

Practices of action research in a social innovation living lab

Justine BALLON, HEC Montréal

Véronique SCHAEFFER, Université de Strasbourg, Université de Lorraine, CNRS, BETA

Résumé

Les collaborations entre les chercheurs universitaires et les acteurs de la société se renforcent par le biais d'approches telles que la science ouverte, la recherche-action ou la recherche participative. Des initiatives réunissant des chercheurs universitaires et des praticiens se développent pour accompagner la transition socio-écologique de nos sociétés. Ils s'engagent dans des processus de co-crédation de connaissances. Notre article vise à comprendre comment les pratiques mises en œuvre au sein de living lab en innovation sociale permettent la co-crédation et la diffusion de connaissances qui permettent l'évolution de la société. L'étude d'un laboratoire d'innovation sociale, dont les membres s'efforcent de développer de telles pratiques, permet de réfléchir aux différentes manières de se coordonner dans ces processus de co-crédation.

Mots-clés : Living labs – Innovation sociale- co-crédation de connaissances – recherche action – pratiques – co-crédation de connaissances

INTRODUCTION

This article aims to provide a reflection on the practices of action research in social innovation living labs that involve academic research in the co-creation of knowledge with a diversity of stakeholders. Universities are invited to adopt a more comprehensive vision of innovation, that include social innovation (Benneworth & Cunha, 2015) in phase with the call for profound changes in society that have led to a growing interest in social innovation from political actors and the academic world (do Adro & Fernandes, 2020; Eichler & Schwarz, 2019,

Kamaludin & al, 2021, Moulaert & al, 2017). Universities are more and more required to integrate into their mission a contribution to innovative responses in the face of the challenges gathered behind the notion of *Grand Challenges*, which refer to complex, unresolved societal problems that have dramatic implications on a large scale (climate change, poverty, famine, exclusion, etc.) (Arocena, Sutz, 2021, Griggs et al, 2013). In some trajectories¹, social innovation relies on knowledge co-creation, through processes that bring together heterogeneous actors. Universities thus engaging in open social innovation processes requires that researchers develop new kinds of practices to create knowledge through research action.

The purpose of this paper is to study the practices of knowledge co-creation in research action in a SILL. The research is based on a single case study and shows the practices of the actors involved in SILL that support knowledge co-creation and reveals the obstacles that hinder the dynamic of knowledge co-creation supported by the SILL. The first part proposes a literature review about the specificities of social innovation and social innovation living labs. The second part presents the methodological device and the case studied. The third part shows the results, that are discussed in the fourth part.

1. LITERATURE REVIEW: KNOWLEDGE CREATION CHALLENGES IN SOCIAL INNOVATION LIVING LABS

There are different approaches to social innovation, each offering a way to address and define the challenges and propose interventions. Two main approaches can be outlined (Pozzebon et al., 2021): (1) an instrumental approach and (2) a transformative approach. The instrumental or entrepreneurial approach to social innovation is based on a model of rational action where crises are conceptualized as problems to be solved. The focus is on solutions developed by entrepreneurs and public administrators relying on expert knowledge (Moulaert and MacCallum, 2019), i.e., academic knowledge. The changes considered in social innovation result from the impact of these new solutions on the users. The second approach, primarily inspired by an institutionalist perspective, considers transformation from the standpoint of "implementing new social and institutional arrangements, new forms of resource mobilization, new solutions to problems for which available solutions have proved inadequate, or new social aspirations" (Klein, Fontan, Harrisson, & Lévesque, 2012, p. 11). It involves changing socio-political institutions to promote citizen participation in decision-making and action. In this approach, the aim is to increase "sociopolitical capabilities and access to resources necessary

¹ Durand-Folco., 2019.

to strengthen the right to satisfy human needs and participate" (Moulaert et al., 2005, p. 1976). This approach to social innovation implies new ways of doing, organizing, framing, and knowing (Pel et al., 2020). An important factor in the transformation is civil society and the social and solidarity economy sector (Avelino et al., 2019). The changes considered in social innovation are those resulting from the impact of the innovation processes themselves on society. These processes are based on the co-creation of knowledge in collective open innovation approaches involving a diversity of actors (Da Silva & Bittencourt, 2019). They feed the evolution of society, through the changes they bring about in terms of social relations and practices, changes in behavioral patterns and modes of action (Béjean & al., 2021).

There is no absolute consensus about the definition of living labs (Westerlund & al, 2018, Béjean & al, 2021). Schumacher and Feurstein (2007) define LL as “a research methodology for sensing, validating, and refining complex solutions in multiple and evolving real life contexts”. Schuurman and Leminen (2021) define LL as platforms which organize the collaboration of a diversity of stakeholders into a network that delivers new knowledge and validated solutions that have an impact in real-life context. In their review of literature based on 114 articles, following a comprehensive perspective, Hossain et al. (2019) identify several characteristics of living labs considered simultaneously as landscapes, real-life environments, and methodologies, and according to their heterogeneous stakeholders, their various business models, their methods, tools and approaches, the challenges they face, their outcomes, their inclination to sustainability.

Durand-Folco & Stambouli (2022) identified three complementary perspectives on SILL. First, as participatory co-creation processes, living labs provide a framework where stakeholders, including researchers, actors from civil society, businesses, and citizens, actively collaborate to develop new innovative solutions. This approach emphasizes the involvement of all relevant actors in the creation process, thereby fostering a better alignment between needs and proposed solutions. Second SILL can be envisioned as platforms for participatory inquiry, where different actors share their knowledge, experiences, and perspectives, thus fostering knowledge co-construction. Finally, SILL represents new organizational forms rooted in specific contexts. They stand out for their ability to establish close connections with local communities and the specific environments in which they operate. Based on research-action or participatory research approaches, for example, living labs physically or virtually immerse themselves in the environments of practices, facilitating an in-depth understanding of the experienced challenges and a smoother integration of solutions within this environment. According to Scaillerez et al, (2022) a living lab provides a collaborative framework in a real-

life context that involve diverse stakeholders and use methods to share, create and diffuse knowledge and solutions that have a social impact.

Answering the question on how to collaborate, Kalinauskaite et al. (2021) propose a conceptual framework to initiate and facilitate transdisciplinary collaboration processes. They note the major role of co-creation, co-design and co-implementation of the solution in ensuring and maintaining the alignment of a heterogeneous group of stakeholders during the various stages of collaboration. SILL structures are considered conducive to co-creation that underpins social innovation. Indeed, three dimensions enable the co-creation of social innovation in LLs: the governance of the collaboration process, the platform for interaction and other tools, and the openness of attitudes, structure, and processes (Da Silva and Bitencourt, 2019). As social change is a fundamental goal of the innovation process, social innovation is considered both the desired outcome and the tool and approach that, by involving communities, will foster sustainable and appropriate solutions (Tirziu and Vrabie, 2018).

