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Transitions towards sustainability in the case of food systems

Issues for ergonomists and ergonomics

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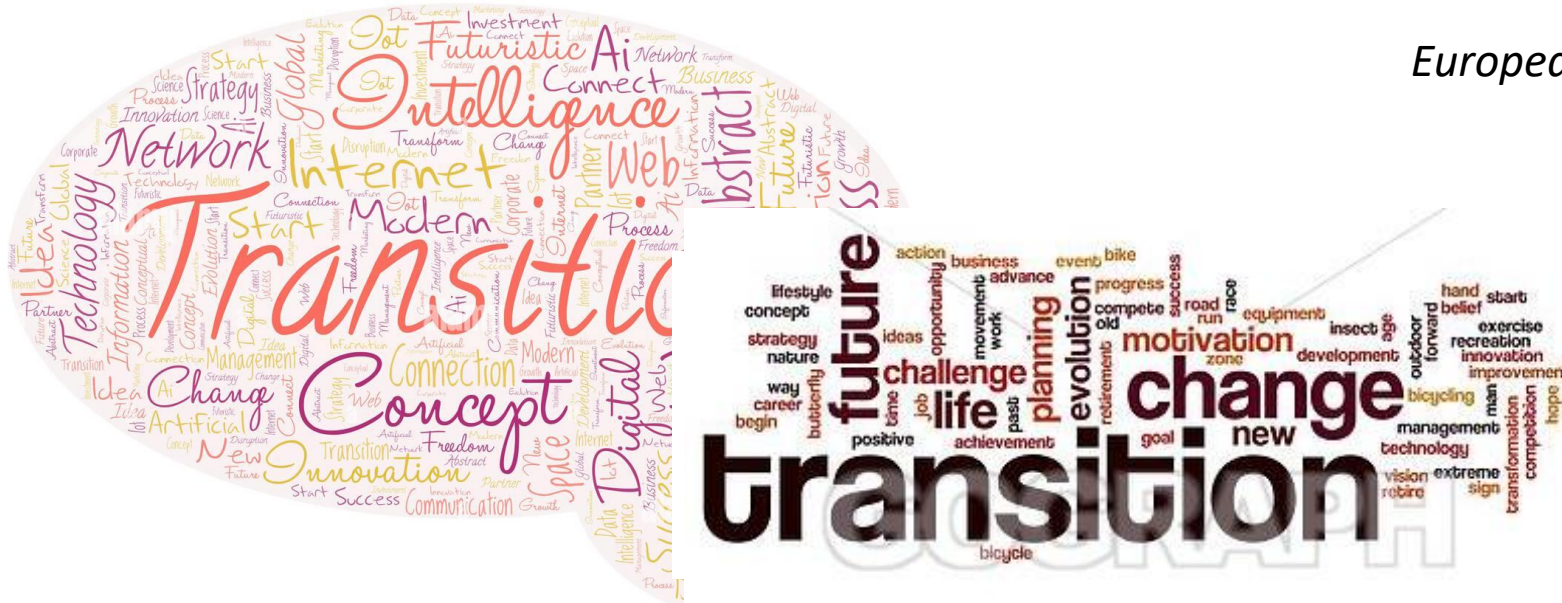
Chloé Le Bail, Vincent Boccara, UMR LISN, Université Paris Saclay



What do we mean by « transition(s) »

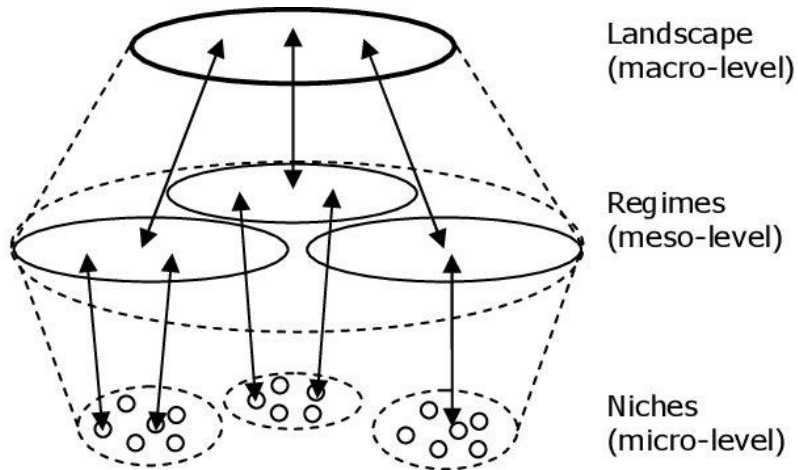
“Transitions (...) being evolutionary (...) it means that they are open ended, non-linear, fundamentally uncertain, and based on searching, learning, trial and error, and experimentation. Surprises and unintended outcomes are likely. Such transitions depend critically on interpretations and social acceptance. They are also conflictual and deeply political, producing trade-offs, ‘winners and losers’, and related struggles, as politically influential and well-resourced incumbents often resist change”

