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Alternative evaluation approaches: evaluating the impact of Transformative Innovation Policies
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Alternative impact evaluation approaches: in what way are they alternative?

- Focus on outcomes rather than impacts
  - Process-oriented
- "Real time" (not ex-post)
- Evaluation type: formative instead of summative
  - Main function: improve design and implementation (vs. resource distribution, audit,…)

- Timing
  - Impact processes are often protracted
    - By the time impact occurs and can be assessed is too late for any lessons to be of much use in the specific evaluation context

- Attribution
  - "Impact" is the result of the interplay of many factors and cannot be attributed to any specific intervention
    - "Impact blues"

- For example "outcome mapping"
  - Mainly developed and applied in the field of development interventions (Terry Smutylo @ International Development Research Centre (IDRC) and others)
    - https://www.outcomemapping.ca/
  - Outcomes vs. outputs & impacts
    - Outcomes as relevant changes in behaviour
      - The example of sanitation
  - Open to anything that may occur
    - Specific outcomes are not identified ex-ante through a "programme theory" or a "theory of change"
      - Is a "programme theory" a "little picture of [donor`s] fantasy"?

- # Research results
  - – Combine with many other inputs to generate impact
  - – Require the contribution of many different actors
- # Importance of identifying the interactions among actors and *how* they help explain the generation and application of socially-relevant research results

Interactions: SIAMPI

- EU-funded project Social Impact Assessment Methods through Productive Interactions
  - www.siampi.eu
- "Productive Interactions" are "exchanges between researchers and stakeholders in which knowledge is produced and valued." (Spaapen&van Drooge 2011 - https://doi.org/10.3152/095820211X12941371876742) .
  - The interaction is productive when the exchange leads to an effort by the stakeholder to engage with the research with the intention of applying research results to societal goals
  - An "impact" occurs when 'productive interactions' result in stakeholders doing new things or doing things differently (Molas-Gallart & Tang 2011 - https://doi.org/10.3152/095820211X12941371876706)
- Three main "tracks" through which interactions can occur:
  - Direct personal contact
  - Mediated through texts ("indirect").
  - "Financial" interactions when stakeholders engage in economic exchanges with researchers
- SIAMPI implemented through a variety of techniques mostly "tracing forward" from a specific research activity
- Characteristics
  - Process-oriented
  - Ex-post (soon after the project/programme concludes)

Responding to these problems (3): Focus on processes - Pathways

- Starting point: different ways in which contributions from different participants are channelled
  - Generate different 'pathways' linking research with the applications of its outputs
- Participatory Impact Pathways Analysis (PIPA) is a project planning, monitoring and evaluation approach
  - A project impact pathway describes how it will develop its outputs and who needs to use them to achieve desired impact
  - Collectively defined using workshops
    - Participants make explicit how they see themselves achieving their goals (through and beyond the project)
    - Participants derive outcome targets, milestones measuring progress towards them and design a monitoring and evaluation plan (to make corrections in the implementation)
  - Applied mainly in development/agricultural contexts

More pathways methods: ASIRPA & ASIRPA RT

- Projects developed at the French agricultural research organisation INRA
- Internal initiative with a main "improvement" objective
- ASIRPA profiles different pathways to impact using mixed methods.
  - Long-term, ex-post, perspective
  - Ambitious, expensive but successful as INRA has kept investing in the approach over many years
    - So far almost 60 case studies following the same structure and using the same tools
      - Chronology, impact pathway, impact vectors (including a summary radar graph with 5 impact dimensions: economic, political, environnemental, health, territorial-social).
- ASIRPA-RT
  - Includes an ex-ante version (closer to PIPA)
  - Uses common definition of stages (output, outcome, short and long-term impacts) and impact dimensions
- https://www6.inrae.fr/asirpa_eng/ASIRPA-real-time

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An example: evaluating the outcomes of Transformative Innovation Policies

Molas-Gallart et al. 2021. *A formative approach to the evaluation of Transformative Innovation Policies.* (https://doi.org/10.1093/reseval/rvab016)

Key assumptions of "Transformative Innovation Policies"…

- TIPs as a "new generation of "research and innovation policy" based on transitions theory

- To address key societal problems requires changes in socio-technical systems
  - Systemic changes with directionality

- To achieve such changes the starting points are "policy experiments" in "protected niches"

- If successful, policies are implemented to deepen and scale up initial (niche) changes

Theoretical base: Multi Level Perspective (MLP)

