



# Identity Frames in Knowledge Co-Creation

## - Facilitators for Sustainability Transformations

---

Maria Nyström

Independent project • 30 credits

Swedish University of Agricultural Sciences, SLU

Faculty of Natural Resources and Agricultural Sciences

Department of Urban and Rural Development

Environmental Communication and Management - Master's Programme

Uppsala 2022



# Identity Frames in Knowledge Co-Creation

- *Facilitators for Sustainability Transformations*

Maria Nyström

**Supervisor:** Lars Hallgren, Swedish University of Agricultural Sciences,  
Department of Urban and Rural Development

**Assistant supervisor:** Eva Friman, Uppsala University, The Sustainability Learning and  
Research Center (SWEDESD)

**Examiner:** Sara Holmgren, Swedish University of Agricultural Sciences,  
Department of Urban and Rural Development

**Credits:** 30 credits

**Level:** Second cycle, A2E

**Course title:** Master thesis in Environmental science, A2E

**Course code:** EX0897

**Programme/education:** Environmental Communication and Management - Master's  
Programme

**Course coordinating dept:** Department of Aquatic Sciences and Assessment

**Place of publication:** Uppsala

**Year of publication:** 2022

**Copyright:** All featured images are used with permission from the copyright  
owner.

**Online publication:** <https://stud.epsilon.slu.se>

**Keywords:** Co-Production of Knowledge, Co-Creation Lab, Facilitation,  
Sustainability, Frames, Facilitators Identity, Learning,  
Transdisciplinary Research

**Swedish University of Agricultural Sciences**  
Faculty of Natural Resources and Agricultural Sciences  
Department of Urban and Rural Development  
Division of Environmental Communication

## Abstract

Research shows that we need transdisciplinary research to face wicked sustainability problems. One approach to creating sustainable societal transformations that are context-based is the process of co-production of knowledge. Knowledge co-creation is conducted through active processes where diverse actors and stakeholders share knowledge and experience. The goal is to broaden the perspective of existing societal narratives by allowing multiple types of knowledge to participate in the process. An aim is also to create a bridge between science and societal stakeholders.

To co-create knowledge between diverse actors and stakeholders there is a need for a facilitator. The facilitator designs the process and guides the stakeholders through it. The facilitator has an essential role in building a safe space that can foster a sense of trust and handle power imbalances between participating stakeholders.

This thesis focuses on a specific process of knowledge co-creation. The Sustainability Learning and Research Center (SWEDESD), located at Uppsala University, is (with SLU as lead) co-leading an ongoing research programme to reframe environmental communication for sustainability transformations, Mistra Environmental Communication. Within this programme, SWEDESD runs a work package on knowledge co-creation, within which a Co-Creation Lab is being developed. The Co-Creation Lab will involve diverse and possibly antagonistic stakeholders participating to co-create knowledge on carbon farming, bushfires, and eco-burials.

Within the research programme of the Co-Creation Lab, no focus is on researching the role of the facilitator. The researcher's role as a facilitator is also under-researched. Since research shows that the facilitator is essential for a successful outcome of knowledge co-creation, this thesis can contribute to important insights on how facilitators enable knowledge co-creation in the case of the Co-Creation Lab. Therefore, interviews with the Co-Creation Lab facilitators were conducted to understand their role. Frame analysis helped to gain an understanding of how the facilitators frame their roles and of what aspects they make salient in enabling the co-creation process. The identity frames found were *the process expert*, *the equal knowledge mediator*, and *the inclusive process leader*. The analysis also helped identify potential challenges faced in the Co-Creation Lab, among them the power and knowledge and the integration of knowledge. The challenge of power and knowledge entails different knowledge hierarchies in society, where the facilitator has a vital role in navigating this balance. If not, full participation of stakeholders with less agency and power will be hindered. This challenge also discusses the power position of the facilitator. The facilitator has a privileged role in leading the process and needs to reflect on this for the stakeholders to feel ownership of the process. The challenge with integrating knowledge is concerned with the need for groundwork to bring the diverse perspectives together. There should not be a strive for consensus but rather an acceptance of different perspectives. Time is also a challenge since integration of knowledge is a process that takes a lot of time.

This thesis contributes to the reflective practice of facilitators and to the understanding of what is essential for factors to think about and act on when facilitating knowledge co-creation processes.

*Keywords:* Co-production of knowledge, Co-creation Lab, Facilitation, Sustainability, Frames, Facilitators Identity, Learning, Transdisciplinary Research

# Table of Contents

<b>List of Tables .....</b>	<b>6</b>
<b>1. Introduction .....</b>	<b>7</b>
1.1 Background.....	7
1.1.1 Co-Creation of Knowledge.....	7
1.1.2 The Facilitator's Role in Co-Creation of Knowledge.....	8
1.1.3 Co-Creation Lab .....	9
1.2 Purpose and Research Questions .....	10
<b>2. Research Design .....</b>	<b>11</b>
2.1 The Interpretative Approach .....	11
2.2 Data Collection and Generation.....	12
2.3 Frame Theory and Analysis .....	13
2.3.1 Identity Frames .....	15
2.3.2 Applying Frame Analysis .....	15
2.4 Other Concepts of Importance.....	16
2.4.1 Power and Knowledge.....	16
2.4.2 Integration of Knowledge .....	17
2.5 Methodological Reflections .....	17
<b>3. Identity Frames – Results and Analysis .....</b>	<b>19</b>
3.1 The Process Expert .....	19
3.2 The Equal Knowledge Mediator.....	23
3.3 The Inclusive Process Leader.....	26
<b>4. Discussing Facilitators' Roles and Challenges .....</b>	<b>33</b>
4.1 Assumptions of the Facilitator's Roles in the Knowledge Co-Creation Process ....	33
4.2 Challenges Faced by the Facilitators.....	35
4.2.1 Power and Knowledge.....	35
4.2.2 Integration of Knowledge .....	37
<b>5. Conclusions.....</b>	<b>39</b>
<b>References .....</b>	<b>40</b>
<b>Popular Science Summary .....</b>	<b>43</b>
<b>Acknowledgements.....</b>	<b>45</b>

**Appendix 1 – Interview Guide ..... 46**

## List of Tables

Table 1. Overview of facilitators interviewed.....	13
--	----

# 1. Introduction

## 1.1 Background

Sustainable development and sustainability concepts are laden with conflicting definitions and perspectives, and what is considered sustainable varies a lot (Polk, 2015). Sustainability is, furthermore, a very complex problem context, framing a multitude of so-called wicked problems. Wicked problems are concerned with issues that are hard to define. They can look different depending on the context and who is framing them. Therefore, there is no easy solution to wicked problems and no right or wrong when dealing with them, only better or worse. Solution attempts can also create new problems, adding to the complexity (Frodeman, Klein and Pacheco, 2017). Research conducted in a traditional way might not be enough to address these issues (Joosse et al., 2020). Thus, navigating any wicked problem, e.g., climate change, demands context-based solutions, multiple perspectives, and new methods. One approach to creating sustainable societal transformations that are context-based is the process of co-production of knowledge (Muccione et al., 2019).

### 1.1.1 Co-Creation of Knowledge

From a co-creation of knowledge perspective, there is a need to involve diverse societal actors and stakeholders into research to address and find solutions to complex issues, such as sustainability (Westberg and Polk, 2016). This is called transdisciplinary research and is conducted through active processes where diverse actors and stakeholders with different backgrounds share experiences and co-create knowledge (Westberg and Polk, 2016). There is an aim within transdisciplinary co-production to create a bridge between science and societal stakeholders through co-production of knowledge (Muccione et al., 2019; Adelle et al., 2020).

Co-production of knowledge within transdisciplinary research means that the stakeholders co-produce knowledge about a problem and possible solution (Polk, 2015). Co-production of knowledge can be described in a variety of ways, e.g.:

Knowledge is co-produced through the combination of scientific perspectives with other types of relevant perspectives and experience from real world practice including policy-making,

administration, business and community life. Co-production occurs through practitioners and researchers participating in the entire knowledge production process including joint problem formulation, knowledge generation, application in both scientific and real world contexts, and mutual quality control of scientific rigor, social robustness and effectiveness (Polk, 2015, p.111).

The co-creation processes can help broaden the perspective of existing societal narratives by allowing multiple types of knowledge to participate (Do, Powell and Naunova, 2018). Within the co-production of knowledge epistemology, other perspectives than academic science are seen as legitimate, and all types of knowledge are considered equally valuable (Polk, 2015; Schauppenlehner-Kloyber and Penker, 2015).

The goal with co-production of knowledge is not only a new and broader range of knowledge but also that the stakeholders have achieved “mutual learning, trust, new relationships, and partnerships, shared enhanced knowledge of participants, knowledge and learning across user groups, and increased ability to work together and articulate joint goals” (Polk, 2015, p.113). To reach these goals, there is a need for someone to guide the process, a facilitator.

### 1.1.2 The Facilitator’s Role in Co-Creation of Knowledge

In collaborative processes where diverse stakeholders collaborate and share their experiences, there has to be an authentic dialogue (Innes and Booher, 2003). To create this authentic dialogue, a facilitator is often needed to guide the conversation (Innes and Booher, 2003; Forester, 2009). “Facilitation plays an important role in supporting the emergence of a co-learning platform” (Do et al., 2018, p.18). The facilitator creates this platform by designing the process and guiding the stakeholders through it (Schauppenlehner-Kloyber and Penker, 2015). The role is to guide the diverse stakeholders “towards openness and deliberation by initiating a collective learning process” (Pohl et al., 2010, p. 276).

Without a facilitator there is a risk of emerging conflicts that will hinder the learning process (Innes and Booher, 2003; Westin, Calderon and Hellquist, 2014). Therefore, the facilitator is there to facilitate meetings between diverse stakeholders where they feel that they can express themselves freely (Adelle et al., 2020) – even in situations when others might not agree with them (Innes and Booher, 2003).

For this sharing to be possible, the facilitator has an essential role in building a safe space that can foster a sense of trust (Schauppenlehner-Kloyber and Penker, 2015; Adelle et al., 2020), because “[t]he most pertinent challenge in these networks is often to establish trust amongst the very diverse actors” (Muccione et al., 2019, p.4). Therefore, the facilitator should be attentive to and handle power imbalances among the stakeholders (Westin, Calderon and Hellquist, 2014; Adelle et al., 2020), especially to allow space for knowledge in lower knowledge hierarchies that have less power of influence in society (Adelle et al., 2020).



Furthermore, the facilitator should help identify and put light on emerging ideas. Therefore, the facilitator is attentive to what is happening in the periphery and brings that into the discussion (Adelle et al., 2020).