European Environmental Agency, 2018:11

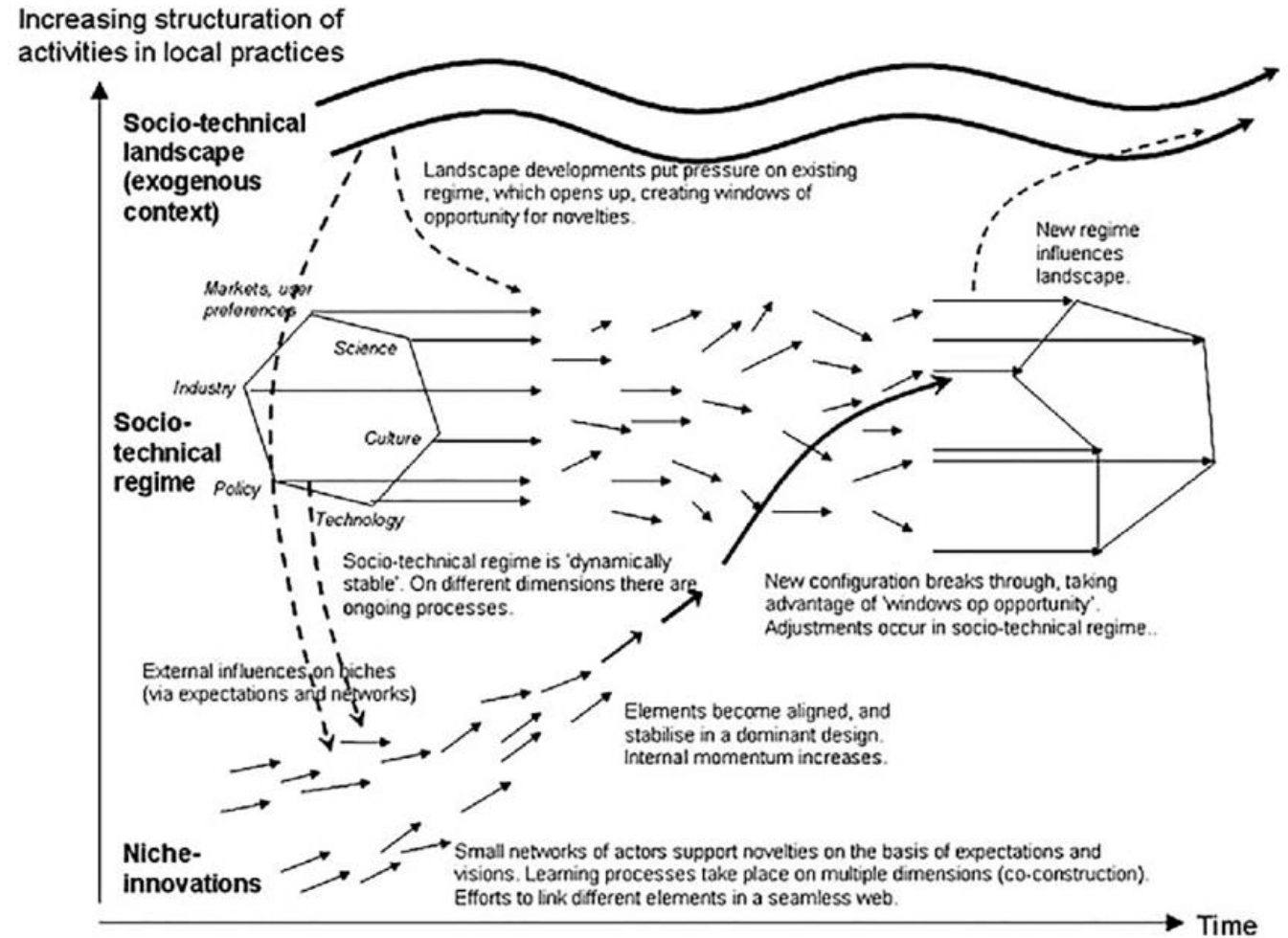


Sustainable transition : MLP as a framework ?

Multi-Level Perspective (MLP) - Geels & Schot (2007)



Geels & Kemp (2000)



Various transition pathways?

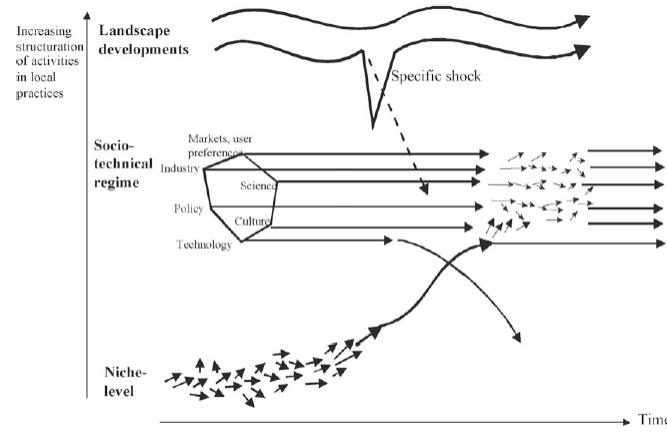


Fig. 8. Technological substitution pathway.

Geels & Schot (2007)

Wigboldus, S.A., Eldik, Z.C.S. van, Vernooij, D.M., 2021

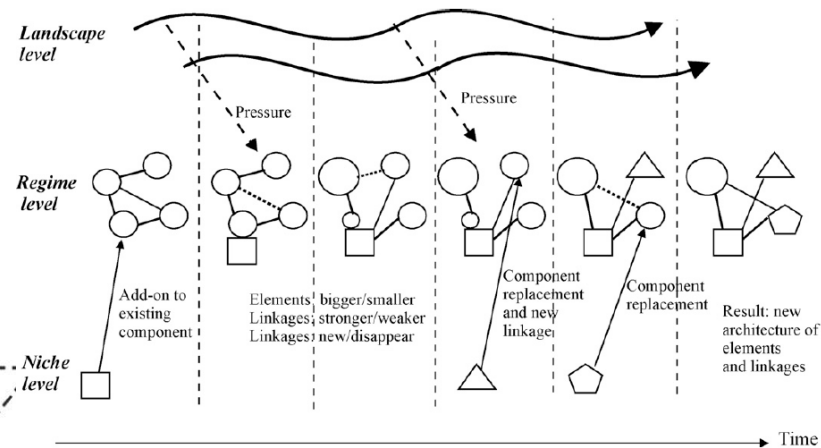


Fig. 10. Reconfiguration pathway.