Action research brings together researchers and practitioners (Christen-Guessac et al. 2006). It is characterized by a dual aim: the production of scientific knowledge and practical social transformation. It takes different forms depending on the trends, the organizations involved and the modes of production. Partnership research, particularly developed in social innovation, is characterized by a partnership between researchers and practitioners to meet a social need through co-creation (Fontan, 2011; Audoux et Gillet, 2011). Social research and development stems directly from the practices of technological innovation. It takes the new knowledge produced by researchers as a starting point to produce new services or products in response to a social need. Whether or not carried out in conjunction with researchers, the aim is to effectively apply the research through the development of services, products, methods, public policies, organisational methods, or economic models (Ellyx, 2020). The contributions are threefold: academic, institutional with transfer activities and practical for the actors involved (Chochoy, 2015). Participatory research is distinguished by the means used to involve citizens in scientific research by the combination of citizen expertise and scientific expertise, creating a space conducive to dialogue and action between citizens and researchers (Anadon, 2007). All these forms of action research share the dual objective of producing scientific knowledge and practical knowledge by bringing together stakeholders and researchers, but they differ in terms of their disciplinary and epistemological roots, context, objective and final product, methods of implementation, degrees of association and positioning of stakeholders with researchers, and criteria of scientificity (Gillet & Tremblay, 2017).

The co-creation of knowledge by a group of heterogeneous actors, belonging to different organisations meets different barriers. Knowledge boundaries come from three properties of knowledge, described as localized, embedded and invested in practice (Bourdieu, 1977, Lave, 1988, Carlile, 2002, 2004). Knowledge is localized around specific problems because individuals specialize around specific problems. The collaboration of heterogeneous actors implies the collaboration of actors specialized around different problems and having developed specific knowledge. Knowledge is embedded in practice, in technologies, in methods and the more individuals are far from the practices of the others, the more it is difficult to transfer this embedded knowledge. Knowledge is also invested in practice. This means that knowledge is invested in the way of doing things. Successful experiences reinforce the relevance of the knowledge developed through practice, and individuals will use this knowledge to solve problems in the future. This generates the core rigidities of organisations characterised by Leonard-Barton (1992).

The strong link between knowledge and practice lead to knowledge boundaries, because it makes difficult to transfer and to share knowledge across functional and organisational boundaries. Carlile (2002) presents three approaches of knowledge boundaries: syntactic, semantic and pragmatic. The syntactic approach to boundaries stresses the necessity to have a common syntax to be able to share information. However, the specialisation of each actor involved in the co-creation of knowledge induces syntactic differentiation. Collaboration thus requires the development of a common syntax and an information processing capacity. The semantic approach of barriers come from the emergence of different interpretation even if the syntax is common to the actors involved, because they use different meanings in their functional units or organisations. The third approach proposed by Carlile (2002) is the pragmatic approach. In this approach “transforming knowledge (Carlile, 1997) refers to a process of altering current knowledge creating new knowledge and validating it within each function and collectively across functions (...) The cross-boundary challenge is not just that communication is hard, but that to resolve the negative consequences by the individuals from each function they have to be willing to alter their own knowledge, but also be capable of influencing or transforming the knowledge used by the other function”.

Few studies on SILL have focused on the processes that allow the heterogeneous actors to coordinate and co-create knowledge, learn, and innovate (Magalhaes and al., 2020). This prompted us to approach social innovation in action and try to identify the collective process of co-production of knowledge in situation and the role of academics in these processes.

Uncovering coordination practices and the processes of co-production of knowledge and learning will allow us to clarify the role of academic researchers in the development of social innovation dynamics.

2. RESEARCH APPROACH AND METHODOLOGY

2.1. A SINGLE CASE-STUDY

This qualitative research is based on a single case study (Yin, 2003) that captures this complex reality experienced by universities, businesses, and organizations both over time and space, and on multiple levels of observation (Schwandt & Gates, 2018). We are interested in coordination practices within SILL, that reflect an interest in what actors do, the devices they make use of in action, and the performing of practices (Gherardi, 2016; Feldman and Orlikowski, 2011). From the practice perspective, research is considered a social practice that produces knowledge in action (Gherardi, 2019). This perspective draws attention to the materiality of organizational practices (texts, devices, instruments, activities, measurements) and how they enable action.

We choose to study the Manufacture Coopérative (Manucoop) in France. Manucoop is an action-research cooperative born in 2015 from a meeting between people from the cooperative and research worlds. They made the same observation: the need to think and act to produce alternatives and support social transformation processes with and through cooperation. Manucoop presents the features of SILL driven by social innovation. It combines cocreation of knowledge, co-conception and co-implementation of the solution (Kalinauskaite et al., 2021). One co-author of this paper participates in the activities of this SILL in a research action approach and provide an insider's understanding of the practices observed, in addition to the researcher's point of view. Its 50 members - cooperators, worker cooperatives and researchers – carry out consultancy missions for cooperatives (governance, inter-cooperation) and action research (gender equality in the social and solidarity economy, transmission of mandates in cooperatives). The cooperative is organized around different projects (there is no employee but autonomous worker and volunteers working on projects) and the running of a cooperative life, to create links between members and to make circulate knowledge and practices. Manucoop has no physical offices; it exists where its members make it exist.

2.2. DATA COLLECTION AND ANALYSIS

To understand coordination and research practices in the SILL, we took a two-stage approach. First, we analyzed the grey literature and the documents produced by the SILL. Then, we described the SILL based on elements of the organization such as the links between researchers and practitioners and the research processes at the core of their laboratory activities.

The analysis was focused on situated actions, which refer to activities, actions, and interactions that take place in a real context, encompassing the environment (conditions and resources such as norms, values, policies, infrastructures, tools, instruments, etc.). We began processing the data with a description in the form of a monograph, that includes a descriptive chronological narrative for the SILL (Langley, 1999). It helped us to identify periods and the key actors involved, according to their role and function, as researchers, practitioners, users, or stakeholders. We analyzed also the activities performed by these actors within the SILL context, including their research and coordination practices.

Finally, to potentially conduct a more in-depth process analysis, we identified troubled situations, that is, situations that are not yet stabilized and reveal different perspectives, interests, positions, values, or normative horizons regarding the conception of research - theory, practice, and their links - and thus the coordination problem to be resolved and its aims. These situations are of interest to observe in SILL, where the objective is to bring researchers and practitioners together, as they have traditionally operated in distinct spheres, to understand the challenges of cooperation and the emergence of new practices or creative solutions. In presenting the results, we focus on keys moments to highlight the challenges posed by the collaboration between researchers and practitioners in a SILL. These results are presented to explore the characteristics and the challenges posed by the cocreation of knowledge between heterogeneous groups of actors, that include researchers and practitioners.