Another aspect that the facilitator enables is to build relationships between the stakeholders. A partnership among the stakeholders enables the co-creation process and is therefore important for a successful outcome of the knowledge co-production process (Polk, 2015).

### 1.1.3 Co-Creation Lab

The Sustainability Learning and Research Center (SWEDESD), located at Uppsala University, is co-leading<sup>1</sup> an ongoing research programme to reframe environmental communication for sustainability transformations. Within this programme, SWEDESD runs a work package on knowledge co-creation, within which a Co-Creation Lab is being developed: “The Co-Creation Lab serves as a learning platform that hosts and experiments with a variety of exploratory methodologies [...] to reflect upon the issues brought up in the other case studies, i.e. carbon farming, bushfires” (SLU, 2021). Each workshop within the Co-Creation Lab will involve diverse and possibly antagonistic stakeholders participating to co-create knowledge on carbon farming, bushfires, and eco-burials.

The Co-Creation Lab aims to: 1) explore different types of knowledge and ways of knowing to co-create pathways for transformation in the case study contexts, 2) identify potential challenges and opportunities for knowledge co-production that supports sustainable transformations, and 3) empower those who are part of the co-production process with an anticipatory, ethical, and systemic cognizance (Bussey et al., forthcoming). The Co-Creation Lab aims not to solve the issue at hand but to function as a platform to enable all actors and stakeholders to be co-researchers in the process of “thinking through assumptions, exploring possibilities and testing transformative behaviours” (Bussey et al., forthcoming, p.2). The goal is shared, or openly conflicting, understandings of the issue but also to together explore and test different ideas on the wicked problem. To make this possible, the relational aspect within the Co-Creation Lab is essential, including care and trust. It is also important with “flexibility in the process that allows the Co-Creation Lab to function as a space from which new knowledges can emerge that potentially bridge previously antagonistic or divergent epistemological positions of stakeholders” (Bussey et al., forthcoming, p.2).

To foster a space of trust and create a flexible process, researchers in Sweden and Australia will facilitate diverse stakeholders from various contexts. It has been argued that researchers’ roles in co-creation processes are under-researched (Adelle

---

<sup>1</sup> The Mistra Environmental Communication research programme, with The Swedish University of Agricultural Sciences (SLU) as lead.

et al., 2020), and in the case of the Co-Creation lab studied in this thesis, researchers are the facilitators. More research is thus needed on how the facilitator enables the co-creation between diverse actors (Schauppenlehner-Kloyber and Penker, 2015). The research programme where the Co-Creation Lab is included does not focus specifically on the role of the facilitator. Therefore, the focus of this study will lie in trying to understand the facilitator's role in the Co-Creation Lab. Since antagonistic perspectives participate in the Lab, I find it important to analyse how the researchers as facilitators enable these perspectives to meet. I believe this thesis can add to the facilitators' reflective practice to make it more salient what a facilitator should focus on for the stakeholders, with possible antagonistic and divergent epistemological standpoint, to be willing to co-produce knowledge – a prerequisite to developing new ideas and solutions to wicked problems and enabling sustainable transformations.

## 1.2 Purpose and Research Questions

The purpose of this qualitative study is to understand the role of the facilitator, facilitating the stakeholders participating in knowledge co-creation in the Co-Creation Lab. The overall aim of the thesis is to understand how facilitators impact the possibility of co-creating knowledge and shaping new ideas among the diverse and possible antagonistic stakeholders.

The thesis deals with two main research questions, which will be answered in the result and analysis section and then elaborated on in the discussion section. A third question, relating to the two research questions, will be elaborated on in the discussion section.

### *Research questions*

How are the facilitators framing their roles in the process of co-creation of knowledge in the Co-Creation Lab?

How are the facilitators creating conditions for diverse and antagonistic stakeholders to meet and co-create knowledge?

### *Question to discuss in relation to the two main research questions*

What kind of challenges can be identified within the roles of the facilitator?

## 2. Research Design

This section will present my research design for this thesis. I present the chosen research approach, my data collection, the analytical and theoretical approach, and my methodological reflections.

### 2.1 The Interpretative Approach

My research is conducted with a social constructivist worldview which means that dialogues with facilitators through interviews help me understand and create meaning about the facilitator's role in the Co-Creation Lab. In a social constructivist worldview, the meaning created is subjective, leading to multiple meanings about the situation (Creswell and Creswell, 2018). In my master thesis, I seek to understand the different meanings provided by the interviewees. The social constructivist worldview is closely related to the interpretative approach (Creswell and Creswell, 2018). I, therefore, apply an interpretative approach to my thesis since I, as a researcher, make sense of the facilitator's role through my interpretations. My interpretation of the facilitators' roles will be affected by my previous experiences (Schwartz-Shea and Yanow, 2011; Creswell and Creswell, 2018).

Interpretative research follows an abductive process instead of the inductive process common for qualitative research. "In abductive reasoning, the researcher's thinking is led, or, more actively, directed, in an inferential process, from the surprise toward its possible explanation(s)" (Schwartz-Shea and Yanow, 2011, p.28). This means that abductive reasoning entails an iterative process in which you move back and forth between your empirical data and the theoretical framework to move toward your result. You want the definitions and understandings of the situation and concepts to emerge from the study (Schwartz-Shea and Yanow, 2011). I applied this reasoning by moving back and forth between the data extracted from the interviews and previous research on co-creation of knowledge and deliberative facilitation.

The abductive research process is circular, "iterative and recursive, each of its parts informing and folding back on the others, enacting the same sense-making spiral that characterizes the conduct of interpretive inquiry" (Schwartz-Shea and Yanow, 2011, p.55). When conducting research with abductive reasoning, there

must be flexibility within the process. Since new ideas and surprises can occur along the way, adjustments in research design and questions will be needed. My analysis was made in an iterative and recursive process where I continuously reflected on my findings in the analysis, which helped me look for other aspects, search for new suitable literature and adjust my research questions accordingly.

To create meaning about the facilitators' role in the Co-Creation Lab, I used frame analysis as a methodology (van Hulst and Yanow, 2016), see section 2.3. Frame analysis is a form of interpretive approach.

## 2.2 Data Collection and Generation

To answer my aim and research questions, I collected data by conducting interviews. Interviews are a suitable method for exploring someone's personal experiences, views, and understanding of something (Brinkmann and Kvale, 2018). Interviews can help create an understanding of the underlying mechanisms of a behaviour (Robson, 2016). Interviews helped me achieve the understanding I wanted of how the facilitators of the Co-Creation Lab perceive themselves in their role and why they choose to act in certain ways.

I interviewed five facilitators, all facilitators within the Co-Creation Lab, to understand their perception of facilitation. I created a semi-structured interview guide with open-ended questions. Inspiration from a webpage by Forester et al. (2005): "Profiles of practitioners" helped me formulate my questions and how to structure the interview guide. *Doing Interviews* by Brinkmann and Kvale (2018) also guided me in framing my questions and what to think about while conducting the interviews.

Three of the interviews were held through Zoom and two in person. All interviews were held in English, even though the interviewees also could express themselves in Swedish. Each interview lasted for approximately 60 minutes. I asked for consent to record and transcribe the interviews at the beginning of the interview. Before starting, I asked for consent to use the collected data from the interviews in a workshop with the interviewees to further reflect on the findings. I tried to keep the interviews flexible and open in the sense that I would adjust my interview guide according to the interviewee's answers. According to Brinkmann and Kvale (2018), the follow-up questions should be created after listening to the interviewee's answer and with the research questions in mind. Therefore, if new topics arose, I would ask follow-up questions to explore that and adjust my following questions and follow-up questions according to the interviewee's answers.

I transcribed the interviews with help of the program Otter.ie, and I listened through the interviews and manually adjusted the transcriptions to make sure they were correct. I removed double words, words like 'sort of' and 'like' (said while

thinking) and sounds like ‘uhm’. Before starting the analysis, I offered to send the interviewees the transcript for approval.

The following table shows an overview of the facilitators I interviewed and their experience with facilitation.

*Table 1: Overview of facilitators interviewed*

<b>Facilitators/ Interviewees</b>	<b>Description</b>
Facilitator 1 (F1)	PhD student Early in the facilitation carrier Background in Environmental communication
Facilitator 2 (F2)	PhD student Have experience with facilitation within higher education and pedagogy
Facilitator 3 (F3)	Background with teaching Long experience with facilitation International experience with facilitating participatory processes
Facilitator 4 (F4)	Long experience with facilitation International experience with facilitating participatory processes
Facilitator 5 (F5)	Background in Environmental communication Experience with facilitation in environmental governance processes

All facilitators have experience with facilitations in the context of sustainable development and environmental issues.

## 2.3 Frame Theory and Analysis

Frames have their origin from Bateson (1972) and Mead (1934), who studied the meaning-making process through interaction (Westin, 2019). The phrase Frame Analysis was later coined by Goffman (1974), who conceptualized the negotiation of meaning-making in social interactions through frame analysis (van Hulst and

Yanow, 2016; Westin, 2019). There are different approaches to frame theory and analysis (Westin, 2019). I have chosen to mainly use the approach presented by van Hulst and Yanow (2016), I will more specifically focus on frames connected to identity construction (van Hulst and Yanow, 2016).

“Frames [...] guide the ways situational participants perceive their social realities and (re)present these to themselves and to others; a frame reflects actors’ organizing principles that structure those perceptions” (van Hulst and Yanow, 2016, p.94). This means that frames are contextual and will vary depending on who is conducting the framing due to different experiences (van Hulst and Yanow, 2016).

Frames highlight specific information of interaction to create meaning (Entman, 1993). Therefore, the process of frame analysis helps us identify how frames highlight certain aspects and, at the same time, leave other aspects out (Entman, 1993; van Hulst and Yanow, 2016). Entman (1993) explains the word salience in connection to frames. He says: “To frame is to select some aspects of a perceived reality and make them more salient in a communication text” (p. 52). By highlighting some parts in a text, you make those parts more meaningful and noticeable. Our previous experience and worldview will affect what aspects of the text will be salient to us (Entman, 1993).

Frames draw attention to and make aspects salience through storytelling about the situation. “Stories frame their subjects as they narrate them, explicitly naming their features, selecting and perhaps categorizing them as well, explaining to an audience what *has been* going on, what *is* going on, and, often, what needs to be done” (van Hulst and Yanow, 2016, p. 100). Through stories, we organize our thoughts and frames and create meaning (Westin, 2019). Within storytelling, framing is made through the acts of selecting, naming, and categorizing:

Through all three of these, policy actors draw disparate elements together in a pattern, selecting some things as relevant or important and discarding, backgrounding or ignoring others, occluding other ways of seeing (and acting), and thereby silencing them in policy discourse and ensuing action (van Hulst and Yanow, 2016, p. 99).

