

4- Dynamique naturelle du système



Approche systémique pour la gouvernance des systèmes de santé

2024

- Vous allez développer une théorie de changement / de programme pour imaginer un changement
- Cette théorie sera développée par étapes
- Pour chaque étape:
 - Un processus de questionnement
 - Une compréhension améliorée du système
 - Un processus de priorisation
 - Une révision des choses faites dans les parties précédentes
 - Limites du systèmes
 - Actions que « je », « nous » pouvons contrôler ou influencer

Les différentes étapes

- Partie 1:
 - Le « système valeurs, buts, objectifs... processus »
 - Les postulats: Les modèles mentaux et structures sous-jacentes
 - Moi, nous et le système qui m'intéresse (délimité)
- Partie 2:
 - Expliquer la dynamique observée du système (en routine)
 - BOTG
 - Modèle multiniveau de Geels

Les différentes étapes

- Partie 3:
 - Les acteurs et leurs comportements (ajouter Michie) à cibler en fonction du processus à changer
 - Les parties prenantes, leur pouvoir, confiance et leur intérêt dans la prise de décision
- Partie 4:
 - Flux entre acteurs
 - Identification de boucles de rétroactions
- Partie 5:
 - Théorie de changement / programme (le changement « imaginé » dans un système)

Entre chaque session: un devoir à soumettre

- Max 3 slides
- Explication dans la partie note
- Révision des parties précédentes
- Discussion d'exemples la semaine suivante
- Revue par pairs

Travail 2

- BOTG
- Modèle multiniveau
- ? Première TdC?

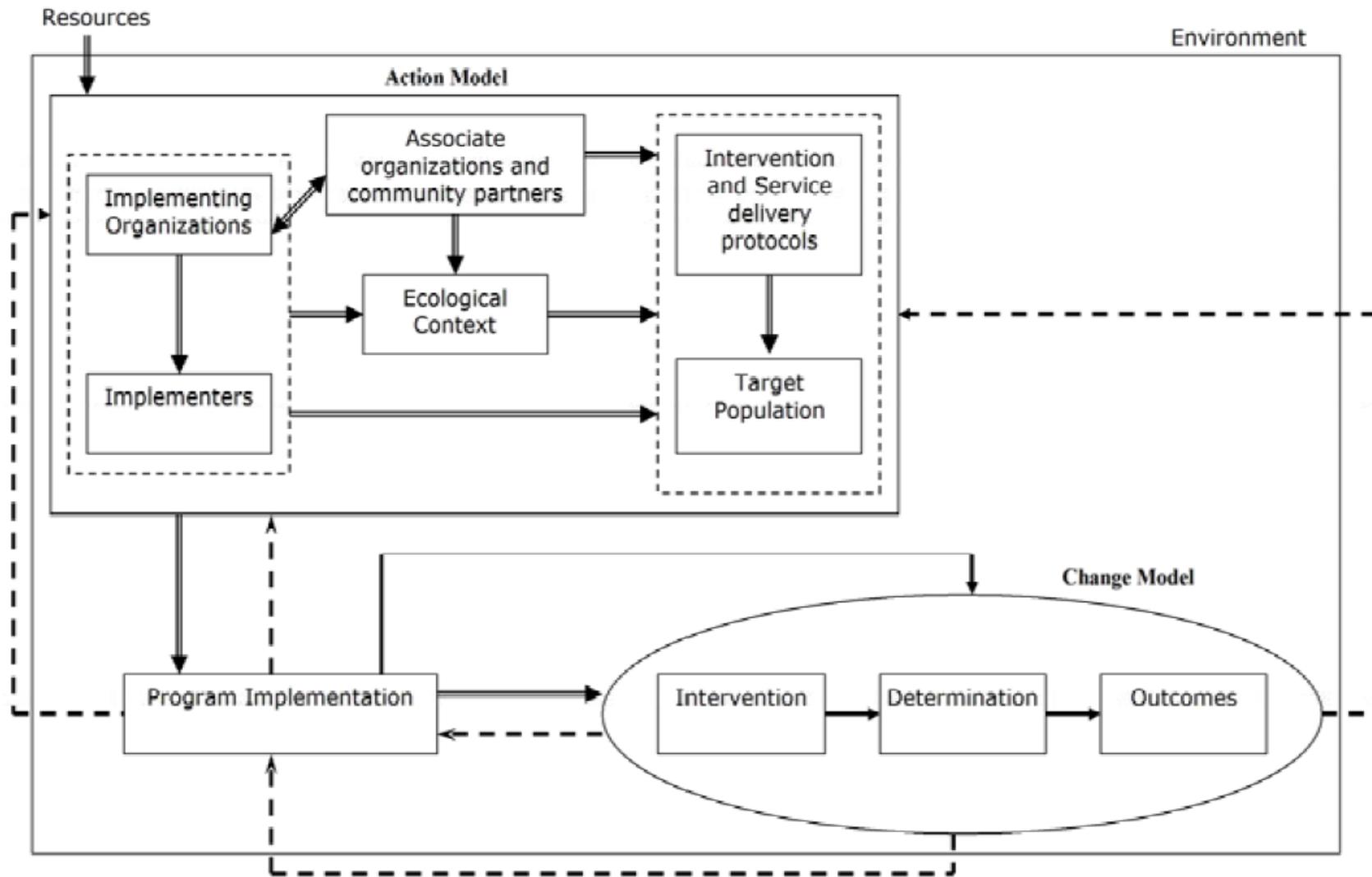
Des ressources

Des défis

Un contexte

Un processus de changement

Objectifs sur le court
et le long terme



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RESEARCH IN THE SCHOOLS
2006, Vol. 13, No. 1, 75-83