3. MANUCOOP: PRACTICES AND OBSTACLES FOR SOCIAL TRANSFORMATION

3.1. THE HISTORY OF MANUCOOP

Manucoop is the result of a trajectory of cooperation between various actors through research-action design. Between 2012 and 2015, several action-research projects, involving cooperation between two cooperatives, some of its members and academic and practitioner

researchers, led to the production of articles, books and conferences, thanks to public and cooperative funding and voluntary work. One of Manucoop's founding moments was the international symposium entitled "Transition vers la coopérative / coopératives dans la transition" held in December 2013. Researchers from France, Greece, and Argentina, as well as practitioner-researchers and practitioners, came to present papers and cooperative experiments.

From 2015 to 2018, Manucoop, structured itself, became a cooperative, and created its own action research and intervention tools. Manucoop's membership grew progressively. For a year and a half during this period, Manucoop had an office in a third place in Paris. Since 2018, Manucoop has continued to develop more socially and culturally than economically, carrying out several successful action-research projects, continuing to publish and raising its profile within the cooperative movement. Its membership continued to grow, especially in number of practitioners. However, Manucoop found it difficult to maintain a dynamic cooperative life, with an active participation of academic researchers. This tends to restrict its development, despite some fruitful new partnerships. Manucoop is organized around a coordination circle, including two co-managers, and a monthly agora where volunteer members can take part in decision-making and find out what's going on in the cooperative.

3.2. THE MEMBERS OF MANUCOOP

Four categories of members can be distinguished: academic researchers, cooperatives and NGOs, practionners researchers and practionners. A specificity of Manucoop is the presence of two categories of researchers - academic and practitioner researchers. In the cooperative, at least formally, everyone, regardless of "label", participates equally in the activities. At Manucoop, the relationships of equality we seek to achieve lead academic researchers to review their posture, following a logic of humility, in relation to their academic knowledge, which we find in action-research practices.

Manucoop works on action research projects, bringing together the relevant members, sometimes with partners (research laboratories, external researchers, non-member cooperatives). Historically, the key role of several people (5 practitioners, 4 practitioner-researchers, 2 researchers, 3 cooperatives) can be identified in project coordination. Participants in AR project come from all four categories of members or only one or two depending on the interests of participants.

3.3 THE ACTIVITIES LEADED BY MANUCOOP

Manucoop currently develops two areas of activity: working with organizations in the social and solidarity economy and leading action-research projects about questions such as methods of transferring management and leadership mandates in business and employment cooperatives (BECs), gender equality in the social and solidarity economy or emancipation of BEC entrepreneurs. Conceived as a space for reflection and social innovation for its members, they encourage a variety of experiments that promote the co-creation of knowledge to respond to the problems encountered by its members. At Manucoop, research and action are jointly associated with the aim of regaining the power to act through the development of economic democracy and maintaining a permanent questioning of our practices. The aim is to produce a common research culture and shared, common knowledge. In this way, Manucoop subscribes to the tradition of social economy thinking, placing social transformation through action research at the heart of its project, on the themes of democracy in production, the division of labor, income distribution, forms of subordination and solidarity-based practices rooted in economic activities. In connection with its research, it publishes brochures and books for the world social economy world (eg. Appendix 1), and organises or takes part in events, such as conferences and research symposia. It has a web radio station, designed as a space for reflection, criticism, and scientific mediation.

Analyzed through the prism of SILL, Manucoop is characterized by several elements. The construction of knowledge begins with the identification of a problem or a need, which needs to be resolved through investigation, reflection, and experimentation. It is the people concerned who are invited to do this, in cooperation with researchers. In this way, the challenge is first to understand the situation, and then to think together about what's possible, based on existing experiences and imagining what is possible or seems impossible.

As a public space of democratic deliberation, as a coop, Manucoop brings together actors, researchers, organizations, and individuals. There is no hierarchy between members (at least not intentionally) and no hierarchy in speaking and writing. Anyone with a legitimate interest in an issue, experience or knowledge can take part in research, as long as they respect the rules of co-production. There are forums where actors can express themselves freely on a variety of subjects: AGMs, agoras, coop council open in addition to spaces dedicated to research. They combine several types of knowledge solve (popular, practical, experiential, and scientific) to address the problems they seek to solve.

3.4 THE PRACTICES OF KNOWLEDGE CO-CREATION IN ACTION RESEARCH

Manucoop has developed an action-research system inspired by popular education practices in the social economy (Desroche, 1990; Draperi, 2007): « les universités éphémères », which can be translated as ephemeral university. This involves spending a day and a half reflecting on a theme (for example local currencies in companies, in 2017) with interested parties (researchers, practitioners, etc.), combining several postures and activities between research, action and transfer. It can happen in universities, cooperatives or elsewhere, depending on the possibilities. The challenge is to build on these experiences and their cross-fertilization to create learning materials that can be disseminated (data sheets, experience stories, drawings or diagrams, audio/video support, etc.) to feed the co-support network in an open-source spirit. Over the course of a project, several workshops are organized, in small groups and plenary sessions, in a spirit of collective intelligence, and following an inclusive approach to co-create new knowledge.

3.4.1 The choice of the research questions

The issues addressed by Manucoop have specific characteristics that lead the action research process to be conducive to social innovation (Pel et al, 2020). The issues are complex, have a societal dimension and emerge from social constructs rooted in unconscious representations. For example, the issue of gender inequality in the SSE world addressed by Manucoop, presents such characteristics. The choice of this issue came from documents and testimonies collected by inquiry, that showed the persistence of inequalities between men and women in the sector of SSE while it promotes values of equality between all actors. It is also based on the use of popular education methods to reveal those that stakeholders want to address. During the AR process, methods used include consciousness-raising inquiry, forum theatre and open forums. They bring out the issues that people want to work on collectively. One of the first steps in research action projects is to define the terms, to have a common syntax and to lower semantic barriers.

Projet Transmission dans les coopératives

« On a retenu le terme de transmission coopérative pour cette recherche, là où d'autres terminologies sont utilisées, notamment pour des entreprises non-coopératives. On pourrait parler de succession, qui offre une acception plus patrimoniale, et peut être aussi paternaliste, qui n'est ni dans l'esprit des coopératives, ni dans leur statut car nous ne sommes pas dans le cadre d'un changement de propriété. On évoque les changements de direction. La polysémie est intéressante au sens où il y a un changement au niveau des personnes impliquées dans la gouvernance et de facto une évolution dans l'orientation, en lien avec les manières de faire le travail politique de direction. On s'est donc arrêté sur le terme de transmission pour cette recherche-action dont l'objectif est de comprendre ce qui se joue dans les structures économiques organisées de façon démocratique (...) » (source : La Manufacture coopérative, 2022)

Projet égalité

Comment définir l'égalité ? Au-delà des débats politiques ou philosophiques légitimes, nous avons délibérément choisi de circonscrire la notion d'égalité à son approche légale :

- Interdictions des discriminations en matière d'embauche,
- Absence de différenciation en matière de rémunération et de déroulement de carrière,
- Obligations vis-à-vis des représentants du personnel (élaboration d'un rapport écrit et négociation),
- Information des salariés et candidats à l'embauche et mise en place de mesures de prévention du harcèlement sexuel dans l'entreprise.