This means that naming identifies what is going on, it draws attention towards specific aspects through, for example, metaphors. Categorizing is “a form of naming, entails identifying things as a “this” but not a “that.” (van Hulst and Yanow, 2016, p.99). These concepts will help me identify frames by analysing the stories and narratives given by the interviewees and the selecting, naming, and categorizing within their storytelling.

In frame analysis, analysing what is not being said can be as important as what is said. Entman (1993) says, “Receivers’ responses are clearly affected if they perceive and process information about one interpretation and possesses little or incommensurable data about alternatives. Therefore, exclusion of interpretations by frames is as significant to outcomes as inclusion” (p. 54). People are not always

aware of the frames that guide their perception and behaviour, so going beneath the surface is required to understand the underlying meaning (Westin, 2019).

Frame analysis focuses on analysing communication and language through texts (Entman, 1993). Frame analysis helps us to draw attention to what is meaningful and important to a person by looking at the use of language, metaphors, and values in the text (Entman, 1993; van Hulst and Yanow, 2016). When doing frame analysis, you look at two aspects of the frame: “how they understand and remember a problem, as well as how they evaluate and choose to act upon it” (Entman, 1993, p. 54). This means that frames entail a diagnosis of the situation that focuses on what has happened and how the situation is being understood. The second aspect is the action bias which focuses on what action is a suitable solution to the situation (Entman, 1993; van Hulst and Yanow, 2016; Westin, 2019).

### 2.3.1 Identity Frames

Since I am interested in knowing how facilitators perceive their role within the Co-Creation Lab, I will be focusing on identity frames (van Hulst and Yanow, 2016, p. 102). Identity frames are defined as how “actors’ [makes sense] of their own and other actors’ identities and the relationships between or among them [...]. Framing works to construct these identities, as well as their relationships to one another” (van Hulst and Yanow, 2016, p.102). Through identity frame analysis, I want to understand how facilitators construct their identity and make sense of their role in relation to the diverse stakeholders participating in the Co-Creation Lab.

Identities are interwoven with a person’s beliefs and what a person finds meaningful (van Hulst and Yanow, 2016). With the help of frame analysis, I can analyse the transcribed interviews and identify these underlying beliefs that constitute the identity of the facilitator. Furthermore, “the sense-making work of framing can be seen to unfold as actors engage in a *conversation with the situation*, where “the situation” intermingles persons, acts, events, language, and/or objects” (van Hulst and Yanow, 2016). Therefore, frame analysis is suitable for this thesis. Through the interviews where the interviewees interact with the situation of facilitation in the Co-Creation Lab, they start to produce and give meaning to the situation (van Hulst and Yanow, 2016). This process can contribute to the facilitators’ reflective practice of their roles in the Co-Creation Lab. Van Hulst and Yanow (2016) suggest that frame analysis is a form of reflective practice.

### 2.3.2 Applying Frame Analysis

This section will present how I applied frame analysis as an analytical method to fulfil the thesis aim. By using frame analysis, I wanted to understand the interviewees’ construction and perception of their identity and, therefore, their respective roles in the Co-Creation Lab.

Entman (1993) describes that “[t]he text contains frames, which are manifested by the presence or absence of certain keywords, stock phrases, stereotyped images, sources of information, and sources that provide thematically reinforcing clusters of facts or judgments” (p.52). Thus, I went through my material to identify different types of information that could help me identify frames. I transcribed (see section 2.2) my interviews, and while reading through them several times, I added comments to remember thoughts that came up.

I did the first round of thematic coding by using colour codes. With my research question in mind, I identified data connected to the role of the facilitator in the Co-Creation Lab and how the facilitator enables the co-creating of knowledge among the antagonistic stakeholders. I organized the highlighted text from each interview into different categories in a new document. In the second round of coding, I divided the identified categories into the diagnosis of the situation and the action bias. van Hulst and Yanow (2016) points out that “[a]lthough for analytical purposes it can be useful to separate the two, they typically work simultaneously and interactively, and at the level of tacit, not conscious, knowledge” (p. 98). To make it clear in the analysis what data is concerned with the diagnosis of the situation and what is connected to the action bias, I chose to separate them in my result.

To move closer to my frames, representing the result and analysis presented in section 3, I identified similarities and differences among the categories. To reach my frames, I constructed thematic networks of the categories and named them tentatively. This was an iterative and interpretative process where I moved back and forth between the data collected and the theory.

Finally, in the quotes presented in the analysis, section 3, grammar was adjusted, and disfluency words were left out to improve the readability and flow of the text.

## 2.4 Other Concepts of Importance

I will now elaborate on concepts that I find relevant to discuss in connection to the challenges the facilitators face in the process of co-creating knowledge. I have chosen to focus on the challenge of power and knowledge and the integration of knowledge.

### 2.4.1 Power and Knowledge

I have chosen Pohl’s et al. (2010) explanation of the relation between power and knowledge as a basis for my discussion. They discuss power in connection to co-creation of knowledge. They “understand power as the capacity of individuals or institutions to achieve their goals even if opposed by others” (Pohl et al., 2010, p.271). Furthermore, they specify the definition in connection to co-creation of



knowledge: “having power means having the ability and the resources to negotiate and adapt interests during the process of knowledge co-production” (Pohl et al., 2010, p. 271). They point out that in co-creation processes, you want diverse actors participating. Therefore it is important to actively work towards equal participation where no knowledge perspective is privileged over another (Pohl et al., 2010).

## 2.4.2 Integration of Knowledge

Several studies have shown that within transdisciplinary research and knowledge co-production, one major challenge is integrating diverse knowledge (Godemann, 2008; Pohl et al., 2010; Polk, 2015). Pohl et al. (2010) say in one of their studies that the aim of integrating knowledge in co-production of knowledge processes “is to achieve a more comprehensive, or — in terms of power and thought styles — more balanced and adoptable understanding of an issue and corresponding solutions” (Pohl et al., 2010, p. 272). They speak of integration as interrelating epistemological, conceptual and practical elements not related before (Pohl et al., 2010, p. 272). In another study by Polk (2015), they write that knowledge integration can be done with the help of three activities: exchanging information and knowledge, creating a common basis of understanding, and meta-reflexivity within groups (p.113). Complementing Polk’s view, Godemann (2008) expresses that knowledge integration depends on the following processes a) exchanging information, b) achieving understanding, c) creating a common knowledge base, d) achieving awareness of the frame of reference, and e) the developing group mental models (p. 637). These two explanations will work as a basis for my discussion on the challenges of integrating knowledge.

## 2.5 Methodological Reflections

In this section, I will reflect on the choices made in my research design.

When I interviewed the facilitators in the Co-Creation Lab, they were in an early stage of their research and planning. The workshops had not yet been performed, which means that this research will only apply in the preparation stage of the Co-Creation Lab processes. If I would have conducted the interviews with the facilitators during and after the workshops, I might have received different answers and new insights that are important when facilitating workshops to co-create knowledge – a venture I would gladly embark on in the future.

Reflecting on my interview guide, I think I could have framed the questions differently or added some questions to allow for even more reflexivity about the facilitators’ roles. More reflective questions could have given more insights into how the facilitators influence the Co-Creation Lab and not only what aspects they find essential to think about for a facilitator within it.

My initial plan was to do participatory observations of the Co-Creation Lab combined with interviews, as observing the facilitators and the stakeholders in the Lab would have given me an understanding of how they practically play out their roles. Observations would also have given me a chance to include the response of the stakeholders, to understand their perspectives of the roles of the facilitators and what is important for them to be able to co-create knowledge. However, the actual performance of the Lab workshops was delayed due to Covid-19, which is why this was not possible.

The selection of interviewees came from one research program, and thus the result is context-specific and hard to generalize. However, the results could be used to inspire facilitators in other similar co-creation processes.

From the start of my research process, I intended to have a workshop with the facilitators. This would have been an opportunity to further reflect and discuss my results with the interviewees and a chance to deepen the analysis. I think that such a workshop could have given me more multifaceted results. It would also have been an opportunity for the facilitators running the Co-Creation Lab to take part of each other's perspectives and learn from each other. Unfortunately, there was not enough time to have this workshop.

One aspect to reflect upon connected to frame analysis is that depending on my previous knowledge and experiences, some frames can become more salient to me and affect how I interpret the frames (Entman, 1993). This means that if someone else had interpreted the same material, they would probably have reached other conclusions than I did. This is, however, a methodological implication of interpretative approaches, and perhaps of research in general.

## 3. Identity Frames – Results and Analysis

The purpose of this study is to understand the role of the facilitator in the Co-Creation Lab. I also aim to understand how the facilitators enable co-creation of knowledge between the diverse stakeholders. This section will present the results through the three identity frames found in my analysis. The frames are *the process expert*, *the equal knowledge mediator*, and *the inclusive process leader*. I will describe how the facilitators frame their roles through these identity frames by discussing the diagnosis of the situation and the action bias of each frame.

### 3.1 The Process Expert

The first identified frame is the facilitators' role as *the process expert*. The diagnosis of this frame is concerned with planning and guiding the process in such a way that it is transparent to the participants what they can expect. The diagnosis also emphasizes an emerging process that is open and easy to follow for the stakeholders. The action bias of this frame is that facilitators reflect upon the process and are flexible to make sure that it is relevant to the stakeholders.

One aspect of the diagnosis of the situation is that the Co-Creation Lab is a new way of doing research, the participants might not be used to this kind of process. This means that the facilitator needs to guide them through the process and take the role of a *process expert*. Facilitator 4 explains:

A lot of them [the stakeholders] were not comfortable with this type of process. When you invited stakeholders, and you tried to have a dialogue with them, and you tried to co-create something with them, they were more comfortable with – ‘this is how we do cost-benefit analysis’.

The facilitator is responsible for the process and is, therefore, the expert on the process and the process design of the Co-Creation Lab. However, one facilitator expressed: “I never see myself as the expert” (F3) within the workshop topic. “Let them do the talking. [...] the facilitator isn't there to offer a lecture or seminar or anything like that” (F1).

The role of *the process expert* involves the planning and design of the process. You need to ask yourself, facilitator 4 states:

all these basic questions, who you want to involve, what issue would you like to discuss? And what questions you want to address in the workshop? So basically, you come up with an aim, and then you design a process that could help you unpack those aims. And also, of course, you have to think about who to involve as well. So that's the pre-workshop planning process.

When planning the process, the facilitators point out that one should aim for a balance between a clear structure and an openness allowing the process to unfold following the participants. As a facilitator, “you have to be able to articulate to some extent the aim of the process, even though, of course, you can change the methods, you can adapt” (F4). The facilitators’ role is to communicate the aim clearly and be clear about that there is no fixed outcome and that the process can change: “It's important to have that purpose and important to make people see and understand that purpose. Even though, on the other hand, convincing them to be open about what might unfold” (F4).

