# Understanding the role of mindsets in sustainability transformations: How do employees in Norwegian municipalities engage with change?

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# Abstract

As humans, the mindsets that we hold affect how we respond to crises, and how we perceive and enact agency to achieve transformations towards sustainability. Yet, surprisingly little research has been done on how personal dimensions such as mindsets affect the agency of people working on the ground with sustainability issues. The overarching goal of this master's thesis is to contribute to understanding individual's roles in social innovation processes, including how personal change relates to political and practical changes. The personal sphere refers to how both individuals and groups think, feel, understand, and perceive the world. This is at the core of how we build and organize society. Despite its importance for understanding and tackling crises such as climate change, the personal sphere is just beginning to receive attention in sustainability science. This thesis looks at how mindsets influence how municipal employees engage with sustainability issues. The research focuses on municipal employees who participated in a social innovation initiative called Kommuneinkubatoren (municipality incubator) – an incubator for employees in Norwegian municipalities that aims to increase their leadership capacities to tackle complex sustainability-related challenges. I conducted semi-structured interviews, along with observations, which are analysed using the three spheres of transformations framework. The findings suggest that the barriers to deep and rapid transformations may be linked to a lack of questioning or challenging systems and structures and a gap between self-awareness and the enactment of agency. This highlights the importance of addressing sustainability issues through a system understanding. This research argues that the personal sphere represents opportunities for deep and rapid transformation, including transformations in everyday practices that influence sub-systems and systems. The thesis emphasises the importance of reflexive research that contributes to a greater understanding of the potential that lies within each individual's decision to learn more, be more mindful about intentions, and organise change initiatives that are aligned with sustainability goals.

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# Table of contents

# 1.0 Introduction

How do people's mindsets affect their ability to achieve transformative changes needed to reach the Sustainable Development Goals? This is a key question that needs to be considered and addressed in order to realise the 2030 Agenda for Sustainable Development, and it is particularly relevant for people whose job is to lead sustainability initiatives in and through local governments. Growing amounts of research shows that mindsets, worldviews, and paradigms significantly influence how people view and relate to sustainability (Hedlund de Witt, 2014; Wamsler & Brink, 2018; Ives, 2020). Mindsets are our most profound sets of beliefs and assumptions about what we say the world is like, how the world works, and how we think it should be (Meadows, 1999). In fact, it has been argued that the core tenets of the worldviews, mindsets and paradigms of dominant western societies are a root cause of why interconnected crisis such as climate change, biodiversity loss, and social inequality have emerged, as they are dominated by a mindset of extractivism, commodification, domination, disconnection, and othering (Sharma, 2017; Næss, 1984).

Consequently, the role of mindsets, including worldviews, is increasingly recognized as essential in forming individual identities and collective visions and strategies for systemic change (Göpel, 2016). Ives et al. (2020: 208) argue that "… encouraging scholars and practitioners to cultivate their inner worlds to strengthen inner resources intentionally is necessary for addressing sustainability challenges." As such, what goes on inside our minds is significant for how we engage with transformations to sustainability.

Actions to achieve the United Nations 2030 Agenda for Sustainable Development needs to go beyond mere practical solutions, towards a more holistic and integrative approach that addresses the root causes of unsustainability (Shrivastava et al 2020). Transformations involves more than practical innovations and interventions; they also include understanding and addressing structures and systems that promote or hinder these, as well as beliefs and assumptions that influence how we relate to them (O'Brien, 2018). The United Nations emphasises that the 17 Sustainable Development Goals and 169 targets for 2030 are integrated and indivisible (The United Nations, 2015); in other words, it is vital to view them from a relational and interconnected perspective. As such, it is important to view sustainability problems such as climate change as more than an environmental problem: they are also a social,

economic, political, cultural and development problems, and the solutions lie in all of these areas, and can be addressed through transformative change.

Although there are many definitions of transformation towards sustainability, one overarching way is to view it as the "fundamental alteration of the nature of a system, once the current conditions become untenable or undesirable" (Horlings, 2015: 163). It is, however, also useful in this context to define transformation in a way that includes the role of people, as suggested by Walker et al (2004 in Westley et al., 2013: 1): "the capacity of people in a social-ecological system to create a new system when ecological, political, social, or economic conditions make the existing system untenable". This definition suggests that people's agency is an essential component in transformations (Westley, et al. 2013. This is also emphasised by Sharma (2007) who refers to transformation as "The powerful unleashing of human potential to commit, care, and affect change for a better life". A key question, however, is how do transformations come about? What does it involve? Equally important, who does it involve?

Bardal, Reinar, Lundberg & Bjørkan (2021) argues that the global society cannot successfully implement the Sustainable Development Goals (SDGs) without involving local actors and the local context. In Norway, municipalities are the level of government that is the closest to people, and Norwegian municipalities are connecting their current activities and planning to the SDGs (Amundsen & Hermansen, 2020). In fact, the Norwegian government has mandated that the SDGs form the basis for all future policy making and implementation both nationally and locally (Norwegian Government, 2020). Thus, the 2030 Agenda for Sustainable Development can be considered foundational to the overall context for the future of Norwegian municipalities. In particular, municipalities must address climate challenges, while also developing their local communities in order to achieve sustainability transformations (Dannevig, Hovelsrud, Hermansen & Karlsson, 2020). Developing local communities includes managing changes in demography, social inequality and economic conditions. In order to achieve this, municipal employees must experiment with new forms of leadership, which acknowledges the role of mindsets and inner dimensions. Inner dimensions has been defined as "subjective domains within the individual relating to people's mindsets, worldviews, beliefs, values, and emotions" (Wamsler & Brink (2018: 55).

Leadership is considered a key to sustainability transformations, but understandings of leadership is changing (Ferdig, 2007) There is a recognized need to develop new models and

practices of leadership that go beyond implementing solutions with the same mechanistic mindset that created the problems in the first place is a problem (Hutchings & Storm, 2019; O'Brien 2020). For example, Kuenkel (2019) discusses an emerging shift from individual, siloed leadership to collaborative leadership. This represents a move away from leadership as the capacity of the individual only (the "capable" leader) to leadership as the capacity of the collective, which includes a capacity for collective action. There is also an emerging focus on non-hierarchical leadership, as opposed to top-down leadership (Kuenkel, 2019; Case et al., 2015). An increasing perception is from goal attainment only to contributing to the common good and enlisting people to engage with collective responsibility.

One emerging understanding of leadership is that everyone has leadership potential and can contribute to generating transformations to sustainability (Sharma, 2017; O'Brien, 2018). According to Gram-Hanssen (2021), there is a growing emphasis on "… leadership capable of deliberately transforming societal systems toward enhanced sustainability and equity". Gram-Hansen's understanding of leadership recognises it as something that is "… collective and emergent while at the same time being dependent on individuals "showing up" in everyday situations and contributing with their unique skills and perspectives toward the greater good" (Gram-Hanssen, 2021: 18). She calls this process she the "individual-collective simultaneity". Understanding leadership in new ways is essential to bring about sustainability transformations, because practices of leading change are part of every aspect of our society and thus can enact individual and collective agency. Such transformations start with challenging ourselves and being of inspiration to others (Göpel, 2016). In this, the role of municipalities and their employees is essential, as they are central agents in creating solutions and key actors for transformative change (Anttiroiko, 2016).

## 1.1 Aim of the study and research questions

This thesis focuses on the role of mindsets in facilitating transformative changes that address complex societal problems, including sustainability challenges. The mindsets and "inner dimensions" of people involved in sustainability initiatives have received considerable attention in the literature on transformative change.  However, there is not enough empirical research on exactly *how* these inner dimensions influence people's ability to generate transformative change. The overarching question of this thesis is therefore: In what ways do mindsets influence how people engage with sustainability issues and see their roles in transformative change? More

specifically, it explores how growing attention to mindsets or inner dimensions is being "taken up" by municipal employees who are working with sustainability to address diverse issues. Through a case study of employees from five municipalities who are participating in a leadership program that focuses on mindsets, skillsets, and toolsets, to address complex sustainability challenges, I will address the following specific research questions:

1) How do municipal employees [1]working with sustainability issues view the role of inner dimensions in promoting transformative change?

(2) How do those working with sustainability issues in municipalities perceive of their own agency and ability to engage with and transform systems?

To investigate these questions, I looked at the specific case of a "municipality incubator" called Kommuneinkubatoren. This case represents an – an experimental initiative for employees in Norwegian municipalities to help them solve complex problems. The Kommuneinkubatoren was organized and implemented by SoCentral, a collaborative incubator located in Oslo, together with Lent, a consultancy company. An incubator is defined as a "change lab" (Westley et al., 2011: 776), in that it creates conditions for various perspectives through working with complex issues, enabling people and organisations to expand their potential (Bøllingtoft & Uhøi, 2005). Through the municipality incubator, selected Norwegian municipalities have the opportunity to work on real issues in a programme where they receive support to experiment with solutions, learn new skills, and develop professionally across municipality boundaries and barriers.

The program aims to increase the leadership capacities within each individual participant to tackle complex sustainability related challenges, through working with a combination of "mindset, skillset and toolset". All of the participants in the Kommuneinkubatoren that I studied work with issues that are related to the 2030 Agenda for Sustainable Development. Within each municipality, these are people working at the front line of environmental issues, health issues, and welfare. Municipalities have to deal with various issues; an example of this is the current COVID-19 situation. This research contributes to understanding the individual's role in such

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[1] «Municipal employees» can also mean bureaucrat. However, the informants work in various ways; therefore, «municipal employee» is used instead of bureaucrats.

processes, and the deeper dimensions of transformation with insights on how this relates to political and practical changes.

## 1.2 Structure of the thesis

The introduction has thus far framed why mindsets are important in systems change. **In chapter 2**, I will explore theoretical perspectives that are relevant to the field and present a review of relevant literature. The focus will mainly be on four theoretical perspectives. Firstly, the debate on agency vs structure will be explored. Secondly, transformations as a concept, particularly in relation to transforming systems, with a specific focus on a framework called the three spheres of transformation. Thirdly, deep transformation and the role of inner dimensions will be elaborated on, including on why beliefs play an important role. Fourthly, mindsets will be explored, more specifically what kind of mindsets matter for sustainability transformations and the process of exploring mindset. The chapter on theoretical background will end with a section on moving from theory to practice and the role of leadership in this.

**In chapter 3**, the use of methods and methodology will be described by looking at what methods I am using and why, followed by ethics and reflections around my role as a researcher.

**In chapter 4**, I will present results from the municipality incubator based on my observations and interviews.

**Chapter 5** is where the results derived from use of the Gioia methodology will be presented, focusing on self-awareness and system-awareness. First, the chapter looks at the role of self-awareness in transformative change. Then, it looks at the participants' role in system change, as my data shows a gap between self-awareness and the degree to which the informants see themselves as able to create system change.

**Chapter 6** is the discussion. Here the findings from chapter 4 and 5 will be discussed and connected to the theoretical background in chapter 2. The focus will be on holistic transformation, the role of mindsets, and the potential of the municipal incubator in transformative change.

**Chapter 7** is the conclusion, where I sum up and answer the research questions. I will also discuss the relevance of this thesis, its transferability, and avenues for future research. This thesis shows the importance of both self-awareness and system-awareness, and how systems change involves a process of recognising and engaging with interconnectedness, viewing things as linked, not separate. Overall, the research argues for a holistic approach to transformation that recognizes the practical, political and personal spheres or dimensions (O'Brien & Sygna, 2013), highlighting the need for an integrative approach that includes a focus on inner dimensions, which have been largely neglected in sustainability practice, especially in local governments.

# 2.0 Theoretical background

To answer the research questions, there is a need to explore a range of concepts and theories within the social sciences. Firstly, I will look at the quintessential debate about agency vs structure. This is key in understanding if and how individuals and their mindsets and leadership influence transformative change before looking closer at transformations, transforming systems and the role of inner dimensions. Furthermore, I will present the research regarding mindsets and situate this thesis within this literature and why mindsets matter in that context through a framework called the three spheres of transformation. Lastly, I will explain the challenge of moving from theory to practices in regard to the inner dimensions, focusing on alternative leadership practices, particularly in relation to sustainability.

## 2.1 Agency vs structure

'Agency' and 'structure' have often appeared in social sciences and philosophy as antinomies, contradictions, or incompatible (Giddens, 1979). The agency vs structure debate has been a constant topic of discussion in human geography and was predominantly present in the 1970s and 1980s (Coe & Jordhus-Lier, 2010). According to Cresswell (2012), human geographers and other social scientists have tended to fall into either one side or the other on emphasising individual agency or structural limitations, although not being in extreme ends, but still being closer to one or the other. After the quantitative turn in human geography in the 1960s, positivism and spatial science dominated the field. Several reactions to this developed, among them Marxist geography and Humanist geography. Marxist geographers critiqued positivism for not taking capitalist limitations into account. Within Humanist geography, the critique of positivism was that "… science falls short when it is applied to creative, imaginative, thinking human beings …" (Cresswell, 2012: 105). Humanist geography was subject to criticism from both positivist geographers and radical geographers like Marxist geographers. However, Humanist geography has profoundly influenced and has been influential in Human Geography research (Cresswell, 2012). Furthermore, this reaction has contributed to acknowledging subjectivity, positioning, and situated knowledge. Cresswell notes that Humanist Geography was more than a reaction to positivism, quoting Buttimer (1993).

> "Humans are wilful agents and not puppets of mysterious forces. They are imbued with intelligence, imagination, and consciousness, and any truly human geographer needs to

foreground these rather than excluding them as worryingly unpredictable nuisances" (Buttimer, 1993 in Cresswell, 2012: 107).

Buttimer's words are also relevant today, especially when working towards transformations to sustainability. However, there are structural limitations, and agency is not evenly distributed. Socio-economic limitations and power relations constrain agency (Bourdieu, 1986). In addressing this, though, there is great potential in people as the solution. Schlitz et al. (2010) argue that human agency has been downplayed. It is essential to understand that we are part of the system. Thus, the picture is dynamic and multifaceted. Giddens (1984), with structuration theory, had one of the most systematic approaches trying to solve the structure vs agency debates in the 1980s (Cresswell, 2012). Human geographers brought this approach into the field. 'Structuration theory' views structure and agency as interactive and linked, and that "… the production and reproduction of social action are at the same time the means of system reproduction (the duality of structure ...." (Giddens, 1984). Giddens emphasise reflexivity in the way of actors regulating, reproducing, or changing the system's conditions. Central to 'structuration theory is that actors reproduce and produce the system in every moment and that the actions of individuals express the system. Milkoreit (2017: 162) sums up the structure-agency discussion as follows:

"What the structure-agency discussion comes down to is a disagreement about the source of causal power and ultimately social change in the international system: are actors structurally coerced by the given material reality that determines their interests, or can they choose to act based on motivations that are, at least in part, independent of system structures?"

Thiermann & Sheate (2020) argue that individuals have to become "active agents" in all aspects of life, from private to public. However, it is not just about having agency, equally important is the quality of that agency. Where it comes from also matters. Sharma (2017) emphasises a difference between talking about inner dimensions like values and embodying them through actions. This approach is removed from the "objectivity" of positivism and a move towards the normative, in that the point is not only to inform or prove but also to encourage action. Viewing people as active agents of change (O'Brien & Sygna, 2013) is not widely accepted in human geography. According to Wamlser et al. (2020), this view conflicts with some of the current dominant belief systems and worldviews. However, agency is not only understood as the

actions of the individual, but of collectives (Otto et al., 2020). Socio-environmental change researchers have increasingly pointed to the "interconnections between individual agency and systemic shifts (Gram-Hanssen, 2021; O'Brien, 2018). Westley et al. (2013: 1) argue for an understanding of agency in a broader perspective than as "single individual's vision and steering" and emphasising the role of "mental models, management routines, and resource flows". The collective perspective is also essential, as the individual agency is inseparably connected to collective agency and the relations between individuals and groups. I follow the perspective of Giddens (1984), viewing structure and agency as interactive and linked, while also arguing the potential in people as "active agents" (Thiermann & Sheate, 2020; O'Brien & Sygna, 2013).

## 2.2 Transformations to sustainability

Transformations entails complex processes and understandings and has been understood in many different ways. Still, for something to be transformative, it needs to challenge the nature of a system. Feola (2015: 387) recommends resisting the "fashion of transformation", in other words not attribute transformation to every social change. Transformations furthermore refers to more than one dimension, not only aiming towards a practical change in transport, area-based change or new buildings. It needs to go deeper and see things as interrelated; this encompasses the importance of inner dimensions and mindsets in geographical transformation processes.

### 2.2.1 The three spheres of transformation

To understand the role that mindsets play in relation to sustainability leadership and transformations, the three spheres of transformations framework developed by O'Brien and Sygna (2013) is a valuable frame as it looks at the relationship between individual, collective, and systems change. The three spheres framework looks at the political, practical and personal sphere and tries to capture the depth and width of changes needed to realise a goal or outcome (O'Brien, 2018). Transformation processes involve all three spheres, and interaction between the spheres is crucial because they are always connected.

*Figure 1: Illustration of the three spheres of transformation (O'Brien & Sygna, 2013)*

The practical sphere represents specific actions towards an outcome that is often possible to measure (O'Brien, 2018). These actions can mean technological solutions such as designing buildings, infrastructure or promoting alternatives to car travel. . The practical sphere is where most steps towards sustainability have taken place and where most of the attention goes. Practical actions are important, but we also need to go deeper to understand why certain practical efforts succeed, fail or have limited impact. This limited impact often is because policies that only consider the practical sphere can fail to address structural challenges.

The political sphere reflects structures and politics, norms, rules, regulations, institutions, regimes and incentives, influencing practical outcomes (O'Brien, 2018). This sphere is the collective organising of society and the structures and power relations it bases itself on. Action in the political sphere can involve social movements or lobbying. However, the personal sphere, such as values, worldviews, beliefs, and paradigms, influences the political sphere's systems and structures. The dimensions are often ignored or not adequately considered, even though

they matter deeply concerning whether both practical and political interventions achieve their intended outcomes.

The personal sphere involves people as individuals, as groups and as a collective. Including how we all think, feel, understand and perceive the world (O'Brien, 2018). The personal sphere is at the core of which the society is built and based. Mindsets belong in the personal sphere. People's perception of the world is the foundation for practical and political solutions and actions, and further, it influences what we include or exclude, what we allow, what we do and do not give power (ibid). Perceptions of the world affect how people are treated, how resources and other beings are treated and how we treat ourselves. According to Sharma (2021), the mindset that exploits the earth is the same mindset that exploits humans and other beings. The personal sphere has not focused on climate change research or action, but researchers are increasingly arguing its importance (DeWitt, 2014; Schlitz, 2010; O'Brien, 2018). The three spheres are connected, and they are all critical. Therefore, all must be understood and addressed simultaneously.

### 2.2.2 Transforming systems

Transformations towards sustainability involves deliberately changing systems that are harming people and planet or that are not functioning optimally towards that goal. Meadows (1999) work on leverage points for system change is helpful to understand system transformation. In her analysis of "places to intervene in a system", she lists 12 points in order of effectiveness. See Table 1 for a list of her leverage points in increasing order of effectiveness.

