The Web science windmill tool

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- a basic question of Web science

- non-disciplinary research

- building tools for web science

  - case 1: economics

  - case 2:sociology

- the Web science windmill tool

- conclusions

Web science

- ## a basic question

what technological and other changes need to be incorporated in evolution of Web technologies to best serve human beings?
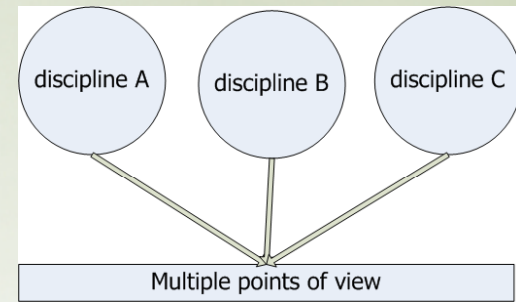
- ## trans-disciplinarity

basic source of added value in Web science, but we need a common language & tools between sciences
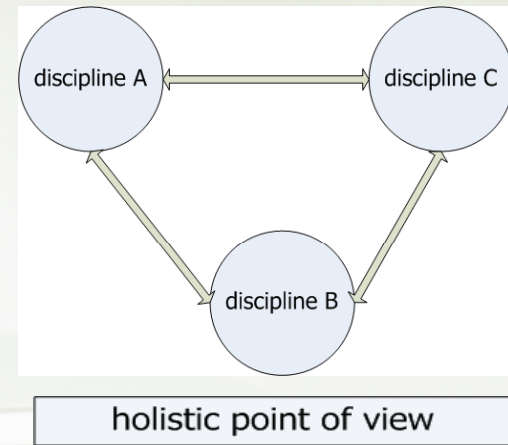
non-disciplinary research

multi-disciplinarity

no interaction between sciences
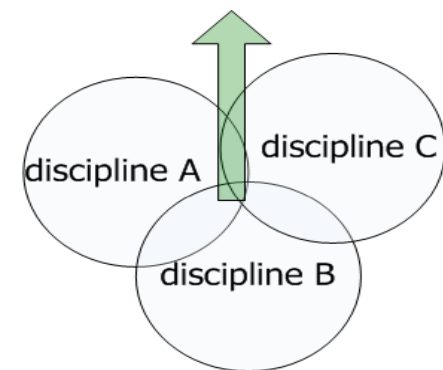
i.e. environment, economy, earth

inter-disciplinarity

resolution of overlappings/conflicts

i.e. econometrics, bioethics
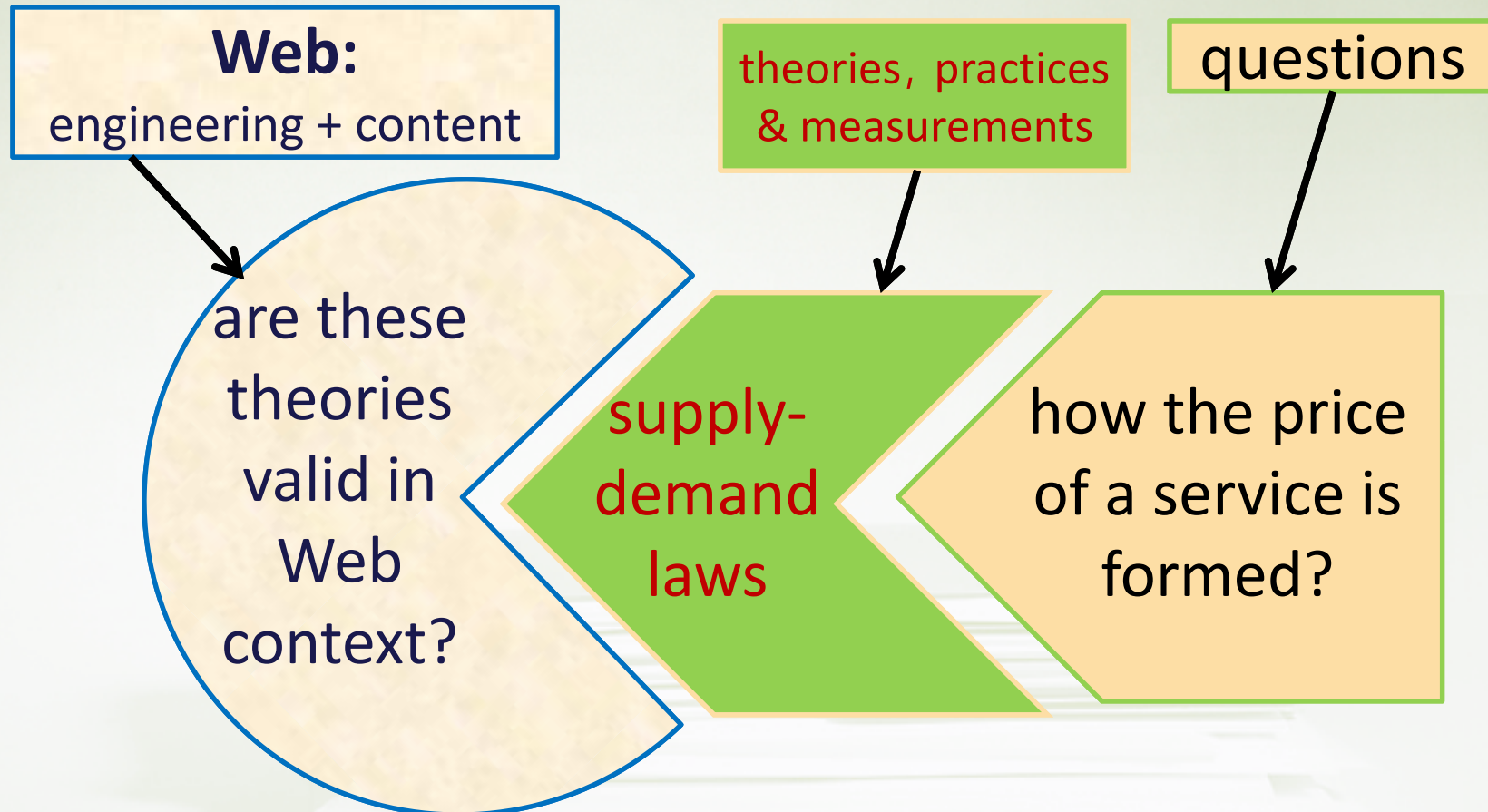
trans-disciplinarity