One of the facilitators said that flexibility in the process is important, because a rigid structure “kills the conversation”, continuing:

I would warn against planning facilitation too rigidly or workshops too rigidly, too structured, to sort of cut out the surprises. I would rather say: how can we do so that we do get surprises so that we get interesting ideas happening, interesting things happening, things that challenge our thinking (F1).

Therefore, being *the process expert* involves the challenge of guiding an evolving process that does not have a clear outcome. The facilitator provides this balance between structure and emerging process since “many people seem to have a desire for somebody to give them direction” (F2).

After the pre-workshop preparations, the diagnosis of *the process expert* is the need for clear instructions so that the group can work independently and discuss freely without the facilitator always present. That creates opportunities for a co-creation process that emerges from the group without the steering and influence of the facilitator.

you give them some certain instructions so that they know the tasks, what they need to do in a smaller group, but then I think they [are] often quite self-organized, they figure out how to work with that without having someone there and guide them. And I also don't like the idea of having someone sitting there and guiding them because in a way [then] you [are] also steering the discussion, and what you want is to have an emerging discussion: how they interpret the issues or the questions you're asking, and how they go about addressing those questions. It's more interesting than having a facilitator sitting there and sort of nudging them (F4).

However, the facilitators’ role is to keep the process on track and not get off, to keep the group in the direction towards their goal. F2 states that if stakeholders have a goal that they are trying to achieve, then a facilitator can play an important role in keeping the directions. The balance between having an emerging process and

following a structure toward a clear goal demands *process expertise* and to be able to reflect upon the process:

What happened there and how can we do it differently next time? Or how can we handle this? Or maybe also help to reflect on oneself, how me myself, for example, influence the process by doing this or that in the room, and should I have maybe more forcefully interrupted someone who just talks and talks and talks – small things, but that are quite important (F5).

The diagnosis of the situation of *the process expert* also shows that the facilitator needs to concretely design the process with suitable tools and methods. They should think about the choice of exercises, the tools, and the modes of interaction (F1). F4 also stress making sure to get the framing of the question right. When framing the questions, the facilitators should keep it simple, with one or two main questions (F2). By considering these aspects, the facilitator makes sure that it is easy to follow the process.

Within the Co-Creation Lab, a broad range of perspectives is wanted. Therefore, as *process experts*, the facilitators express that you must identify and analyse the interest of the stakeholders, to make the process relevant and meaningful to the stakeholder (F4). The facilitators work as the experts who ensure that the process and its aim are relevant to the stakeholders. That the stakeholders feel that they will gain something from the process. To make the process relevant for the stakeholders to engage their time in the co-creation process, it is also, F2 states, quite important to know what is at stake for the people in the room. Therefore, it is:

really important to also understand the type of processes, the type of practice they are working with, and how we could draw that connection so that they could really see the relevance. And so that they wouldn't think that this is something extra, and something on the side and something they are just sort of giving away without getting anything back (F4).

*The process expert* creates opportunities for the participants to co-create the issue being discussed and gives them a sense of ownership of the process to make the process relevant.

It's really important that the group gets to frame the problems that they're trying to solve [...] And it's really important for you as the facilitator to make sure that it's their process and not your process. It's their solution, not your solution, you're not the one solving the problem for them (F1).

As a response to the diagnosis of the situation in the action bias, *the process expert* is seen as a guide that is taking care of a space where people can feel they are supported to learn in the ways that they need to learn. The facilitators explain that their role is not to be an expert in the topic being discussed, e.g., carbon farming. Their role is instead to engage the group in questions that they're interested

in tackling connected to the topic (F2). The action bias to make the process relevant is:

to have a little bit of background information. So, in the ones I'm planning to do, and in the ones I've done, I've always had a few interviews or some focus groups to see what are the different worldviews, etc., the different perspectives that exist here [...] Where are you in your processes? What are your opportunities? What are your concerns? And then how can we contribute to that through a process design? (F1).

The facilitator then plans the process with this information in mind and enters the Co-Creation Lab with a toolbox. To make the process feel relevant and to bring the stakeholders' values into the process, the facilitators start by asking the stakeholders to share their stories: "what's something that really worries them? What's a great success story of their career? What was the most exciting project you did" (F3)? Sharing their stories helps the stakeholders relate to each other. F3 explains a view that all realities are relational and what is key is the way we interpret or tell the story or stories. So, the Co-Creation Lab is about learning to allow stories to flow together and merge (F3) and to help the stakeholders to connect their stories and relate to each other "it's really about listening in the beginning" (F1).

Another action bias in keeping the process relevant is "to be flexible" (F5) and "spontaneous" (F2). Being *the process expert*, the facilitator must trust that the process will change and dare to follow the process in a direction to see what unfolds and support the stakeholders in that – that is, "follow the interest, people's passions, people's concerns" (F3). F2 point out that in doing so, it's important to be able to read the group. F4 states that the facilitator should be open to something new happening, even if it feels like it sways off from the agenda. They must be sensitive to pick up on new aspects, ask further questions to gain a better understanding, consider how it might be relevant to the process and help connect the dots (F4).

The action bias concerning being reflective as a *process expert* is to make sure that learning is happening. Thereby, F2 states that it is important to observe how the questions are received, if it is a good question for the groups, and if not, then shifting it. To think through the questions thoroughly was something that all facilitators mentioned as necessary. The questions asked should be open and framed so that the diverse stakeholders can jointly discuss and think about the topic together. The questions should be framed so it investigates every perspective and allows everyone to bring something to the table (F1). Therefore, it is crucial to be observant and responsive to the group, F2 continues

The reflective skill is also used to guide and challenge the stakeholders forward when they feel stuck or confused. Instead of solving the problem, facilitator 2 suggests involving the group and asking: "why are we stuck? what's going on?" and trying to figure it out together with the stakeholders. Because being stuck is a learning moment to understand why they ended up there and how they might be able to move forward. Furthermore, F1 states that in situations where the

conversation needs to be stimulated in some way, to help the stakeholders forward, the facilitator can poke the stakeholders with an interesting new question.

To be a *process expert* is also concerned with knowing different methods and when a method is suitable. Also, being flexible enough to adapt them to the situation. Thus, the facilitators advocate having contingencies plans (F1) where you have a range of processes you can use (F3). Being *the process expert* also entails being able to combine the different methods to make it the best fit for the process (F3).

## 3.2 The Equal Knowledge Mediator

The second frame identified is *the equal knowledge mediator* frame. The diagnosis of the situation of this frame is concerned with equal possibilities for all different kinds of knowledge to take part in the process. Therefore, the action bias suggests that the facilitator works towards having the stakeholders accept different types of knowledge and that there are different ways to look at an issue.

One aspect of the diagnosis of the situation is that some types of knowledge and expertise are more dominant and have more power of influence. Facilitator 2 reflects on scientific knowledge being a traditional way of gaining knowledge about how to best go about things.

This is definitely prioritized over lots of other ways of knowing. And so, for me this is a really important thing to address in this group. And that's what we're going to work with that there's lots of different ways of knowing and how to elevate these more marginalized ways of knowing (F2)

The different perspectives in the Co-Creation Lab will have different statuses depending on the topic. Facilitator 5 says that knowledge and power are very closely related. So, F5 continues explaining that it is important to always think of what groups and scientific perspectives that are involved. The facilitators' role here is to acknowledge the power dimensions that different expertise brings and consider how that affects the group.

I have in the back of my mind, what kind of scientific expertise dominates or underpins the dominant discourse about the issue? And what happens if we bring in other scientific perspectives into the debate on these topics? What can we learn then? What happens to how the issue is problematized, what new angles come in (F5)?

This means that there will be underlying hierarchies among the different types of knowledge and stakeholders participating. Therefore, the facilitator has the role of creating a space where the strive is for equal participation and acceptance of different perspectives. Where multiple ways of knowing can coexist and can play off each other. Especially if indigenous people are included in the process, the

facilitator should make sure that their way of knowing gets accepted. Another aspect important to consider is the acceptance of more practical knowledge, e.g., farmers, so that they get heard and informs about how the problem is being understood (F1). In addition, to enable equal participation, the facilitator needs to consider the possibility for different actors to take part in the process. Facilitator 5 explains that:

different actors have different capacities to take part both in terms of resources, economic resources and but also in other ways, like they might have different experiences in taking part in these kinds of processes, which gives them disadvantages or advantage (F5).

To be an equal mediator, the facilitator needs to be attentive to specific difficulties that the stakeholders express and support them through the process.

Another aspect of the diagnosis of the situation is that the facilitator, as an *equal knowledge mediator*, has to work actively with the power structures to encourage participation. Because as facilitator 2 says, if people work with the assumption that somebody is more qualified than them or somebody knows more than them, they will have trouble making their voices heard. Without the active participation of different perspectives, there will be no co-creation of knowledge:

the real interesting word is the 'co', the together. If there's no co, there's no creation, then there's just blabbering and getting people to listen that is the fundamental thing of everything we do (F1).

In the role of *the equal knowledge mediator*, Facilitator 1 states that a challenge is to open people up. To create a space where people open up can be difficult, F3 states, as you might be too stuck in your own worldview, antagonistic towards somebody else's worldview. A polarized situation makes it very hard to find a place of mutual respect. To bring people together on equal terms and for them to respect each other, most of the facilitators talk about relational work, i.e., to have the stakeholders interact in different ways to help them open up to other perspectives. This will not happen by itself but is the responsibility of the facilitator. Facilitator 3 stresses that people with different backgrounds will not talk to each other unless the facilitator does a lot of groundwork to bring them together. This process can take time, and the process needs to allow that time to make it possible for people's diverse perspectives to meet.

It's very hard when somebody has been in cultured in being a member of the finance department of a state government or a national government, for them, to not be socialized into that space, you have to be a very unusual person to be able to comfortably immediately step into another space. Most people can't do it. Not without a lot of help and that is where the facilitator comes in (F3).



Therefore, the facilitators diagnose that as an *equal knowledge mediator*, you need to handle the feeling of discomfort among the participants and challenge them to go outside of their comfort zone. Facilitator 5 explains that when you are with a person who you know that you share the same worldview and experience with it feels comfortable. But if you are with people who are not sharing your worldview it can be uncomfortable.

The diagnosis aspect of *the equal knowledge mediator* frame is to make things more equal and just among the different perspectives and therefore emphasizes that consensus is not the goal (F2). Facilitator 4 states that the facilitator should not force the participants to agree, that could antagonize the participants. The goal should instead be an experimental process that allows for an open and safe way to explore different kinds of actions. The stakeholders get to experiment with different kinds of knowledge or information that they normally might not be operating with because of different kinds of societal and economic structures (F2). Therefore, encouraging and legitimizing different perspectives could enable more perspectives to enter the discussion and lead to new learning. You change the dynamic and therefore change the conversation, which creates possibilities for innovations, creativity, and different ideas on how to address an issue (F4).