Meadows' way of describing high and low leverage points helps analyse and thus generate transformations. She does, however, emphasise that this is no recipe as systems are complex. It is rather a way of thinking broader and deeper. Leverage points have received increased attention (Abson et al., 2017; Diaz et al., 2020). Abson et al. (2017) draws on Meadows (1999) and argues that small shifts can lead to fundamental changes in the system as a whole, which mindsets are an example of. Similarly, Otto & Wiedermann et al. (2020) argue that human agency can form World-Earth systems through intervention on different levels in the system.

Thus, it is necessary to explore how these subtle changes influence the system as a whole. In Figure 2, O'Brien (2018) has combined the three spheres framework with Meadows' leverage points for systems change. This highlights that personal aspects like mindset are at the top, illustrating how it has a high potential for generating transformations further down the scale. As such, relatively small shifts in our mindsets can have a significant impact.

Places to Intervene in a System
(in increasing order of effectiveness)

12. Constants, parameters, numbers (such as subsidies, taxes, standards)

11. The sizes of buffers and other stabilizing stocks, relative to their flows.

10. The structure of material stocks and flows (such as transport networks, population age structures)

9. The lengths of delays, relative to the rate of system change

8. The strength of negative feedback loops, relative to the impacts they are trying to correct against

7. The gain around driving positive feedback loops

6. The structure of information flows (who does and does not have access to what kinds of information)

5. The rules of the system (such as incentives, punishments, constraints)

4. The power to add, change, evolve, or self-organize system structure

3. The goals of the system

2. The mindset or paradigm out of which the system—its goals, structure, rules, delays, parameters—arises

1. The power to transcend paradigms

*Table 1: Meadows (1999) leverage points*

The figure shows arrows pointing downward, labeled from bottom to top:

Constants, parameters, numbers
Size of buffers relative to flows
Structure of material stocks and flows
Lengths of delays relative to rate of change
Strength of negative feedback loops
Reinforcing positive feedback loops
Structure of information flows
Rules of the System
Power to influence system structure
Goals of the system
Mindset or paradigm from which system arises
Power to transcend paradigms

SYSTEM

PRACTICAL

POLITICAL

PERSONAL

*Figure 2: Three Spheres of Transformation mapped onto Leverage Points for Systems Change (O'Brien, 2018, based on Meadows, 1999)*

The focus in bureaucracies such as national and local authorities has traditionally been on lower leverage points, such as changing constants, parameters and numbers, whereas the high leverage points in the personal sphere have been avoided or neglected.

It is necessary to consider what is included when talking about systems and structures. If the system is the problem, what is included in that system? Hawkins, Marston, Ingram & Straughan (2015) argues that we are not passively watching the world and the system; we are creating it every day. Hence, it is essential to see how the system includes people and their inner worlds in that system understanding. It is easy to believe that systemic shifts are happening only "out there", failing to realise it is also within us. The three spheres are about including multiple dimensions of change, working with them simultaneously and seeing how they are interconnected. Ferdig (2019 uses the term "generative engagement" to illustrate how the things we do have or should have a mutual value. In the words of Ferdig (2019: 3):

"… we choose to engage generatively because we know that our own well-being, and that of those we love, depend on the well-being of the interconnected, interdependent network of life of which we are an inseparable part" (Ferdig, 2019: 3).

Schlitz et al. (2010: 21) uses the term 'social consciousness' "to denote conscious awareness of being part of an interrelated community of others". When people expand their self-awareness, it becomes easier to see how they and others can contribute to transformative change. Interconnectedness can mean a sense of connection to other people and the planet, awareness of being part of a larger whole and the dynamics in between. Deep ecology also emphasises interconnectedness (Næss, 1984). The way people perceive nature can influence empathy and engagement levels, as with thinking about other people as someone utterly different from ourselves. Within deep ecological thinking, viewing nature as valuable in itself is emphasised and connected to other species and people. When this is lacking, there is a risk of maintaining a condescending view of nature and other people, thus reducing the value of nature itself and people's agency. That is a perspective that keeps a distance between nature and society, us and them. A certain engagement is still possible, but not on a deep level, illustrating the importance of interconnectedness. Often only actions are taken into account, what's done and how these literal actions affect the system. However, people's inner dimensions are also part of the system. Thus, including them in perceptions of systems is valuable because those inner dimensions are what the system is based on and reproduced through. Following Giddens with structuration theory (1984), the system is produced and reproduced in every moment. I argue that it is vital to see ourselves within the system, not just our actions but also our mindsets. According to Göpel (2016: 6), "… bringing individuals and their mindsets into systems is an important step towards understanding where change originates and who promotes it with what effects."

## 2.3 Deep transformation

There are various ways of scaling transformation and scaling deep is considered to be one of them, aiming to impact the roots of society (Moore et al. 2015). Lam et al. (2020) argue that scaling deep is understood differently within different frameworks. Within social innovation, it consists of two strategies; the first is to spread ideas and reframe stories to change beliefs and norms through knowledge sharing and alternative practices platforms and approaches that focus on learning in communities through a participatory process approach. The second strategy is to focus on such communities and networks that facilitate new stories (Moore et

al., 2015). Lam et al. (2020) refer to scaling deep as creating "seeds of a good Anthropocene" as it enables people to live differently by changing underlying values. A commonality is a form for learning and collaboration that fosters new mindsets, perceptions and relations across scale, topic and organisations. Other ways of scaling transformations are also significant, such as scaling up (involving more people and places) and scaling out (reproduce). The value of scaling deep is that underlying assumptions are challenged, thus addressing the root causes of sustainability issues (Lam et al. 2020). Moore et al. (2015) argues that scaling deep is necessary for systemic change.

### 2.3.1 The inner dimensions of sustainability

Inner dimensions are an under researched area of sustainability transformations in need of further attention and empirical research in different domains of practice (Woiwode, Schäpe et al. 2021: 1). Inner dimensions have been defined as "subjective domains within the individual relating to people's mindsets, worldviews, beliefs, values, and emotions" (Wamsler & Brink (2018: 55). According to Ives, Freeth & Fischer (2019: 208) humans and the inner world is at the heart of sustainability action, and thus, entails a powerful transformative capacity for system change. Therefore, encouraging people to cultivate their inner world or create conditions where this is possible is a high leverage point for addressing sustainability challenges.

The importance and potential of inner dimensions in the more extensive sustainability debate have been increasingly emphasised (Hedlund-DeWitt (2011; Westley et al., 2011; O'Brien, 2018; Woiwoide et al., 2020). The growing focus is an important signal and illustrates the significance of the inner dimensions. This matter because bringing about sustainability transformations, there is a need to address what lies behind our actions and policies. Wamsler & Brink (2018: 55) emphasise how new technology or governance alone cannot solve climate change and why it requires a broader cultural shift. Milkoreit (2017) argues that focusing on individual and collective thought is essential to understand global climate change politics. According to Horlings (2015: 163), long-term commitment towards sustainable transformations resides within people's choices, and that that this is grounded in people's deepest motivations because sustainability transformations may require "radical, systemic shifts in deeply held values and beliefs, patterns of social behaviour, and multi-level governance and management regimes".

## 2.3.2 Beliefs

Beliefs are immensely important. They influence people's life, how they think and act, and creates our society. *beliefs* are "… forms of mental representations and one of the building blocks of our conscious thoughts" (Horlings 2015: 164). Hence, beliefs matter because they are the foundation for how the world is perceived and people's actions, and they can be very inflexible. People are often unaware of their own limiting beliefs, thinking that beliefs are neutral, positive or permanent, and not realising any limitations they might bring. People often have a negative bias, noticing what is not working and reproducing pessimistic views about the world around them. It is possible to have beliefs that hinder people from trying new things, activities, jobs, or meeting new people without being aware of the limitations of one's beliefs or mindsets. For example, if a person believe that one is not a creative person, this person is likely to avoiding activities that centres around creativity, and therefore will not develop creative abilities further either. Dweck (2006) argues that beliefs are crucial to happiness and misery because our minds constantly observe and understand the world around us. It is easy to forget how much one is influenced by one's beliefs, as it can be difficult to separate between what is a belief and what is happening. According to Berzonsky & Moser (2017), hanging on to old beliefs can cause harm because many of our beliefs do not necessarily make us better, our lives better, or the world better. Hanging on to old beliefs can limit people from their full potential, and inhibit actions, even though they often are a way of self-protection.

To be aware that beliefs matter can be an essential enabler for sustainability transformations in itself. Therefore, challenging beliefs can increase people's potential because what one believes can create or inhibit motivation. To create change, believing it is possible to do so is fundamental. It is possible to do something without thinking it is possible, but it makes it more challenging. Moreover, some things might not be possible at all without believing it is possible. Göpel (2016: 2) argues:

> "Radicalness in purpose is equivalent to holding a vision or belief in what could be possible if X, Y or Z was to change, an imaginary that stirs up energy, commitment – and persistence in taking the many incremental steps to get there".

Having a belief about something is in itself powerful, as this quote illustrates. It can wake up something and create something, strengthening the way we act and what we engage ourselves in. We imagine our "social whole" (Göpel, 2016) to a more significant degree. Wright (2010)

also recognises that beliefs are a powerful force in transformation processes, especially beliefs about what is not possible, because beliefs are a part of our ability to imagine something. Constraining beliefs about what is possible and the possibilities that exist to such a small place where barely anything is possible, we are perhaps setting ourselves up for failure. O'Brien, (2018) argues that challenging assumptions and beliefs to explore alternative ones often leads to more inclusive worldviews. Thus, it is necessary to look at the way we think and why - what governs us. Related to this, Duchi et al. (2020) argue that beliefs or a mindset about the world as changeable or not changeable influences action and inaction. In a study of action on climate change, they found that beliefs about the world as changeable were associated with more positive attitudes towards environmental action. To believe that values and beliefs are not changeable is in itself a belief, and beliefs and values change throughout a lifetime and across different environments, cultures, and situations. Beliefs about agency affect actions, and thus agency and whether it is acted on. Believing in one's agency is vital to enact that agency.

## 2.4 Mindsets in transformative change

Mindsets guide the whole interpretation process, thus going further than beliefs (Dweck, 2006). According to Meadows (1999), mindsets or paradigms are some of the highest leverage points, which may involve reflexivity on our mindsets and the paradigms we are a part of. The highest leverage point in her model is to transcend paradigms, to stay unattached from paradigms, to understand that the universe is far beyond human comprehension, accept that we do not know and that this in itself is a paradigm. According to Meadows, these recognitions have created the most significant changes in human history. Meadows (1999) argues that the mindset or paradigm of which a system arises is the next highest leverage point in system change in her model for system change. Inner dimensions have great potential in contributing to sustainability transformations, and mindsets is a dimension that has received attention within many fields. Certain mindsets relate to sustainability and can contribute to people having a wider circle of care, relate to nature differently, and have a different understanding of complexity.

### 2.4.1 What kind of mindset?
As discussed earlier, mindsets are our most profound beliefs about how the world works, and our assumptions about the world. According to Dweck (2006), growth and fixed mindsets refer to our implicit beliefs about our own and other's abilities, talents and intelligence. A growth mindset is where people perceive the world as changeable and signify when individuals believe

they can change and improve. In contrast, thinking that individuals cannot do so is a fixed mindset, which can make room for action can become very limited, not seeing the world or oneself as changeable. Duchi, Lombardi, Paas & Loyens (2020) argues that having a growth mindset, thus believing the world is changeable, is related to greater pro-environmental behavioural inclinations. These inclinations are opposed to a set mindset. Holding a growth mindset might help to overcome some of the psychological barriers to environmental action. Attitudes about the changeability of the world impact both people's view and actions concerning climate change, and a gowth mindset can therefore be an enabler for sustainability transformations (Duchi et al., 2020).

According to Scheffer & Westley (2007), there are reasons as to why we have rigid attitudes, and that stress is something that can increase our rigidity. Dweck (2006) points out that a fixed mindset serves something at some point, and therefore a fixed or rigid mindset doesn't change quietly. Furthermore, there has been criticism of fixed and growth mindsets (Moreau, Macnamara & Hambrick, 2019), emphasising the need for a balanced approach to it and also an awareness of the challenges in changing mindsets. Changing mindsets can be linked to a behavioural approach, which "nudging" is another example of, in contrast to engaging with people as active agents of change (O'Brien & Sygna, 2013). Goodwin (2012) and Schubert (2017) argues for a rejection of "nudging" because of its paternalistic nature taking advantage of imperfections in the human brain, calling for more "deliberative democratic models" (Goodwin, 2012: 90), focusing on transparency rather than manipulation.

Dweck (2006) also recognise the nuances in the concept of mindsets and does for example emphasise that everyone has fixed and growth mindsets in different areas, thus having contradictions within oneself. Our conscious and subconscious beliefs influence how we create meaning from situations, process, and behave, primarily outside of one's awareness (Burnette et al., 2013; Heslin & Keating, 2017 in Gottfredson & Reina, 2021: 4). What people believe and thus what mindset one has matters. Those with a fixed mindset are continually on guard for situations where they are likely to fail, exposing and reinforcing their lack of worth. Thus, leaders with a fixed mindset are more concerned with protecting their self-image and less inclined to approach situations in which they believe they can succeed while avoiding situations that may lead to failure, such as challenges or conditions that require effort (Dweck, 2006). And the other way around, leaders who have a growth mindset, believing people can change and improve, are less likely to guard against challenges. Thinking they can change and that doing

so enhances their self-worth. Thus, they are inclined to approach challenging situations because they recognise that through challenges and effort, they can best grow to improve their self-worth (Blackwell et al., 2007; Dweck, 2012; Hong et al., 1999 in Gottfredson & Reina, 2021).

Related to mindsets is the developmental perspective on human development and complexity in developmental psychology, and these psycho-social change processes are relevant in transformative change. Hochachka (2020) argues that insights from developmental psychology help explain why and how meaning is organised. Awareness and development differ through people's lives, stages of development, places and experiences. People are in different spaces, and an older person in a small municipality can have a different baseline or consciousness than a young person in a large municipality (Rentfrow, 2014). Connecting global challenges to local contexts feel natural, while for others, it is challenging and intimidating.

Furthermore, as mentioned on mindsets, having people re-think how they create meaning is complicated. The differences between people are also connected to many things, one of them being personality, where openness is an example of personality features in the big five personality test. High levels of openness indicate an openness for experiences, aesthetics, imagination, new ideas, emotions and values (Rentfrow, 2014); however, it is relative and varies across populations. Nonetheless, this personality feature is an example of how cognitive differences is influential in how people are open to change. People with conservative values or personality features tend to be more sceptical towards addressing climate risks (Stoknes, 2017). People's cognitive style is also related to mindsets; some value stability more than others, affecting how they address sustainability issues, which is essential to recognise. However, the nuances between mindset and personality are interesting because research on mindsets suggests that everyone can see things differently, despite variation in personality. Still, personality differences are real and present in people, but combining the concept with mindsets suggests a more optimistic view of human development.

Understanding human development also contributes to an understanding of collaboration, which is' an essential part of transformative change processes. Psycho-social dimensions are important in sustainability transformations (Hochanka, 2020), which the focus on mindsets in this thesis aims to add research too. The notable point is that taking a meta-perspective on one's personality can bring the same awareness as doing it on mindsets; in other words, being aware of something makes it easier to change, illustrating the value of self-awareness and being able

to pause and question one's assumptions both as an individual and as a collective as well as being able to see the perspective of other people. The ability for perspective-taking is related to mindsets and thus is changeable, but also varies based on personality, emotional capacity and cognitive ability. Awareness of the inner dimensions means knowing and reflecting on what these inner dimensions are, what they mean for the choices one makes, and the life one lives. Antonio Gramsci (1891-1937) (as cited in Gill, 2003: 37) argues that

"Self-awareness leads to a more complex and coherent understanding of the social world and is a form of historical change (and thus the balance of social and political forces)"

Ives et al. (2020) argue that our inner worlds have been neglected in sustainability. This neglect is also emphasised by the three spheres framework (O'Brien & Sygna, 2013), which illustrates the practical sphere and the political sphere within the personal sphere. There is a lot of potential in people's inner worlds. It is a risk to only focus on external elements and problems' out there. It is also a potentially powerful and profound leverage point; therefore, it cannot be ignored (Meadows, 1999). There is research on what can increase reflexivity and self-awareness, these can be practices that focus on stillness and reflection, like mindfulness or meditation, enhancing self-awareness and reflexivity (Wamsler & Brink, 2018). The fast-paced tempo embodied by people today does not give the space needed for reflexivity. Furthermore, collective social consciousness can increase reflexivity if the focus is deep, illustrating the importance of interconnectedness.

Furthermore, having an awareness and a belief in agency doesn't necessarily equal a space to practice it. But having a growth mindset to a more significant degree than a fixed mindset enables entering areas for reflexivity and creating the space needed. In comparison, a fixed mindset might think that there is no point in making that space. However, the most important aspect of focusing on mindsets is perhaps not what kind of mindset we have, but rather developing reflexivity when relating to it. Moore et al. (2018) argue that more profound systemic reflexivity will be needed to navigate transformational change processes towards sustainability and vital social innovation capacity. The importance of systemic reflexivity is illustrated by Hestad, Tàbara & Thornton (2019, 7), who when studying sustainability-oriented hybrid organisations in Barcelona found that these organisations ability to contribute to sustainability transformations depended on the ability of the entrepreneurs to engage in 'socio-

ecological sensemaking' and their ability to understand the complexity of the socio-ecological systems in which they form and integral part.

### 2.4.2 Developing mindsets

Mindset shifts are called for in the context of sustainability to support new ways of communication and collaboration across sectors and contexts, and the need for transformative skills. According to Göpel (2016: 149), to change a system, one must have a consciousness about the future and recognition of "path dependency" in the brain, and therefore, means to engage in human aspirations, beliefs or values and what they mean in the historical context in every activity. Moore et al. (2018) argues that system reflexivity is less of a fixed capacity; it is more an ongoing process. Gottfredson & Reina (2021: 11) argue that one of the most potent things about focusing on mindsets is that this helps us become more self-aware and mindful. The reason for this increased self-awareness is that we consider our subconscious beliefs to a more significant degree and enable our ability to 'look at rather than looking through', as Meadows (1999) and O'Brien (2018) emphasise. Beliefs about what we can do can create powerful shifts (Sharma 2017; Wright; 2010; Dweck, 2006).

To do so it is essential to create spaces for reflection and dialogue, providing space to discuss the need for climate action concerning mindsets that focus on the individual while not ignoring the necessity for collective and systems change (Wamsler, 2020: 334). Moore et al. (2018) note that there are many initiatives and programs to create change in the world. Therefore, it mustn't become business-as-usual but to understand what sustainability transformations entail. However, they do emphasise that there is great potential within transformative learning spaces to increase capacity, shifting scales, focusing on both the individual, organisational, network, more global, macro scales, using different lenses and frameworks to nurture reflexivity (Moore et al. 2018). A transformative learning space can be challenging due to the work of unlearning, crossing scales, confronting diversity, and acknowledging positive and negative dynamics (Moore et al., 2018; Westley et al., 2017). Therefore, it is essential to focus on the importance of psychological safety (Delizonna, 2017). Wamsler et al. (2020) emphasise the need for further research on how to design such spaces and what methods and processes that best support transformational skills so that enabling new mindsets and transformative skills can become an essential element of social change.