Nous nous appuyons également sur l'accord professionnel du 27 novembre 2015, portant sur l'égalité professionnelle femmes-hommes dans l'ESS, qui vise 3 objectifs :

- Parvenir à l'égalité effective
- Outiller les branches professionnelles dans leurs dynamiques de négociation et favoriser la mise en place d'un cadre commun, propre à l'économie sociale et solidaire
- Soutenir la négociation en entreprise sur l'égalité professionnelle

Source : La Manufacture coopérative - 2018 - www.manufacture.coop

The action research carried out is based on an understanding of the situations in real life, based on a set of observations and on inquiries. The methods used make it possible to incorporate the sensitive dimension in issues such as discrimination and gender inequality. The sensitive nature of the issues that affect people personally **poses barriers that lie upstream of syntactic**, semantic and pragmatic boundaries. These barriers lead **to not speaking** out behaviors, upstream of knowledge sharing. The work done to understand the situation has led to the action research being structured around two main issues: the invisibility of inequalities and women's access to power.

Projet transmission

“La dimension très intense de la relation des personnes à leur organisation est perceptible, mais les épisodes les plus difficiles des expériences de transmission sont moins mis en avant. Est-ce de l'autocensure, de la pudeur, une volonté de protéger la structure ? Ou bien les souvenirs de la résolution des problèmes sont-ils plus prégnants que leur manifestation même ?”

(source : La Manufacture coopérative, 2022)

Projet Égalité

« Nous avons mené cette enquête dans l'esprit de John Dewey, philosophe pragmatiste, interactionniste, pour lequel on avance sur la voie de la démocratisation par l'enquête, avec les personnes impliquées. Dans cet esprit l'enquête constitue une expérience commune, et croise les expériences singulières. Elle procède sur la base du sensible, de vécus. Cette dimension sensible dans le champ des inégalités, des discriminations, des relations femmes-hommes est en soit un vecteur de mobilisation. Nous la considérons comme une composante de l'enquête, puis de la mobilisation. »

Source : La Manufacture coopérative - 2018 - www.manufacture.coop

Another factor that can lead to not participating to workshops is the lack of awareness of certain issues that do not necessarily fall within the sphere of concern of people, while they are concerned. The role of Manucoop is then to raise this awareness, through the use of tools and methods of inquiry.

In the AR about inequalities, very few men took part in the workshops on this subject. An inquiry was conducted among some of them who did not take part in the workshops. The results revealed a fear of speaking out on this subject, of being in a position of blame in the workshops, of being incompetent, of not feeling concerned or of not wanting to change things. In this way, the collective knowledge creation project can face barriers linked to the questioning of the interest of the subject.

“It is widely acknowledged that stereotypes create limitations and obligations for both men and women. The question that arose, and which was addressed in the form of a theatre-forum at the Université Éphémère, was how can we work on our own limitations? The organisation of awareness-raising workshops, the creation of specific working groups, reflection on company communications and the implicit or explicit message they send out in this area, the organisation of lectures or plays, are all ways of deconstructing stereotypes and trying to overcome them. Mediation through artistic practices or tools was highlighted during the workshops as a way of changing the way we look at situations, and in particular unconscious gendered constructs, by associating a different language, engaging the body and the senses and not just the mind and rationality.”

(source : La Manufacture coopérative - 2018 - www.manufacture.coop)

In this project, the collective also mobilised various sources to show that inequalities are in contradiction with the values espoused by the cooperative world to which Manucoop's members belong. These sources are the cooperative principles reaffirmed by the International Cooperative Alliance (ICA), the guide to good practice drawn up by the Conseil Supérieur de l'ESS following

the law in 2014, and the 2015 professional agreement which affirms the equality of men and women. An interview was conducted with Elisa Braley, Chair of the Equality Commission of the Conseil Supérieur de l'ESS, on the actions taken and the difficulties encountered in getting people to acknowledge the inequalities between men and women in the SSE.

3.4.2 The collective search for solutions in democratic deliberative forums

For Manucoop, knowledge is above all a collective analytical reflection on action. Knowledge stems from experimentation and is based on and nourished by scientific knowledge. The result is a way of producing new knowledge through continuous action-reflection, best symbolized by the ephemeral universities: for a day and a half, people who are interested (often researchers and actors, but mainly actors) come to contribute to the reflection, drawing on their experiences and readings to formulate reflections and ultimately new experiential knowledge. In other words, more than collaboration, it is cooperation that is central to the production of knowledge at Manucoop, where action research occupies a central and permanent place. This is reflected in the use of open-source tools such as wikis and podcasts. In the deliberation forums, there is no hierarchy between members, so that different types of knowledge can be combined. People find each other in the organisation of exchange times. From a spatial point of view, people are arranged in a circle to encourage non-hierarchy and to ensure that all words have the same importance.



Source: La Manufacture des coopératives, 2018

In the project about gender inequalities, surveys have been carried out to develop knowledge about solutions implemented and experimented to make visible the question of inequalities within organisations. The experiences of a variety of actors were shared: the UP group learned to people how to read and understand statistics to give visibility to the inequality problem, the journal Alternatives Économiques has set up a working group to raise the profile

of women in published articles (following the observation that in half the issues 100% of the experts were men), Enercoop has set up a temporary working group to identify inequalities and disseminate tools to help raise awareness, Coopaname, which set up a working group and included gender equality in the organisation statutes. Manucoop uses tools to learn collectively. “L’Arpentage” and “Gro’débat” are methods for acquiring knowledge collectively on specific issues (see below)

L’arpentage

L'intention : S'approprier collectivement un livre ou des articles sur un sujet

Les étapes :

1. Se répartir par groupe de deux/trois des passages du livre ou des articles sur le thème choisi (5')
2. Lire dans un premier temps chacun-e de son côté. (10')
3. Échanger parmi les sous-groupes sur vos lectures respectives, en suivant une même ligne, par exemple : (15')
 - a. L'idée qui me semble centrale
 - b. Ce que j'ai appris
 - c. Ce que je n'ai pas compris, ou ce sur quoi je ne suis en désaccord
 - d. Ce qui fait écho à mon expérience
4. Préparer une restitution sous forme graphique : dessin, schéma, frise... (10')
5. Restitutions en plénière (5' par groupe)

La durée : Environ 45'

Le matériel : Le livre à arpenter ou des copies des articles proposés, du papier/feutres

(Plus de détail sur cette méthode :

<https://www.scoplepave.org/pour-discuter>)

Source : La Manufacture coopérative, 2018)

Gro’débat

L'intention : S'approprier collectivement des connaissances sur un sujet

Les étapes :

1. Formuler une problématique (5')
2. Par groupe de 3 à 5, brainstormer, en chronométrant chaque partie, et en notant sur des grandes feuilles :
 - a. Brainstormer sur « c'est quoi le problème ? » 10'
 - b. Brainstormer sur « ce serait quoi l'idéal ? » (et là on se fait plaisir !) 10'
 - c. Brainstormer sur « que peut-on inventer ? » 10'
3. Restituer au groupe les idées trouvées.