Figure 1. Conceptual Framework of Program Theory (Comprehensive F

A Theory-Driven Evaluation Perspective on Mixed Methods Research

Huey T. Chen
University of Alabama at Birmingham

Cours 2: TdC ce qu'on a l'habitude de faire et la dynamique habituelle du système



Concepts:

La dynamique d'un système et ce qui peut l'expliquer

Une théorie de changement c'est quoi

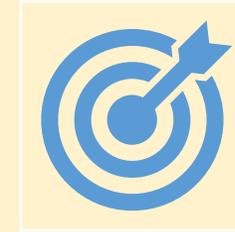


Outils, théories et modèles

Le modèle multiniveau de Geels pour expliquer l'équilibre du système

Les BOTG

Moi, nous, le « monde »

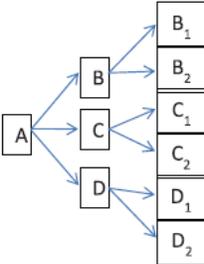
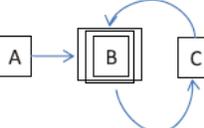
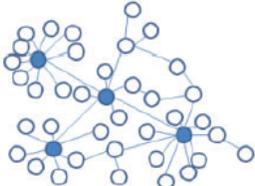
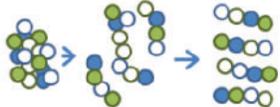
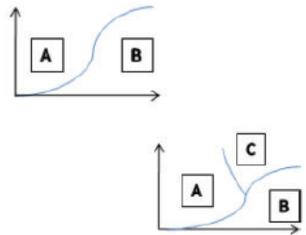


Déliverable:

Une première « théorie » de changement centrée sur leviers, stratégies et programmes existants (avec des si... alors... parce que...)

Qu'est ce qui a du sens? Qu'est ce qui ne l'a pas? Pourquoi?

Table 1 Examples of phenomena in complex adaptive systems (CAS)

CAS phenomena	Definition	Health sector examples
<p>Path dependence</p> 	<ul style="list-style-type: none"> • Non-reversible processes have similar starting points yet lead to different outcomes, even if they follow the same rules, and outcomes are sensitive not only to initial conditions, but also to bifurcations and choices made along the way 	<ul style="list-style-type: none"> • Health reforms such as introduction of social health insurance or quality assurance programmes may work well in one country but cannot be simply copied to a developing country and have similar results • Adoption of different standards for health technology in different countries
<p>Feedback</p> 	<ul style="list-style-type: none"> • Happens when an output of a process within the system is fed back as an input into the same system: <ul style="list-style-type: none"> ◦ Positive feedback increases the rate of change of a factor towards an extreme in one direction ◦ Negative feedback modulates the direction of change 	<ul style="list-style-type: none"> • ‘Vicious circles’ between poverty and ill health; or malnutrition and infection • Swings in the prices or demand for certain health services • How standardized modes of health care delivery continue to serve the same populations, but fail to reach the poor
<p>Scale-free networks</p> 	<ul style="list-style-type: none"> • Structures which are dominated by a few focal points or hubs with an unlimited number of links, following a power-law distribution 	<ul style="list-style-type: none"> • Rapid pandemic disease transmission • The persistence of slow-spreading viruses to combat eradication • The disproportionate effect of influencing highly connected members of a sexual network on the transmission of sexually transmitted infections • The adoption of new health practices disproportionately influenced by ‘hub’ individuals
<p>Emergent behaviour</p> 	<ul style="list-style-type: none"> • The spontaneous creation of order, which appears when smaller entities on their own jointly contribute to organized behaviours as a collective, resulting in the whole being greater and more complex than the sum of the parts 	<ul style="list-style-type: none"> • Why health workers can suddenly organize to go on strike • How informal providers form organizations to protect practices in their trade
<p>Phase transitions</p> 	<ul style="list-style-type: none"> • Events that occur when radical changes take place in the features of system parameters as they reach certain critical points 	<ul style="list-style-type: none"> • ‘Tipping points’ in health services, leading to sudden changes in demand for health services or changes in referral patterns • How epidemic thresholds or herd immunity develops • Changes in collaboration–competition behaviours and referral patterns for patients within and across health facilities