Several actions are suggested to address the diagnosis of this frame. One action bias is to work with the group to understand that there are different kinds of knowledge and that they can all be legitimate. Facilitator 3 explains that they do this throughout the time they work with the stakeholders. They allow the participants to see that knowledge is plural, e.g., that scientific knowledge is not the same as a doctor's knowledge and that knowledge is culturally produced. People look at issues differently and have different focuses when looking at them. Making that more explicit helps the group to understand that they have different worldviews and that their knowledge might not necessarily be opposing. "It's that thing about what are the lenses, the colour of the glasses that you're wearing?" (F3).

As another action in guiding people to understand each other's perspectives, the facilitators suggest activities where participants can openly reflect and articulate the normative underpinnings of their assumptions (F5). This is to create an understanding that value commitments underpin a person's worldview (F3). In turn, this reveals the personal connection to the issue and why it is important for them. To be able to get to these underlying values, the stakeholders get the opportunity to articulate themselves in new ways. The facilitators create that opportunity by mixing the groups so that not everyone from NGOs is in one group or all researchers in one. When mixing the groups, the participants are not able to talk in a way they do when someone knows the issue in the same way as they do. The stakeholders are therefore forced to articulate what they take for granted (F5).

Furthermore, in these groups, the facilitator, as an *equal knowledge mediator*, frames the question in a way to challenge them to move away from their

predetermined ways of formulating themselves based on their organization. Instead, make them discuss from their individual perspectives. That allows the discussion to take new directions (F5).

The facilitators' view of the advantage of knowing your stakeholders before the workshop was mentioned in the previous section and is again reinforced as action bias in the role of *the equal knowledge mediator*. To understand, e.g., what agenda and interests they have but also what level of agency and power they have in the system. Knowing these aspects gives the facilitators a certain understanding and can, therefore, already in the planning process take the different perspectives into account (F4). This is a way to give stakeholders with less agency a voice in the process to make sure that different ways of knowing are given a place in the conversation (F2). Facilitator 5 states that when altering the power balances in discussions, more critical voices are allowed to step forward. The facilitator's role as a knowledge mediator is to repeatedly remind that "everybody comes in with their own expertise. And it's not like one has better knowledge than the other" (F2). But also "think about how you can change things, so it makes it easier for everyone to take part" (F5).

Another aspect of the action bias of *the equal knowledge mediator* frame is that the facilitator works with the group to lift the discussion to an acceptance level (F1) to allow differences (F5). Facilitator 5 says that it is important to be able to talk openly about when the stakeholders do not agree and be clear that they do not have to agree (F5). There will be strong differences in opinions in the co-creation process. Therefore, the facilitator thinks through the process and the questions to push the stakeholders beyond their own perspectives to move closer to new knowledge. The facilitator works actively to pick up on what is being said, help to summarize and help to connect the different aspects (F1). Facilitator 3 expresses that the facilitator teaches the stakeholders to listen to somebody who they disagree with. Because co-creation is not about consensus, it is about diversity (F3).

Several facilitators express the importance of the relational and personal aspects in the room. They explain that the facilitators have a role in creating activities that allow the stakeholders to relate to each other personally. To show that their disparate parts can be brought together (F3). The facilitator, through creative activities, brings different views together and makes something valuable or even beautiful out of it to create relationships between the different perspectives. Facilitator 3 explains that emotional activities help the stakeholders relate to each other.

### 3.3 The Inclusive Process Leader

The third and last identity frame identified is *the inclusive process leader* frame. The diagnosis of the situation is that the stakeholders should feel safe to express

themselves and explore new perspectives. The facilitators want everyone to feel included in the process. To respond to this diagnosis, the action bias suggests that the facilitators have a role in creating a safe and creative space where the stakeholders can go outside of their comfort zone.

All the facilitators expressed why a facilitator is so important is because diverse stakeholders, with possibly antagonistic perspectives, participate in the Co-Creation Lab. Facilitator 4 explains: “[if] there are these maybe antagonistic views [...], I would say it's very difficult to have a process that could be effective. It might end up causing more harm than anything, particularly if people don't feel safe in the group”. Therefore, one aspect of this frames diagnosis is the need to create a safe space for people “to be seen” (F2), where “multiple ways of knowing can coexist” (F1) and to “foster a sense of trust” (F1) amongst stakeholders and the facilitator. This sets the ground for the possibility of sharing and exploring knowledge and perspectives together. Facilitator 3 reasons that if people come in with a trust deficit, you have to work twice as hard. If this groundwork is not done, then it will be difficult to foster an open conversation where people want to share. Facilitator 1 says that what is possible for us as a group to see and to do, is determined by what is possible to say (F1).

Therefore, the facilitator is there to read and sense the energy in the room to understand what is going on, e.g., is it quiet because people are offended or is it quiet because people feel like they have not got the opportunity to speak (F2). They need to be attentive to who is talking and taking the space because it is common that there are dominant voices dominating the whole conversation. This can lead to shy participants not saying much even though they have important things to say (F4). Including stakeholders and making it possible for everyone to participate is crucial because if someone does not feel heard, there is a risk that they will stop participating (F2).

To set an inclusive tone, language is also part of the diagnosis. The facilitators will set the room's tone depending on how they communicate and what language is used. If the facilitator speaks to technical or academic, e.g., if they speak in bureaucratic terms or use technical questions, that will lead to a bureaucratic or technical discussion. That might shut out ways of knowing, and stakeholders might leave the process not feeling included (F1). Having several diverse stakeholders in the room will also entail many ways of communicating. The facilitator then will have to be attentive and reflect on what language is being used and how it will affect the conversation. Therefore, as an *inclusive process leader*, the facilitator will have to help the stakeholders understand each other and push them to use language and frame the conversation to open up for new perspectives and participants.

Another aspect of the diagnosis of the situation of *inclusive process leader* frame is the physical space. The facilitators express that the space is important, and also to have in mind when you plan (F5). The space will influence the stakeholders

participating. Therefore, the facilitators mention that they consider where the best suitable place to have the workshop is. The facilitator thinks about who will participate and who will be affected the most based on location. Different locations entail different expectations and hierarchies, affecting which people who will feel more legitimized in that environment. For example, being on a farm or in the woods can make some actors more comfortable (F5).

Another concern with the space is that it should be creative. “We need to be in the creative space. And the creative space doesn't come from expertise, necessarily, it comes from the boundaries of where expertise mingles with other sort of disciplines” (F1). Thus, being inclusive diagnoses a creative space where knowledge that might not come from expertise also gets acknowledged. Therefore, most facilitators strive for an inclusive space that allows for “personal stories” (F1) and not only expert opinions.

if they're not allowed to be personal, the risk might be that that you shut ways of knowing out, because who am I to speak about carbon particles when there's a carbon physicist next to me, but I still maybe know something about that that's highly relevant to understand the problem (F1).

This connects back to the safe space and to foster personal communication. Facilitator 1 explains that by interacting with people you can get different perspectives on an issue. F1 also states that you get a completely different understanding of that person's culture and of who they are when you are in a relationship with them. The same facilitator continues by stressing that if we never hear the stories of what people have gone through, we miss out on their way of knowing. Sharing these stories fosters a “vulnerability” (F2, F3) that can bring people closer and to be more open to each other. Again, the facilitator will influence whether this sharing will be possible. Because if the facilitator is not warm, inviting and listening to the values, then it will be hard to stimulate a personal conversation (F1).

To foster this inclusive space where people can arrive as themselves, the facilitators have a role of being attentive to who is representing what in the room. Are there possibilities for people to arrive as themselves, or do they feel responsible for representing a particular perspective? Facilitator 1 explains the challenge with unbalanced groups where for example, being the only woman in the room or the only one with a nature-conservative background forces you to represent that perspective.

I think it's dangerous that people have to arrive representing an entire group or an entire perspective. I think it's optimal if people can come as themselves, that's really a lot stronger co-production process (F1).

To be in an inclusive and safe space, this frame diagnoses the possibility of expressing oneself with respect and openness. According to facilitator 2, the facilitator should require respect from the participants towards each other. If that is not enabled, the risk is that outright attacks occur of a person or of his/her perspectives, particularly if emotions are running high about an issue.

As a response to the diagnosis, the action bias of *the inclusive process leader* frame is to create a safe space where everyone can participate, and the “role is to make sure everybody is heard” (F2). The “role as a facilitator means that you hold the space for people to be seen and say the things they need to say” (F2). To make people feel seen, you have “to be an excellent listener” (F2). Further on, facilitator 3 says that you should “start by saying, I see that you stand somewhere that is meaningful to you” (F3). That fosters a sense of trust and opens a conversation about something important for the stakeholders. That “makes people feel welcome to join the process, and also make them feel that their perspective is appreciated” (F4).

[T]he most important thing for me is to be able to hold a safe and inclusive space for stakeholders to feel safe enough to express opinions and their feelings about the different issue, [and] [...] to think outside of the box. [T]hey now are given the opportunity to really try [...] to think differently (F4)

By holding this inclusive space, the action bias of the facilitators’ role is to be attentive to what is happening in the discussion and who is talking. Most of the facilitators discuss how they can enable equal participation.

[Y]ou plan how you can make the balance more equal between the participants to make those people who are not used to taking part in those kinds of processes feel comfortable (F5)

The facilitator needs to find a balance between being present in the groups to secure that everyone is included and giving them space to self-organize. Furthermore, facilitator 2 points out that in any group, there is at least one person that loves to hear their own voice, and there are lots of different ways to make sure that that person does not completely take over the space. The same facilitator gives an example:

The facilitator can drop in and say “How's it going? What's going on here?”. Maybe offer an observation. If, for example, I've been watching a group the whole time and I only see two people talking at each other. I might draw it on a piece of paper [...] with arrows pointing to who's been speaking to each other and say: “this is an observation that I've had about how the speaking pattern is going. What do you think about this?” And hopefully they're like: “oh my gosh, you haven't said anything in forever. So, what do you think? What's your contribution?” So, gently, nudging and making observations to just keep people on track (F2)

The facilitator should work actively to make it possible for different perspectives to have a place at the table. This is done, for example, by making sure that everybody speaks at least once before anyone is allowed to speak twice. Facilitators should make sure everybody says the things that they need to say, but without feeling put on the spot (F2). The facilitator also enables the co-creation process through coaching the stakeholders in skills like listening.

Making sure that you provide a space where people also listen, where they practice listening. So for example, you could put people in an exchange where you have the role to speak for five minutes [while the other's] role is to listen. And then you switch roles (F2).