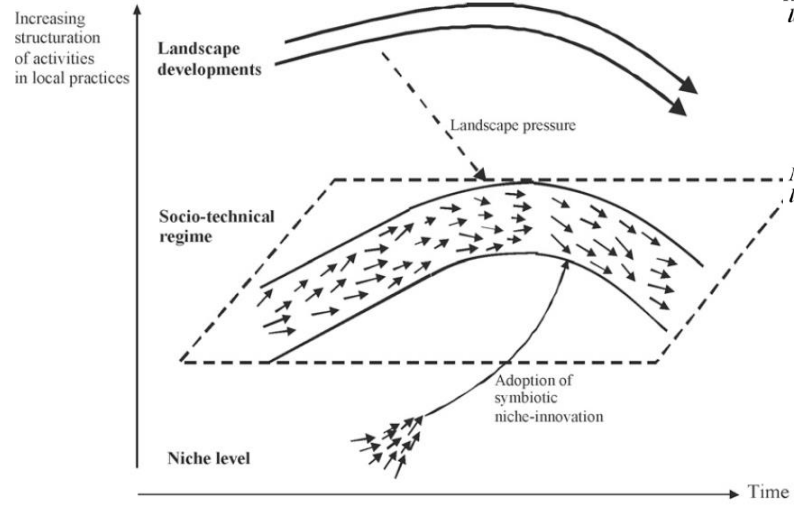
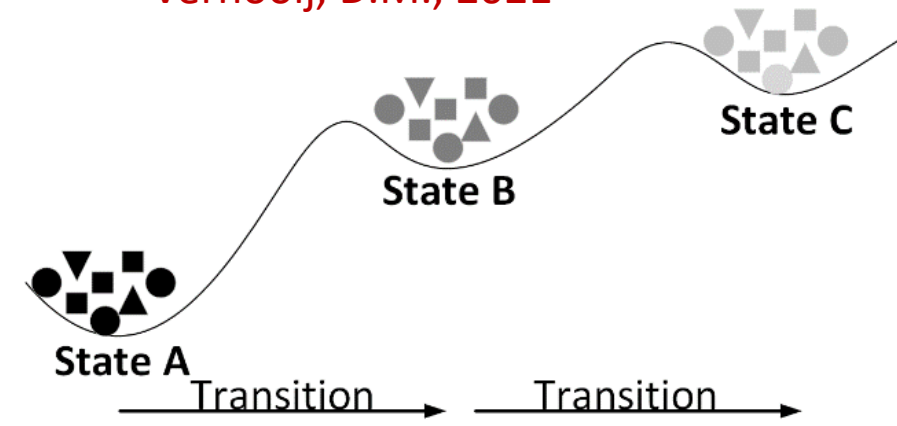


Fig. 5. Transformation pathway.

Zolfagharian M., Walrave B, Raven R., Georges A., Romme L. , 2019.
 « Studying transitions: Past, present, and future » Research Policy
 looking at past transitions or at transitions in the making?

Food systems transition towards sustainability

The case of the territorial food project « de la Plaine aux Plateaux »

« territorial food project » A multi-layered object!

1. A policy instrument to support transition in food systems related to various French laws regarding food, nutrition, health and social inclusion.

Main purpose : relocalize agriculture and food in so called territories by supporting the installation of farmers, short circuits or local products in canteens.



A procedural policy instrument



National label & contract with a regional public administration



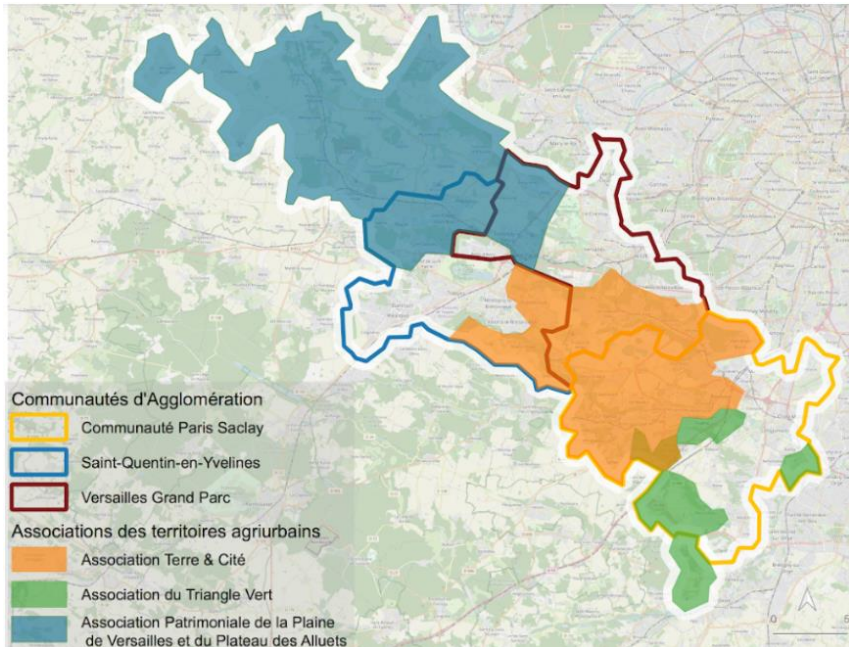
France Relance : agriculture, alimentation et forêt
Mesure 13 Volet B
Amplification des Projets Alimentaires Territoriaux

Appel à candidatures 2021
Actions d'investissement dans le cadre de Projets Alimentaires Territoriaux

Financial means (after Covid crisis)

« territorial food project » : A multi-layered object!