## 2.5 Inner dimensions: From theory to practice

As showcased in this chapter there is considerable research done on transformations in the literature. But to actually achieve transformations we need to move from theory to practice and understand *how* to create transformations that span across the three spheres. Although there is more and more focus on inner dimensions there is still little empirical evidence and experience to rely on with regards designing practical interventions that cut across the personal and political sphere and ultimately creates systems change. Leadership and how that is perceived, practiced and developed is an entry point for moving from theory to practice. Agency differs within hierarchical organisations (reference), and this variation in agency makes it essential to look further into how leadership is understood and practised and its role in generating sustainability transformations. Kuenkel (2019: 10) argues that current mainstream practices and approaches to leading change towards around sustainability have started questioning traditional practises, but that it still "… seems to stay attached to a focus on a linear, non-systemic worldview with a projectable and predictable future". The way we currently organise, and lead organisations is heavily influenced by what Weber (1864-1920) described and criticised as "instrumental rationality", where the goal of bureaucracies was to remove human agency from the organisational equation resulting in what he called overspecialised workers 'without spirit'. As Hestad (2019) points out this was further developed and advanced through organisational theories such as Taylorism (scientific management) and Fordism, perpetuating a view of organisations as environments in and of themselves separate from ecological, social, cultural, and historical contexts. This view or organisations and management bases itself on an objective and hierarchical notion and can be assigned as a cultural root cause of the socio-ecological crisis we are currently experiencing (Hestad et al., 2019).

The structure in bureaucratic organisations could be an obstacle for awareness of inner dimensions because the inner dimensions are not supposed to be present. Employees in large bureaucratic organisations such as national or local governments are not encouraged to bring their whole self to work or to have their own opinions and views on the matters they work on. However, they are still very much there whether individuals, leaders, or institutions are aware of it or not. It has proven almost impossible to eliminate human subjectivity from the equation of bureaucratic organisations. Not to say that specialisations and rules are not necessary to make big, complex, endeavours function efficiently – it is not advisable to rid the airline industry of safety standards for instance. But how the rules are interpreted and applied is ultimately up to

individual human beings. Additionally, in the current climate crisis, not sourcing the full potential of each person can be a barrier to achieving sustainability transformations. Bureaucracies can be interpreted as a lack of belief in people's agency, assuming that everyone needs strict rules and guidelines to do their jobs. Again, criticising this template does not mean that there is not a need for templates, guidelines and rules. Instead, it means that many structures in the traditional bureaucracy can inhibit people from bringing their full potential to life and creating new solutions taking advantage of their inner dimensions. If transformations are to come about, it is necessary to change how organisations are led and structured. Alternatives are required.

There are many ways to view leadership. Kotter (1990) has differentiated between management and leadership, where management is needed to produce orderly results efficiently. In contrast, to realise real change, there is a need for leadership (Kotter, 1990 in Meijerink & Stiller, 2013: 241). Case (2015) presents some of the most common understandings of leadership. One way to understand it is leadership as a person. This understanding refers to the preferable personality traits of the individual leaders as one of the more critical factors. Leadership as a position focuses on the role in which leaders operate from a formal position of authority, and this is, according to Case (2015), the most common way to understand leadership. This understanding comes from the Weberian understanding of bureaucracy, where there traditionally has been a hierarchical focus on leadership. It means that the individual has a formal position as a leader in a hierarchical system, having the power to lead. Leadership as a process refers to how leaders get things done and emphasise different leadership styles, exemplified through transformational, democratic, distributive or visionary leadership. Leadership as a process often exists as an ideal rather than practised approaches (Case et al., 2015). Leadership, as a result, means that what leaders achieve is a defining feature, which separates it from those already mentioned, and is perhaps also the most practically minded and is often associated with change. Lastly, there is leadership as purpose, which emphasises the capacity to "provide followers with convincing reasons or motives for achieving particular ends" (Case et al., 2015).

Senge et al. (2015) emphasise the importance of systems leaders focusing on the health of the whole. They highlight three capabilities of a system leader, the first one being the ability to see the more extensive system. The second being to foster reflection, where they use the term deep reflection, which is similar to reflexivity. Moreover, thirdly, more generative conversations, which I interpret as a focus on interconnectedness. They make a significant point on fostering

deep reflection and fruitful discussions that need to slow down long enough to see other perspectives, describe deep reflection as reflexivity), and focus on co-creating the future. It is helpful to explore how people view themselves and their role to facilitate new ways of thinking. Everyone sees the system differently and defines oneself in various ways. Therefore, it is important to look at people's perceptions more empirically. Inner dimensions and the interconnectedness of different spheres are always present in underlying; this case study shows that it is still not a part of practice even though the discussions have changed. However, we need to pay attention to it. Still, figuring out to do that is a challenge, which is why these things are so essential to focus on. Because people have an understanding or a degree of awareness, but the question is how to get it out and into practice. It is necessary to bring things below the surface, to the surface, to get to these leverage points that are there regardless of they are focused on or not.

As previously mentioned, this thesis focuses on the role of mindsets in facilitating transformative changes that address complex societal problems, including sustainability challenges. The research questions I address are how municipal employees working with sustainability view the role of inner dimensions in promoting transformative change and how they perceive their agency and ability to engage with and transform systems. To understand these questions, I have explored the agency vs structure debate, theoretical perspectives on transformations to sustainability with a particular focus on the three spheres of transformations and deep transformations, the role of mindsets, and lastly, moving from theory to practice, focusing on the potential of alternative leadership practices. I am trying to fill the gaps in engaging with the SDGs on a local level, combining geographic perspectives on sustainability with a psycho-social perspective. Traditional structures of bureaucracy are not the solution for addressing sustainability challenges because of their limiting perspectives on human beings and ecosystems, and it is necessary to explore new ways of thinking, organising and leading transformations.

# 3.0 Methods and methodology

In this chapter, I will outline how I developed the research to investigate the role of mindsets in transformative change, how I did the data collection, and what has been important to me in this process. I start the chapter by focusing on why I choose to carry out a qualitative case study. Furthermore, my data collection will be presented, which includes sampling and recruiting, interviews and observation. Then, an explanation of how COVID-19 has affected my research will be accounted for. After that, I will elaborate on transcription, coding, and analysis, describing how I worked with my data. Then the limitations of the research will be assessed. Subsequently, I explore the role of ethics in research. More specifically, consent, positionality, subjectivity, and reflexivity, which I emphasise as essential in research. Lastly rigour, validity, reliability and transferability in this study will be evaluated.

## 3.1 Qualitative case study

Doing a qualitative intensive depth study allows one to explore individuals' experiences and feelings (Winchester & Rofe, 2016). This kind of case study means the researcher could catch nuances of a phenomenon (Baxter, 2016). This is important given the focus of this thesis. A quantitative research project is unlikely to garner the kind of depth needed to explore individual mindsets and their role in promoting transformations towards sustainability.

### 3.1.1 Qualitative methods

A central question a qualitative method can answer is: "What are individuals experiences of places and events?" (Winchester & Rofe, 2016: 7). Qualitative geographic research emphasises different opinions and interpretations rather than forcing one dominant or "correct" understanding of a phenomenon (Winchester & Rofe, 2016), which is essential when looking at a concept like mindsets. Doing a qualitative case study makes the results less generalisable, but it gives a vital insight into different views on inner dimensions and agency, allowing people to elaborate when needed. Individuals understand the same events differently, and "… the experiences of individuals and the meaning-making of places and events cannot necessarily be generalised, but they are a part of a multi-faceted and fluid reality" (Winchester & Rofe, 2016: 8).

### 3.1.2 Case study

A case study has two roles: test theory and generate or develop theory and is more an approach to a research design or methodology rather than a method to collect data (Baxter, 2016). This case study is mainly striving to generate or develop theory. In many case studies, it is customary to map a theoretical foundation before one starts to research the area (Yin, 2003 in Baxter, 2016: 137), which I did. An in-depth understanding of a phenomenon is valuable in itself, regardless of whether it is present in other cases (Baxter, 2016), in this case, incubators of various kinds are a growing phenomenon and there might be crossovers in terms of lessons between this case study and other incubators.

### 3.2 Data collection

I collected data from October 2020 to April 2021 through interviews and observation. My original plan was to conduct interviews and observe in person, but due to COVID-19 restrictions, I did everything on Zoom, which I will elaborate more on. The interviews involved talking to the participants about their views on leadership, mindsets, inner dimensions in sustainability, and their role in creating change. I conducted interviews and observation of the incubator process, both as a whole and focusing on each individual's participation. My role in the incubator events was a combination of an outsider and an insider. The insider has more access (full participant), and therefore, has the advantage of natural communication and trust but less freedom to do research. Social roles do not limit the outsider (full observer) in the same way; however, they might have more difficulties establishing trust and relations (Kearns, 2016). For me, it was a combination of the two; I was more an outsider than an insider but following the process over several months gave me some of the advantages of being an insider, as the participants knew who I was and had seen me before. Through the data collection, I hoped to gain knowledge on the role of mindsets in each participant through their views on inner dimensions and their own agency.

### 3.2.1 Sampling and recruiting

Criterion sampling involves "... selecting all cases that meet some criterion", which in this context was being a part of the municipality incubator (Stratford & Bradshaw, 2016: 124). My primary focus was to interview the participants (sample 1). However, I also conducted interviews with members of the team, in other words; those who organised the incubator program (sample 2). This was done to inform the interviews with the participants, increase my understanding of the program, and gain insight into their thoughts and reflection on leadership,

sustainability, and mindsets. The participants have a diverse background, as they live and work in different municipalities within various fields in different positions. A common feature among the participants is that they are all a part of the incubator program and work in Norwegian municipalities. An advantage of this diversity is that it allowed me to explore the premise that everyone can create change.

I recruited the participants for the interviews at a morning "catch-up" meeting arranged by the incubator team, asking them to write their email in the chat if they could participate. I received eight responses at this meeting. However, all eighteen participants were not present at this meeting, and I wanted to interview as many of the participants as possible. Dunn (2016) has pointed out that emails should be sent individually to informants, not as a group email. Therefore, I asked the incubator team if I could have the participants' email addresses to contact everyone individually. After doing so, I had more responses, and I ended up interviewing fourteen out of the eighteen participants, in addition to three from the incubator team. One of the participants did not want to participate, three of them did not answer, and 14 said yes. The participants all have busy schedules, especially due to COVID-19 taking up a lot of focus in the municipalities, so I was conscious of letting the participants choose the dates quite freely and the timeslots that they preferred, having respect for the time and knowledge that the interviewees provide (Patton, 2015).

### 3.2.2 Interviews

I have conducted semi-structured interviews using an interview guide and a structure of what I wanted to talk about whilst being open to what came up in each interview, so that the participants could adjust the conversation. This type of interview can collect various meanings, opinions and interpretations (Dunn, 2016). All of the interviews were conducted digitally through Zoom. Doing 17 interviews over Zoom gave me good practice in computer-mediated communications. An advantage with Zoom interviews, or digital interviews in general, is that it is very effective. It enabled me to do multiple interviews a day, which made it easier to adapt to the interviewee's schedules. The technology worked well for the most part, except for some technical difficulties in one of the interviews, where we simply did a phone interview instead. In the Zoom interviews, the interviewees and I had our cameras turned on, which I felt gave it a more personal feeling of seeing each other. In addition, the use of camera allowed me to catch facial expressions and pauses, giving a better impression of their reactions and reflections.

I recorded all of the interviews, with the consent of the participants. I wanted to capture the exact words and expressions the informants used, as it could give me an increased understanding of their views and reflections. Furthermore, recording an interview makes the conversation flow more efficiently, and I could go back and listen if the internet connection was poor at any point, which it sometimes was. Each interview increased my understanding of the interviewees' context by being a source of instant feedback from the informants and the topic in general.

### 3.2.3 Observation

To gain insight into the municipality incubator, I observed four out of five gatherings, in addition to a few meetings in between gatherings. The last one was not attended due to the timeline for completing this thesis. These observations have provided me with complementary evidence and improved my contextual understanding (Kearns, 2016). I have strived to make careful considerations when dealing with the ethical aspects of observing, being aware of my position as a researcher, and using critical reflexivity to ethically sound this practice. It is essential to be aware that my presence as a researcher can alter the participants' behaviour and the data I collected. I can never be a complete observer as a researcher observing a program like this, as I cannot hide my bodily presence (Kearns, 2016; Haraway, 1988), and in my case moved between being an observer-as-participant, participant-as-observer and full participation. Full participation implies that I sometimes became a participant myself, participating in activities during a gathering, for example, being a part of discussions.

As the projects form was a dialogue between people present in each gathering, participating in the project was a premise. I was unsure how to handle this initially, and I experienced how it was challenging to decide which activities and discussions to participate in and which not. Sometimes I was also asked my opinion on something. However, most of the time, I was an observer-as-participant. In other words, I mainly observed, but also at times acted as a participant, participating in conversations and practices. I tried to be aware of what I was trying to observe and what was happening in the process, focusing on some themes and categories and observing freely. The observation has been essential to gain a contextual understanding of the processes (Kearns, 2016). It had supplemented the interviews and informed them as I gained insight into the process and context before I conducted the interviews.

### 3.3 COVID-19 and the effects on the research

Due to the coronavirus outbreak in March 2020, Norway faced mobility restrictions and social distancing requirements, creating a different context for the research. It has affected me and my research in several ways. Due to COVID-19, I focused my research on computer-mediated communications (CMC) through interviews and observations performed on Zoom, where there is no direct access to the informant (Dunn, 2016), combined with observation also via Zoom. I have not met any of the interviewees in person. The emergence of web-based technologies has made alternative research strategies more available when faced with an unexpected situation (Stratford and Bradshaw, 2016). Using web-based technologies was an ethical implication I was worried about, as it can be difficult to ensure safety if one is not advanced in information technology. I did all of my interviews in Zoom through my UiO-user, which allow information capsules and data were better protected. An advantage I experienced early is that I would probably have to adapt my research to the current situation, thus preparing to use CMC in my data collection. Choosing a research technique can be influenced by logistics, financial or practical concerns, or the needs of the participants as well as other things (Stratford & Bradshaw, 2016), and the COVID-19 situation is an example of that.

COVID-19 has also influenced the municipality incubator itself. It has meant that parts of the municipality incubator ended up differently than predicted, and in some areas, may have been reduced. Based on my observations and statements from the participants and the team, I think the program's influence could have been more substantial if meeting physically was possible. As my data also illustrates, meetings between people are essential; they mean something in generating transformative change. To a degree, this is also true for digital meetings, but there is something that is lost. With the exemption of half a day in Oslo in October, the gatherings were organised digitally. Part of the concept was that each municipality had a local gathering, and all participants and teams would travel to each of the municipalities.

Another aspect is that each municipality team's projects also influenced COVID-19, as meeting each other in person has been difficult or impossible. Not meeting each other also seems to have made some of the projects more difficult to implement. Therefore, choosing an alternative data collection strategy like this has, in some cases, meant not being able to do methods that in a different situation could have been very suitable for the project. However, I feel that both I and the incubator program have made the best out of the situation. It was necessary to be

continuously reflexive because of the changing situation. I tried to achieve this by writing memos, reflecting on the process and researching the context of being in the middle of a pandemic.

## 3.4 Transcription, coding and data analysis

### 3.4.1 Transcription

I transcribed all of the interviews myself, transcribing every word, including laughter and pauses. I did not always have the time to transcribe immediately after each interview, as I, at times, had many interviews over a short period. I compensated for this by having a template where I could write notes about the interview shortly after including my feelings before, during and after the interview, how the informants interpreted the questions, how the atmosphere was, and other relevant practical information. As a result of doing all of the interviews in Norwegian, I translated them into English. However, some Norwegian phrases, sayings, or concepts were difficult to translate and keep their genuine meaning. I have strived to keep the translation as close to its original meaning, but I sometimes experienced it challenging. One example was the Norwegian phrase "personlige aspekter", which I found suitable in the interviews, which directly translated to English means "personal aspects". However, I decided to use "inner dimensions" in this thesis because it is the most used word describing these phenomena in the literature. I considered using the phrase "indre dimensjoner" (inner dimensions) in the interviews, but I found it to be too unclear in a Norwegian interview setting.

I have tried to be conscious when making these choices, but some things get 'lost in translation'. Risking losing meaning was also a challenge when selecting which quotes to use and how much to use because I experienced a need to shorten the quotes. Oral language is different from written language, and therefore, I chose to cut some of the quotes in the analysis. According to van Nes, Abma, Jonsse & Deeg (2010), the interpretation of meaning is at the heart of qualitative research. When translating raw data, there is a risk of losing meaning. Nes et al. (2010) recommend using the original language as far as possible in the analysing process. I kept the first stages of my coding process in Norwegian. One advantage of doing both transcription and translation was that I became very familiar with my data. Working through the data several times gave me a lot of time to reflect on the meaning of each interview. I have repeatedly checked the Norwegian quotes, asking myself, "what was the informant meaning here?" to secure the translation done to my best efforts.

### 3.4.2 Coding

The process of coding is an integral part of the analysis (Cope, 2016). Coding opens the opportunity for reflexivity and reflection. It is essential to create a structure that will help make the most of qualitative data, I choose to use a method called the Gioia methodology to do so which I will elaborate on below. As I have been using interviews and observations, having a good data analysis strategy has brought the data and the different methods together. Developing a coding structure can enable data to be organised so that all of the various elements, like patterns, commonalities and relationships, are identified.

I assigned codes to various data segments, preparing by looking at relevant themes, literature and past findings, combining some predetermined codes, and openness to what might come up. The strength of coding lies in being open to new and unexpected connections, which can sometimes generate the most critical insights (Cope, 2016). I was available for new codes in response to relevant things I encountered. In this process, I tried to continuously reflect on which information to include, identify when I found patterns, what was relevant, where my data could say something, what to focus on, and what was too thin. I chose to code on paper and in Word. I considered using NVivo but decided that using paper and Word would be sufficient since I had 14 + 3 interviews. According to Cope, some cautions should be kept in mind before using programs like NVivo and emphasises that some of the most basic functions of coding can be completed in word processors or using spreadsheets, and for smaller or fairly basic analyses, these might be preferable. For me, manual coding was a better way of gaining an overview of my data. Furthermore, not every section of interviews needs to be coded (Dunn 2016). Some sections were more useful as a description and further analysis and my understanding of the topic. Descriptive codes reflect themes or patterns that are obvious or stated directly, and analytic codes can reflect a theme the researcher is interested in, or that has already become important in the project (Cope, 2016).