For the facilitator to foster an inclusive, creative, and safe space, the physical space is important (F2). Therefore, the action bias connected to *the inclusive process leader* frame is to consider changing the physical environment to get more people to feel comfortable and included, e.g., if some participants are not working in an office and are used to being outside then meeting in the woods can be a good place to meet (F5). The facilitator uses the physical space to create an inspiring environment both in an inclusive sense but also in a creative way to make the process more holistic and dynamic:

[If] we're talking about farming, let's go to this farm that [is] doing radically different things. And let's see what they're doing, and let's have a meeting there. And you get the embodied way of knowing that can shake the foundations of the process (F1).

An action of the role of the facilitator within *the inclusive process leader* frame is also to create a creative process. Many facilitators mention that creativity is an important aspect of the possibility of co-creation.

I think a critical part of being a really good facilitator is being actually really creative. Really thinking outside the box, and it could be working with the embodied ways of knowing or doing a new tool, futures editions, or whatever it may be to stimulate imagination, play a game [...] as a way of sparking imagination (F1).

The Co-Creation Lab is complex with many different perspectives present. The facilitator shapes an inclusive process “working with these complex problems in reframing them and understanding them from a more holistic point of view, is really to sort of stimulate the abductive process of creativity” (F1). The facilitators strive to challenge the stakeholders’ thinking processes using creative methods and activities. The facilitators also foster creativity by pushing the stakeholders outside of their comfort zone to get out of their regular routine:

if you can go in and totally turn their expectations [upside down], throw them out. That de-centres them. And they freak out a little bit at first, but then they start playing. Because my goal is to let people play. (F3)

The facilitators enable this through an organic process where they get the stakeholders to move around, e.g., dancing, playing, and acting. Facilitator 3 explains that this embodied work makes the brain work differently, and when you are playing you cannot be in control which means that you become more open and vulnerable.

The facilitator also stimulates an organic process that allows a safe space to explore different types of learning. A safe space where the stakeholders can test their assumptions. So, the Co-Creation Lab is “a microcosm for cultures of tolerance and cultures of experimentation, but also cultures of play and respect” (F3). The facilitator then needs to create a space that allows people “to be personal” (F1) and “to be vulnerable” (F2, F3). To open people to different personal stories and use them to create new knowledge. A space that allows the stakeholders to be open about how they feel and that they can say what they think, what they are worried about and what they feel good about (F2). To make the stakeholders feel safe to share their thoughts and feelings about the issue, the facilitators let them practice sharing in an activity. Facilitator 2 gives an example of an exercise that is good to start workshops with:

In groups of three, you have a storyteller, a listener, and an observer. And you're asked to, as a storyteller, tell the listener, what you value and why and how you've lived that value [...] The fact that everybody did that vulnerable experience, you are really revealing yourself to somebody that you might not know that well [...] and that then anchors the room in what you really value.

This exercise fosters a feeling that you have been listened to, and it helps anchor the room in the stakeholders' values, what they find truly important. This creates new ways of collaboration and new types of conversations based on values instead of their position (F2).

Another aspect of making the stakeholders more comfortable sharing, the facilitator must, according to facilitator 3, be real and as vulnerable as the participants. They should lead by example and set the tone of the ecology of the communication (F1). That can be done by the facilitator opening up the meeting by telling a really personal story that is revealing (F1). Working towards this inclusive, safe space with the opportunity to be personal creates a “sense of belonging” (F3). This makes it possible, F3 continues, to do all the creative things that we would be too scared to do in a culture which is alien to us.

Within the action bias of building a safe, inclusive, and organic space, the facilitator should create a space where the stakeholders “feel like you can be trusted” (F1). That means “being reliable” and:

that you actually fulfil the task that you say that you're going to do within the amount of time you say you were going to do it. [That way you] build credibility with the group in different ways, by being honest and transparent (F2).

To build trust is also to be that leader that you feel that you can lean back on. Therefore, the facilitator should be prepared for different challenging situations so that he/she can be a safe person when things get shaky or when you are forced out of your comfort zone. Facilitator 2 suggest making a list of all the things that could go wrong, e.g., if there is a disagreement. And talk through what to do in these situations. This makes the facilitator more secure in the process. When the facilitator is secure in the process, that spreads to the group, and the group understand that they are being held through the process (F2).



## 4. Discussing Facilitators' Roles and Challenges

This thesis aims to understand the role of the facilitator facilitating the Co-Creation Lab and how they are creating conditions for a co-creation process to take place. In the previous section, I aimed to answer the first and the second research question. In this section, I will discuss challenges with facilitating co-creation processes, a question related to the two research questions and further discuss the frames in relation to each other. The frames and the challenges will be discussed in connection with previous research.

### 4.1 Assumptions of the Facilitator's Roles in the Knowledge Co-Creation Process

By conducting a frame analysis, I could identify the facilitators' different roles in guiding the stakeholders through processes in the Co-Creation Lab. The five facilitators interviewed had various facilitating styles, and they all focused on aspects they personally felt were most important. This led to various aspects, all important, to consider when facilitating co-creation processes. I will now discuss some of these highlighted aspects in connection to the literature on co-creation and facilitation.

In the role of *the process expert*, the focus is on the facilitator working as a guide to provide an initial structure that feels relevant to the stakeholders participating. This aligns with previous studies mentioning that the facilitator is responsible for designing an attractive process to create a willingness among the stakeholders to participate. Also to guide them through it (Schauppenlehner-Kloyber and Penker, 2015; Adelle et al., 2020). All the facilitators made it salient that the process and issue must be relevant to the stakeholders and that they should feel that they have ownership of the process. Westberg and Polk (2016) point out in their study that in a successful co-creation process, the aim is that the knowledge produced is meaningful and relevant to the actors participating. They also stress that for this to be possible, a process should be designed that allows a: "pluralist understanding of cognition and interpretation of the world" (Pohl et al., 2010, p.279). In the case of the Co-Creation Lab, this can be interpreted as the role of *the process expert*, and

*the equal knowledge mediator* goes hand in hand to plan for a successful co-creation process. Relevancy means a process where pluralistic perspectives can co-exist and participate in the process.

The role of *the equal knowledge mediator* is a crucial role since “[e]quality is essential for deliberative processes” (Adelle et al., 2020, p.58). The facilitators in the Co-Creation Lab studied here, emphasize that the process should allow for complexity and multiple ways of knowing. This aligns with previous studies, which suggest that the facilitators enable the co-creation of knowledge by expressing and highlighting that there are different types of knowledge present. Mediating between diverse perspectives fosters an understanding of each other’s perspectives (Adelle et al., 2020) and is a step closer to integrating the different types of knowledge. Facilitators create opportunities for the stakeholders to reflect upon the different perspectives to reach new perspectives, both individually and as a group (Polk, 2015). The facilitators in the Co-Creation Lab do this by encouraging the stakeholders to openly reflect and articulating the normative underpinnings of their assumptions. This reasons with Godemann (2008), who states that “to be able to accept and understand other perspectives, reflection is required as to one’s own perspective” (p.634). Reflecting on their perspectives makes the stakeholders understand that their worldview is connected to their values, which can help them question if their worldview is the only way to see the issue. This meta-reflection creates a more accepting environment, allowing stakeholders who feel like they have less legitimized knowledge to speak up (Godemann, 2008).

The facilitators' role as *inclusive process leaders* is important in setting a basis for the work in the other two frames. Many of the facilitators mention that the facilitators should build a safe and creative space where people can be personal and vulnerable. Previous studies have shown that the way facilitators handles group dynamic and communication impacts the outcome of the process (Reed, 2008). Tengö et al. state that “[f]undamental values such as respect, trust, reciprocity, and equal sharing need to characterize all interactions at all scales” (p.589). These aspects create conditions for people to feel comfortable sharing their perspectives and being open to learning from others. This shows the connection between *the equal knowledge mediator* and *the inclusive process leader*. As *the equal knowledge mediator*, the facilitator works to highlight the different knowledge perspectives, but for people to feel safe to share, the work of *the inclusive process leader* is needed. The building of trust and respect makes it possible to mediate the knowledge and have the divergent perspectives meet and learn from each other.

The facilitators also mention the importance of building relationships: “you get a completely different understanding of their culture, and who they are when you're in relationship with them” (F1). Building trust and cooperation are enabled by building a process that “enhances relationships between participants” (Reed, 2008, p.2423). This also means having spaces where the stakeholders can get to know

each other over a meal or coffee (Forester, 2009). One of the facilitators mentions: “it happens over fika, your coffee breaks, in those spaces. And for me it's very much a relational space” (F3). Therefore, the facilitator enables the stakeholders to connect by creating these inclusive spaces in the formal process but also in the more informal spaces where the participants can be allowed to be themselves. The facilitator builds trust and a space to explore.

Co-production of knowledge processes should be open and creative (Schauppenlehner-Kloyber and Penker, 2015). Almost all facilitators stress that the process should be creative and even fun to foster thinking in new ways. A creative space is important to make people think outside the box. It is common for people to feel uncomfortable presenting unfinished ideas or thoughts because of fear “that their idea is foolish” (Innes and Booher, 2003, p. 46). However, diversity of perspectives and unfiltered thoughts lead to creativity and new insights (Innes and Booher, 2003; Forester, 2009). Facilitator 4 reasons on the connection between diversity and creativity:

if you could try to get as many diverse perspectives as possible you could potentially broaden the conversation beyond what [is] often consider [to be] the dominant narratives, [...] [and] there'll be possibilities for innovations [and] creativity.

*The inclusive process leader* frame is thus connected to the two other frames and shows that they are all dependent on each other. *The process expert* needs to be flexible and creative when adjusting the process following the participants, and the *knowledge mediator* handles power imbalances so that diverse perspectives can occur. The facilitator needs to be able to think in new ways to motivate stakeholders to do so.

## 4.2 Challenges Faced by the Facilitators

### 4.2.1 Power and Knowledge

One identified challenge that the facilitators mention is the issue of power connected to knowledge. Facilitator 5 argues that knowledge and power are very closely related. The facilitators discuss existing knowledge hierarchies and statuses among different types of knowledge in society which affects the possibility of sharing and co-create knowledge. Reed (2008) confirms this, mentioning that existing power inequalities hinder equal participation and therefore hinder meaningful engagement. The challenge is not to let knowledge perspectives with the highest status take up too much space (Pohl et al., 2010). The facilitators mention aspects they should consider identifying power inequalities, e.g., “their level of agency” (F4), what kind of working environment they are used to, and

“capacities to take part both in terms of resources [and] economic resources” (F5). Other aspects important to consider are age, gender, and background. All important for the facilitator to consider enabling equal participation of the stakeholders (Reed, 2008). It is, according to Tengö, possible to level power dynamics by establishing frameworks to promote and enable equal as well as transparent connections between knowledge systems (Tengö et al., 2014, p. 588). Therefore, it is evident that both the role of *the process expert* and *the equal knowledge mediator* is important in altering the power imbalances.