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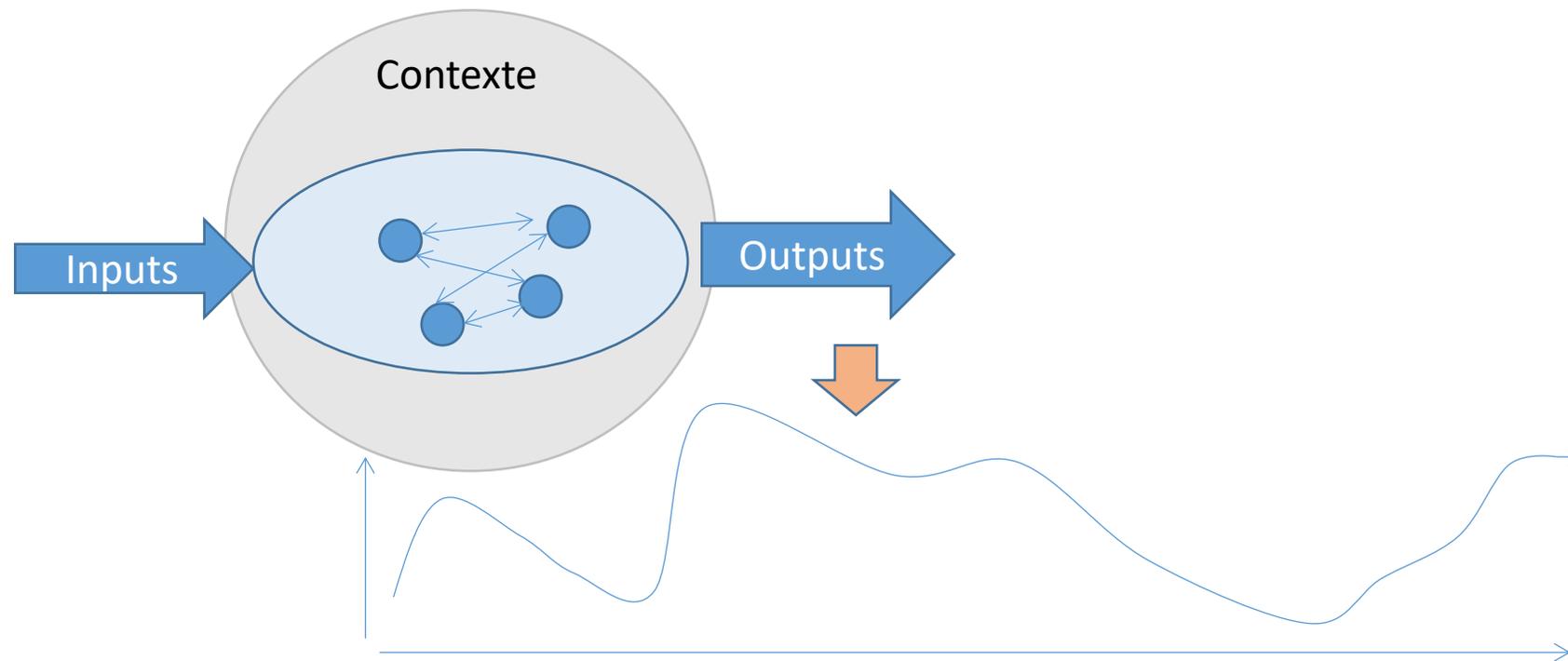
Understanding pathways for scaling up health services through the lens of complex adaptive systems

Ligia Palma and David H Peters*

BOTG

« mimer » la dynamique (possible) du système

La dynamique du système



Qu'est ce que la dynamique d'un système, et pourquoi l'étudier?

Qu'est ce que la dynamique d'un système, et pourquoi l'étudier?

- Quoi?

Représentation de l'évolution de la production d'un système dans le temps et analyse du pourquoi et comment de cette évolution

- Pourquoi?

Donne des clés de compréhension du système

- Moments-clés => phases de transition /équilibre
- Evènements et patterns (récurrence d'évènements)

Constitue un outil utile pour la participation des parties prenantes càd «quelqu'un ou un groupe qui est concerné par la "production" ou les activités du système»

Etude de la dynamique de système

- Etapes :
 - 1) Identifier le système et les outputs d'intérêt
 - 2) Dessiner un Behavior-Over-Time-Graph
 - 3) Identifier et analyser les moments-clés

1) Définir le système

- Raconter « l'histoire » de la situation-problème (« story-telling »)
 - => porter attention à :
 - Autour de quoi (but, enjeu, problème) interagissent des éléments?
 - Identifier les parties prenantes – détenteurs d'enjeu (stakeholders)
- Délimiter le système = choisir les éléments qu'il vous semble pertinent d'inclure
 - ! Garder à l'esprit que votre vision est subjective et partielle...
- Identifier les variables importantes (de processus, d'output)
 - Variable: facteur qui peut prendre une valeur qui peut augmenter ou diminuer