La durée : Entre 30 et 45' selon le nombre de participant-e-s

Le matériel : Grandes feuilles / feutres

Source : La Manufacture coopérative, 2018)

The project called Transmission led by Manucoop in 2021 and 2022, about the transfer of management and leadership mandates cooperative organisations, illustrates this collective process. The project was funded by the Crédit Coopératif foundation and co-sponsored by Manucoop and the Myne association, in a context where a whole generation of founders, managers and co-directors of cooperatives are retiring. The AR was steered by a researcher-participant supported by a committee of 8 people including academic researchers, practitioner researchers and practitioners. In the form of a case study, 12 semi-directed interviews were conducted by 2 people, transcribed by 4 others, then analyzed in several phases by pairs and then put into practice. To pursue the analysis of the data, an action-research workshop was organized with 35 persons, members or not from the cooperatives, among them academic and practitioner researchers, practitioners and cooperatives networks, among them former and future managers of cooperatives.

Not speaking or not participating actively to the workshops can also result from unconscious cognitive bias, which means that all people's voices are not listened to in the same way. The

project about gender inequalities reveals such biases. The observation that men are more likely to speak up came up again and again in the interviews and workshops. This raises questions about the collective action research approach itself. How can we avoid unconsciously taking power by preventing others from speaking out? Actions and tools were created during the ephemeral universities to raise awareness of the problem and come up with solutions. The “Speech Anthropologist” help to compile statistics during meetings to make visible the inequalities, the “Consciousness-raising Inquiry” is a series of questions that has been developed to raise awareness of gender inequalities.

3.4.3 Action and diffusion of knowledge

A permanent working group was set up to continue sharing personal experiences. The GAP ESS group (Genre Analyse de Pratiques ESS) is the result of a short-lived university. This group works with people in difficulty. A community of interest was also created following the AR about transmission, allowing former and future managers to gather once a year, for two days, to share their experience et difficulties.

Various tool sheets used during the AR, drawn up and have been shared through books and wiki so that they could be used beyond the working group.

6. Fiches pratiques "outils"

 Manufacture coopérative - 2018 - www.manufacture.coop

Fiches pratiques "outils"

→

Ce chapitre regroupe quelques fiches pratiques d'outils que nous avons utilisés lors de cette recherche-action. L'idée est que ces méthodes puissent être appropriées dans le cadre d'un travail spécifique sur le genre ou dans le quotidien des organisations.

L'Anthropologue de la parole

L'intention : Lors d'une réunion, une assemblée générale, un séminaire, un colloque... une personne est chargée de tenir des statistiques de prise de parole. Elle peut ensuite restituer de façon agrégée et anonyme les résultats au groupe.

La grille d'observation :

Femmes	Action	Hommes
	Prend la parole	
	Monopolise la parole	
	Interrompt	
	Est interrompue	
	Fait des « chevauchements »	
	Subit des « chevauchements »	
	Rappelle le cadre collectif (ordre du jour par ex)	
	Soutient la parole de l'autre**	
	Introduit de nouveaux sujets	
	Sujets introduits traités par la suite	

Source: la Manufacture des coopérations, 2018

L'enquête conscientisante

Intention : Forger une conscience collective d'un vécu et l'orienter vers de l'action collective

Consignes :

- *En binôme, les rôles tournent : on interviewe puis on est interviewé-e. Il ne s'agit pas d'un dialogue, soit on écoute, soit on parle.*
- *La personne qui pose les questions gère le temps avec bienveillance. On ne fait pas de commentaire.*
- *La personne qui répond ne répond qu'à ce qu'elle souhaite.*
- *Attention : il n'y a pas de bonnes réponses ; si une question a été mal comprise mais que quelque chose d'autre est "sorti", ça a autant de sens. L'expérience de l'enquête est singulière pour chacun-es.*

Restitution :

- *Dans le binôme : assembler les points identifiés qui ressortent de l'enquête qui vous tiennent à coeur et qui mériteraient d'être travaillés collectivement.*
- *Facultatif : Un moment de dévidoir : ça vous a fait quoi ? Quels sont les ressentis...*
- *Boules de neige : en groupes de quatre puis de huit, «collectons les thèmes qui nous semblent important à traiter ».*

The project about transmission ended with the redaction of a book, only made of verbatims, to share what to do, and the difficulties when you transmit a mandate in a cooperative.

3.5 TROUBLED SITUATIONS

3.5.1. The involvement of academic researchers

At the very beginning of Manucoop, academic researchers were among the most involved in projects. Nowadays they are very few in number to participate regularly. In January 2022, the cooperative council conducted short interviews to understand the reason of this disengagement. Despite their disengagement, they are still convinced by the importance of the commitment in such projects. The main reason they revealed is the lack of time because of very intense periods of work. Other reasons such as the difficulty to obtain research grants and the Covid-19 crisis, have strongly impacted the ability of researchers to get involved. As a result, practitioners and researcher-practitioners are the most involved in weekly activities (such as Agora) and action research projects. Despite the wish of Manucoop to include academic-researchers, the institutional conditions of the university makes it difficult. The knowledge co-produce and transfer by practitioners is difficult to publish in scientific review and not enough valued in the career of academic researchers.

Research outputs in living labs, such as brochures, web radio stations, essays, and more, are specifically designed to be useful and applicable in practical settings. They are developed in close collaboration with actors in the field and are directly anchored in the concrete realities of social issues. Within the university context, the increasingly recognized type of research outcome is that of rank-A publications. These publications result from problematization conducted within an academic research field and rigorous and objective methodologies. Rank-A publications are peer-reviewed and primarily read by other researchers in the same field. They play a central role in disseminating academic knowledge and recognizing researchers within the scientific community. This disparity between research outputs from living labs and the criterion for academic recognition creates tensions and challenges for researchers engaged in SILL. Researchers may feel caught between the need to produce practical and relevant results for practitioners while also meeting the academic standards that prioritize traditional scientific publications. This situation raises questions about how research conducted in living labs can be further recognized and valued within the university system.

With academic researchers less actively involved, the vignette also suggests that practitioners and researcher-practitioners have taken on more prominent roles in the weekly activities, such as Agora sessions, and action research projects within Manucoop. This indicates

a shift in the balance of participation towards those with more practical experience in co-creation process.