According to, e.g., F1, there is a challenge to get people to listen to each other within existing power structures – it is hard to move away from antagonistic standpoints and be open to new ways of thinking and viewing an issue. Pohl et al. (2010) discuss the role of the reflective scientist who presents the different perspectives (‘thought collectives’) in the room by highlighting values, their relevance and how the perspectives might complement each other. By doing this, the facilitators alter the power balances and build trust with the stakeholders, proofing their neutrality and making everyone feel seen in the room (Pohl et al., 2010), which allows for a more open discussion.

However, Facilitator 5 states that, when altering the power balance, the facilitator needs to be aware that those in higher power positions might feel threatened or challenged since they are used to having a stronger voice. A possible tension can therefore be identified here between *the equal knowledge mediator* and *the inclusive process leader*. When altering the power imbalances to make sure of equal participation of all perspectives, some stakeholders who are used to taking up space might not feel included. Therefore, the facilitator must be attentive to and meet the different reactions and feelings in the room.

The facilitator has an initial power over the process structure and what perspectives are being invited and will therefore affect the outcome. Therefore, the facilitator should reflect on their authority over the process and how they impact the stakeholders’ conditions to co-create knowledge. The facilitators must reflect on how they shape the process, who is being represented or not and what perspectives should be included in the process to reach new knowledge and ideas on the topic. Another aspect of consideration is that the facilitators studied in this thesis all have a role within academia as researchers or PhD students. Facilitator 2 reasons that there is a view that scientific knowledge is prioritized over lots of other ways of knowing, which can position the facilitators to be in a higher power hierarchy when it comes to knowledge. Therefore, they have to make sure that practice and scientific perspectives get an equal amount of space (Schauppenlehner-Kloyber and Penker, 2015) by “empowering all non-scientific actors as knowledge contributors” (Pohl et al., 2010, p. 278).

In the case of the Co-Creation Lab, I interpret it as many of the facilitators feel that it is their responsibility to lead a relevant process and adjust it to the

stakeholders participating. However, I have identified a tension that some facilitators do not see themselves as leaders, e.g., facilitator 1 views the facilitator as an actor holding space but not leading anything. However, many statements make it salient that they are leaders in the sense that they lead the process, e.g., “the process that you’re trying to lead” (F2), “lead and to deal with uncertainty” (F4). This entails that the facilitators strive for a process that follows the stakeholders and their discussions and not the facilitators’ interests or opinions. You can, though, see a dilemma here where the facilitators do not want to have too much influence and, therefore, power over the process but at the same time manage it so that everyone can take part on equal terms. By balancing the power structures, the facilitators aim for equality. Equality is mentioned in connection to *the equal knowledge mediator* frame, where the facilitator works to foster equal participation of the stakeholders. However, equality is also connected to *the inclusive process leader*, where the facilitators make it salient that they must set themselves in an equal position in relation to the stakeholders.

The situation determines how much the facilitators should lead. However, the facilitators in the Co-Creation Lab need to reflect upon their position to understand their impact. This is to keep the balance between interfering and letting the stakeholders explore by themselves to foster a feeling of ownership of the process (Moore, 2012).

#### 4.2.2 Integration of Knowledge

All the facilitators express that there are challenges within the Co-Creation Lab connected to diverse stakeholders that have different perspectives on the issue being discussed. Because of power imbalances and antagonistic perspectives, integration of knowledge is a challenge and difficult to enable without the help of a facilitator. Facilitator 3 points out that “economists and social workers are not going to talk to one another unless you do a lot of groundwork to bring them together”. People see the world differently depending on their background and experience. The challenge is for the facilitators to bring these worldviews, connected to the topic processed in the Co-Creation Lab, together.

Some researchers argue that the integration of diverse perspectives to achieve a comprehensive picture of the issue at hand is equalized to consensus-building (Pohl et al., 2010). Reached consensus is also seen as a successful outcome (Schauppenlehner-Kloyber and Penker, 2015). This differs from the findings in this thesis. Almost all facilitators that I interviewed mentioned that “consensus is not the goal” (F2). The facilitators discussed the need to allow different perspectives to be present and articulated without forcing them to agree. Two of the facilitators even problematized consensus as something that could cause more conflict in the group: “[it] could antagonize some people when you try to force them to agree on something” (F4). In line with this, F2 views consensus as “pushing things under the

rug”. There is also research that agrees with this view. Godemann (2008) argues that striving for consensus that aims for people to agree on the same perspective will hinder creative thinking and critical voices from participating. The facilitators make it clear that the goal of the Co-Creation Lab is not to have stakeholders agree with each other. The goal is to make perspectives transparent to show that there are different ways of justifying something. Also, to reach an acceptance of that different worldviews exist.

Different worldviews will lead to the stakeholders interpreting the issue in different ways. The stakeholders will have different perspectives on what knowledge is seen as legitimate (Polk, 2015). Thus, integrating knowledge in the Co-Creation Lab may mean exploring different values embedded in different worldviews to relate them to each other (Pohl et al., 2010). Learning about different ways of seeing a problem can start a process of questioning the reality that the stakeholders take for granted. Then together, they might move towards new perspectives instead of agreeing on one specific perspective. Therefore, co-creating new knowledge can be seen as moving beyond consensus, creating new worldviews. Godemann (2008) explains that confirming each other’s worldview leads closer to a shared reality.

One of the biggest hinders to integrating knowledge is time (Polk, 2015). “A challenging thing is [that] a co-creation process takes time” (F1). Building trust, conditions for collaboration and learning takes time. However, “many people are busy” (F1), making the integration of knowledge more difficult because of time pressure. Knowledge co-creation processes need to be long-term for the possibility of knowledge integration. “The point is that if you're really going to commit to social change, you have to be in there for the long term” (F3). Furthermore, to contextualize: when aiming for knowledge co-creation and knowledge integration to navigate wicked problems, a long-term perspective is vital.

## 5. Conclusions

To conclude, by conducting frame analysis (van Hulst and Yanow, 2016), three identity frames of the facilitators' role in the Co-Creation Lab were identified: *the process expert*, *the equal knowledge mediator*, and *the inclusive process leader*. *The process expert* creates a process that is flexible in order to be relevant to the stakeholders. *The equal knowledge mediator* has the role of creating an equal possibility for diverse perspectives to be heard and accepted. To succeed in that, altering power imbalances is crucial. *The inclusive process leader* creates the conditions for the two other frames by creating a safe and creative space. In this role, they set the foundations for everyone to feel included by considering the physical space, building relationships, and encouraging everyone to be personal. All frames are interconnected and depend on each other. Since the facilitators all are different and have personal opinions on what they find is most important in enabling knowledge co-creation, there are also tensions among the frames.

Lastly, there are multiple challenges in co-creating knowledge with diverse stakeholders. Two challenges that affect the outcome of the Co-Creation Lab are the connection between power and knowledge, followed by the challenge with integration of knowledge.

This thesis highlights the importance of the reflective practice of both the facilitators and the stakeholders. The facilitators stress the importance of reflecting and evaluating throughout the process to enable knowledge co-creation. The reflective practice of the stakeholders – researchers included – is crucial to understand where their worldviews come from in order to understand worldviews different from theirs. This process enables all participants to learn from each other. By highlighting the different frames, the relations and tensions between them and the challenges, this thesis can contribute to facilitators' reflective practice in allowing for equal and including co-creation processes. It also gives valuable insights into the researcher's role when facilitating a co-creation process.

In further research, I believe it would be valuable to investigate how the stakeholders participating in the Co-Creation Lab perceive the role of the facilitator and how the different identities of the facilitators affect the stakeholders. It would be interesting to look at how different situations might call for different facilitation styles.

## References

- Adelle, C., Pereira, L., Gorgens, T. & Losch, B. (2020). Making sense together: The role of scientists in the coproduction of knowledge for policy making. *Science and Public Policy* (47) 56–66. <https://doi.org/10.1093/scipol/scz046>
- Bateson, G. (1972). *Steps to an ecology of mind*. 13. pr. New York: Ballantine Books.
- Bussey, M., Friman E. & Do, T., Co-Creation Labs: Fostering Innovative Ways of Communicating for Sustainability. Submitted to *Journal of Environmental Planning and Management*, May 2022.
- Brinkmann, S. & Kvale, S. (2018). *Doing interviews*. 2nd ed. Los Angeles: Sage.
- Creswell, J. W. & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches*. 5th ed. Los Angeles: Sage.
- Do, T., Powell, N., & Naunova, K. (2018). Report on Cross-Case Learning Workshop. Retrieved from Uppsala University website: <http://urn.kb.se/resolve?urn=urn:nbn:se:uu:diva-435993>
- Entman, R. M. (1993). Framing: Toward clarification of a fractured paradigm. *Journal of Communication*, 43 (4), pp. 51–58.
- Forester, J. (2009). *Dealing with differences: dramas of mediating public disputes*. Oxford: Oxford University Press.
- Forester, J., Peters, S., & Hittleman, M. (2005). Creating profiles: Interviewing - creating questions. Available at: [https://courses2.cit.cornell.edu/fit117/CP\\_I\\_CreatingQuestions.htm](https://courses2.cit.cornell.edu/fit117/CP_I_CreatingQuestions.htm) [2022-01-31]
- Frodeman, R., Klein, J.T. & Pacheco, R.C.S. (2017). *The Oxford handbook of interdisciplinarity*. 2nd ed. Oxford handbooks online. Oxford: University Press.
- Godemann, J. (2008). Knowledge integration: a key challenge for transdisciplinary cooperation. *Environmental Education Research* 14 (6), 625–641. <https://doi.org/10.1080/13504620802469188>
- Goffman, E. (1974). *Frame analysis: An essay on the organization of experience*. Cambridge, USA: Harvard University Press.
- Innes, J.E. & Booher, D.E. (2003). Collaborative policymaking: governance through dialogue, in: Wagenaar, H., Hajer, M.A. (Eds.), *Deliberative Policy Analysis: Understanding Governance in the Network Society, Theories of Institutional Design*. Cambridge: Cambridge University Press, 33–59.
- Joose, S., Powell, S., Bergeå, H., Böhm, S., Calderón, C., Caselunghe, E., Fischer, A., Grubbström, A., Hallgren, L., Holmgren, S., Löf, A., Nordström Källström, H., Raitio, K., Senecah, S., Söderlund Kanarp, C., von Essen, E., Westberg, L. & Westin, M. (2020). Critical, Engaged and Change-oriented Scholarship in Environmental Communication. Six Methodological Dilemmas to Think With.