Exemples

- Histoire d'une maison médicale
- Histoire d'un district sanitaire

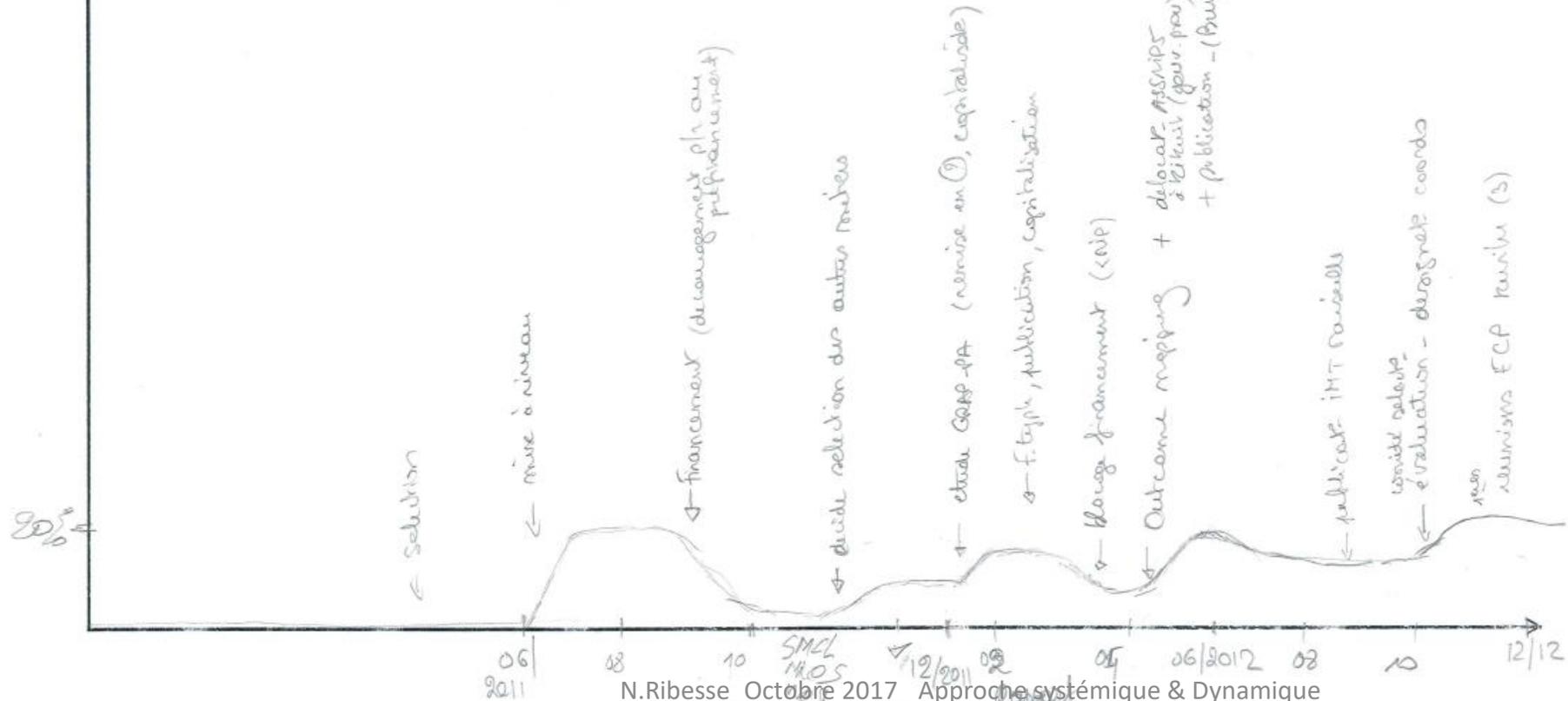
- Quels sont les stakeholders / parties prenantes?
- Comment délimiteriez-vous le système d'intérêt?
- Quelles variables sont produites dans et par le système?

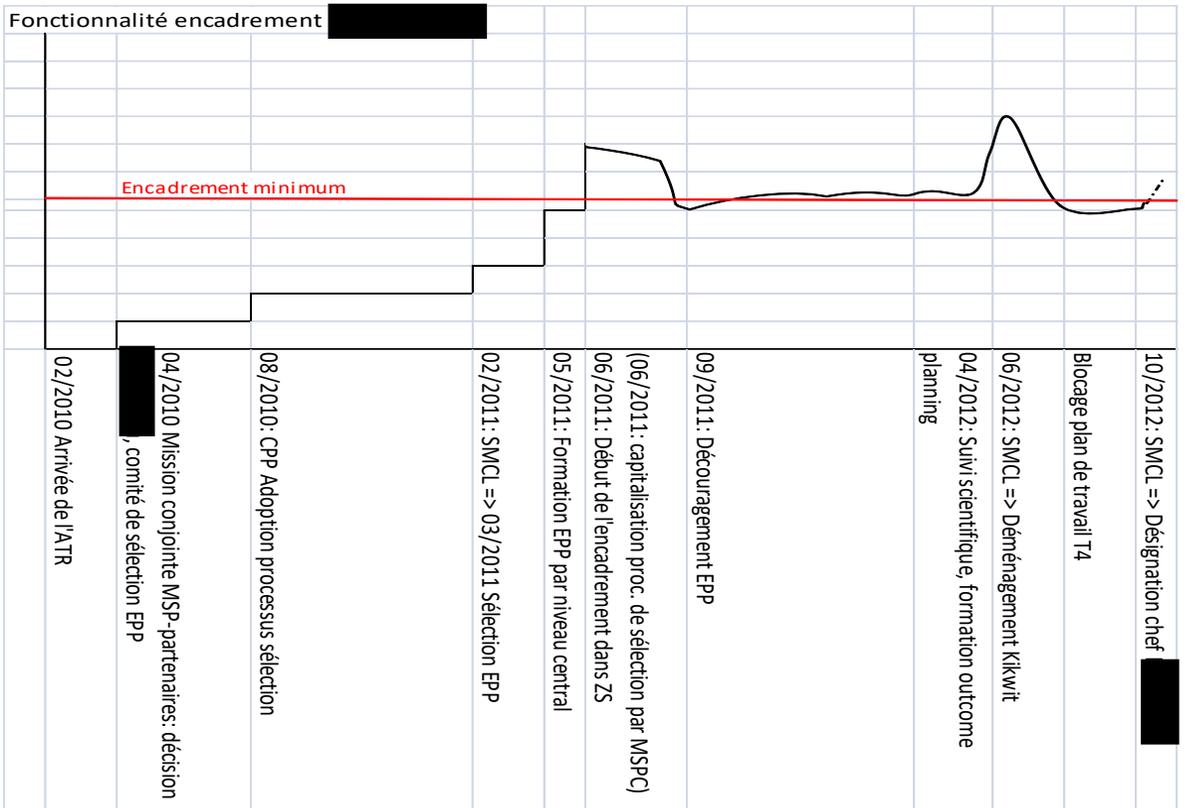
2) Behavior Over Time Graph (BOTG) (1)