3.5.2. Manucoop and the lack of financial resources

Another troubled situation relates to funding. If several small funding were found to realize AR projects, there were never sufficient to remunerate enough persons to work on it, and the academic researchers have not enough interests and time to participate. Fundings came from foundations, universities. 2 funding applications to the French National Research Agency (ANR) have been made without success. Those could have been really helping to develop long-terms AR projects in Manucoop. The problem of Manucoop is to be between institutions: it cannot function as a classic cooperative because it is dedicated to research. It is not considered as a scientific research organisation, because practitioners, practitioner researchers and cooperatives participate actively to the social innovation projects. It is an unsolved problem regularly addressed in Agoras, cooperative councils, and general assemblies.

The unique nature of Manucoop, operating as a cooperative dedicated to research, creates challenges in obtaining funding through traditional avenues, as it does not fit neatly into existing funding frameworks. Manucoop operates in a unique space as it cannot function as a "normal" cooperative since it is dedicated to research but is not perceived as rigorous scientific research. The perception of AR conducted within living labs as less academically rigorous can lead to a devaluation of the research and hinder the access to institutional funding and support. When evaluated blindly by other researchers, using conventional research criteria, research projects like Manucoop's tend to be systematically rejected, however their quality.

The change in funding methods, which now tend to be project-based (in research as much as in social innovation), makes it all the more difficult for SILL like Manucoop to access funding. In fact, project-based funding leads to fierce competition for projects that are more in line with mainstream frameworks than with those claiming to bring about social change. Moreover, obtaining funding also depends on technical skills and experience: there is a way of filling out grant applications that encourages success.

3. DISCUSSION AND CONCLUSION

This exploratory study aimed to understand the evolving practices of academic research and knowledge production in practical contexts to enable the co-production of responses to

socio-ecological challenges. We explored collaborations between academics and societal actors to see how these actors coordinate through plate-forms of participative inquiry and through research-action or participatory-research approaches. Through a practice approach we explored coordination practices in SILLs.

The case shows a fruitful cooperation between researchers and practitioners to solve problems. This collaboration is established through action-research mechanisms that enable users to deal with problems. It is based on an alternative epistemology in which knowledge is produced by a variety of competent actors IN action. The very process of knowledge production is seen as transformative. The SILL we have explored is an innovative example of organization that could inspire any organization aiming to work with, and not at a distance from, communities. The fact of organizing in connection with social actors enables to grasp how social and environmental crises are played out in real-life situations, so to truly respond to the needs and aspirations of the people and populations concerned, outside the sole logic of the market. They also enable to set up ongoing collective learning dynamics and to overcome knowledge boundaries (Carlile, 2002, 2004). The role of the SILL is to provide tools and methods, called boundary objects (Carlile, 2022, 2004) to overcome these barriers. However, our case show that, because the issues addressed and leading to social innovation present specific features, specific boundaries to knowledge sharing appears in addition to syntactic, semantic and pragmatic barriers:

- Some people affected by the subject may not share their knowledge of it because the issues are personal, sometimes intimate and sensitive. Speaking out can therefore be an obstacle upstream, which is why specific methods are used, such as theatre.
- Some people may not be aware that they are affected by the problem. This is what happened, for example, with the men on the subject of gender inequality. They felt that it wasn't their problem. One of the roles of the SILL is to raise their awareness. Before involving them in the co-creation of knowledge, we need to change their values or make them aware of the gap between their behaviour and their values.
- During the process of knowledge sharing and co-creation, the principle is that there should be no hierarchy. The case of the subject on gender inequalities showed that this is not the case. Biases raised in the literature on epistemic injustices show that some knowledge has more credibility than others, depending on the person from whom it emanates. The members of the collective have unconscious biases that are social constructs (biases linked to gender, origin or the person's social status) and that are in contradiction with the principle of equality.

The paper highlights two issues around the role and engagement of academic researchers and fundings of these organizations. From the description of two troubled situations, we can draw several remarks. Manucoop was born out of an initiative by a wide range of actors involved in action research aimed at solving problems encountered in society. Manucoop is a SILL situated between institutions. The link with the institutions is fragile. Their norms of performance that drive the behavior of the actors involved create unresolved tensions. In this situation, it is difficult to Manucoop to obtain the support of the institutions in terms of financial resources and involvement of academic researchers. Academic researchers, as members of research institutions, respond to very specific individual performance criteria, which take little account of the impact on society of the action research carried out. The social innovation initiated by the SILL, based on the creation of new links between actors, comes up against the rigidity of academic institutions. In the French research context, as in many other countries, the performance of academic research is defined by performance norms in a field of international competition. From this perspective, the priority is given to a quantitative evaluation of publications or patenting, over the social impact of action research. Researchers are therefore forced to choose between their legitimacy in relation to academic institutions or in relation to stakeholders facing social problems that have not been resolved by institutions. This tension, which arises from the SILL's position between institutions, undermines the link that the SILL is intended to establish between society and academic research.

A number of social science researchers have been active since the 1990s in highlighting the role of the creation of knowledge in humanities and social sciences for society, over the commercialization of scientific knowledge. In the technological activities of knowledge transfer, scientific research activities are undertaken with a view to applied research, which is different from action-research. The question of the researcher's legitimacy, while not absent, is therefore posed differently.

These two issues emphasizes the difficulties faced at both the level of public policies and universities in recognizing and institutionalizing research conducted outside university's walls. These challenges are even more pronounced when it comes to social innovation research, as compared to research in technological innovation, which benefits from established structures such as technology transfer centers, living labs, and other innovation-related initiatives. This lack of institutional recognition and support for social innovation research is very little explored in the SILL literature, to the exception maybe of Bayuo and al (2021) that reports lack of incentives at the level of universities to support the development of social innovation. The same applies to the lack of commitment on the part of researchers.

SILL aims to involve communities in the development of sustainable solutions and have a lasting impact on their territories. To this end, specific socio-technical arrangements are put in place and activated through various research processes. By combining research and action, SILL research methods are innovative compared with conventional academic research, both in terms of how problems are defined and how results are analyzed and presented. However, the evaluation of research at university or at policy level is based on certain criteria, such as originality in relation to an existing body of knowledge, methodological rigor, and is carried out by peers in a research field. The value placed on certain types of scientific production in the academic world (publications in peer-reviewed journals or participation in certain academic symposia, for example), encourages researchers to privilege these forms to which a large portion of their time and recognition are associated.

The nature of SILLs, operating at the intersection of research and social community practices, poses challenges in fitting within existing funding and institutional frameworks. Exploring socio-material arrangements that facilitate this fit and recognizing the institutional value of SILL research outputs could contribute to sustaining innovation in communities and promoting the institutionalization of action research in social innovation.