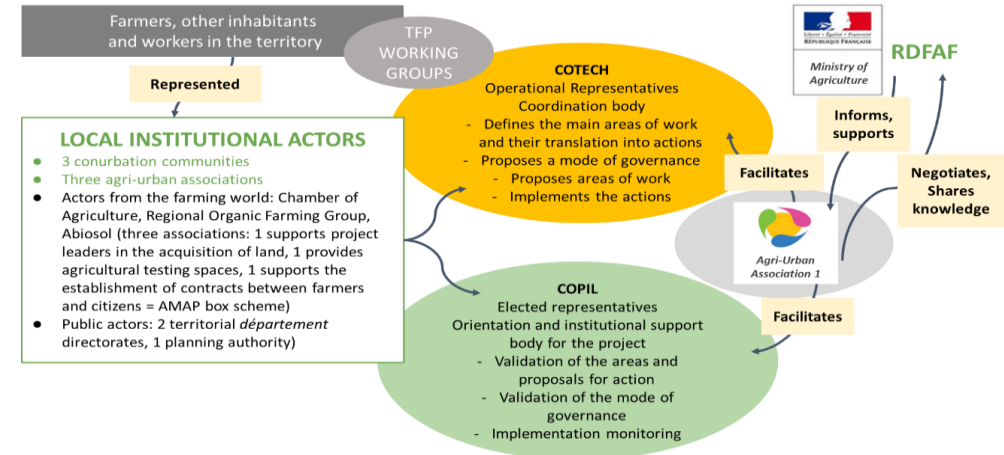
2. A physical and administrative area



3. A collective project with a common goal

Acting together to reinforce the food resilience within the area

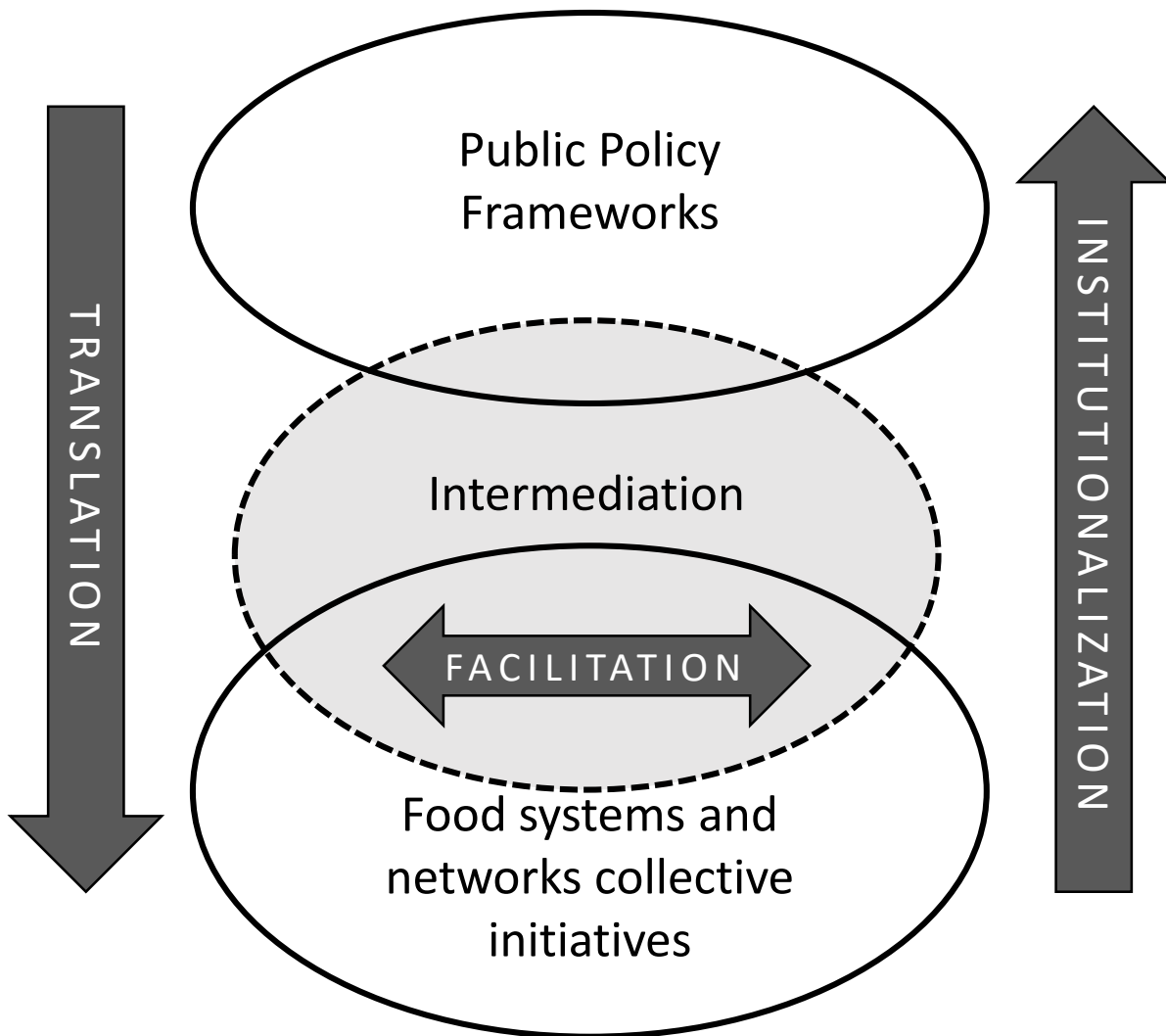
4. A multi-stakeholder governance



5. An action plan with distributed tasks

PLAN D'ACTION DU PAT de la Plaine aux Plateaux		Cibles	Périmètre géographique
Axe 1	ANIMATION : Consolider la démarche partenariale du PAT et impliquer les acteurs du territoire		
	Sous-objectif 1.1: Coordonner la démarche et assurer l'animation transversale et le secrétariat	Co-construire une gouvernance partagée : Organiser les Cotech et Copil, mettre en lien les partenaires, construire des outils de dialogue territorial efficaces Animer des Groupes de Travail : Regrouper les acteurs et favoriser les partages d'expériences Organiser une Conférence annuelle par an Inclure les communes et les acteurs locaux : ateliers intra-agglomérations organisés par les communautés d'agglomérations	Les Partenaires PAT et les acteurs du territoire
	Sous-objectif 1.2: Inscrire la démarche PAT dans les dynamiques de territoire	Articuler le PAT avec les politiques publiques existantes : faire le lien avec différentes échelles (projets des départements, de la région), les autres politiques publiques et avec la dynamique living lab (et les projets de recherche) Coordonner des actions avec les PATS voisins	Communes, communautés d'agglomérations, départements, région, chercheurs. PATS voisins
	Sous-objectif 1.3: Renforcer les connaissances partagées du territoire et documenter cette politique publique	Actualiser le diagnostic agricole et alimentaire Construire un dispositif d'évaluation du PAT Valoriser la démarche auprès de partenaires extra-territoriaux	Les Partenaires PAT, les acteurs du territoire et les autres PATS Autres territoires
Axe 2	PRODUCTION ET TRANSFORMATION: Pérenniser l'agriculture sur le territoire et accompagner le développement d'une offre alimentaire locale, diversifiée et de qualité		
	Sous-objectif 2.0: Préserver les prérequis à l'activité agricole sur le territoire	Agir pour garantir les fonctionnalités agricoles (circulation, drainage, bâti) Favoriser les innovations pour lutter contre les ravageurs des cultures : privilégier l'expérimentation sur des filères de diversification comme les légumineuses Préserver le foncier agricole et intervenir sur les friches Veiller à la diminution des incivilités (dépôts, vols) Introduire les enjeux des logements agricoles dans les projets urbains	Agriculteurs et porteurs de projet agricole Collectivités (élus et service)