### 3.4.3 Analysis

According to Cope (2016), coding and analysis are, in a way, something most researchers probably also do without overthinking, because being humans means that we all categorise, sort, prioritise, and interpret social data in all of our interactions. Thus, Cope argues that analysis is merely a formalisation of this process to provide some structure and communicate interpretations to others.

Thematic analysis can be inductive (data-driven) or deductive (theory-driven) (Braun & Clarke, 2006). I had theory and frameworks from which I worked, but I was open to what I might find. Especially with regards to my sample being quite diverse. But I was looking for certain things, wanting to explore the role of inner dimensions in transformative change. I wanted to see how to create transformative change and what role mindsets play in this. Working with theoretical assumptions was a deductive approach. But at the same time, I knew little of what the incubator process would be like, which meant that I also had to be open for what I found, not only having predetermined thoughts about what it would be like and what I would find. To do this, I drew on a methodology developed by Corley & Gioia (2004), which starts more inductive.
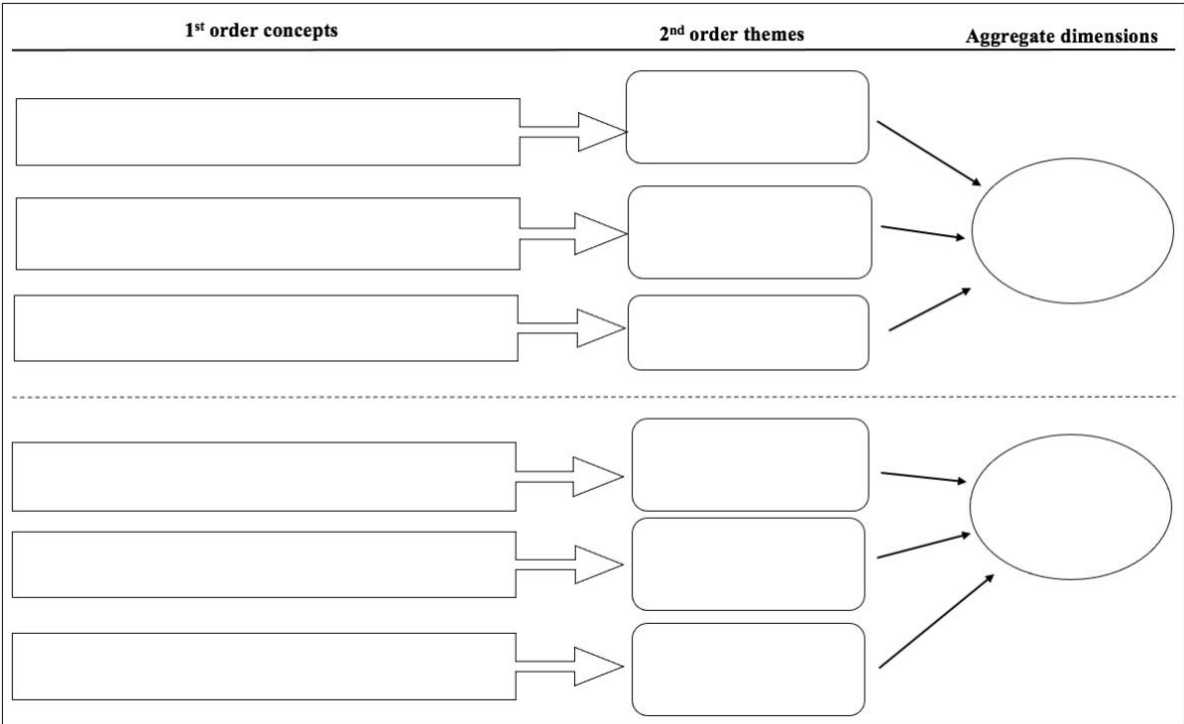


*Figure 3: Corley & Gioias (2012) methodology for thematic analysis.*

The Gioia methodology is well suited for a relatively new case, which one has followed over time, doing interviews with people trying to understand their interpretation of events. The municipality incubator was happening in the present, and my ambition was to learn more about municipal employees' perspectives on inner dimensions and agency. This combination made the Gioia methodology suitable for this case. The coding process was necessary groundwork. In the words of Gioia (2004), "You gotta get lost before you can get found", which I found to be accurate as I furthered my analysis. I explored 1st order concepts based on raw data. In the 2nd order themes, I focused on themes present in the literature. And then, I combined the 2nd

order themes to the aggregate dimensions, which are the most analytical realms. This was the basis for my data structure, which helped me make sense of the data. In the Gioia methodology, one works closely with the data, but it doesn't have to be grounded theory. I didn't have any hypotheses based on theory but started with some assumptions based on theory. The theory-focus was emphasised by using references in the 2nd order themes to illustrate the connection between data and existing research. The data-driven $1^{st}$ order concepts and the theory-driven $2^{nd}$ order themes were to develop the two aggregate dimensions that was the result of the Gioia analysis. An approach combining theory-focused with data-focused analysis is called an abductive approach, which entails variations in what is emphasised (Thalgaard, 2018). An abductive approach supports the cyclical process of data analysis (Gioia et al., 2012), and through this it was experienced how data analysis is a cyclical process as I went back and forth between data, theory, and ideas throughout the analysis. In this work I strived to resist claims that I had captured the genuine public opinion on mindsets and sustainability leadership, being aware of the variety and diversity in people's experiences, feelings and opinions (Dunn, 2016).

## 3.5 Limitations of the data and the data collection

There are certain limitations to the data that I have collected and the collection process that is worth emphasising. The first one being the virtual nature of the data collection, as emphasised above. Overall, COVID-19 has possibly reduced the real transformative potential of the program. The translation from the Norwegian data to an English analysis could be a limitation of the data, especially regarding validity. To reduce this limitation and increase validity, I could have worked with a professional translator (Nes et al., 2010) to keep the meaning of the raw data as close to the informants' quotes as possible. Furthermore, the research would have benefited from data collection with the participants before they started the program and after they finished it, however this was not possible due to time limitations. This would have enabled setting a baseline for what their mindsets and views were before and after the program, to assess its impact. However, mindsets shifts are a process and not an endpoint, so it is difficult to measure shifts in this way. Additionally, I became a part of the program when it started, meaning there was not enough time to prepare interviews before the incubator started its gatherings. The program lasted until June 2021, so I could not participate in the final gathering or do interviews after the incubator ended. Following the program all the way through could have enabled me to see if their perspectives have changed during the program. However, this

would demand more effort from the informants, and some of them struggle with time limitations in their schedule.

## 3.6 Ethics

A researcher must reflect on ethical considerations during the whole research process. It is crucial to practice ethical reflection around using the data material that I collect. I registered my research with the Centre for Research Data in Norway (NSD). I have stored my interview data securely, not keeping personal or identifying information, and using password protection (Dowling, 2016)).

### 3.6.1 Informed consent
It is essential to give enough information to all informants in a study, to inform people about their rights, and that they can withdraw from the study without any consequences (Dowling, 2016), and that I repeat this information. I gained informed consent from each participant. I emailed them an information letter and consent form and verbally informed them about the study before each interview. When talking to my participants, I clearly stated what my research project was about, how the data will be used and informed them of why their answers, thoughts and experiences were important and that they could retract their statements at any time. I told each participant that it might be possible to identify them if someone knew about their participation in the incubator program, but that in the writing I would strive to keep their anonymity.

Because the program is relatively small, the participants might be easier to recognise. However, the fact that I spoke to 14 out of 18 participants did likely increase their anonymity because it made it more challenging to know who said what.

### 3.6.2 Positionality
Objectivity in science is a concept that is increasingly questioned, especially in the social sciences. Donna Haraway (1988) argued that male-dominated sciences positioned themselves outside their bodies and misrepresented the subjective as the objective. Haraway refers to this as the "god trick" where researchers are impossibly separated from their object of study and instead suggests a way of researching that stresses the importance of positionality and making one's subjectivity visible:

"I am arguing for the view from a body, always a complex contradictory, structuring, and structured body, versus the view from above, from nowhere, from simplicity. Only the god is forbidden. Here is a criterion for deciding the science question in militarism, that dream science/technology of perfect language, perfect communication, final order" (Haraway, 1988: 59)

Therefore, it is important to acknowledge the researchers background and interests entering this research (Rose, 1997). I have found the agency vs structure debate interesting personally, and I have experienced it to be rather polarised both in academics and in practice. I am on the left side of the political spectre. I identify with both Humanistic geography and Marxist geography. I acknowledge structural issues while also believing in the transformative force within all humans. Therefore, I do not think capitalism determines everything. I think we can transform ourselves and the system, which might be the same. As mentioned in the acknowledgement, while studying Human Geography and the social sciences, I have also been interested in yoga and meditation. This interest might have given me a biased openness towards such a project, exploring sustainability's outer and inner dimensions.

### 3.6.3 Subjectivity

My position as a researcher, the social structure and culture in which I live, subjective biases, and personal experiences is something researchers must always be aware of and reflect over. It is vital as a researcher to be mindful of the responsibility one has. My subjectivity influences everything I do (Winchester & Rofe, 2016). When doing interviews, it is essential to remember that dialogues never occur in a social vacuum. All interviews are part of social life, in which I will be a part. My own identity will affect the data, as I can never fully control my position or character (Dowling, 2016). I was conscious of having an open mind and trying to see things given in the context. However, my age, gender, background, and experience influence my views and affect how I analyse information, and my personal beliefs are never fully separate from what I am studying, as Haraway (1988: 590) argues:

"Above all, rational knowledge does not pretend to disengagement: to be from everywhere and so nowhere, to be free from interpretation, from being represented, to be fully self-contained or fully formalisable"

However, my subjectivity can be a strength; it enables me to use my subjective perspectives and hopefully contribute something valuable. My academic fields of interests and my personal views and values influence my chosen research topic. I entered this project with certain opinions, and I will always be coloured by my own experiences, as we all are. Therefore, to reduce the negative sides of subjectivity, critical reflexivity is vital (England, 1994 in Dowling, 2016: 34).

### 3.6.4 Reflexivity
To increase my reflexivity, it has been necessary to constantly be asking myself what I have been doing and why and how it might affect others. According to Patton (2015), interviews are a form of interference in people's life", and it therefore is essential to reflect on what influence it can have on them and if it can hurt them (Dowling, 2016). A part of this is considering which topic might be sensitive to an interviewee. Still, it is difficult to predict fully because each person is different and might have other triggers and topics that are uncomfortable. I tried to be aware of this throughout the whole process, and during each interview, I tried to get a feeling of what was comfortable and what was not with each interviewee. One way I did this was to record myself answering what I assumed would be the most challenging question for the interviewees to answer. This practice gave me insight into the difficulty of answering such questions. According to Philo et al. (2004), the interviewer is also a participant in the research, therefore both the interviewer and the interviewee construct data. Leading Thagaard (2018) to argue that data development is a better term than data collection, because of the constant development of the data including all choices made throughout the research.

As a researcher, I choose to emphasise something over something else. Another researcher might decide to emphasise something completely different. It is always interactive. But subjectivity can be seen as something good. I am a part of what I study, which is true for all of social science, and perhaps also for all research. This acknowledgement is also valuable. For me, this emphasises my arguments in this thesis, everything matters, my values and my actions matter, and I can transform something by being a part of it; we all can. As Dowling (2016) points out, I need to draw on my resources to communicate with the participants in my study. Being aware of my subjectivity can reduce my subjectivity. Dowling (2016) emphasises critical reflexivity as the best strategy to deal with subjectivity because it allows me to reflect on my position continuously. An important side note is that reflexivity is used in two ways in this thesis; epistemological reflexivity and personal reflexivity. Epistemological reflexivity is what

I have emphasised the importance of in this chapter, while personal reflexivity relates to how the informants have a meta-perspective on their inner dimensions. However, the two understandings are closely related to each other, and this study stresses the importance of both.

**3.7 Rigour validity, transferability and reliability**

I have strived for rigour throughout the whole research process, continuously reflecting on what I am doing and why, seeking to establish trustworthiness in my work (Stratford & Bradshaw, 2016). It has been a learning process in which I have intended to have a humble perspective on what I have been doing. According to Dunn (2016), preparation, input and verification of interpretation can also enhance rigour. To increase reliability, I interviewed as many of the participants to ensure representation and thus reliability and rigour. Striving for representation has perhaps also strengthened transferability, meaning that it could be transferable to a similar case. I have aimed for transferability by being transparent in my research process through organised data, how I have been thinking and analysed, and keeping a memo. I strived for rigour through using the Gioia methodology in my analysis, as previously described. According to Gioia et al. (2012: 12), the approach can enhance both "creative imagination and systematic rigour". It increases transparency by making my analytical process clearer to the reader. It has been a way of focusing on validity, to compare data to theory and my interpretations.

Furthermore, I have tried to enhance rigour by continuously communicating with my supervisors, fellow students, literature, and the people involved in the municipality incubator. I experienced that my research design sometimes had to be altered; in other words, my assumptions or theoretical foundation needed to be changed to fit better with reality. People's reality is always richer and more nuanced than what theory perceives it to be. It is necessary to take the participant's community's interpretation experiences seriously to conduct dependable research (Stratford & Bradshaw, 2016). I would argue that transparency, reflexivity and clarification of own positioning and subjectivity are essential to rigour in qualitative methods.

# 4.0 The story of the municipality incubator

The role of incubators is becoming more and more prominent in all levels of society. As previously mentioned, an incubator can be defined as a "change lab" (Westley et al., 2011: 776), creating conditions for various perspectives through working with complex issues, enabling people and organisations to expand their potential (Bøllingtoft & Uhøi, 2005). Incubators emerged in the private sector to help new companies get off the ground but have now entered the public sector and is an increasingly present word in the mainstream vocabulary. This chapter will present the story and context of the municipality incubator, including the reason for its creation, its vision and aim, motivation for participants joining, structure and content of the incubator, and lastly, perceptions of what worked and what did not. Informants refer to either participants or the incubator team, whereas participants are the municipal employees participating in the program, and the team informants are from SoCentral or Lent. . This chapter is descriptive, presenting the incubator and mainly the participants perceptions of it. The program will be discussed in relation to theory in greater detail in the next two chapters.

## 4.1 Incubator as a concept

Anttiroiko (2016) argues that incubators, innovation labs, living labs, and similar concepts are part of the same trend: the participatory turn in the public sector and innovation environments on various scales connected to this. Furthermore, it is argued that some commonalities are "… a diversity of engaged actors and the principles of openness and co-creation" (12), as well as valuing collaboration (Bøllingtoft & Uhøiu (2005). Bøllingtoft & Uhøi (2005: 270) describes incubators as seeking to:

> "… maximise the potential of entrepreneurial agency by providing entrepreneurial actors with services and support that complement their existing talents and resources, which in turn means to enable them to expand their potential" (270).

Their description is in a business context but also fits into the vision of the municipality incubator. However, it is relevant to note that no two incubators are alike. Westley et al. (2011, 76) argue that using "policy laboratories" or "change labs" can create conditions for different perspectives and knowledge while working with complex issues. Thus, serve as a test arena for a sustainable policy so that there are options when an opportunity for transformative change arises. They emphasise the importance of financial and political support. Bøllingtoft & Uhøoi

(2005) describes a nurturing environment, network and psychological support as some of an incubator's most essential features. According to Nicolopolou, Karatas-Özkan, Vas & Nouman (2017: 370):

> "incubators can provide an ideal environment, combining space for creativity, together with dedicated resources, as well as structures for the creation and maintenance of social networks, and social and intellectual capital; this combination can make them uniquely suitable for fostering innovation".

A critique of concepts like an incubator as a concept is that it can maintain "business as usual" (Feola, 2015; Moore et al., 2018; Westley et al., 2011), if it does not have an underlying theory of change beyond putting people in a room and creating processes through which they assume change will occur. This is limiting and does not take advantage of the knowledge gathered indifferent fields on how and why change comes about, especially change designed to transform systems. As such, incubators likely would benefit from deeper engagement with existing research on transformative change

## 4.2 Actors involved in the municipality incubator

### 4.2.1 SoCentral

SoCentral is an Oslo based social enterprise working for a common future, creating new solutions that can change our society. They work together with municipalities, businesses and inhabitants who want to create a more sustainable society. They focus on broad cooperation to facilitate for people to meet, create, and work together in a way that replaces "… collective apathy with hopeful action" (SoCentral, 2020). They describe themselves as being "in-between everything" and receive increased attention for being a field of practice. They focus on knowledge and research-based approaches, working closely with research environments, facilitating people and environments to start talking with each other. One of the key initiatives is the Nordic Incubator for Social Innovation, targeted mainly towards social entrepreneurs.

### 4.2.2 Lent

Lent is an organisation that works with strengths-based change work, organisational development, employee and leader development and process leadership. The organisation is Norway's largest professional environment on process leadership and strength-based development (Lent, 2021). Within Lent, the employees have a background in pedagogics, work-

and organisational psychology, sociology, relational leadership, economics and chaos-pilot education. They work with public and private organisations, doing courses, guidance, leader development programs, facilitating, and facilitating learning and co-creation, focusing on involvement and participation in practice. Lent describes themselves as working a lot on capacity building, as they call it, meaning strengthening teams, individuals, and organisations to solve challenging and complex tasks. Lent focuses on SDG 17: Partnerships for the goals.

### 4.2.3 Participants

The participants involved in the incubator are municipal employees from five Norwegian municipalities. They work on various issues, such as rural-urban cooperation, area development, social welfare and education for the future. They work in different levels in the municipality with fourteen women and four men, of which I spoke to 12 twelve women and two men. The ages ranged from approximately 30 to 60 years, with the majority being around 45 years old.

### 4.3 Reason for the creation of the municipality incubator

The background for creating the incubator was a perceived need in the public sector and particularly municipalities to address complex sustainability issues better. More specifically, the municipalities have been calling for "… someone who can connect cities and places, someone who knows who knows, and someone who can help find the unknown" (SoCentral). According to one of the team informants, municipalities experience many of the same issues and face similar challenges to each other. Furthermore, the informant emphasised that it doesn't matter if it is within health, youth or any other issue; it is often the same systemic challenge. This is why the program wanted to gather people from different municipalities and from different parts of the country, working on different issues. The municipality incubator is a result of experience, both in and outside SoCentral, and a belief in solving complex challenges if one puts together people and resources who want to create change. The incubator is a way of connecting those parts, creating enough power to influence real change. Another team informant highlighted that the way things are done in the private sector seems to work, while in the public sector, there are either these extensive reforms - or nothing at all. "Why do we choose other ways of working with innovation in the public sector than other places", she asked, "why is it all so fragmented and small? If it is a good idea to build networks and competency to upscale solutions, why do we not think that for the public sector?" A team informant working

with the public sector for years experienced the need for the change up close. Especially in light of the complex challenge society faces related to sustainability, the municipality incubator attempts to address these challenges in new ways.