o new common analytical framework

o creating new possibilities

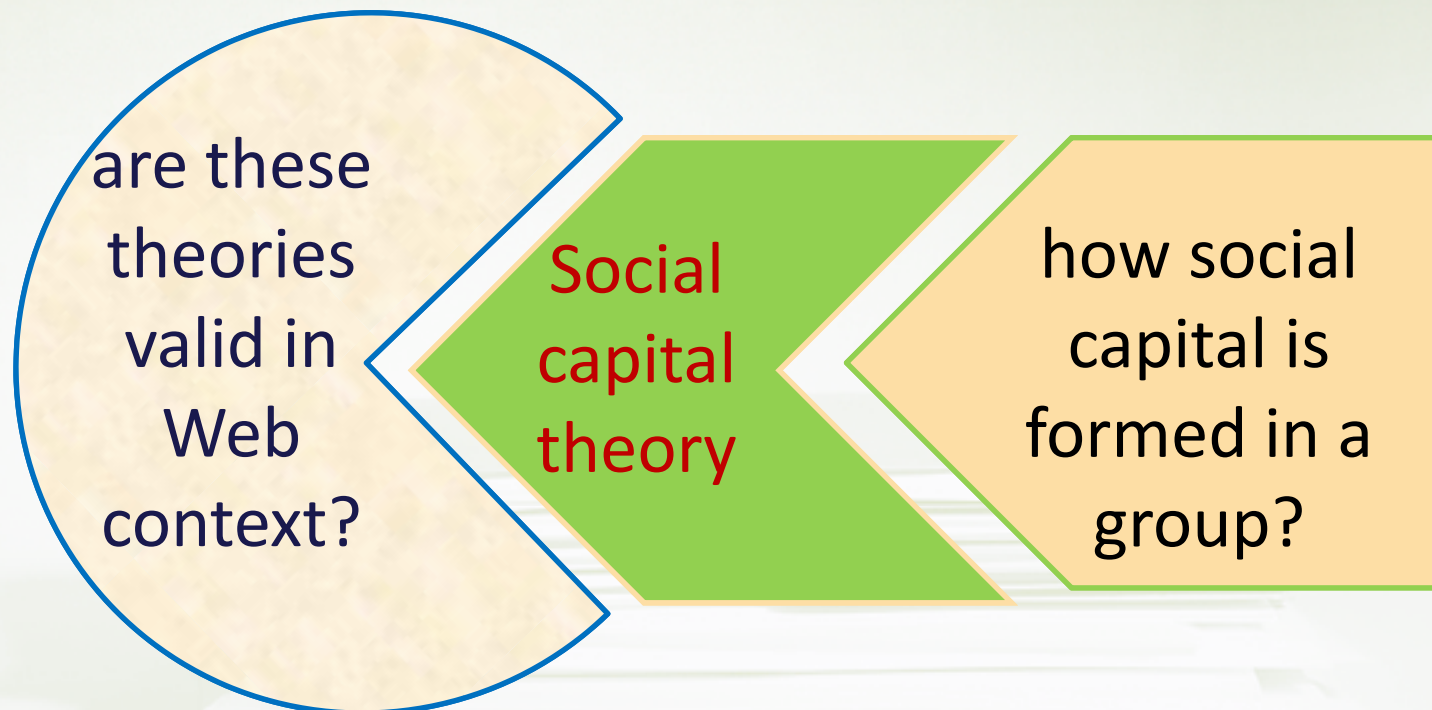o trans-forms mainstream definitions
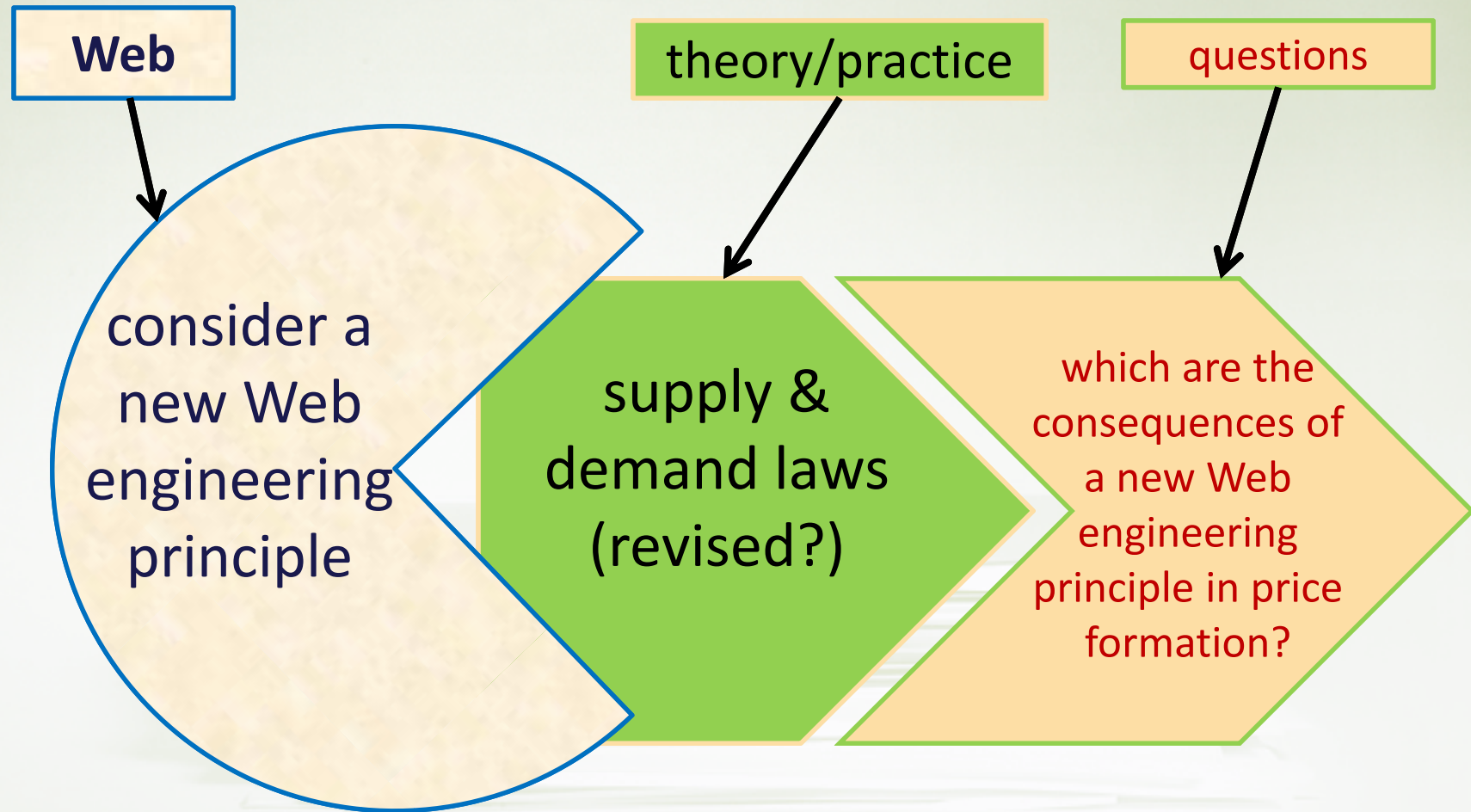
building tools for web science

Web:
engineering + content

theories, practices & measurements

questions

are these theories valid in Web context?

supply-demand laws

how the price of a service is formed?

building tools for web science
case 2: sociology

are these theories valid in Web context?

Social capital theory

how social capital is formed in a group?

building tools for web science
case 3: economics (reversed)

Web

theory/practice

questions

consider a new Web engineering principle

supply & demand laws (revised?)

which are the consequences of a new Web engineering principle in price formation?

building tools for web science
case 4: sociology (reversed)

Web

theory/practice

questions

consider a new Web engineering principle

social capital theory (revised?)

which are the consequences of a new Web engineering principle in social capital formation?
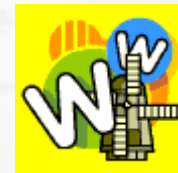
The Web science windmill tool
implementing trans-disciplinarity

The Web science windmill tool

- a tool to discover, understand, represent, communicate Web science dynamics

- builds a common language with existing science, research and practice

- under construction, will be enriched

- semantic relations will be represented with RDF/OWL

conclusions

despite the fact that Web is "still in its infancy" *(TBL)*

- is changing our lives

- has extended human language

- it is time to understand what technological and other changes need to be incorporated in evolution of Web technologies to best serve human beings

- we need Web science

- Web science needs tools...