How to analyse the management of a food territorial project ?



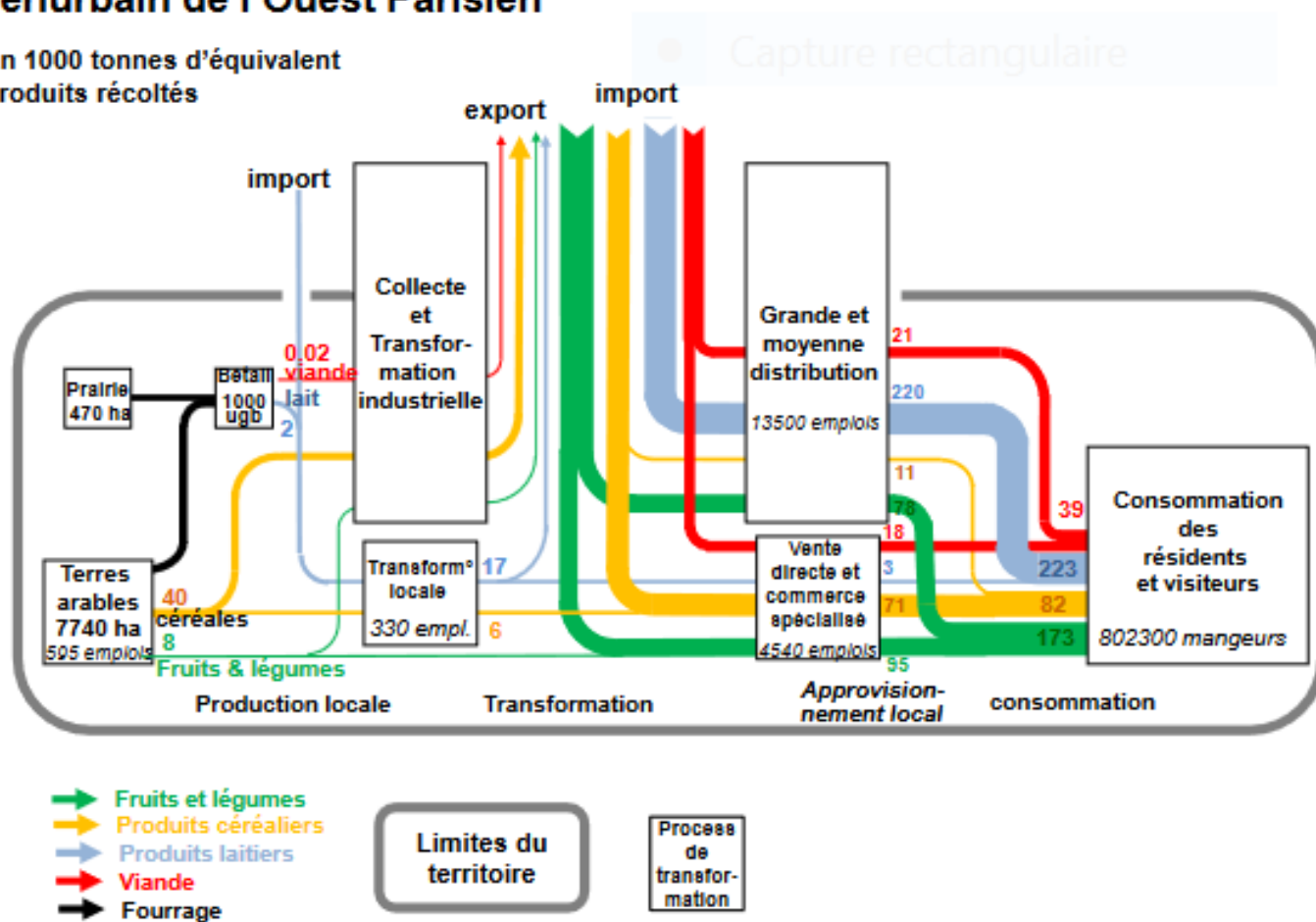
The public policy prescribes compulsory tasks

- ✓ Diagnosis of the food systems
- ✓ Definition of a governance structure
- ✓ A clear action plan with milestones and deliverables
- ✓ An assessment of the outputs and outcomes, and more recently of the impact on change in agri-food systems towards sustainability

territorial metabolism picture a way used to represent the territorial food system :

Périurbain de l'Ouest Parisien

En 1000 tonnes d'équivalent produits récoltés



A « cold » picture

It does not acknowledge that such flux are the result of a long history of interactions between farm land and urbanization, food production and consumption.

How do intermediaries anchor this analysis in a long-term dynamics ?