## 4.4 Vision and aim of the municipality incubator

The vision of the incubator can be seen in two parts. Firstly, it has been to create an arena where municipality employees can work on projects that they bring into the program as a way of working on it in a supportive community. Secondly, the vision is to develop leadership from within each participant, with the purpose of building consciousness and confidence within the municipalities, and further, develop leadership regardless of the individual`s role in the municipalities. The incubators aim is to enable people to be able to use each other, create solutions and a network of people and a way of thinking, focusing on including people in different positions in the hierarchy in the program. The reason for including employees from different positions is to challenge existing traditional ways of working in municipalities, which can enable municipality employees to tackle complex issues such as sustainability. According to Moore et al. (2018, 10), not questioning the existing systems because of their challenging nature bears the risk of "keeping scales siloed and prevents the rewiring of social-ecological systems and the kind of cross-scale reflexivity that we argue is needed to transform, systems". Therefore, the incubator aims to contribute to people gaining knowledge, tools, and skills to find new ways of working together to create sustainability transformations while also developing local communities where people thrive.

The incubator has been focusing on collaboration, especially collaboration across scale, to learn to collaborate with individuals that have different ways of viewing the world. Doing this can contribute to learning, taking a step back from own challenges, observing and asking others and thinking differently. The value of co-creation and collaboration was emphasised by the participants, the team informants and in the incubator as a whole. An example of this was seeing the value of other's perspective and having what one of the team informants referred to as a "win-win" mindset, in other words; a perception that other people's success benefits oneself too. I interpret this as a belief in people's individual agency. All of the informants are engaged in participation and co-creation in practice. Nevertheless, the way people focus on participation and co-creation can be seen as "buzzwords", in other words lacking content. However, the participants are embedded in a local community, and they want people involved. One of the

incubators aims has been to encourage and facilitate this, providing tools and ways of thinking that supports participation in practice. A team informant emphasised the need for finding methods to practice co-creation, in what areas, and what to do with it.

## 4.5 Motivation for participants joining

The participants had different motives and reasons for joining the municipality incubator. Several of the participants were selected to join the incubator by their leader. As a result of this, some participants saw the incubator primarily as a work task, while others were more invited thought it sounded exciting and valuable, because of the different ways of working. When asked to be a part of the incubator, several of the participants found the idea intriguing, liking that way of working in a community, learning together through sharing and co-creation.

For two of the municipalities participating in the incubator, the incubator enabled collaboration between them, allowing them to work on a joint project. For one of the municipalities, their reason for joining was a project where they worked with exclusion, seeing that many families had to drop out of working lives because they had to take care of their kids and youth with special needs. An employee from SoCentral saw their project at a presentation and asked them to be a part of the incubator because he thought that could scale up the project to other municipalities. Therefore, the employees in the municipality saw the incubator as a good way of working even more systematically with the families and the projects and working closely with different sections in the municipality. The majority of the participants mentioned working on their projects as an important motivation. The participants emphasised big societal goals, such as creating rural-urban models that can be implemented on a higher level, making it attractive for youth to live rurally, building local communities, and creating better transitions for different life phases. Common for all municipalities was the focus on co-creation and broad participation as an important focus, and something they wanted to learn more about and work within a community with others. The municipality employees hoped to increase their competency, learn about processes, systems and tools, and see things related to each other. They wanted to gain better insight into the opportunity space they have and create change in the area they are working within, achieving the "large societal mission" of sustainability while bringing local communities forward.

## 4.6 Structure and content of the incubator

The incubator was created and implemented for the first time between the fall of 2020 and the spring of 2021 with a big focus on development, experimentation and learning by doing. The program places a strong emphasis on co-creation, participation and development of leadership to solve complex issues, working with innovation focusing on the continuous learning and development of the participants. An essential detail is that the program has a non-hierarchical focus, meaning the participants are employees at different levels in the municipalities. The program also aims to provide knowledge of process management and access to methods, tools, models, and experiences in experimentation, entrepreneurship, innovation and co-creation and strengthen their capacity to influence change and stand in continuous restructuring (SoCentral, 2020). The participants receive practical training in the use of innovation methodology, tools and experimentation as a method (SoCentral, 2020). Through the program, the municipalities can develop and test new solutions, models and forms of collaboration on the issues they bring into the programme, giving them knowledge and access to solutions that have been tested in other municipalities. The municipalities bring their projects and issues into the incubator, which are in different phases of development. The incubator has an experimental structure in this first round, in other words; parts of the program develop as it goes, thus being a space for exploration. The experimental approach has been a conscious one as a way of exploring the unknown.

The incubator consists of five gatherings spread out over eight months, where each municipality hosts a gathering, or at least parts of it. There have been talks, workshops and tasks during each gathering, and guidance from the team in between the gatherings. The participants work on their specific projects as a municipal group, learning tools and methods, while also developing as individuals through reflecting and providing each other with input. There is also a strong emphasis on co-creation, rather than top-down solutions and management, and how to work more value-based. Below is an illustration of the municipality incubator's foundational framework (SoCentral, 2019), and as it is in Norwegian, I will explain it below.
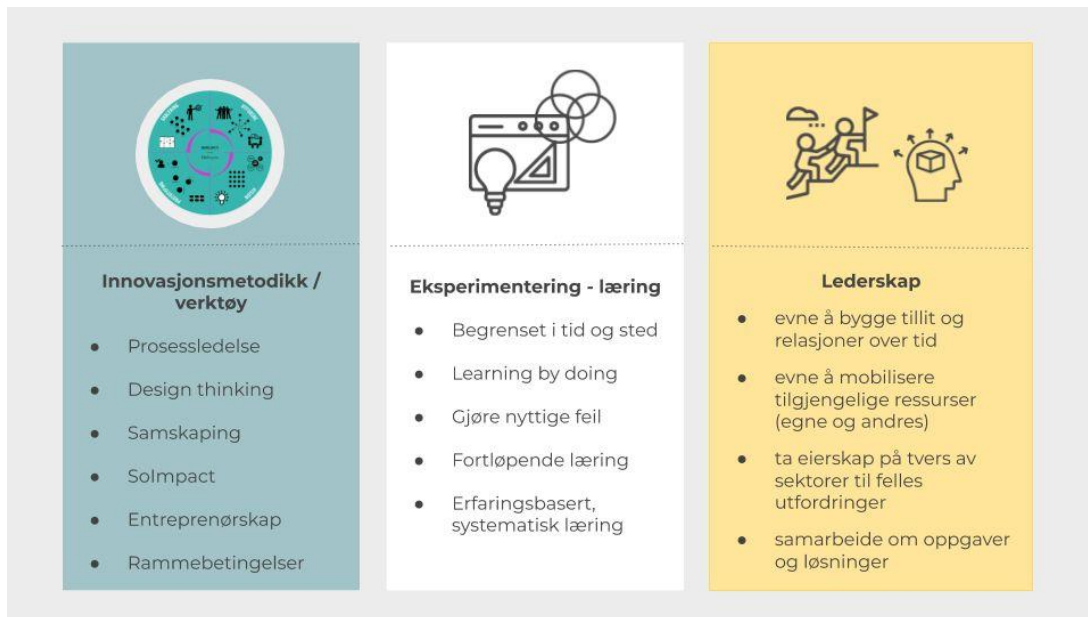
*Figure 4: Illustration of the methodological approach applied in the incubator (SoCentral, 2020)*

Figure 4 showcases the methodological approach SoCentral and Lent applies in the municipality incubator. The figure illuminates three main focus areas which aims to enable the participants to solve complex sustainability issues they are facing in the incubator and in their municipalities. Firstly, in section one various innovation methodologies are highlighted. These innovation methods include process management, design thinking, co-creation, a tool called SoImpact, entrepreneurship and framework guidelines. Secondly, experimentation is emphasised as a tool for learning. Experimentation will include development design, combination and testing of new solutions, roles and cooperation forms. SoCentral states that experimentation will, in various ways, provide learning to the participants, which will contribute to a more sustainable and just world. Lastly, guidelines for leadership are highlighted in the third section. These guidelines for leadership include establishing trust and relations to the team members, mobilising available resources, taking ownership across sectors addressing common challenges, and to cooperate on tasks and solution. This methodological approach is the so-called "theories of change" that are the foundation of the municipality incubator. As illustrated, it is a broad range of strategies whereas process leadership, learning by doing and working across sectors seems to have been the most influential strategies.

## 4.7 Perceptions of what worked

The majority of participants emphasised the value of gaining new tools, networks and knowledge, and learning about leading innovation and participation processes. The incubator team challenged the participants to reflect on what they are doing and why, giving the participants experience in seeing an issue from different angles, understanding the potential of what they can do. Focusing on participation and co-creation was also mentioned by many participants, and how it gave them new ways of thinking about co-creation and tools to facilitate for it within their municipality. The incubator has given the municipalities support in the processes they are in, their projects, and the challenges they face on a more general level. The gatherings each municipal team hosted seem to have worked well, and the participants seemed pleased after each gathering.

The interviews indicate that the tools and methods were a positive feature in the incubator, as well as the guidance from the team before, during and after the gatherings. Furthermore, the incubator has given the participants time to work on their projects, being in a group with other people, valuing that the municipality set the projects on the agenda. Some participants explained how the incubator has been like a "think tank", seeing how others work and also the value of doing something else than what they do day-to-day. The variation in scale and topics is also one of the program's strengths, and during my observations, it seemed like people were able to use their creativity to focus on new things. Many of the participants found it exciting to contribute and listen to the other's challenges, one of them highlighted learning to be braver in change processes and see things more as a whole. This variation in scale and topics can strengthen the focus on co-creation, which is one of the goals of the program. During my observations, it seemed like people got to use their creativity in focusing on new things, challenging people to try something that they maybe wouldn't normally do.

> "When you are pulled out of the normal job you're doing, where you're going to solve problems that pop up here and there, and then pulled out of that context right, you get a little meta-perspective and get to think more about things. I think that the incubator can make me a little better at maybe both seeing and putting things in context and a slightly larger context. So, it makes me lift my gaze, and then maybe I can do it a little bit for others as well. Also, I find it very useful to hear examples from other municipalities

when talking about things, learning what they are concerned about. When you put people together across sectors and places, you learn from each other ..." (participant 9).

"I find it exciting to be able to participate in something that happens a bit on the side of and outside of our daily life. And I enjoy working on development, and that's maybe for personal gain. Also, I think it's really fun to be allowed to contribute. And it is, I must say, that it is stimulating to sit and listen to what people are working on in the other municipalities; I think that is very exciting" (participant 6).

## 4.8 Perceptions of what didn't work

The above quotes illustrate that working across topics and scale was perceived positively. However, this way of working was also a challenge. Working across scale, sector, and level is valuable but also demanding, and finding common ground in the incubator program seemed to be both a challenge and a strength. How and in what ways the participants engaged in each other's problems and visions during the gatherings has varied. Every participant was actively engaged, but some expressed in the interviews that it was challenging due to the different nature of the projects. As previously mentioned, the incubator focuses on including people of different positions in the program, such as leaders and advisors. Some participants seemed to find it valuable to work across topics, maybe because they are in a role where they work more across issues themselves. For example, having a higher position in the hierarchy, they often work with all of the different topics present within a municipality. All of them seem to have strived to participate, but some expressed in the interviews that it was challenging due to the different nature of their topics and projects. One municipality group is on a lower hierarchical level in their municipality and had a project that differed more from the others, at least in their own opinion. Some of the participants from this group found it harder to engage with the problems of the other municipalities. The participants from this municipality clearly expressed the challenges in the interviews, sometimes finding it hard to engage with the problems of the other municipalities. The challenge of finding common ground was apparent during gatherings; a variation in how participants engaged in each other's problems and visions differed. This distance might be because they are at another scale than the other municipalities. The project and topic they brought into the incubator seemed to have less in common with the other projects. As expressed by some of the informants:

"We have such different issues and projects; we are doing completely different things than the others. One can recognise some things and extract something. Still, it might have been easier to see what we could exchange of experiences if we were working on something a little more similar" (participant 8).

"The issues are very different; there is a significant gap in the thematic, which is challenging. But at the same time, it has been solved in an excellent way" (participant 7).

"We have such different issues. I sometimes feel I have very little to contribute to the others because it's so far away from my reality" (participant 11).

Another issue in the incubator has its digital form due to COVID-19. A majority of the participants and the team highlighted that this has been a challenge for many reasons, one of them being a feeling of digital draining. Another reason cited was the perceived value of being physically present in the various municipalities, experiencing first-hand how life there is like. People-meetings are of great value, and this is decreased digitally. Furthermore, the experimentational form of the incubator programs brings with it a lack of clarity, which was emphasised by some of the participants, being unsure of what the municipality incubator entailed when they entered into the program.

"Before we became a part of the incubator, we didn't quite know what it entailed and what it demanded of us" (participant 1)

"I think it was challenging in the beginning to grasp what this was about, to understand what the municipality incubator was" (participant 4)

"It has been a bit confusing to enter into something that wasn't that tangible, but exiting too, to see the potential" (participant 12)

"There were sides to the incubator that was challenging to comprehend in the first place" (participant 10)

SoCentral and Lent too reflected over the challenges of the incubator's experimental form, acknowledging this is the pilot of the municipality incubator, in other words, they have not done it before. Therefore, the program is really focused on experimenting and learning as they g, emphasising that the whole program is form of experiment. The openness of the program indicates a willingness to explore new pathways and perspectives.

# 5.0 Results

To answer the main research question: "In what ways do mindsets influence how people engage with sustainability issues and see their roles in systems change?", I used the methods described in chapter 3, applying the Gioia methodology to conduct an abductive approach, combining data-driven and theory-driven analysis. Two aggregate dimensions was the result of the Gioia analysis. I explored the roles that participants see for themselves in creating systems change, and how it is influenced by their self-awareness and system awareness. Self-awareness relates to their perception of inner dimensions and their ability to contemplate and reflect over these as well as their belief in individual agency. Whereas system awareness or lack thereof, meaning they perceive individuals as mattering in changing systems, but they do not see how they themselves can change systems. This is related to the degree to which they practice system reflectivity and their orientation towards solutions. As will be discussed below, there is a duality between these two, whereby the first is enabling, and the second is disabling to people's ability to engage in systems change. Figure 5 showcases the data structure table used to arrive at these dimensions. I will present in what ways the informants showed self-awareness before looking at system awareness. The results presented in this chapter will be further discussed in the following chapter, along with the incubator results from Chapter 4.

# 1st order concepts

- Views inner dimensions as important for sustainability
- Awareness in how their inner dimensions affects their actions
- Describes values as a driving force

- Are open to learning, new solutions and new ways of creating
- Open to lift their gaze and explore their own mindsets
- Emphasises the importance of reflection, stillness
- Perspectives on increased awareness

- Emphasises human encounters as influential
- Reflects over how mindset shifts affected them

- Understanding between individual, collective and system change
- A sense of interconnectedness
- Limited by role

- Believing they matter and that can contribute to change
- Believes the signals you send out to people matter
- Feels like a small piece who doesn't matter much
- Expresses frustration and demotivation over feeling small

# 2nd order themes

**Awareness of inner dimensions** (Ives et al 2020; Hedlunga 2015; Millcoret, 2017)

**Contemplation and reflection** (Wamsler & Brink, 2018; Woiwode et al., 2020; DeWitt, 2016; Scheffer & Westley, 2007)

**Reflection on personal change** (Gipel, 2016)

**Perceiving system reflexivity** (Senge, 2006; Moore et al 2018; Abson, 2018; Nguyen; Meadows, 1999)

**Perception of agency** (O'Brien, 2020; Westley et al., 2013; Wright, 2010; Duchi et al. 2020; Dweck, 2006)

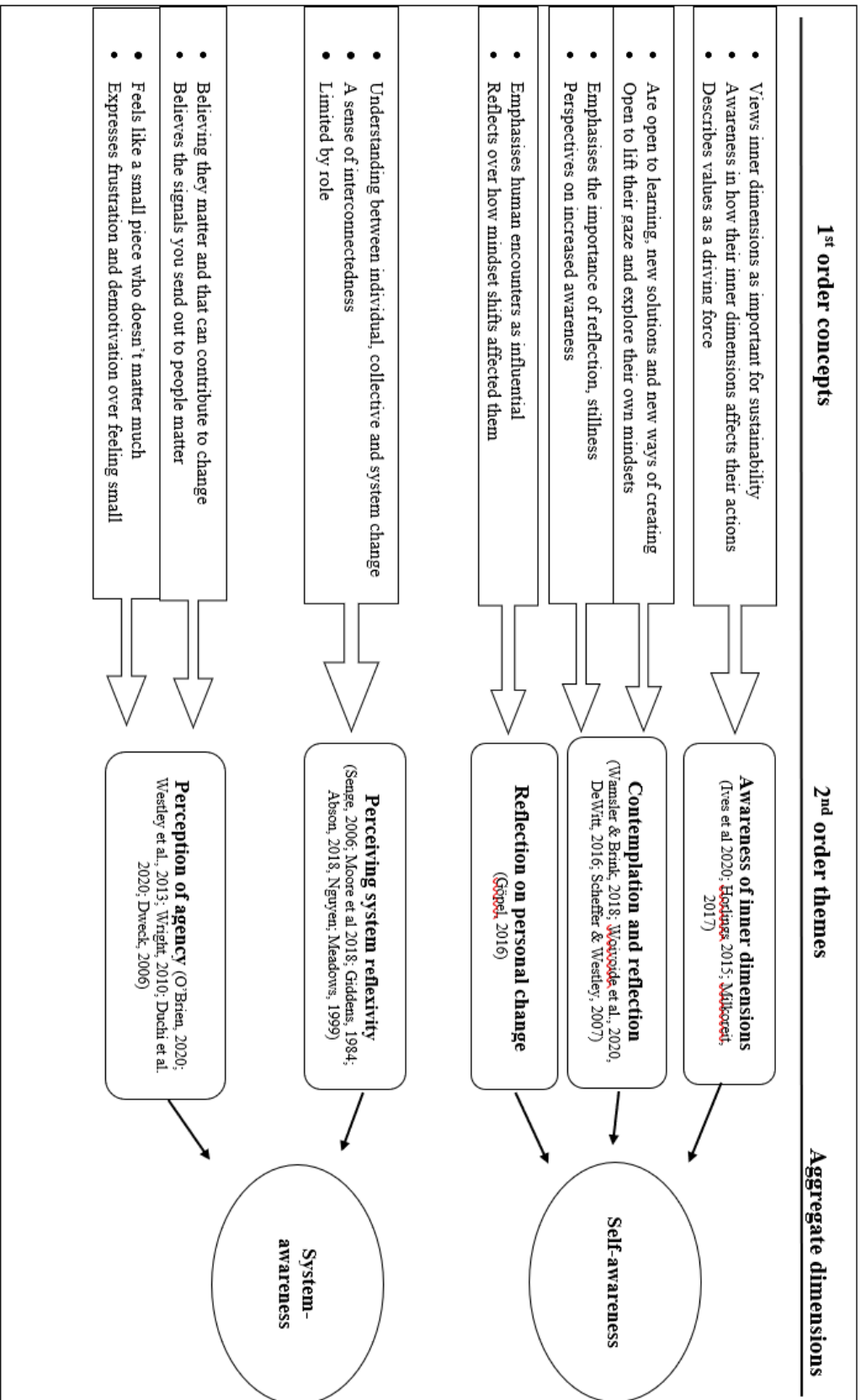# Aggregate dimensions

Self-awareness

System-awareness

*Figure 5: Illustration of the reasoning that led to the identification of two key dimensions influencing the mindsets of municipal employees (Gioia et al., 2012)*

**5.1 Self-awareness**

In my analysis, I found that the municipal employees had a high degree of self-awareness on inner dimensions and their effects. Self-awareness matters because it increases the ability to 'look at' own mindset, and it affects how people view their roles in systems change. I have identified awareness of inner dimensions, reflection on personal change, a cognitive arena for reflection and challenging one's belief systems as essential parts of self-awareness. There are, of course, different degrees of this between and within the participants, but the general findings suggest a relatively high degree of self-awareness.