Figure 4: Multi level perspective of the socio-technical transition framework. Source: Geels, 2002; Geels and Schot, 2007
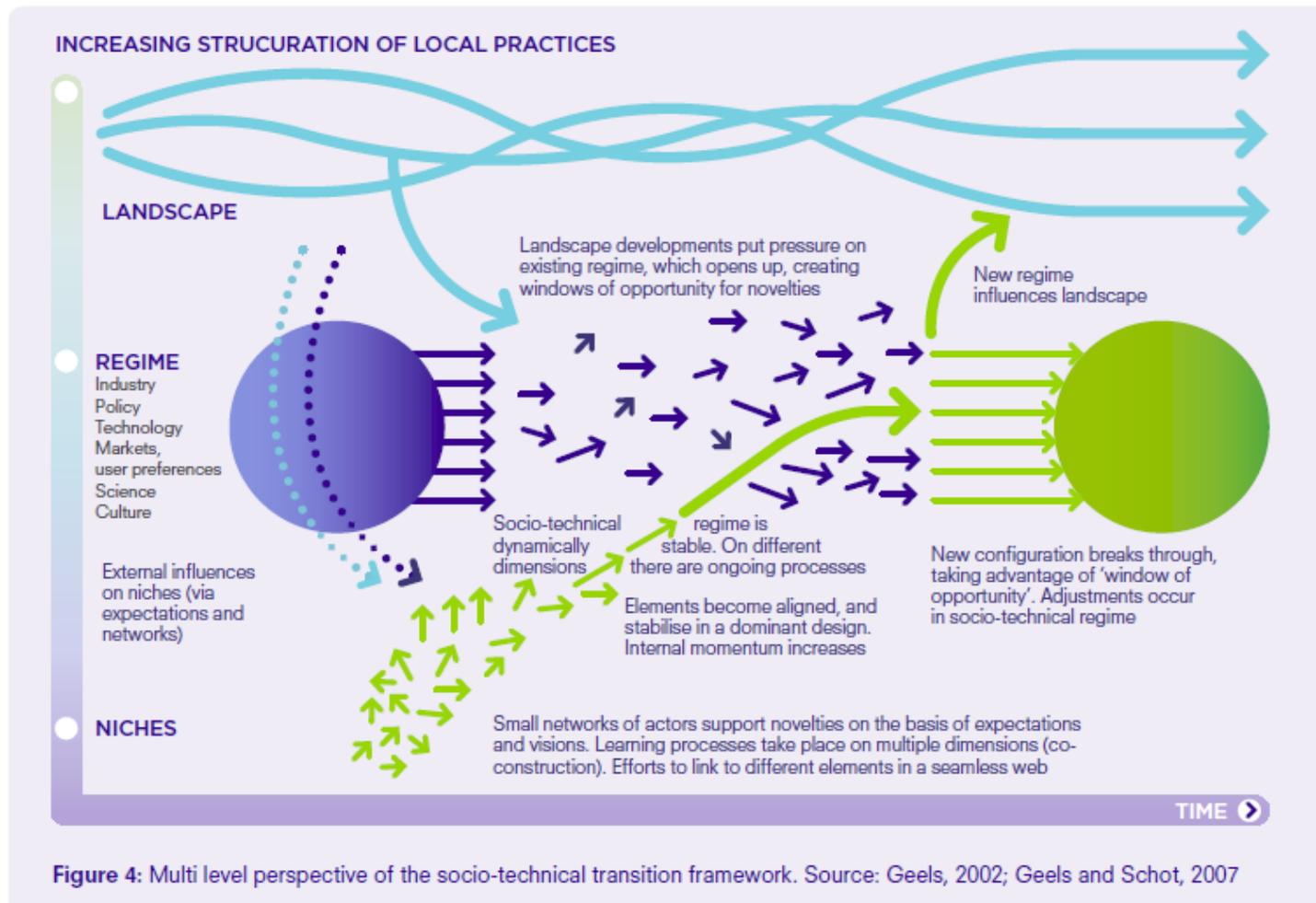
The challenge of evaluating Transformative Innovation Policies (TIPs)

TIP characteristics pose two main evaluation challenges

TIPs are often performed in protected niches/local spaces but aim at triggering change in the socio-technical system. How can we assess the longer term systemic consequences of small-scale TIPs?

TIP experiments emphasise inclusive participatory processes. Evaluation practices need to be consistent with this inclusive philosophy

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Our understanding of "formative evaluation"

- Aims at
  - improving the design/implementation of an intervention with the direct participation of stakeholders
  - providing an understanding of why an intervention is working (or not)
- Can be oriented to first-order and second-order learning (but we are particularly interested in second-order learning!)
- Addresses and analyses failure
  - Failure can provide learning opportunities
- Requires the development of new internal evaluation capacities

- ToC specifies
    - The expected relationship between structure (inputs), outcomes and impacts
    - The assumptions behind these expectations
    - The processes that link them
    - The context that influences them
- The evaluation process can lead to a re-definition of the initial theory of change
    - Initial goals and objectives of an intervention can also change (second order learning)
- Note: For the ToC to be flexible the evaluation approach needs to be formative

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Elements (2): Focus on "transformative outcomes" to track progress

- Based on transitions theory/MLP
- Three categories of ""transformative outcomes" (Ghosh et al. 2021): (https://doi.org/10.1093/scipol/scab045)
  - Related to niche building:
    - Shielding
    - Learning
      - Broad: multiple dimensions
      - Second order: questions assumptions
    - Networking
    - Expectations (directionality, robustness)
      - More robust (shared among a broad network),
      - More specific (about directionality)
      - Higher quality (substantiated by results of experiments and other studies)
  - Related to embedding:
    - Scaling up (wider adoption of products, rules,…)
    - Replication (in other regions, areas,…)
    - Circulation (of rules, system elements,…)
    - Institutionalization (regime formation)
  - Related to opening up of regime
    - De-aligning and destabilizing regimes
    - Unlearning and deep learning in regime
    - Strengthening regime-niche interaction
    - Changing perceptions of landscape pressures

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Elements (3): A nested approach

- Identify the policy level at which we are working
  - *Policy mixes* involve a broad set of objectives and associated interventions
  - Policy mixes will include a number of *programmes*: interventions with an allocated budget and a pre-defined timeline that involve several discrete activities
  - Programmes will include a number of projects: specific activities implemented by an individual or team of individuals to address specific aspects of the programme
- Relevant outcomes will
  - vary according to the level we are assessing
  - form part of a *specific* ToC
  - be coherent across levels

1. Through workshops with project participants specify ToC

   - Outcomes pursued

   - Link to inputs and final impacts

   - Make assumptions explicit

   - Define monitoring strategy and indicators

2. Monitoring and assessment

   - (Again) stressing participation

   - Can lead to changes in ToC (and the intervention being evaluated)