A richer picture dynamics which co-exist locally



Citizens handling contracts with small-farming holdings



A « french silicon valley » planned by the State , with circular economy

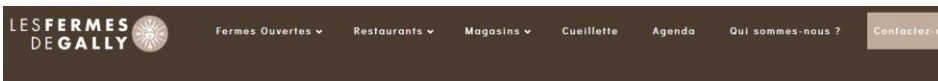
Municipalities : offering job and land to farmers who are comitted to provide vegetables for canteens



Farmers offering to urbans various services (on-farm picking & selling, training)

Farmer organizing local diversification and transformation

Local agri-urban associations building internet facilities to reconnect farmers & consumers



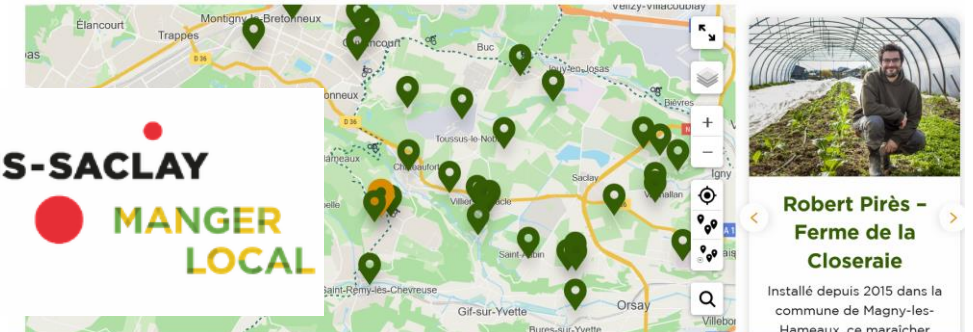
Saint Cyr l'École

La Ferme de Gally de Saint-Cyr est située entre la forêt de Marly et les collines de Saint-Cyr-l'École. Sa vocation s'est affirmée dans la nécessité d'avoir, à portée de ville, une fraction de nature. Ici, petits et grands retrouvent la joie et le plaisir de cultiver, cueillir, cuisiner... dans le respect de la nature.

- Le Magasin
 - la jardinerie - le marché & l'épicerie - l'art de vivre
- La Ferme Ouverte
- Le Café
- Cueillette



PARIS-SACLAY
MANGER LOCAL



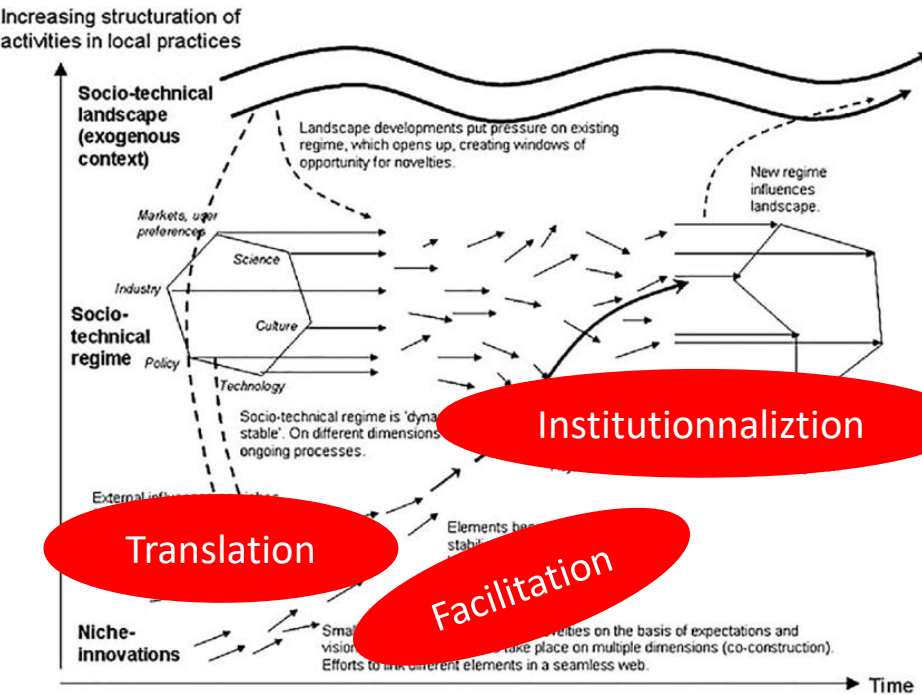
Which place for the ergonomist?

Participate in opening inquiry spaces in which to include

- the multi-voicedness related to the diverse systems developed to re-connect local food production and consumption from an activity perspective
- the workers and their way to perform their activities within these systems including those designing and implementing policies

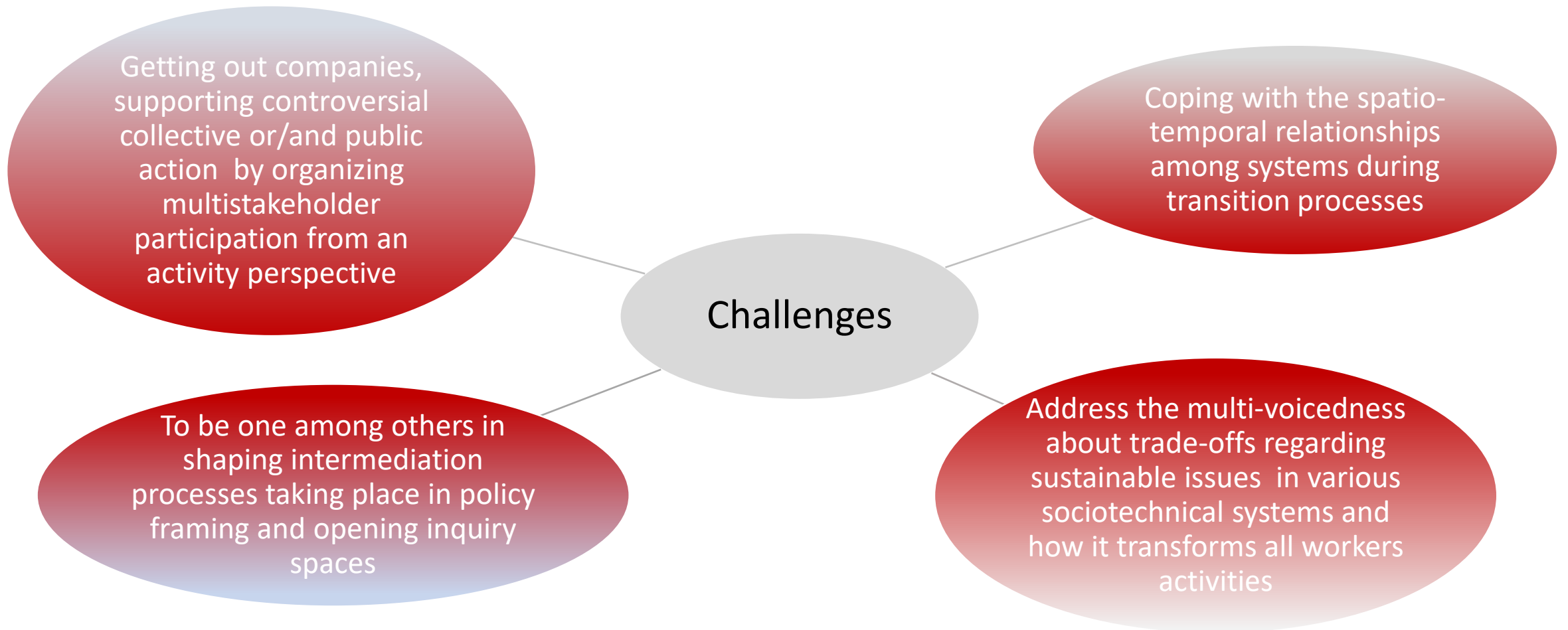
=> In our case we chose to point unseen issues such as