**5.1.1 Awareness of inner dimensions**

The inner dimensions of people, defined as subjective domains related to mindsets, worldviews, beliefs, values and emotions (Wamsler & Brink, 2018) are rarely talked about in workplaces and in formal settings, and can even be perceived as taboo in some of these arenas. Yet, literature shows it is important, and somewhat surprisingly the municipal employees in the incubator agree. The municipal employees were very willing to talk about it, and the interviews indicated that they believed inner dimensions really matter. In fact, the majority of the informants, in various ways, expressed that inner dimensions play an essential role in sustainability. The following quotes highlight the shared view that inner dimensions are important and relevant.

"It matters a lot how each person relates to things" (participant 3).

"It's a bit depressing, but I think it means everything" (participant 8)

"How you perceive the world to be connected does, of course, matter" (participant 12).

"I think it matters a lot what personal perceptions and personality we have, what experiences, how we relate to big questions and what associations we have. I think that is very important, in terms of how we deal with things and relate to challenges we face along the way" (participant 13).

"If you don't believe in human-made climate change, you will not believe what you do is important. Because you think it's just a cycle. So, your beliefs are completely crucial for you to take climate change seriously. I am only on the earth for a short period, and I

have to do what I can. I can't think that it will probably be fine. A lot of people have thought that before … I have to believe that my part plays a role in a greater context" (participant 2).

That the informants perceive inner dimensions to be important, challenges traditional notions of how bureaucracies are meant to function Bureaucrats, in the traditional sense, have traditionally strived for neutrality and objectivity. The aim is to make choices in the public sector from a neutral space, avoiding personal influence due to an idea of personal influence weakening people's ability to make the "correct" choices (Grey, 2017). However, even in a professional setting, people act as subjects, not neutral objects. Decisions made are characterised by who a person is as rules are often individually interpreted. Haraway (1988) argues that all knowledge, and thus decisions, comes from positional perspectives. Furthermore, research shows that bureaucratic and political decisions often are based on personal beliefs (Milkoreit, 2017). The informants also emphasised how they believe inner dimensions have an influence on how choices are made, and how it influences them in their personal as well as work lives. Two interviewees especially pointed this out:

"In theory, it is believed that all-important and significant decisions are made based on facts and knowledge. Still, I do think that emotions also influence people's actions and many decisions. So, if people have an interest or positive feelings towards making decisions in a particular direction, inner dimensions are of strong influence" (participant 14).

"… you have the plans and structures, laws, and rules there, but how you tackle the situations that arise or the directions you choose will be characterised by who you are and what competency you bring" (participant 5).

Values are an example of an inner dimension that can be foundational in people's life. If values are at the centre of people's decision making and actions, they can be really powerful, connecting people to themselves and enables them to make choices from a deeper place. It is however important that these values are universal, as in that people hold these values for themselves as well as others (Sharma, 2017) this prevents someone working for justice and equality only for people that fit within their own group, for instance. Some of the informants described values as a central force in their life and work. They showed an awareness of how

values, as an example of inner dimensions, affect their decisions and actions. Participant 9 described equality as central in her life since from the time when she was a student, illustrating its importance, both personally and in her working life.

"… I am concerned with equality, trying to give everyone the same opportunities. I did a master's degree in (…), and it has been with me the whole time that I wanted to work with justice in some form. So, I'm trying to work for equality in the role I have …" (participant 9).

"… you need to have some drive, and that driving force often comes from values … I have strong values such as fairness, meaning that it must be meaningful, it must be real, it must be honest …" (participant 5)

"I think your values should matter. But I don't always think it does" (participant 6).

### 5.1.2 Reflection on personal change

Reflection on personal change in one's life is another aspect of self-awareness (Göpel, 2016. When answering questions regarding experiences with events that had changed their perspective, many informants shared examples from their own lives. They reflected on how these shifts have affected them. Some of the participants brought up personal experiences of career shifts or sickness, and these are often events that can change the way people look at the world.

"I worked in a business in the early 2000s, when the tsunami struck in Thailand ... and then the director says that now we have to make a campaign something that was going to be about this tsunami. All he thought about then was that we were going to make money from it, and then, this was entirely out of the question for me, so then I quit. So that was a massive shift for me; life values must also be part of my job; there has to be more meaning. I couldn't sit there and sell something just because, sit and capitalise on the catastrophe of others. For me, that was terrible. So, I think that is probably the strongest gamechanger in my life, in terms of what I'm going to spend my knowledge and everyday life on and contribute to positive change" (participant 2).

"We had a shift to this "unified" management, and this meant there could only be one leader at each level in charge of both the professional and the administrative. And that whole process there made me reflect on a lot of aspects of being a leader. And then, I was one of those who got one of these jobs as a unified leader. As a nurse, I then had psychiatrists and psychologist specialists in the line below me. It was a revolution for me, both personally and in the way we organised things and processes. I think it has had the most significant impact on how I understand leadership. That exact change there" (participant 6).

However, the participants mostly emphasised human encounters in various settings, especially spending time with people outside of one's own "circle" or work field. Sometimes it is a significant change in our lives that changes our perspectives, but according to these data, this is not necessarily so. The experiences most often mentioned in the interviews involved interactions with other people, and many of those experiences contributed to a shift in mindset. The following quotes highlight examples of changes experienced by the informants and how they have been influential in their lives.

"I think it's the human encounters I've had. I think it happens all the time, a new colleague coming in and see things differently, to broaden your horizon, to experience in your own body that people view the world differently than you" (participant 8).

"When I worked closely with the (…) population on some projects, I learned a lot through working closely with people working in other fields than me. I had some suggestions for projects and things to do, and they told me I couldn't start there; I had to start at the other end, find out what the (…) population was interested in, and work from there; otherwise, you won't create any change. And that was useful; it was meaningful learning. People had whole different ownership when they got what they were interested in; I saw its effects. And then they come and seek you out later when they have something, they want to solve because of what is an empowerment process really, feeling they have the power to create change themselves" (participant 4).

### 5.1.3 Contemplation and reflection
An important part of self-awareness is the ability to take a meta-perspective, being able to step back and see things from different perspectives. This ability to take perspective influences

power over own thoughts and actions and is closely related to openness. The informants emphasised the importance of contemplation, reflection, and stillness in taking perspective and increasing awareness. The participants emphasised how COVID-19 has provided space for reflection and how programs, like the municipality incubator, had become a space outside their everyday tasks, and a space for reflect. The interviews indicated an openness to explore different perspectives and be open to new solutions, changes and ways of working. A commonality across different practices is to pause and reflect, a kind of deliberate action in what perhaps is a hectic life through space, and time. I did not ask the informants about reflective practices, but several pointed to the importance of silence, pausing and reflecting over what they are doing and why. In other words, contemplating and reflecting. Some of them relate this to how COVID-19 has put things on hold.

"... it's easy to think that the way we work is the way we have to work, and always have to. In that sense, I am kind of grateful for some of the things COVID-19 has brought, in the way that we can think that, oh wow, it is possible to work in many different ways. It does not have to be a completely insane restructuring that requires hundreds of meetings and hours" (participant 8).

"I think COVID-19 has challenged us a lot … But I believe that it has increased our awareness of sustainability. I hope that we can look back at this time and think that we learned something, but there was a pretty high price to pay, we also missed something along the way, and maybe it becomes more valuable afterwards" (participant 13).

"It's not just taking action; it may not be the right action we are using, and where is the power then? We are often striving to show that we are active and not giving ourselves room to reflect. We might have had the time now to process what has happened before subconsciously, and then had time to think and mature maybe, and then maybe we can become better at figuring out what stories, what steps, what shifts do we need. It is a challenge in our fast-paced societies when we do not have time for reflection, and it is scary" (participant 5).

The informants showed an appreciation of stillness and reflection, despite the barriers to it in practice. Related to this is an openness to challenge own patterns and explore new perspectives. The interviews indicated an openness to explore things from different perspectives, and the

informants emphasised that they are open to learning, new solutions, and new ways of creating and lifting their gaze, thus exploring their mindsets. Having an openness for exploring new perspectives indicates a willingness to work in new ways, challenging one's assumptions and patterns. The importance of daring to try and be vulnerable was emphasised by some informants, especially by one team informant who pointed out the value of daring to try and fail. There are many aspects within the umbrella of self-awareness. Still, the commonality is a consciousness of what the inner dimensions mean and an openness to explore them, which correlates with how self-awareness is emphasised in the literature (Gill, 2003; Ives et al., 2020; Wamsler & Brink, 2018).

## 5.2 System-awareness

Self-awareness is as illustrated in the previous sub-chapter, important because it can enable an exploration of own assumptions and beliefs. Considering oneself as an active agent makes people more likely to act (Thiermann & Sheate, 2020), and how one relates to the system as a whole is crucial in this. Awareness in general must translate into actions, which is not always the case, as people often find it hard to engage with system change. To counter act this belief that changing systems is hard or even impossible, there is a need for system-awareness A system is a collection of elements that interact, and system thinking emphasises the connections between these elements (Ngyuen & Bosch, 2013). Systems relate to smaller systems at for example a workplace, and larger-scale systems in the society as a whole. My findings suggest that the participants practiced limited system awareness, negatively influencing their potential for creating systems change.

### 5.2.1 Perceiving system reflexivity
Finding engaging with systems change difficult is related to not seeing solutions and perceiving one's opportunity space as limited. Some of the informants actively engaged with systems change, working to rethink institutions and structures in their municipalities, for example, related to alternative food systems. Two of the informants did, in particular, emphasise that they matter in what systems they engage concerning local food initiatives. My experience is that those who engaged with system change thought of themselves outside of their role, seeing more possibilities of engaging in system change. Heaton (2016) emphasises the difference between wholeness vs partial knowledge; when people are not using their whole self is limited to a role, there is a risk of missing the wholeness. Bureaucratic organisations can limit people's ability to

consider and understand the true nature of systems reflexively. Restricting people to a narrow box of what they do and who they are can reduce system reflexivity, seeing themselves less as a subject in the system. At the same time, the neutrality of bureaucracy can be of great value. There is, however, a difference in striving for neutrality while being transparent about subjectivity and claiming to be neutral and objective. An awareness of interconnectedness or how things are linked to each other relates to perceptions of system reflexivity. It is applicable for how people believe themselves and others matter, thus thinking about nature and humanity as part of oneself. Interconnectedness, therefore, relates to seeing oneself in the system because it indicates how one's actions and perception influence other people and species and the planet as a whole. Senge (2006) argues that people's life is connected and connected to all life on the earth in general. Schlitz (2010: 22) argues that a significant shift is from being in a self-centred mode where people lack an awareness of interconnectedness to one where the self is part of a greater whole. Some of the informants mentioned this sense of interconnectedness.

"Attitudes and values do give you kind of a perspective on the world, where you can either be, what can I say, concerned with you and yours, or you can have a kind of broader societal perspective, where you see your role in the greater whole in a way" (participant 4).

"... the understanding of how things are inextricably linked is essential. That we are all inextricably linked, to understand the consequences of your action on others" (Team informant 2).

"I think that the increasing consciousness that I experience the whole world has had in recent years has been a part of influencing my views on this" (participant 13).

The above quotes indicate an awareness of interconnectedness or interrelatedness, which can be related to perceptions of system reflexivity. A sense of interconnectedness can inspire active change agents in one's local community and beyond (Vieten et al., 2006; Hedlund-De Witt, 2014), because it shows an awareness in how different parts of a system affects one another. However, it is critical to acknowledge that systemic limitations are real, important, and problematic. Systems can be designed or have emerged in a way that constitute fundamental limitations to action. One informant pointed out a relevant example of this:

"Let's say that we in the incubator suggest that I bring 300 000 NOK to housing, and then I am asked in the next meeting to find that 300 000 NOK, then I am in the red, and that will in a way do something about the creativity, and the will to dare and to contribute in a way" (participant 9).

Some of the informants also emphasised the limitations of current systems, and the frustration of static systems feeling unchangeable:

… you do work in a plan, and to accept the system and that you are in it and have to relate to it, and at the same time wanting to change it a bit, that is challenging … We kind of have to accept that we are in a system where we can't change everything, we do have guidelines (participant 12.

… you start to become so sick of these silos, you want to blow them upright, but then you can't do that (participant 1).

### 5.2.2 Perceptions of agency

The interviews indicated that there was a belief in people's ability to contribute to change. All informants seemed to believe in their agency to a certain degree, they expressed that beliefs mattered and that they wanted to contribute to positive change. Some of the informants believed they could enact individual agency through conscious actions. The literature emphasises that deliberate and conscious actions are a necessary piece of the puzzle in bringing about sustainability transformations. In that regard, O'Brien (2020: 81) emphasises that "every action represents an opportunity to both individually and collectively influence the whole". Believing in one's agency affects how people choose to act and perform conscious actions in everyday life. This was made clear by two of the interviewees.

"I see myself as important. I am a small piece of a gigantic puzzle, but I think that every one of us can make a difference. I can make a difference in the work that I do, based on the tasks I have in my job, and that is my mission in this collaboration and our innovation challenge. So, I don't think that I alone can save the world, but if enough people increase their consciousness, I think we can make a difference together" (participant 13).

"My driving force is related to compassion, community, and that I have a responsibility for what I do for those who come after. And also, now really. Because when we talk about sustainability leadership, we are talking about here and now. About what kind of consequences what we do here and now, will have in the future" (participant 5).

The informants highlighted how being given trust and opportunities made them feel more influential, and therefore, seems important in enabling agency in each person. Several participants described experiences where people trusted them, and how this affected how they view themselves as change agents. In the words of one participant:

"Having someone listen to me, feeling that people value what you put out there, has influenced how I view my own sphere of influence" (participant 8)

However, when most informants talked about their influence, it usually ended with a comment such as, "but I am just a tiny piece". The perception of influence was weighted differently with different informants. Nevertheless, some informants expressed a lack of belief in their individual agency, and voiced frustration over feeling small and insignificant in the bigger picture. Little confidence in one's agency can be connected to a fixed mindset (Dweck, 2006), meaning that the world around you is not changeable. According to Dweck, a person with a fixed mindset will view efforts as fruitless and perhaps avoid challenges, which is a limitation. At the same time, some of the same participants seemed to think that people's actions matter, just not their own. As such, the informants seemed to think individuals' matter, in theory, but were more sceptical in practice. This implies a duality between having self-awareness but finding it challenging to believe in and enact an ability to engage in system change. One of the reasons can be that even though they have some sort of belief in agency, not all of them see themselves in the role of enacting it in practice. A commonality was the duality of feeling that they matter somehow but having a limited belief in their ability to matter. One informant expressed her views directly related to sustainability; an idea that shared by some of the other informants:

"… you can get a bit demotivated, too, by being just a tiny drop in an ocean of puzzles that is so big that it isn't tangible. But you have to think that you are pulling in the right direction at least" (participant 12)

Some informants expressed a limited belief in their agency due to the boundaries of their work and jobs. There also seemed to be a belief in and a lack of confidence in their own agency within each informant. I interpret this contrast between a belief in agency but still a lack of confidence in own agency as conflicting beliefs. Having contrasting beliefs and mindsets within oneself is present within everyone, it is common to have a fixed and a growth mindset in different areas and at different times or periods of life. Some informants were uncomfortable expressing a belief in their agency, and a reason for this can be because they view it as "grandiose". This view can be particular to the Norwegian context, where people traditionally are careful to express their abilities and ambitions too loudly, having a humble approach. This is a deeply culturally engrained belief heavily influenced by something called the law of Jante (janteloven) (Sandemose 1899-1965). Two informants related agency to work in their municipalities in a deterministic manner, that the changes happening is forcing it's way independent of them.

> "It's in the culture; it's not anyone outside that can change it; they would have to work with the leaders or the culture in the municipality. We are five people spread out in the organisation on a lower system level, so we don't have very much influence, I would say, on changing the structures here" (participant 3).

> "… we influence in making these changes that we do. So yes, I would say I matter, together with many others, yes. But it is also something that has forced its way forward. If it hadn't, we probably wouldn't have made all of these changes. Something is coming from the outside that we have to handle" (participant 7).

Other informants also talked about themselves on behalf of their municipality, but still with a perception of themselves as agents of change, like these two quotes illustrate, participant 14 notably is on a high hierarchical level in his or her municipality:

> "Yes, working in the public sector and working in a municipality, you are a part of it (to what degree do you see yourself as important to create sustainable societal change). And (…) municipalities have set in on the agenda" (participant 3).

> "Yes, in my municipality, I think I have quite a lot of influence. We are a significant actor as a municipality. Of course, I substantially impact what I lay down for political

processing in my work as a leader here. I also influence the plans we create for future development here in the municipality" (participant 14).

There seemed to be a difference in the expression of beliefs in one's agency based on hierarchical position. Informants higher positioned in the hierarchy seemed to believe in their agency more than those further down in the hierarchy. Based on both the interviews and observations, the lower the informants were in the hierarchy, the more insignificant they seemed to feel. The informants were critical towards what was not working and pointed out how hierarchical and "fixed" structures in the municipalities were potentially problematic for change related to sustainability. Relating perception of agency back to perceiving system reflexivity, hierarchy in bureaucratic organisations can be an example of structural limitations on individual agency. The informants pointed out how hierarchical structures contribute to a limited opportunity space in certain areas. This insight illustrates an awareness of the problems present. They also emphasised the importance of ownership to the changes. All of the informants emphasised the importance of non-hierarchical democratic leadership, to focus on as many people as possible being a part of something and having their voice heard. One of the informants especially expressed frustration over feeling insignificant in a hierarchical structure. This finding was interesting because this informant works in a recently merged municipality from several small municipalities to a larger one. As a result of this the informant was placed further down in the hierarchy. This change seemed to have made the informant feel less significant and thrive less.

> "I felt I mattered more in the municipality I worked in before because we were closer to the leader group; I am further down in the hierarchy. This change means that I am further away from where people make decisions. It's very hierarchical, at least compared to what I'm used to. I think we were more willing and more capable to make decisions on our own than we are now" (participant 3).