In conclusion, this study sheds light on the operationalization of relationships between research and practice players within SILLs. It uncovers the practices involved in co-creating knowledge and identifies areas that require further exploration. The exploratory study, although limited in scope, contributes to the theoretical and epistemological foundations of LL literature, particularly in the context of social innovation, since the LL approach is still at the conceptualization stage (Joncoux & Handfield, 2021; Compagnucci & al., 2021; Kalinauskaite & al., 2021; Baran, 2020). The study also highlights the need for more research on LLs in social innovation and their impact on research conduct and organization. By understanding and enhancing these innovative models of knowledge production and transfer, we can foster transformative research and address the complex challenges of our socio-ecological context.

References

- do Adro, F., & Fernandes, C. I. (2020). Social innovation: a systematic literature review and future agenda research. *International Review on Public and Nonprofit Marketing*, 17(1), 23-40.
- Anadón, M. (2007). *Recherche participative : Multiples regards*. PUQ.
- Andion, C. et al. (2022). Social innovation ecosystems and sustainability in cities: a study in Florianópolis, Brazil. *Environment, Development and Sustainability*.
- Ansell, C. (2012). What is democratic experiment? *Contemporary Pragmatism*, 9(2), 159–180.
- Audoux, C., & Gillet, A. (2011). Recherche partenariale et co-construction de savoirs entre chercheurs et acteurs : L'épreuve de la traduction. *Revue Interventions économiques. Papers in Political Economy*, (43).
- Arocena, R., & Sutz, J. (2021). Universities and social innovation for global sustainable development as seen from the south. *Technological forecasting and social change*, 162, 120399.
- Avelino, F., Wittmayer, J.M., Pel, B., Weaver, P., Dumitru, A., Haxeltine, A., O'Riordan, T., (2019). Transformative social innovation and (dis)empowerment. *Technological Forecasting and Social Change*, 145, 195–206.
- Baran, G., & Berkowicz, A. (2020). Sustainability living labs as a methodological approach to research on the cultural drivers of sustainable development. *Sustainability*, 12(12), 4835.
- Bayuo, B. B., Chaminade, C., & Göransson, B. (2020). Unpacking the role of universities in the emergence, development and impact of social innovations—A systematic review of the literature. *Technological Forecasting and Social Change*, 155, 120030.
- Béjean, M., Picard, R., & Bréda, G. (2021). Living Labs, innovation collaborative et écosystèmes : le cas de l'initiative 'Concept Maturity Levels' dans les Medtech. *Innovations*, 65(2), 81-110.
- Benneworth, P., Cunha, J., 2015. Universities' contributions to social innovation: reflections in theory & practice. *European Journal of Innovation Management*, 18 (4), 508–527.
- Bragaglia, F. (2021). Social innovation as a 'magic concept' for policymakers and its implications for urban governance. *Planning Theory*, 20(2), 102-120.
- Bryer, A. (2020). Making Organizations More Inclusive: The Work of Belonging. *Organization Studies*, 41(5) 641–660.
- Carlile, P. R. (2002). A pragmatic view of knowledge and boundaries: Boundary objects in new product development. *Organization science*, 13(4), 442-455.
- Chochoy, N. (2015). Médiation entre acteurs de la recherche et acteurs économiques : Originalité des pratiques de recherche et de transfert de l'Institut Godin. *Sociologies pratiques*, 2(31).
- Compagnucci, L., Spigarelli, F., Coelho, J. & Duarte, C. (2021). Living Labs and user engagement for innovation and sustainability, *Journal of Cleaner Production*, 289(20).
- Christen-Guessaz, E., Corajoud, G., Fontaine, M., & Racine. (2006). *Recherche-action « Processus d'Apprentissage et d'Innovation Sociale »*. L'Harmattan.
- Cuomo, F., Ravazzi, S., Savini, F., & Bertolini, L. (2020). Transformative urban living labs: Towards a circular economy in Amsterdam and Turin. *Sustainability*, 12(18), 7651.
- Desroche, H. (1990). *Entreprendre d'apprendre, d'une autobiographie raisonnée aux projets d'une recherche-action*. Editions ouvrières.
- Durand-Folco, J. Les trois trajectoires historiques de l'innovation sociale : entre marchandisation, reconnaissance et émancipation, dans *Trajectoires d'innovation. Des émergences à la reconnaissance*. Sous la direction de Klein, J.-L. et al., Presses de l'université du Québec.
- Draperi, J.-F. (2007). Fondements éthiques et posture épistémologique de la recherche en économie sociale. *Revue internationale de l'économie sociale*, (303).

- Durand-Folco & Stambouli, (2022). Co-construire la légitimité d'un projet de développement communautaire : L'exemple du laboratoire vivant de Hawkesbury. *Revue Interventions économiques. Papers in Political Economy*, (68).
- Ellyx. (2020). *Renforcer les liens Société et Recherche - Le rôle structurant des sciences humaines et sociales*. Ellyx. http://www.ellyx.fr/wp-content/uploads/2020/11/LivreBlanc_OCTOBRE_2020.pdf
- Edwards-Schachter, M., Wallace, M.L., 2017. 'Shaken, but not stirred': sixty years of defining social innovation. *Technological Forecasting and Social Change*, 119(4), 64–79.
- Edwards-Schachter, M. (2019). Social innovation living labs in Howaldt, J., C. Kaletka, A. Schröder, M. Zimgiebl (Eds) (2019), *Atlas of Social Innovation. New Practices for a Better Future*, Dortmund, Technische Universität, Social Innovation Driving Force of Social Change project.
- Eichler, G. M., & Schwarz, E. J. (2019). What sustainable development goals do social innovations address? A systematic review and content analysis of social innovation literature. *Sustainability*, 11(2), 522.
- Feldman, M. S., and W. J. Orlikowski. (2011) "Theorizing Practice and Practicing Theory." *Organization Science*, 22: 1240-1253.
- Flyvbjerg, B. (2011). Case study. In N. K. Denzin & Y. S. Lincoln (Eds.), *The Sage handbook of qualitative research*. Thousand Oaks, CA: Sage, 301-316.
- Fontan, J.-M. (2011). Innovation et transformation des sociétés : Rôle et fonction de l'innovation sociale. *Économie et Solidarités*, 41(1-2).
- Godrie, B, Boucher, M, Bissonnette, S, Chaput, P, Flores, J, Dupéré, S, Gélinau, L, Piron, F, and Bandini, A. 2020. Injustices épistémiques et recherche participative: un agenda de recherche à la croisée de l'université et des communautés. *Gateways: International Journal of Community Research and Engagement*, 13:(1).
- Gherardi, S. (2016). To start practice theorizing anew: The contribution of the concepts of agencement and formativeness. *Organization*, 23(5), 680–698
- Gherardi, S. (2019). *How to conduct a practice-based study. Problems and Methods*. Edward Elgar Publishing Limited, 2nd edition.
- Gillet, A., & Tremblay, D.-G. (2017). *Les recherches partenariales et collaboratives*. Presse de l'Université du Québec.
- Griggs, D., Stafford-Smith, M., Gaffney, O., Rockström, J., Öhman, M. C., Shyamsundar, P., ... & Noble, I. (2013). Sustainable development goals for people and planet. *Nature*, 495(7441), 305-307.
- Hossain, M., Leminen, S., & Westerlund, M. (2019). A systematic review of living lab literature. *Journal of Cleaner Production*, 213, 976-988
- Huggins, R., and Johnston, A. (2009). The economic and innovation contribution of universities: a regional perspective. *Environment and Planning C: Government and Policy*, 27(6), 1088-1106.
- Joncoux, S. et Handfield, M. (2021). L'influence des contextes territoriaux sur les laboratoires vivants utilisés comme outil de développement. Trois études de cas dans le Bas-Saint-Laurent, *Revue Canadienne des Sciences Régionales*, 44(3) : 150-158.
- Kalinauskaite, I., Brankaert, R., Lu, Y., Bekker, T., Brombacher, A., & Vos, S. (2021). Facing societal challenges in living labs: Towards a conceptual framework to facilitate transdisciplinary collaborations. *Sustainability*, 13(2), 614.
- Kamaludin, M. F., Xavier, J. A., & Amin, M. (2021). Social Entrepreneurship and Sustainability : A Conceptual Framework. *Journal of Social Entrepreneurship*, 0(0), 1-24.
- Klein, J.-L., Fontan, J.-M., Harrisson, D., & Lévesque, B. (2012). The Quebec system of social innovation: a focused analysis on the local development field. *Finisterra*, 47(94).