- Choisir une ou plusieurs variable(s)
- Raconter graphiquement son évolution sur une ligne du temps
 - Mettre les repères temporels pertinents, locaux ou contextuels

Ensemble 28

↳ obs de travail, expérience
 * Vision de la réforme et de la 28 feuille



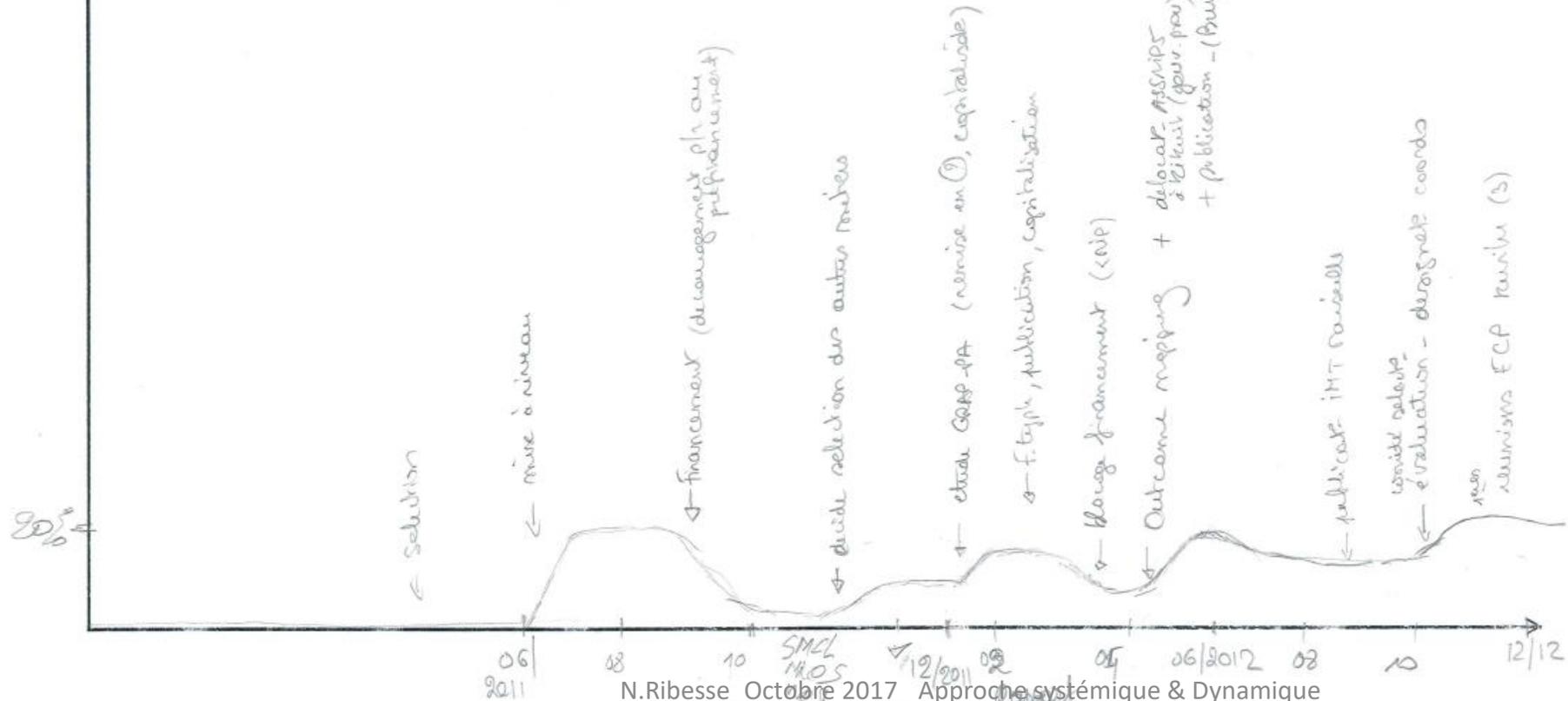


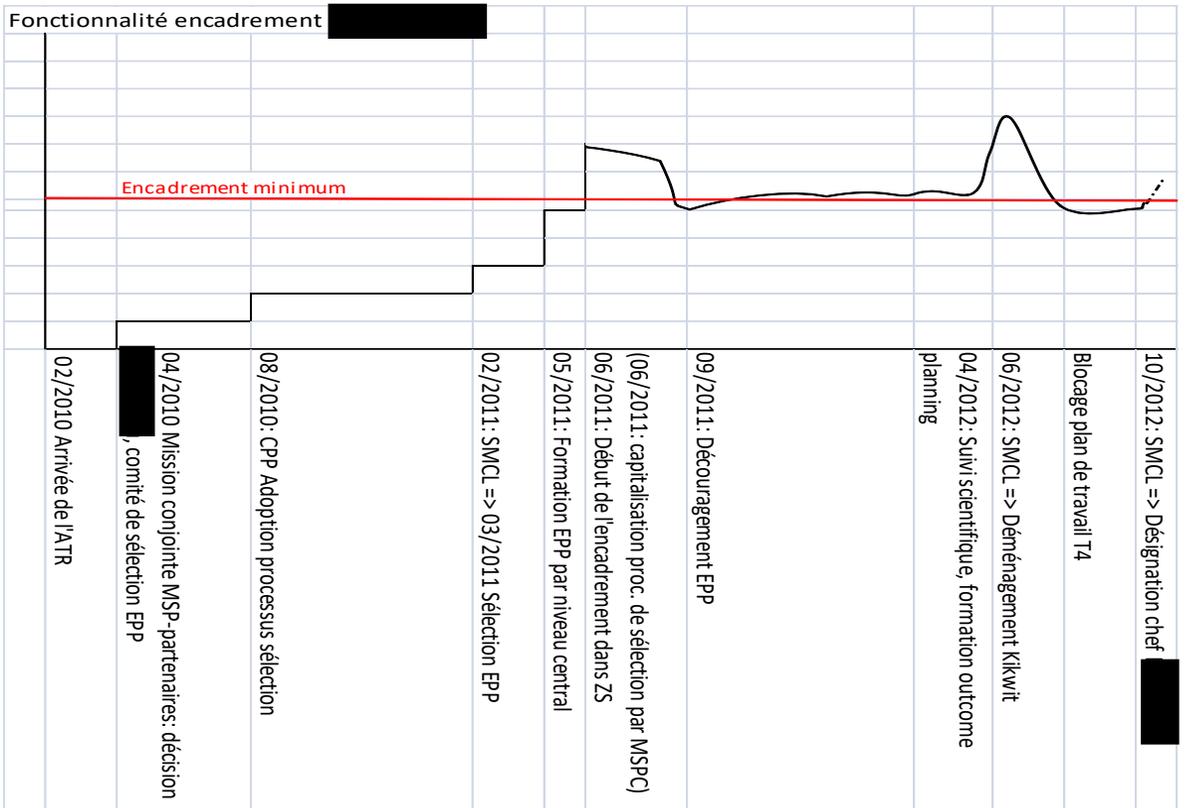
2) Behavior Over Time Graph (BOTG) (2)

- Analyse graphique:
 - Quels évènements menant à un changement de dynamique (phase de transition) observons-nous?
 - Quelle est l'origine de ces changements de dynamique?
 - Y a-t-il des récurrences?
 - Quelles phases d'équilibre observons-nous?

Ensemble 28

↳ obs de travail, expérience
 * Vision de la réforme et de la 28 feuille





3) Analyse des moments-clés

- Phase de transition/phases d'équilibre
 - Que s'est-il passé entre les parties prenantes lors de cet événement, de cette période? Y a-t-il des boucles de rétroaction dans leurs interactions?
 - Est-ce que les frontières du système que nous avons décidées sont appropriées?

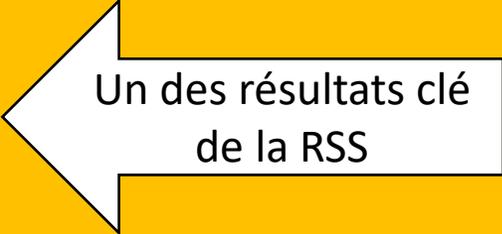
Définition de théorie

- *“There are numerous definitions of theory, for example, Meleis (2007, p. 37) defines it as: “An organized, coherent, and systematic articulation of a **set of statements related to significant questions** in a discipline that are communicated in a meaningful whole. It is a symbolic depiction of aspects of reality that are discovered or invented for **describing, explaining, predicting, or prescribing responses, events, situations, conditions, or relationships**. Theories have concepts that are related to the discipline's phenomena. These concepts are related to each other to form theoretical statements.” (Bradbury-Jones et al. 2014)*
-
- Types of theories (grand – mid-range – programme theories or ToC) –

Types de théories

« Grande » théorie (théorie applicable à la majorité des contextes)

Théorie à « moyenne portée »



Un des résultats clé
de la RSS

Théorie du changement

Department of Industrial Engineering and Management

Supporting service innovation via evaluation: a future oriented, systemic and multi-actor approach