I found that awareness matters in creating transformative change, both self-awareness and system-awareness, this will be explored in more detail in the following chapter. But I also found that there is a gap between awareness and the ability to engage in system change in practice. While the informant's perspectives on self-awareness was similar to the views in the literature that is explored in this thesis, perspectives on system-awareness showed a more mixed picture, where the informants value a system perspective through a sense of interconnectedness (Ferdig,

2019; Schlitz et al., 2010; Nguyen & Bosch, 2013), but finds it challenging to challenge the system, illustrating structural barriers like hierarchical practices (Kuenkel, 2019; Hestad; 2019; Senge et al., 2015).. In order to see where to go from there, what this means, there is a need to go deeper. The results presented in this chapter will therefore be further discussed in the following chapter.

# 6.0 Discussion

The previous two chapters presented results from the incubator process and used the Gioia Methodology to answer the main research question, *in what ways do mindsets influence how people engage with sustainability issues and see their role in systems change*. In this chapter, the results and answers to the research questions outlined in the previous chapter will be brought into a critical and more theoretical conversation. The most potent results will be discussed in relation to the theoretical background outlined in chapter 2, seeking to explore the connections between the results and the theoretical perspectives. The discussion is first structured around relating the results to a holistic approach to transformation, then it looks at perspectives on the role of mindsets in creating systems change, before it investigates the potential such incubator programs have in creating systems change. Throughout this thesis, I have explored deep transformation to sustainability, and this chapter intends to connect the dots and see things in a larger whole.

## 6.1 A holistic approach to transformation

As showcased in chapter 2, this thesis advocates for a holistic approach to transformation viewing the three spheres framework (O'Brien & Sygna, 2013) as a helpful heuristic for understanding transformation from a holistic perspective, focusing on the relationship between individual, collective and systems change. A holistic approach involves seeing the personal sphere in relation to systems change, and system-awareness includes an understanding of how the three spheres relate to each other. According to Smith (2011, in Nguyen & Bosch, 2013: 105), "systems thinking can 'enable integration across dimensions of sustainability". This is important because it is necessary to work across different dimensions of sustainability, scale, level and topic. It is evident from the data that the informants had a high degree of self-awareness. Self-awareness is to a certain degree based in the personal sphere but heavily influences the political and practical spheres, as it matters for what practical solutions they implement and whether and how they engage with systems. The results showcased a mixed picture of agency and engaging in systems change. The informants tended to see themselves as important in creating societal change and had a belief in individual agency. Directly related to this, a belief in agency is vital to engage with systems change (O'Brien, 2020; Thiermann & Sheate, 2020; Göpel, 2016).

However, the informants at the same time expressed feeling small when faced with larger systems. The data revealed a lack of belief in own agency due to a sense of frustration over existing systems. This indicates a lower degree of system-awareness than of self-awareness, illustrating that awareness of the personal sphere is not enough, there is a need to move between the spheres. If people believe they matter and thus have an awareness of the personal sphere, but don't know how to engage with the practical and the political sphere or enact system-awareness, it is unlikely to create transformative. Furthermore, the duality highlights how a focus on inner dimensions tends to skip past the political sphere and move straight from the personal to the practical sphere. It is evident from the data that this lack of acknowledging the political sphere can reduce people's ability to enact their agency, because there is a need to acknowledge how institutions, frameworks and structure can inhibit people from engaging in systems change.

The results indicated that people are open to talking about the inner dimensions, yet something is missing to bring out its full potential and a full sense of agency, in other words; structural limitations are a real challenge. Therefore, system thinking is a useful approach. Systems thinking provides "new ways of thinking to understand and manage complex problems, whether they rest within a local context, or are globally experienced" (Nguyen & Bosch, 2016: 105). Even though issues often are treated as if they are separate, it is essential to understand that it is connected. Furthermore, viewing systems as only something out there, not including ourselves in it, is limiting. System change is created by collective change, and personal change is a part of collective change, therefore everything we do is a connection of the individual, the collective, and the system. Nonetheless, it is essential to note that agency is not evenly distributed due to structural, socio-economic and other variables, illustrating the importance of addressing social justice and equity. Agency differs, and systems change is not a linear process. Still, even though there are limitations within a system, system understanding is still essential. Nguyen & Bosch (2013: 114) argues that

> "... in the resource-constrained world that we live in today, it is of significant importance to be able to identify key leverage points in any system that has to be managed sustainably. These leverage points form the basis of devising high priority and effective systemic intervention strategies that will make the best use of available resources and facilitate the creation of sustainable and long-term development outcomes".

Finding effective leverage points are dependent on a system understanding that acknowledges interconnectedness and interrelatedness. Leverage points are crucial to see where one can engage within the system; finding the most substantial possible leverage points a system understanding is important. Based on the life experiences of the informants, experiences that have influenced them personally have also experienced them in their work-life, whether through quitting their jobs because of personal convictions or changing personally because of job experiences. Still, as exemplified by the results, the most common personal change was related to interpersonal relations. The importance of interpersonal relations relates to a sense of interconnectedness that this sense of connection to other people can have profound effects (Schlitz, 2010; Næss, 1984; Haukeland, 2008; Ferdig, 2019). Whether people view things as interconnected or separated can influence actions or lack of actions, it affects how people think about an act, how it is enacted and in relation to others, and how interconnectedness can strengthen the quality of actions. Kuenkel (2019: 51) highlight that when a collective of actors integrates openness and willingness for change, actors can see larger contexts and the embeddedness of their actions and practices, which allows for intractable problems to be shifted. Therefore, having a broader and deeper perspective on people and nature can be a strength, viewing people as active change agents, not something to be "helped". According to DeWitt (2011) it can also increase levels of tolerance, and interconnectedness with other people and nature can enable collaborative action and practice. Ferdig (2020: 2) argues:

> "… sustainability thinking, and action becomes meaningful when people begin to consciously shift how they see themselves in relation to one another and the complex processes of life that are occurring in and around them every day".

A lack of connection to inner dimensions can be a barrier because it relates to interconnectedness with others and the planet. When we engage actively through self-awareness, we can change our relationship with others and ourselves with a collective social consciousness. According to Schlitz et al. (2010), a greater sense of awareness enhances our co-creation engagement, and the results indicated that those who mentioned interconnectedness and awareness, were more engaged with systems change. Within deep ecology, the importance of the willingness to question and appreciate the importance of questioning is emphasised (Næss, 1984). There is a need for ecological and social awareness. O'Brien (2020) argues that hierarchies of domination and exploitation are often connected to worldviews that have an "us versus them" and "human" versus "nature" perspective.

Transformation must move across the different spheres and aim to create results and change systems, and it is evident from the findings that the informants were aware of how practical actions within their municipalities are affected by aspects in the personal sphere, such as beliefs, values, worldviews and paradigms. The results in this thesis, therefore, suggest that self-awareness and system-awareness are essential to create such changes in systems, because self-awareness relates to an awareness of the personal sphere, while system-awareness relates to an understanding of how the three spheres interrelate. In other words, practical strategies and plans implemented in a municipality are influenced by political goals and motivations as well as personal perceptions, illustrating the importance of a holistic approach to transformations.

## 6.2 The role of mindsets in systems change

The findings indicated the presence of a growth mindset among most informants, which includes a willingness to explore new perspectives. This variation in fixed and growth mindset between the participants and within each participant is noteworthy. It illustrates that everyone has fixed and growth mindsets in different areas simultaneously (Dweck, 2006). Understanding an individual's possibility to change as limited, can be connected to a fixed mindset; viewing one's own life and the world as very static makes it harder to engage with systems change. As a result, having a perception of oneself as an active change agent is an enabler for sustainability transformations and one reason why mindsets matter in systems change.

A significant leverage point is to have an awareness of one's inner worlds (Meadows, 1999) because it contributes to understanding which choices are conscious and not. Self-awareness links to a reflexivity mindset, in other words, having a perspective on one's mindset (Göpel, 2016). In systems thinking, 'mental models' is the deepest system level, which encompasses our beliefs, values, and assumptions, and through them, we interpret the world around us, act, and make choices (Nguyen & Bosch (2013). The distinction between reflection and reflexivity is helpful to repeat. Göpel (2016: 211) puts it: "rather than that we merely take perspective on a certain situation, we reflect on our attitudes, thought processes, values, assumptions, prejudices, and emotional reactions in relation to that situation". It is necessary to go beyond mere observation and reflection over action and instead try to embody reflexivity. According to Schlitz (2010), DeWitt (2016) and Göpel (2016), reflexivity has empowering potential and Schlitz et al. (2010: 28) argues:

"With increased awareness, the limitations of this mindset can be seen, and it can be recognised that engagement with the world and others must be collaborative rather than prescriptive".

The importance of reflexivity seems to cut across the different topics analysed. Reflecting on our mindsets might be the most important reason for focusing on mindsets in sustainability transformations. Researchers argue that reflexivity is essential to navigating sustainability (Moore et al., 2018; Meadows, 1999; Göpel, 2016; Gottfredson & Reina, 2021). As highlighted by the results, self-awareness consists of different aspects, but it is noteworthy that an essential part of inner dimensions is awareness. O'Brien (2018) argues that enhanced personal and political agency often results from being able to 'look at' rather than 'look through' one's beliefs and thus question what is socially or culturally given. The importance of 'looking at' illustrates that the most valuable thing about mindsets is not necessarily what kind of mindset one has but being aware of it; thus, a reflexive perspective is perhaps the most critical factor to bring about sustainability transformations. Meadows (1999: 19) argues:

"It is in this space of mastery over paradigms that people throw off addictions, live in constant joy, bring down empires, found religions, get locked up or "disappeared" or shot, and have impacts that last for millennia".

In other words, the most important thing is not necessarily what kind of mindset but having a reflexive approach to one's perspective. According to Meadows (1999), the highest leverage point in system change is to transcend paradigms, the ability to look at your paradigm or mindset. Giddens (1984) also emphasises actors seeking reflexivity to regulate system production to change or keep it. It is also related to self-awareness, which can increase reflexivity, hence the ability to 'look at' rather than only 'look through' one's mindset. An aspect of the view on inner dimensions is the ability and willingness to explore them, and the majority of the informants expressed a desire to explore their perspectives and appreciation for stillness and reflection. As evidenced in the literature (Wamsler & Brink, 2018; DeWitt, 2011), practices that focus on calmness and reflection can increase reflexivity in people. However, it must be stressed that this is not always realistic in the midst of people's everyday lives. While the informants highlighted the importance of reflection and stillness, they also expressed frustration over time limitations and overwhelming tasks. This contrast can make the practical reflexivity reduced, even though there is an awareness of its importance. Nevertheless, this awareness is

in itself a critical enabler for transformative change (Moore et al., 2018). In this, it is also significant that one is willing to constantly explore it and continuously ask whether we as a society and individuals are where we want to be personally and collectively, on the direction needed for sustainability transformations. According to Senge et al. (2006), when people's awareness grows, so does the coherence of actions, and thus we choose to do better things. Therefore, it has much potential. In the below figure (6), Senge's point is illustrated.
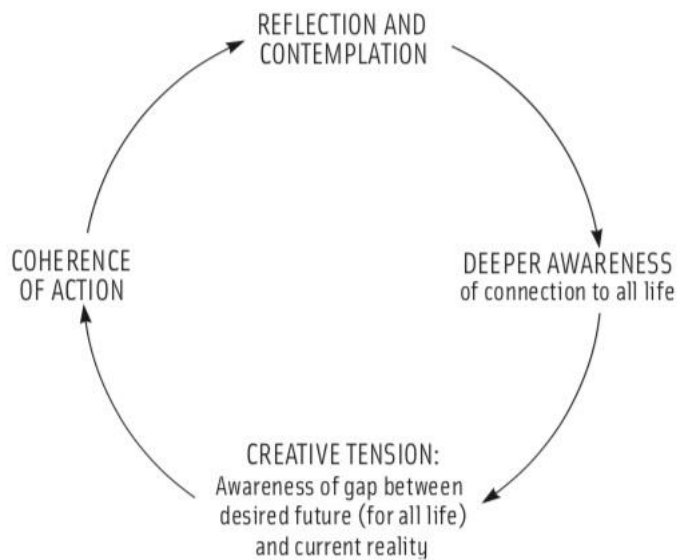
REFLECTION AND
CONTEMPLATION

COHERENCE
OF ACTION

DEEPER AWARENESS
of connection to all life

CREATIVE TENSION:
Awareness of gap between
desired future (for all life)
and current reality

*Figure 6: Senges (2006) illustration of how awareness grows.*

The above figure illustrates the connection between reflexivity (reflection and contemplation), and interconnectedness, mindsets and practical actions. The point on creative tension can be linked to a growth mindset, because of the way it highlights imagination for alternative futures. However, having a growth mindset does not equal sustainability transformations, and Senge's figure showcases this complexity. Inner dimensions like values and mindsets are frequently mentioned but often superficial, focused on efficiency, reducing its full strength and potential. Consequently, it is a danger of oversimplifying mindsets, and only concentrating on what kind of mindsets that is needed is too narrow and an approach that fails to see the whole instead, only focusing on separate parts. This is because the interesting thing about mindsets is how it links to systems, action and awareness, and the dualism of the results in this thesis illustrates that mindsets are powerful *and* that they are insufficient by themselves. Moreover, there are many different ways of perceiving the mind and mindsets, as it varies across cultures and periods of time. Therefore, there is no objective answer to the potential of mindsets. Having a strict perspective of what kind of mindset is needed is in itself a fixed mindset, and it can be linked to rigid structures based on hierarchy or certain groups

dominating. Therefore, taking a step back is perhaps the most powerful thing, and this is why reflexivity has been emphasised.

Mindsets cannot be seen as isolated, and one of the challenges of focusing on mindsets is the intention of changing other people's mindsets. Thus, it is vital to engage individuals and groups instead of seeing people only as carbon footprints and 'objects to be changed'. One of the goals of the municipality has been mindset shifts within each participant. There are good reasons for this, because as the literature on the subject emphasise, certain mindsets are linked to being more inclined towards sustainability transformations (Dweck, 2006; Gottfredson & Reina, 2021; Duchi et al., 2020). On the other hand, working to change people's mindsets can fail to engage with people as active agents of change (O'Brien & Sygna, 2013), similarly to the critique on behavioural change and nudging (Goodwin 2012; Schubert, 2017). Perceiving mindsets as just another "technical" aspect to fix fails to include all the spheres and can be a limitation for reflecting over underlying assumptions and ways of seeing the world. Furthermore, another possible issue is that mindsets and mindset shifts can be perceived as a solution on its own, but mindsets cannot be shifted and expect change to happen automatically. In itself, it is insufficient in creating transformative sustainable change, even though mindsets are powerful. There is still a need to engage with sustainability issues and engage with systems change as systems are complex; they are a part of mindsets, but it is also about more than mindsets. Nevertheless, changing a mindset from thinking that changing systems is not possible to a mindset where systems change is possible, and everyone matters in that change is still a powerful shift. However, it does not equate to action, illustrating the need for strategies and tools to address systems change and work with systems thinking, something of which an incubator program such as the municipality incubator can influence. What is new about the results on mindsets in this study compared to existing research, is that it combines perspectives on what mindsets are beneficial for creating transformative change (Dweck, 2006; Duchi et al., 2020; Gottfredson & Reina, 2021) with perspectives that highlights reflexivity (Göpel, 2016; Moore et al., 2018).

### 6.3 The potential of the municipality incubator, and similar incubator programs in promoting sustainability transformations

This section is not an evaluation of the incubator, but rather of the overall concept of an incubator for municipalities and their roles in creating systems change. Incubators can be great

arenas for several things, among them, working with complex issues, challenge and develop employees, structures and whole organisations, if implemented in an appropriate manner. Overall, I argue that in order for incubators such as these to realise their transformative potential they need to apply an approach that focuses on transformational learning processes in addition to being process oriented. Bøllingtoft & Uhøi (2005: 270) states that incubators are seeking to:

> "… maximise the potential of entrepreneurial agency by providing entrepreneurial actors with services and support that complement their existing talents and resources, which in turn means to enable them to expand their potential".

As the data highlights, hierarchical structures can lead people to feeling less influential, thus illustrating how non-hierarchical approaches are powerful. Within this, leadership practices are central because they carry great potential due to being present in many or perhaps, all, change processes. Alternative approaches to leadership highlight how everyone has leadership potential (Sharma, 2017; O'Brien, 2018; Gram-Hanssen, 2021; Burns et al., 2015) This is an interesting approach in relation to the findings presented in this thesis, as the informants wanted to move away from hierarchical leadership structures but did not necessarily view themselves as a leader. The split in this perception on leadership illustrates that although people have a problem understanding and wants new approaches to leadership, viewing oneself as a leader can sound and feel foreign. Thus, non-hierarchical perspectives of leadership in that context indicate wanting to be given trust and space by a leader, but not to self be a leader. Still, the results do indicate that non-hierarchical approaches contribute to enhanced agency, because people feel more valued when they are given trust. This highlights the importance of changing structures in municipalities, which is something the incubator aims to do, focusing on system change and patterns working to challenge hierarchical habits through collaborative interaction patterns.

However, the combination of process-leadership and experimentation is one that bears the risk of becoming "business-as-usual", instead of transforming systems. Nonetheless, the informants, the participants, SoCentral and Lent, are engaged with a collaborative approach in practice, getting people involved through broad participation, which can signify a wish to challenge hierarchical structures, something that was also highlighted throughout the interviews. A focus in the incubator program has been challenging people to try something that they maybe would not normally do.

Still, co-creation, collaboration and participation are also typical "buzzwords" in incubators, in other words, focusing on them alone without a deeper theoretical and system focus can mean they are superficial. If everything is comfortable and familiar, this might be a sign that systems are not changing (Moore et al., 2018; Westley et al., 2017). One reason for this is that transformations are demanding, challenging people both as groups and individuals to challenge their basic perceptions and beliefs about the world. In this regard, the municipality incubator has perhaps been too "safe". If leadership development programs aim towards mindset shifts, but people fail to see opportunities to be decision-makers themselves that can change systems, the programs fail to be transformative. On the other hand, programs like the incubator, have great potential to create transformative change. Thomas Kuhn (as cited in Meadows, 1999: 18) argues the following on changing systems:

"… keep pointing at the anomalies and failures in the old paradigm; you keep speaking louder and with assurance from the new paradigm in places of public visibility and power. You do not waste time with reactionaries; rather, you work with active change agents and with the vast middle ground of open-minded people."

The above quote can be connected to incubator programs and show how these types of program can be a practice space for alternative systems, Thus, similarly to Meadows' leverage points for system change (1999), illustrating how to engage in system change and change paradigms. However, a challenge here concerning sustainability transformations is leaving people out, ignoring those who do not support "your" paradigm. Instead, it is crucial that people enter into a collaboration with people with a different perspective and see the value in it, being aware that other people might have seen something oneself has not, based on their knowledge, experiences and values. To bring about sustainability transformations, it is also necessary to engage with people who are not necessarily "open-minded", something the incubator has aimed to do, taking a broad approach when recruiting municipal employees across levels and topics. Sharma (2017) stress that everyone can create new patterns and change systems when using inner capacities and learning transformative design, tools and practices. Thus, I would argue, there is a need to engage with the paradigms while also listening to the old ones, valuing people's experiences and reality. This illustrates the importance of a mindset focused on interconnectedness. There is a need to engage with people as agents of change who can create system transformation. According to Schlitz (2010), there is a transformation in everyday experiences; in other words, people's presence in an alternative system means something.