- Langley, A. (1999). Strategies for Theorizing from Process Data. *The Academy of Management Review*, 24(4), 691-710.
- Lawton Smith, H. (2007). "Universities, innovation, and territorial development: a review of the evidence." *Environment and Planning C: Government and Policy*, 25(1), 98-114.
- Westerlund, M., & Leminen, S. (2011). Managing the Challenges of Becoming an Open Innovation Company : Experiences from Living Labs. *Technology Innovation Management Review*, 1(1), 19-25.
- Leminen, S., & Westerlund, M. (2019). Living labs: From scattered initiatives to a global movement. *Creativity and Innovation Management*, 28(2), 250-264.
- Leminen, S., Westerlund, M., & Nyström, A.-G. (2012). Living Labs as Open-Innovation Networks (September 2012). *Technology Innovation Management Review*, 2(9): 6-11.
- Leminen, S., Westerlund, M., Nyström, A.G., 2014. On becoming creative consumer/user roles in living labs networks. *International Journal of Technology Marketing*, 9(1), 33-52.
- Leminen, S., Nyström, A.G., Westerlund, M., Kortelainen, M.J., 2016. The effect of network structure on radical innovation in living labs. *Journal of Business and Industrial Marketing*, 31(6), 743-757.
- Leonard-Barton, D. (1992). Core capabilities and core rigidities: A paradox in managing new product development. *Strategic management journal*, 13(5), 111-125.
- Magalhaes, T., Camus, A., Andion, C., & Tello-Rozas, S. (2020). Laboratoires vivants en innovation sociale et coconstruction des connaissances dans les villes: les cas du TIESS (Montréal) et de l'OBISF (Florianópolis). *Revue Organisations & territoires*, 29(2), 1-13.
- Moulaert F, Martinelli F, Swyngedouw E, González S. (2005). Towards alternative model(s) of local innovation. *Urban Studies*, 42(11):1969-1990.
- Moulaert, F., Mehmood, A., MacCallum, D., & Leubolt, B. (2017). Social innovation as a trigger for transformations: the role of research. In European Commission, DG for Research and Innovation.
- Moulaert, F., & Mehmood, A. (2019). La coconstruction d'une épistémologie socialement innovante pour l'analyse du développement territorial : Réflexions sur vingt de recherche-action. In J.-L. Klein, J. L. Boucher, A. Camus, C. Champagne, & Y. Noiseux, *Trajectoires d'innovations. Des émergences à la reconnaissance*. Presse de l'Université du Québec, 51-66.
- Muniesa F., Millo Y., and Callon M., An Introduction to Market Devices, *The Sociological Review*, 55(2).
- Pel, B., Haxeltine, A., Avelino, F., Dumitru, A., Kemp, R., Bauler, T., I. Kunze, J. Dorland, J. Wittmayer, et Jørgensen, M. S. (2020). Towards a theory of transformative social innovation: A relational framework and 12 propositions. *Research Policy*, 49(8), 104080.
- Pozzebon, M., Tello-Rozas, S., & Heck, I. (2021). Nourishing the Social Innovation Debate with the "Social Technology" South American Research Tradition. *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations*, 32, 663-677.
- Scaillerez, A., Joncoux, S., & Guimont, D. (2022). Les living labs : Une approche facilitant les innovations sociales, le développement des territoires et des communautés. *Revue Interventions économiques. Papers in Political Economy*, 68.
- Schaeffer, V., & Matt, M. (2016). Development of academic entrepreneurship in a non-mature context: the role of the university as a hub-organisation. *Entrepreneurship & Regional Development*, 28(9-10), 724-745.
- Schumacher, A. J., & Feurstein, B. K. (2007). Living labs—a new multi-stakeholder approach to user integration. In *Enterprise interoperability II* (pp. 281-285). Springer, London.
- Schuurman, D., De Moor, K., De Marez, L., Evens, T., (2011). A Living Lab research approach for mobile TV. *Telematics Inf.* 28(4), 271-282.

- Schuurman, D., & Leminen, S. (2021). Living labs past achievements, current developments, and future trajectories. *Sustainability*, 13(19), 10703.
- Schwandt, T. A. and Gates, E. F. (2018). Case Study Methodology. in Denzin, N. K. et Y. S. Lincoln (Eds) *The Sage Handbook of Qualitative Research*. London: Sage (600-630).
- da Silva, S. B., & Bitencourt, C. C. (2019). Open social innovation in living labs. *Revista Pensamento Contemporâneo em Administração*, 13(3), 16-34.
- Tirziu, A. and Vrabie, C. I. (2018), *The Role of Internet of Things in Developing Smart Cities SSRN*.
- Veeckman, C., Schuurman, D., Leminen, S., & Westerlund, M. (2013). Linking living lab characteristics and their outcomes: Towards a conceptual framework. *Technology Innovation Management Review*, 3(12 december), 6-15.
- Westerlund, M., Leminen, S., & Rajahonka, M. (2018). A topic modelling analysis of living labs research. *Technology innovation management review*, 8(7).
- Westley, F., Antadze, N., Riddell, D.J., Robinson, K., Geobey, S., 2014. Five configurations for scaling up social innovation: case examples of nonprofit organizations from Canada. *The Journal of Applied Behavioral Science*. 50(3), 234–260.
- Yin, R. K. (2003). *Case study research. Design and methods*. 3rd ed. London: Sage.