Kirsi Hyytinen



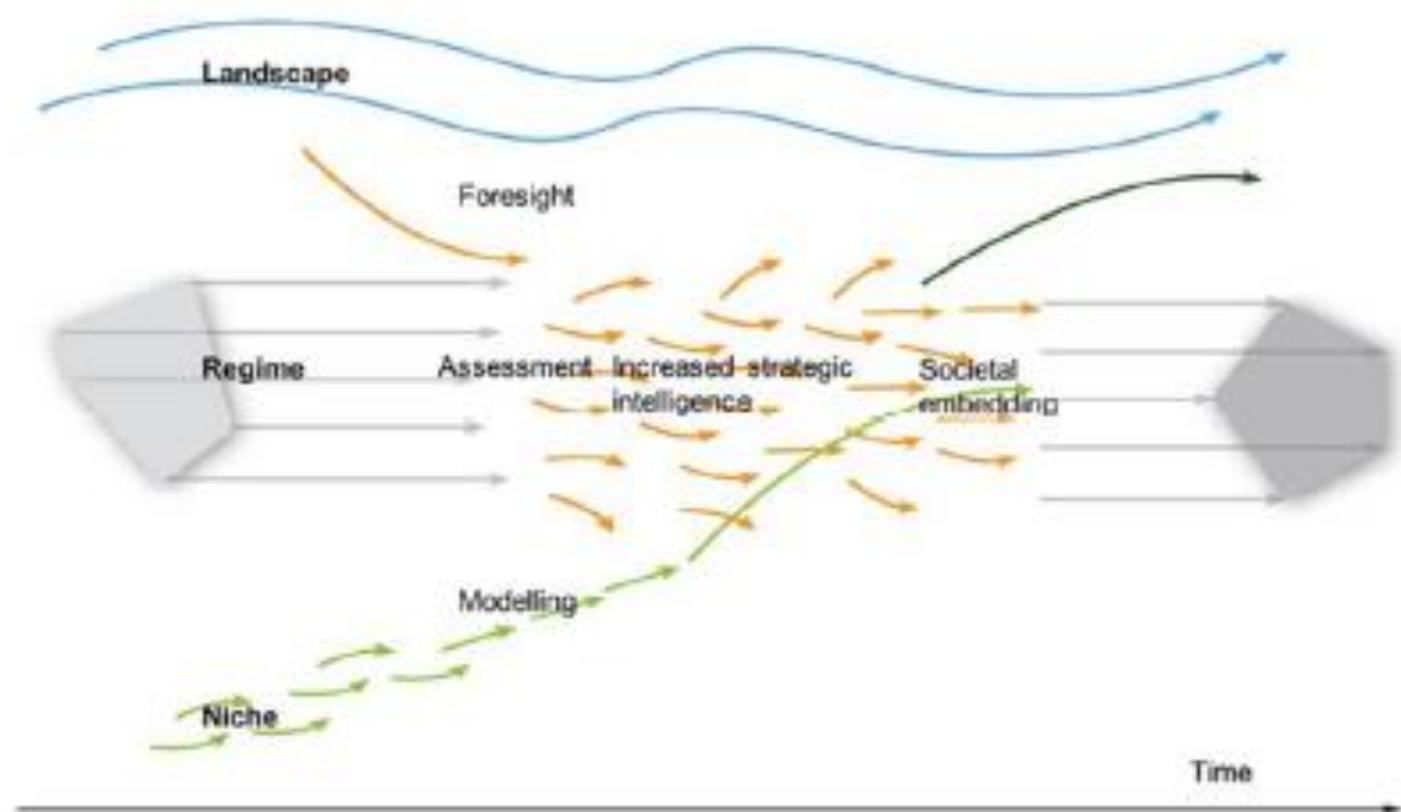


Figure 5. A multi-level framework for future oriented impact assessment (Nieminen & Hyttinen, 2015, 456; originally modified from Geels, 2002)

general societal values and norms, political changes, economic fluctuations, society's infrastructure etc., i.e. factors the actors at the regime level can affect a little or only indirectly. The status quo is maintained so long as there is 'compatibility' between the landscape level and regime. However, if the structures and action models in the regime are not compatible with the landscape, the regime confronts pressure from the landscape to change.

Régime = système de soins de santé= élément "conservateur" (stable)
 1. available and used technologies;
 2. scientific institutions and paradigms;
 3. politics and administration;
 4. socio-cultural values and symbols etc.; and
 5. users and markets.

innovations and experiments taking place outside the regime. These innovations have the potential to reform or even transform the existing regime. Niche could include a small niche market, or a protected and publicly supported segment where new innovation can be developed without fierce market competition which might destroy it

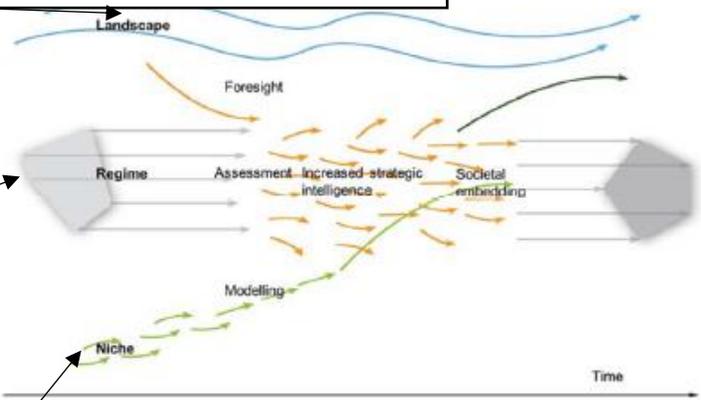


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Le changement est le résultat de l'interaction entre les 3 éléments

Évolution dans le temps



contexte

general societal values and norms, political changes, economic fluctuations, society's infrastructure etc., i.e. factors the actors at the regime level can affect a little or only indirectly. The status quo is maintained so long as there is 'compatibility' between the landscape level and regime. However, if the structures and action models in the regime are not compatible with the landscape, the regime confronts pressure from the landscape to change.

Organisation ou groupe d'organisations

include here the concepts of mis-alignment between stakeholders: (1) conflicting objectives; (2) power imbalances; (3) cooperation failures.