- the activity of workers to access to sustainable food at their workplace
- the way private collective catering managers reorganize work and access to local food while faced the high competition among the various food systems wishing to access local food
- The activity of intermediaries while they collaborate to enable interactions between niches and regime food systems.



The MLP can be related to intermediation processes but don't really support the way we can contribute, as ergonomist, in such intermediation processes

Lessons learn from this case study some challenges we had to face



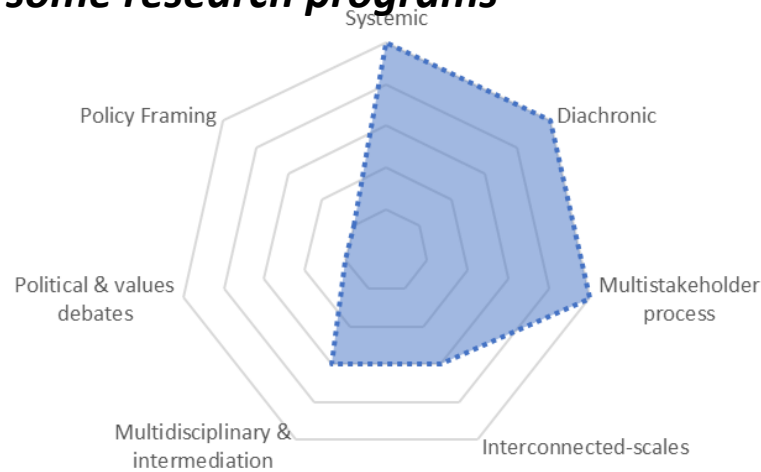
Key points to be addressed by ergonomic frameworks

In order to help ergonomists to face these challenges

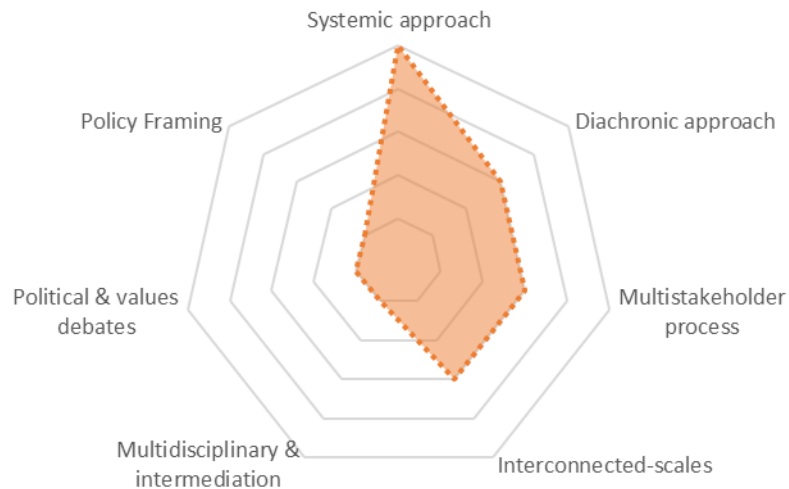
- Develop a **systemic** AND **diachronic** approach
- Support the **involvement of stakeholders** acting at various **interconnected scales**
- Enable the ergonomist to be part of a **multidisciplinary intermediation team** which contributes to a **policy framing and implementing process**
- Give account and support a **multi-voicedness process** on the **long term** in which **political and values debates** take place