- Environmental Communication*. 14 (6) 758–771.  
<https://doi.org/10.1080/17524032.2020.1725588>
- Mead, G.H. (1934). *Mind, Self, and Society from the Standpoint of a Social Behaviorist*. Chicago: University of Chicago Press.
- Moore, A. (2012). Following from the front: theorizing deliberative facilitation. *Critical Policy Studies*, vol. 6 (2), pp.146-162.  
<https://doi.org/10.1080/19460171.2012.689735>
- Muccione, V., Huggel, C., Bresch, D.N., Jurt, C., Wallimann-Helmer, I., Mehra, M.K. & Pabón Caicedo, J.D. (2019). Joint knowledge production in climate change adaptation networks. *Current Opinion in Environmental Sustainability*. 39, 147–152. <https://doi.org/10.1016/j.cosust.2019.09.011>
- Pohl, C., Rist, S., Zimmermann, A., Fry, P., Gurung, G.S., Schneider, F., Speranza, C.I., Kiteme, B., Boillat, S., Serrano, E., Hadorn, G.H. & Wiesmann, U. (2010). Researchers’ roles in knowledge co-production: experience from sustainability research in Kenya, Switzerland, Bolivia and Nepal. *Science and Public Policy*. 37, 267–281. <https://doi.org/10.3152/030234210X496628>
- Polk, M. (2015). Transdisciplinary co-production: Designing and testing a transdisciplinary research framework for societal problem solving. *Futures: the journal of policy, planning and futures studies*, 65, 110-122.  
<https://doi.org/10.1016/j.futures.2014.11.001>
- Reed, M.S. (2008). Stakeholder participation for environmental management: A literature review. *Biological Conservation*. 141, 2417–2431.  
<https://doi.org/10.1016/j.biocon.2008.07.014>
- Robson, C. (2016). *Real world research: a resource for users of social research methods in applied settings*. 4th ed. Hoboken: Wiley
- Schauppenlehner-Kloyber, E. & Penker, M. (2015). Managing group processes in transdisciplinary future studies: How to facilitate social learning and capacity building for self-organised action towards sustainable urban development? *Futures: the journal of policy, planning and futures studies*. 65, 57–71.  
<https://doi.org/10.1016/j.futures.2014.08.012>
- Schwartz-Shea, P. & Yanow, D. (2011). *Interpretive research design: concepts and processes*. New York: Routledge. <https://doi.org/10.4324/9780203854907>
- SLU. (2021). *Knowledge co-production for sustainability transformations*.  
<https://www.slu.se/en/subweb/mistra-ec/focus-areas/knowledge-co-production-for-sustainability-transformations/> [2022-03-25].
- Tengö, M., Brondizio, E.S., Elmqvist, T., Malmer, P. & Spierenburg, M.J. (2014). Connecting Diverse Knowledge Systems for Enhanced Ecosystem Governance: The Multiple Evidence Base Approach. *Ambio*. 43, 579–591.  
<https://doi.org/10.1007/s13280-014-0501-3>
- van Hulst, M.J. & Yanow, D. (2016). From Policy “Frames” to “Framing”: Theorizing a More Dynamic, Political Approach. *The American Review of Public Administration*. 46, 92–112. <https://doi.org/10.1177/0275074014533142>
- Westberg, L. & Polk, M. (2016). The role of learning in transdisciplinary research: moving from a normative concept to an analytical tool through a practice-based

approach. *Sustainability Science*. 11, 385–397. <https://doi.org/10.1007/s11625-016-0358-4>

- Westin, M. (2019). *Rethinking power in participatory planning: towards reflective practice*. Diss. Uppsala: Swedish University of Agricultural Sciences, Department of Urban and Rural Development. <https://pub.epsilon.slu.se/16462/>
- Westin, M., Calderon, C. & Hellquist, A. (2014). *The Inquiry Based Approach (IBA)*. Visby: SWEDES - Swedish International Centre of Education for Sustainable Development. <https://doi.org/10.13140/RG.2.1.4025.4804>

# Popular Science Summary

To face the complicated problems caused by climate change we need new ideas and solutions. Like Einstein said: “We can't solve problems by using the same kind of thinking we used when we created them”. To create new ways of thinking and ideas about an issue we need to include many different types of people, organisations, and occupations. Because all these people have knowledge and experience valuable for solving tricky societal challenges.

The Sustainability Learning and Research Center (SWEDESD) at Uppsala University wants to create this opportunity, to co-create knowledge together with researchers and actors from different parts of society in a Co-Creation Lab. The Co-Creation Lab is a learning platform where different workshops are held around different sustainability topics. The different actors and researchers have different opinions and experiences on the topic being discussed in the workshops. The goal is to make use of these differences, combine them and then hopefully end up with new perspectives and ideas on how to address an issue. Collaboration and communication can be hard when people have opposing or different ways of seeing things and therefore a facilitator will be present in the workshops to help them.

In this thesis, I have looked at how the facilitator makes it possible for these very different actors to meet and together create new knowledge and ideas on a topic. To make it clearer what a facilitator does and what I found out I will describe an example of facilitating a workshop about bushfires.

## *How the facilitator makes it possible to co-create knowledge about bushfires*

The facilitator is the expert in designing a co-creation process. Before the workshop the facilitator thinks through what actors are concerned with and affected by bushfires and invites them to join the workshop. The facilitator then prepares a workshop with the different actors in mind. It is important to know the actors a bit beforehand to make the workshop relevant for them. The facilitator prepares with suitable methods and questions but makes sure to be flexible in the process to be able to follow the interest of the participants.

During the process, the facilitator will have a role in mediating between different types of knowledge that the actors have. This is important so that everyone has an equal chance to present their perspective of bushfires. In doing this, the facilitators need to be attentive to and address power imbalances.

To make it possible for these diverse actors to meet and work together they have to feel safe and trust each other. One important aspect of the facilitator's role is then to create a safe space where everyone feels included. They do this by having activities that encourage everyone to be personal, so it is easier to get to know each other. When the actors start creating a relationship with each other they can feel safer sharing their perspectives and experiences. The facilitator also makes sure that there is a creative space and process which makes it easier for the actors to step out of their comfort zones.

The facilitator will be faced with challenges when co-creating knowledge with diverse actors. Two challenges that I found important to highlight are the connection between power and knowledge and the integration of knowledge. The challenge of power and knowledge is concerned with that there are different knowledge hierarchies in society. This means that the facilitator will have to actively work to make it possible for the actors with a less dominant knowledge perspective to participate. The challenge with integration of knowledge means that there is a lot of work to actually bring perspectives together. The goal is to accept that there are different ways to look at bushfires and that these different perspectives can learn from each other. Integration of knowledge takes time which is a challenge since often these kinds of projects have limited time.

To understand how the facilitators create conditions for the actors to meet and co-create knowledge I interviewed the researchers working with the Co-Creation Labs.

## Acknowledgements

I would like to thank my supervisor Eva Friman for supporting me through the thesis process and for giving me the opportunity to write my thesis in collaboration with SWEDESD. This made it possible for me to write about knowledge and learning in connection to sustainable development, a topic that I find very interesting. I am grateful to the team of facilitators in the project of the Co-Creation Lab for taking the time to be interviewed. Therefore, I want to thank them for the very interesting insights they gave me about facilitation and knowledge co-creation.

For helping me understand frame analysis and supporting me in my analysis process, I want to give Fanny Möckel a special thanks. Without her support, I would have found it challenging to move forward in my analysis process.

I also want to thank my fellow students for all their help and support through the process. Finally, I want to thank my great friends, family, and partner for all the cheering words and support.

# Appendix 1 – Interview Guide

## **Introduction**

- Present the aim of the research project
- Inform the interviewee about the interview process. The interview will take approximately 60 min, it will be recorded, and the material will be transcribed and analysed
- Ethical considerations. It will be anonymous. Ask if the interviewee would like to read the interview transcript before analysing it?
- Do you have any questions before we start?

## **Personal Experiences**

- For how long have you been facilitating participatory processes?
- Can you give me a brief overview of what you do as a facilitator within the Co-Creation Lab?
- What are the goals you most want to accomplish in your work as a facilitator for co-creation?
- What motivated you to be engaged as a facilitator within the project of Co-Creation Lab? / Did you have any life-changing experiences that put you on the path that led you to be doing what you are doing today? Tell me about them.

## **The Practice Story**

- In your role as a facilitator, can you briefly describe how you prepare and plan for the Co-Creation Lab?
  - What is important to think about at the beginning of the workshops?
  - What is important to think about at the end of the workshops?
- What aspects are important to think about when planning a co-creating process?
- What would you say are optimal conditions for a co-creation process? How are people acting, what are the facilitator doing, and what is the feeling in the room?
  - Can you describe a situation/example?
- How do you see your role as a facilitator in the Co-Creation Lab?
  - Could you give me an example of a situation where you are in your role as a facilitator? What do you do, what do you not do?

- Do you have more examples?
- What responsibilities do you have as a facilitator?
- Are there situations where a facilitator is not needed?
  - What do you think would happen if there was no facilitator?
- Which skills do you think are important for a facilitator to have?
- Could you give me an example of a challenging situation that could occur in the Co-Creation Lab?
  - Do you have more examples?
- How do you prepare for challenges and surprises?
- How do you imagine handling a situation when you feel like the process gets stuck? Do you plan for this?
- How do you handle a situation where the stakeholders disagree on what knowledge is legitimate?
- Are your goals of facilitation the same in every case or differing with every process?
- What do you personally feel/expect is the most challenging about being a facilitator in the Co-Creation Lab?

### **Reflection**

- What advice would you give me if I were to facilitate a co-production process?
- What have you learned from the people you have worked with within the project?
- What do you think you taught them?
- What are you looking forward to the most as a facilitator in the project of Co-Creation Lab?

### **End of Interview**

- Thank you so much for participating
- Would you like to add something?

## Publishing and archiving

Approved students' theses at SLU are published electronically. As a student, you have the copyright to your own work and need to approve the electronic publishing. If you check the box for **YES**, the full text (pdf file) and metadata will be visible and searchable online. If you check the box for **NO**, only the metadata and the abstract will be visible and searchable online. Nevertheless, when the document is uploaded it will still be archived as a digital file. If you are more than one author, the checked box will be applied to all authors. Read about SLU's publishing agreement here:

- <https://www.slu.se/en/subweb/library/publish-and-analyse/register-and-publish/agreement-for-publishing/>.

YES, I/we hereby give permission to publish the present thesis in accordance with the SLU agreement regarding the transfer of the right to publish a work.

NO, I/we do not give permission to publish the present work. The work will still be archived and its metadata and abstract will be visible and searchable.