Interventions, « projet »

include here the concept of "disruptive innovation" versus "sustained innovation" such as: (1) business-model innovations such as: innovation shops; (2) Value adding process innovations; (3) facilitated user-networks

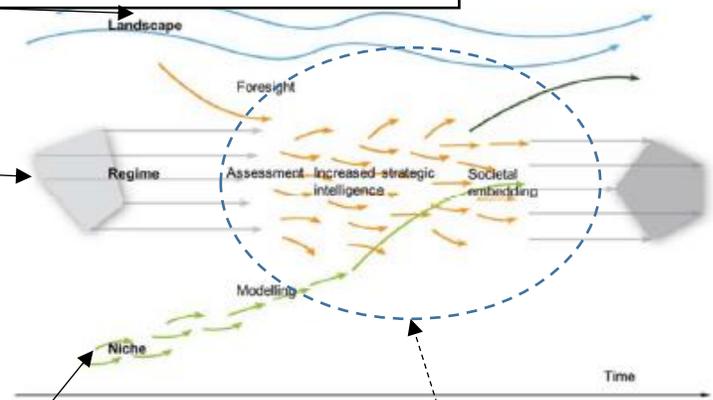


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Moment d'apprentissage

general societal values and norms, political changes, economic fluctuations, society's infrastructure etc., i.e. factors the actors at the regime level can affect a little or only indirectly. The status quo is maintained so long as there is 'compatibility' between the landscape level and regime. However, if the structures and action models in the regime are not compatible with the landscape, the regime confronts pressure from the landscape to change.

Include here the concepts of mis-alignment between stakeholders:
 (1) divergent objectives; (2) power asymmetries; (3) cooperation failures.

Include here the concept of "disruptive innovation" versus "sustained innovation"
 And "business-model innovations" such as:
 (1) Solution shops; (2) Value adding process businesses; (3) facilitated user-networks

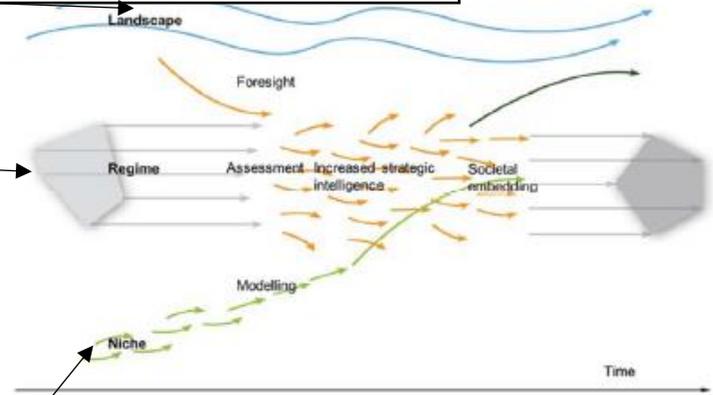


Figure 5. A multi-level framework for future oriented impact assessment (Nieminen & Hyttinen, 2015, 456; originally modified from Geels, 2002)

Le changement est le résultat de l'interaction entre les 3 éléments

- Distinguer intervention / projet pour modifier la routine ou le régime ou pour renforcer le régime
- Faire lien avec atteinte des buts

Why place based? (a resilience agenda?)

- It is expected to
 - integrate actions on individual and « community » determinants of health
 - Operationalize population responsibility and proportionate universalism?
- Health as *«people's ability to deal with the physical, emotional and social challenges in life. And to be in charge of their own affairs, whenever possible»* (M. Huber)
- *« Community health focuses on an overall geographic area rather than on shared characteristics such as age or diagnosis.»* it aim at *«protecting and improving health by addressing the structures and systems that define a place—and by supporting the people who live and work there in making healthy choices »*. (<https://www.elmhurst.edu/blog/what-is-community-health/>)

How to do that in Wallonia and Brussels?

Regimes



Landscape



« niches »



Regimes

- Culture of monoprofessional, monosectorial approach with a Strong professional hierarchy balanced with a search for more autonomy or more recognition by some professions
- Organic and unstructured primary care sector
- Social work provision by « mutualities » (who are under pressure to change their « core business »)
- Hospitals working in « pillars », organisation in loco-regional networks. Tendancy towards shorter hospitalisation and care organization by trajectories
- Decision mainly done through negotiation between representatives at « macro » level that satisfy powerfull players

landscape

- Slow-acting:
 - Chronic disease, multimorbidities and dependency in a aging population
 - Climate crisis (heatwaves, floods, ...)
 - Social inequities in health
 - Strong biotech – pharma sector that is a « motor » of (mostly extractive model of) economy
 - Numerous NFP associations
 - State and inter-state reforms with a constant « centralisation – décentralisation » dynamics
- Acute:
 - Mental health crisis in youngest
 - Shortage of professionals at primary care (and in hospitals)
 - Political elections and changes

Niches

- Decree to reorganize primary care including the concept of place-based organization
- Think-tanks and reflection networks on primary care (Be-Hive)
- Integrated care « movement » (community integrated care)
- Pilot projects and small scales of team based primary care
- Healthy cities
- ...

Challenges

- « Accountability » put upfront
- Political « ego »
- Sensemaking
- the missing link between central decision making and perception by operational level