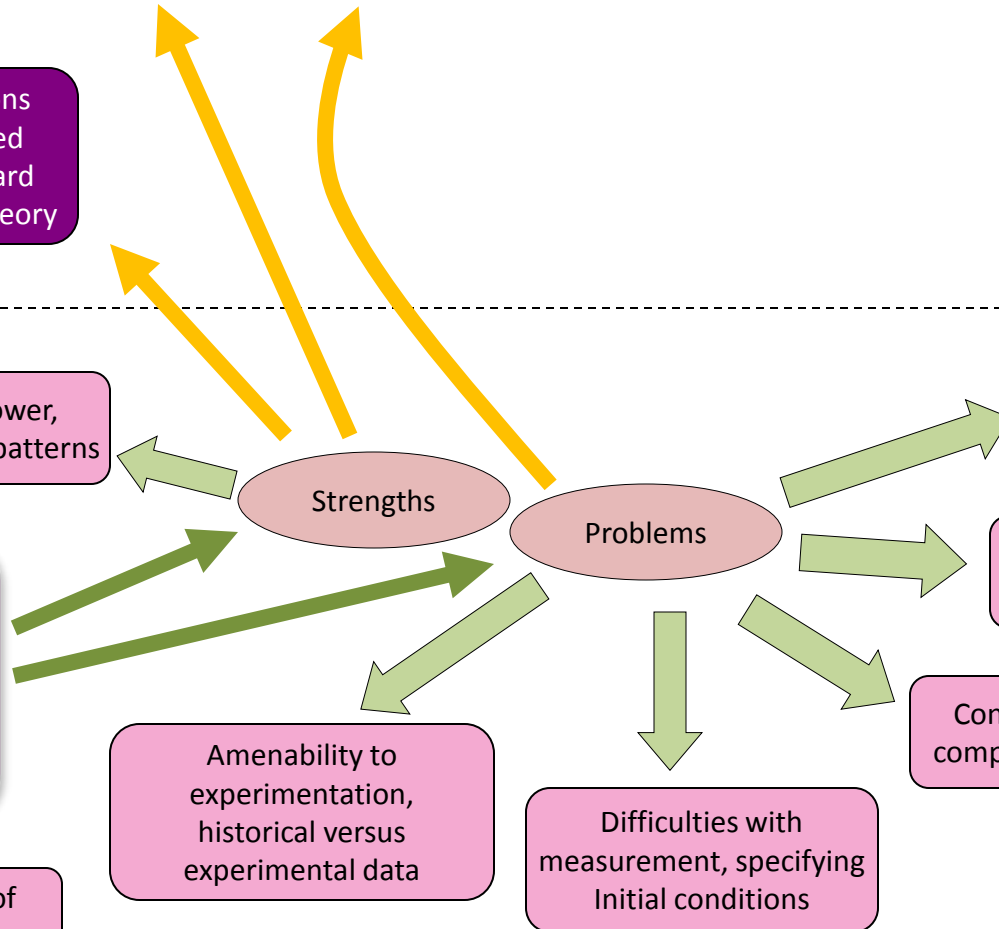
Problems of induction and generalization

Confounding variables, complexity of interactions

Amenability to experimentation, historical versus experimental data

Difficulties with measurement, specifying Initial conditions

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Chemistry: Mendeleev and periodicity

Chemistry: valence shell electron pair repulsion theory

Economics: the Phillips curve

Biology: evolution by natural selection: homology, palaeontology, artificial selection, etc.

Other real-life situations (natural sciences and human sciences)

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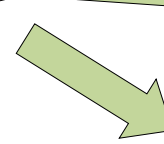
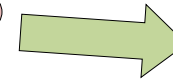
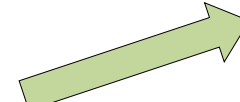
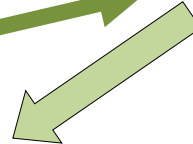
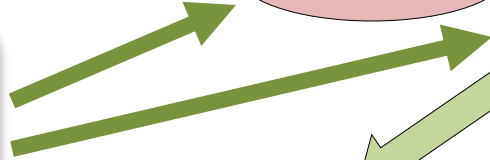
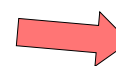
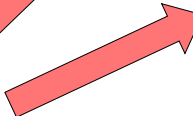
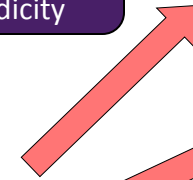
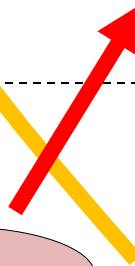
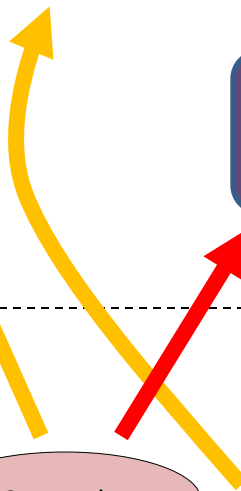
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