how are such key points addressed currently

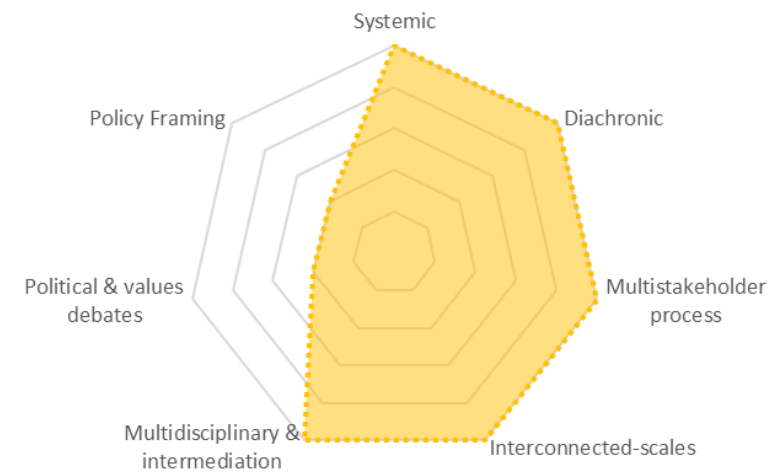
In some research programs



Cultural-Historical Activity Theory

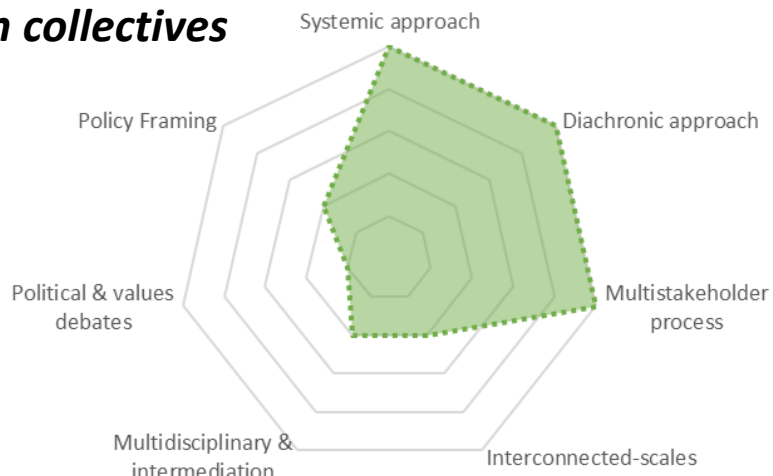


Sustainable System of Systems

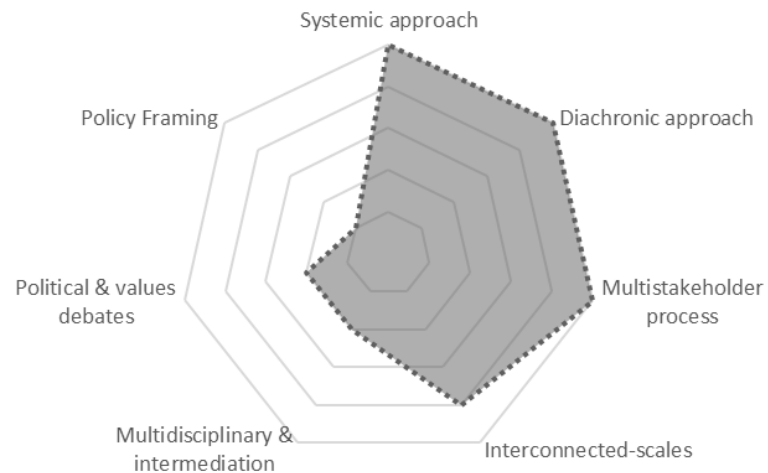


ATEMIS-LIR

Or research collectives



CREAPT



Commission CDD (Design for Sustainable Development) of ARPEGE

Towards an ergonomic community contributing to sustainability transition management

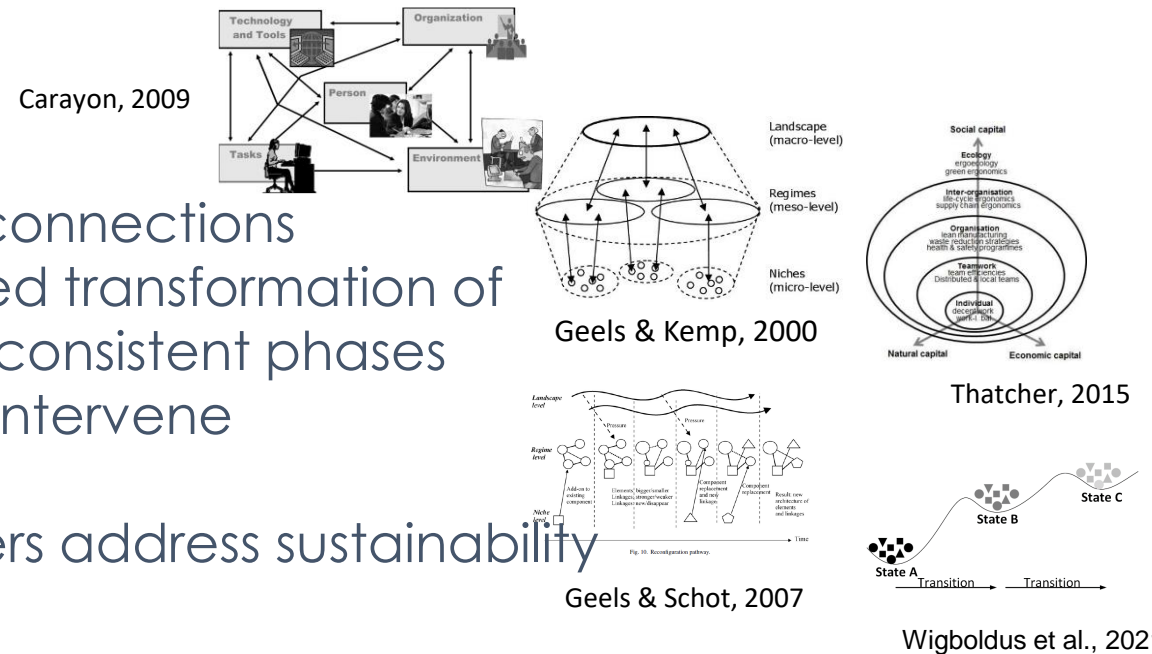
• A need of structuration

- At a national (e.g. SELF) & international level (IEA) ?
- Symposium, Technical committee (as ODAM) ?
- Researchers, students and practitioners in ergonomics or within an interdisciplinary community



• Which topics to discuss ?

- How to represent system : limits, interaction, connections
- How to represent transition : as a multi-layered transformation of intertwined systems/ various stabilization and consistent phases
- How to analyze intermediation work and to intervene as an intermediary ?
- How to be reflective on the way we and others address sustainability issues in transition processes



• How to make aware transition managers of what ergonomics and ergonomists can offer ?

Thank you for your attention