A collaborative approach is in itself powerful, but on its own may be inadequate, because it must be integrated into the whole, integrating a collaborative approach with the inner dimensions and a greater system understanding. The municipality incubator has so far seemed to be more focused on reflecting than on reflexivity, which means that there has been reflection over tasks, work and ideas, but not reflexivity over why we do as we do and what it means and says about us. This suggests both a need and the potential for a deeper focus. Creating space for more reflexive practices in a program like this might meet resistance due to the participant's tight schedules, which they pointed out as challenging, but it is necessary to create the results they are working for. In a study, Moore et al. (2018) observed a program where the focus was to create transformative space to enhance system reflexivity. They used live case studies that were uncontrolled, unpredictable and constantly changing, often focusing on the participant's own work. Having people share their work and look at various frameworks is similar to the methods used in the municipality incubator. The findings in the study indicated that increasing system reflexivity was an uncomfortable process. The participants showed defensiveness, thus pushed back. I found this in my data too, but not to the same degree. The potential of the municipally incubator is not easy to estimate, because of limitations caused by COVID-19. Moore et al. (2018) argue that systems are fixed for a reason. This is also the case with our mindsets (Dweck, 2006). It is challenging to explore and confront individual's mindset, and systems are demanding to challenge. Related to this, Sharma (2017) argues that one should not expect people to clap for you when changing systems because you are often on contested ground. Westley et al. (2017) too, argue that systems react and "fight back" when attempts to transform them occur, as there are people with vested interests in maintaining the current system

Overall, based on the findings, this thesis argues that there is considerable untapped potential in the municipality incubator and similar programs. Strengthening the focus on co-creation without including system understanding and the inner dimensions limits the program's potential. It is hard to challenge the traditional structures by only addressing the collaborative approach without addressing the other elements, might be part of the problem. Only addressing hierarchical structures without addressing the inner worlds of humans is not enough either, therefore, a program that combined these two perspectives could be strong and preferable. However, it is important to note that the municipality incubator focuses on an experimental approach, i.e., the whole program is an experiment and with this, there is also an openness to considering what a program could contain and what it could be. In other words, the foundation for the program is based on an open mindset where people want to learn, which is a potent

starting point for systems change. This open mindset can be linked to a growth mindset (Dweck, 2006), which indicate a willingness to learn, challenge existing assumptions and approach complex issues (Gottfredson & Reina, 2021).

Furthermore, based on my observations, inner dimensions have not been a focus in the incubator, but as previously mentioned, the interviews indicated that the participants recognise it as important. The self-awareness in the informants, shows that there is potential in focusing more on it, and this awareness is vital to be aware of one's own bias and develop a purpose from these inner dimensions. Without a deeper focus, change processes often fail to be transformative, illustrating the importance of arenas where people have the space and time to reflect on one's own experiences, perceptions and relations to others. According to Göpel (2016: 168):

> "... the emerging twenty-first-century paradigm is about reflexivity and transformative literacy: working on a properly integrated perspective with clarity and transparency about one's assumptions and value judgments".

Having an openness for reflection is an integral part of self-awareness, and to enable this awareness requires space and a willingness to go deeper within oneself cultivating "conscious awareness" (Ferdig, 2020: 6), which the majority of the informants seems to have. There are many different areas and practices to create a space of "conscious awareness". Thus, a starting point in creating transformative change is to focus on the inner dimensions while seeking alternative practices and systems to engage in, and an incubator program has the potential of being just that. People's interaction across time and space always has some sort of effect, because "… we are materialising potential outcomes in the world at every fraction of time" (O'Brien, 2020: 82). This combination of inner dimensions and engaging in alternative systems is a way of engaging with system change, changing the structures of which everyone is part. For an incubator program to truly engage in systems change, reflexivity is of great importance.

# 7.0 Conclusion

How do people's mindsets affect their ability to achieve transformative change? In this final chapter, I come back to this fundamental question. Solving sustainability issues is dependent on people's willingness and ability to think and act in new ways. This thesis has aimed to understand the connection between people's inner worlds and systems change through focusing on mindsets. I have explored this by observing a municipality incubator where the aim is to enable the participants to create change in each municipality and develop leadership within each participant. Exploring mindsets in relation to municipal employees is interesting because inner dimensions are rarely focused on within bureaucratic institutions like municipalities. However, the research highlights that inner dimensions matter in municipalities, and the employees know it. I have conducted a qualitative case study, including interviews with municipal employees participating in the municipality incubator and the team responsible for the municipality incubator, along with observation of the majority of its gatherings. The data has been analysed using the Gioia methodology, where I ended up with two aggregate dimensions that formed the answer to the main research question. Namely that mindsets matter greatly, but that focusing on them is insufficient on its own. This method proved helpful in making sense of the data. In this conclusion, I will explore the main findings and revisit and answer the two sub-research questions. I will then assess limitations of this study and suggestions for future research. After that, I will elaborate on the study's implications and its contribution to human geography as a discipline as well as other relevant research fields before finishing the thesis with some concluding remarks.

## 7.1 Main findings and revisiting the research questions

This research argues that mindsets matter greatly in sustainability transformations. However, there should be a cautionary when focusing on it, thus emphasising a reflexivity mindset rather than a specific type of mindset. In other words, the research argues that the most potent element of focusing on mindsets is to take a step back and embody reflexivity on one's own mindset. Still, certain mindsets influence how people engage with sustainability issues and see their roles in systems change, such as a growth mindset.

There is a need for a holistic approach to systems change, highlighting the connections between personal, collective, and systems change. The results of this research emphasise the need for such a holistic approach, as they showed a dualism between people's belief in agency and the

ability to enact systems change. In other words, there is a need to see inner dimensions and structural limitations as interrelated.

I address this more specifically in relation to the first sub-question: *How do people working with sustainability in municipalities view the role of inner dimensions in promoting transformative change?* It is evident from the data that people working with sustainability in municipalities view inner dimensions as essential in promoting transformative change. This challenge the notion of neutrality and objectivity in bureaucratic institutions, which municipalities are examples of, and confirms that most informants, similarly to the existing research I have explored, see the profound effect personal aspects have on sustainability. This is, however, in theory, and the results indicate that there is not as much space in practice to bring the inner dimensions into people's work. However, a more significant focus on each person's driving forces and reflexivity have great potential. The findings suggest an underutilised interest in inner dimensions, which could be a part of future programs like the municipality incubator or similar programs. Challenging hierarchical structures in bureaucracies can give more space to people's inner worlds because roles do not limit them to the same degree as when there are strong hierarchical structures. Still, including inner dimensions goes beyond role understanding and requires reflexivity that is not currently present in the municipality incubator.

This structural dimension came out clearly with respect to the second sub-research question: *How do people working with sustainability issues in municipalities perceive their own agency and ability to engage with and change systems?* The findings indicate a dualism in the way the informants perceive their agency in systems change. The purpose of this research question has been to see whether the municipality employees see themselves as system changers or if they view themselves more as "carriers" of certain practices in the bureaucracy. The informants expressed a belief in agency but articulated frustration over feeling small within the context of the larger system, and it was highlighted that those hierarchical structures enhanced this frustration. Considering the results, hierarchical structures in municipalities need to be addressed, something the incubator has tried to do. However, there are limitations for a municipality incubator to be a transformative space, one of them being if and how the incubator and similar concepts can challenge mainstream systems, changing the larger structures by being something more than «business as usual. Therefore, there is also a need for a greater system understanding. The dual view between perception of agency and systems change illustrates the

importance of a holistic approach, working with practical, political and personal aspects simultaneously.

## 7.2 Limitations of the study and future research

Mindsets are a challenging concept to explore because it is hard to measure, although it has not been my intention to do so as I have rather focussed on ascertaining people's reflections and views. Despite this, I argue that mindsets are crucial to focus on, even though they can seem intangible. I am aware of the difficulty of capturing perceptions on this topic. However, I have tried to contribute to the sustainability debate, combining a focus on inner dimensions exemplified through mindsets, emphasising systems change. It is relevant to mention again that the effects of this municipality incubator could have been stronger and more transformative if physical meetings were possible. The effects of physical presence are perhaps especially true for an experimental program like this, being extra vulnerable to a digital form. Another limitation of this study is that the unclarity of the incubator as a project made it difficult to stick with a plan from the start; in other words, I had to adapt my research as I learned more about the people involved and the concept, which is common with this type of research.

Furthermore, despite the sample being representative within this specific incubator, it is still grounded in a small sample, and there is a need for more research. Future research could benefit from following an incubator program like the municipality incubator before it starts and after it ends, conducting several interviews and perhaps also questionnaires with the people involved. That would give a better understanding of how a program affects them over time, something my research has not been able to do. Furthermore, it would be engaging with research going more profound into how people engage with systems change and how they think in order to do so. Another possible and fascinating research would have been to ask the participants how they would have reacted to a deeper focus in a future incubator or program, focusing more on their inner dimensions and degree of reflexivity and their role as system changers. This kind of research could have been conducted through an Action Research Approach, testing different interventions and reviewing them.

## 7.3 Implications of the study and contribution to the discipline

In this study, I have conducted an in-depth case study of an under-researched area; namely the role of mindsets in practice related to municipal employees involved in sustainability work. Inner dimensions have received increased attention in sustainability research, but as previously mentioned, there is a need for empirical research on the topic, which this thesis has contributed to. Because this is a small qualitative case study, there is not enough evidence to generalise my findings. However, the research can still be helpful for further research on mindsets, and I hope that it can be of use for similar incubators wishing to contribute to sustainability transformations.

This thesis intends to combine perspectives that are sometimes shown as separate, such as inner dimensions and strategic change or agency and structures. Exploring how inner dimensions such as mindsets are connected to other changes is essential to understand how to enable sustainability transformations. Seeing things as connected is an integral part of human geography, and I hope that these perspectives can contribute perspective to the discipline. Like the three spheres and this thesis illustrate, practical, political, and personal changes are interconnected, all important in geographical research. Moreover, this points to the relevance of linking the inner dimensions to strategic action. The personal aspects of people working on the ground with several different geographical topics related to the 2030 Sustainable Agenda matter for how they think, engage and enact change, illustrating how practical and political solutions are always based on the personal perception of individuals and groups. Change or innovation in itself is not necessarily a transformation (Feola, 2015). Changes in the practical or political sphere can also create transformations in the personal sphere; in other words, it can influence their inner dimensions when people participate in a practical event.

## 7.4 Concluding remarks – the complex relations between people, systems and planet

Mindsets and mindset shifts are not an endpoint; instead, it is a constant exploration process of reflexivity and challenging assumptions, ideas and beliefs, illustrating that a deep perspective is crucial in creating sustainable transformations. According to Meadows (1999: 18), change in a single individual can happen in a millisecond, "...all it takes is a click in the mind, a falling of scales from eyes, a new way of seeing..." To create changes in the society as a whole is more complex. However, change initiatives offer glimpses of new ways of thinking and being in

society as a whole. As argued in the introduction, implementing new solutions with the same mindsets that created the problem in the first place is problematic (Hutchings & Storm, 2019).

The sustainability challenges we as a society face are related to a mindset that does not see how people are connected to each other, other species, and the planet as a whole. To achieve successful sustainability transformations, how we position and view ourselves, and what we assume to be true, needs to be rethought and reflected on. An incubator program has the potential of being and creating an alternative system, where people can engage with transformative change. Engaging in and creating alternative systems allows people to focus on something that is happening and believing that this can change existing systems. Our engagement with the world means something, and through it, we can change paradigms.

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# Appendix

**A The interview guide team informants**

**Introduksjon**

1. Kan du starte med å fortelle meg litt mer om jobben din og hvor lenge du har jobbet der?

**Inkubatorprogrammet**

2. Hvorfor valgte du å starte/bli med i kommuneinkubatoren?
3. Hva håper du at inkubatoren vil oppnå?
4. Hva synes du har vært givende og utfordrende i utviklingen og implementeringen så langt?

**Arbeid og ledelse**

5. Hva er lederskap for deg?

**Mindset**

6. Hva er din forståelse av «mindset shifts» og relasjonen dette konseptet har til lederskap og bærekraft?
7. Hvilke «mindset shifts» ønsker du å se i kommuneinkubatoren?
8. Hvordan måler eller vurderer dere eventuelle «mindset shifts» i kommuneinkubatoren, altså hvordan kan man vite når det har skjedd et «mindset shift»?
9. Opplever du noen utfordringer ved å arbeide for «mindset shifts»?
10. Hva slags type «mindset shifts» mener du er nødvendig for å skape bærekraftige samfunn?
11. Har du selv opplevd et eller flere «mindset shifts», og hvordan påvirker det din tilnærming til bærekraft?

**Avslutning**

Tusen takk for intervjuet, og for at du tok deg tid! Alt du har fortalt er interessant for meg.

12. Er det noe mer du ønsker å tilføye, som ikke kom frem i intervjuet?

**B The interview guide participants**

**Introduksjon**

1. Kan du starte med å fortelle meg litt om jobben din og hvor lenge du har jobbet der?

   → Mulig oppfølging: hva er givende ved arbeidet ditt?

Så går vi videre til å snakke litt om inkubatorprogrammet.

**Inkubatorprogrammet**

2. Hvorfor valgte du bli med i kommuneinkubatoren?

3. Hva håper du å oppnå gjennom deltakelsen i inkubatoren? Både for deg personlig og i din kommune.

   → Mulig oppfølging: knytte det til arbeidet i sin kommune.

4. Hva synes du har vært givende og utfordrende så langt?

   → Mulig oppfølgingsspørsmål: Hvordan går det med prosjektet deres?

Da går vi over på skifter og perspektiver på endring knyttet til bærekraft. Vi skal først snakke om tro på egen endring og påvirkning, før vi går videre til lederskap, medvirkning og til slutt bevissthet rundt ting som verdier, verdensbilder og liknende.

**Mer i dybden på ulike mindset skifter:**

**A) Tro på egen endring og påvirkning (aktørskap), knytte det til bærekraft?**

5. I hvilken grad ser du på deg selv som viktig for å skape bærekraftig samfunnsendring, og hvordan?

   → Mulig oppfølging: både for deg personlig og i din jobb

6. Hva har påvirket hvordan du ser på dette?

   Hvordan ser du for deg at inkubatorprogrammet kan hjelpe deg til å lede endring?

**B) Lederskap, fra hierarkisk og ikke-hierarkisk**

7. Hva slags type lederskap tror du er nødvendig for å skape en mer bærekraftig fremtid?

8. Hva har påvirket hvordan du ser på ledelse? Har inkubatorprogrammet endret dette synet så langt?

**D) Fra top-down til overfladisk medvirkning til «reell» medvirkning**

9. Hva er dine tanker rundt medvirkningsprosesser, særlig knyttet til bærekraft?

   → Mulig oppfølging: hvordan kommer dette til syne i ditt arbeid?

10. Hva har påvirket ditt syn på medvirkning? Har inkubatorprogrammet påvirket dine perspektiv så langt?

**E) Bevissthet rundt egne mindsets, paradigmer, verdensbilder (the great shift?), perspektiv på perspektiv**

11. Hvilken rolle tror du at verdier, måten man ser på verden og andre personlige aspekter spiller i å få til en mer bærekraftig fremtid?

    → Mulig oppfølging: hvordan kommer dette til syne i ditt arbeid? Synes du det er viktig i ditt arbeid?

12. Har du erfaringer med hendelser eller prosesser som har skiftet ditt syn på verden? (eller som har skiftet noe for deg på noe vis? AHA-øyeblikk)

    På generelt nivå, hvilke hendelser og prosesser tror du kan påvirke og skifte måten folk ser på verden på eller måten de tenker på?

    → Mulig oppfølging: Har du noen eksempler fra eget liv?

**Avslutning**

13. Er det noe mer du ønsker å tilføye? Er det noen aspekter du mener ikke har blitt berørt, som er relevant for deg?

Tusen takk for intervjuet, og for at du tok deg tid! Jeg setter veldig stor pris på det.

Mal for intervjunotater

Mine følelser før intervjuet

Under

Etter

Hvordan var stemningen? Var det noe prat før eller etter?

Hvordan var det med tidsbruk?

Var det noen spørsmål som var vanskelig å forstå?

Generelle ting?

**C The consent form team informants**

<div align="center">

**Vil du delta i forskningsprosjektet**
*" Følgeforskning av SoCentral's kommuneinkubator"?*

</div>

I forbindelse med min masteroppgave i samfunnsgeografi ønsker jeg å be om samtykke til å kunne foreta feltarbeid i forbindelse med din deltakelse i kommuneinkubatoren 2020/2021. Formålet er å studere hvordan hvert enkelt individ kan skape endring i en gitt kontekst eller organisasjon. I dette skrivet gir vi deg informasjon om målene for prosjektet og hva deltakelse vil innebære for deg.

**Formål**

Formålet med prosjektet er å forstå hvordan skape endring for å løse komplekse problemstillinger relatert til bærekraft. Jeg ønsker å undersøke hvordan kommuneinkubatoren kan bidra til transformasjon hos deltakerne og innad i hver kommune gjennom ledelse, innovasjon og samarbeid. Jeg vil se på deltakernes refleksjoner rundt programmet og egen rolle i det å skape transformativ endring, ved å se på endringer i tankesett og hva dette innebærer, hvordan de skjer, og eventuelt hvilke konsekvenser de får for politiske og praktiske endringer. Gjennom observasjon av og deltakelse i kommuneinkubatoren, intervjuer, to spørreundersøkelser og tekstanalyse, er mitt mål å samle data for å analysere endringsprosesser og «mindset» knyttet til bærekraft. Denne forskningen vil informere videre drift av kommuneinkubator programmet til SoCentral.

Studiet er en masteroppgave tilknyttet Institutt for sosiologi og samfunnsgeografi ved Universitetet i Oslo.

Du inviteres til å delta i studien på bakgrunn av at du deltar i inkubatorprogrammet for kommuner i regi av SoCentral.

**Hvem er ansvarlig for forskningsprosjektet?**

Universitetet i Oslo er ansvarlig for prosjektet. Prosjektet er utført i tett samarbeid med SoCentral ved Karin Lindgård og Cathrine Skar. SoCentral ønsker følgeforskning for å forstå innvirkningen av programmet og for å informere videre utviklingsarbeid.

**Hva innebærer det for deg å delta?**

Deltakelse i studien innebærer at jeg følger den generelle prosessen i kommuneinkubatoren gjennom observasjon som vil kunne variere mellom deltakende og ikke-deltakende observasjon. Det innebærer at jeg kommer til å notere ned opplysninger under observasjoner, men det vil ikke brukes navn under observasjonene.

Deltakelse i studien innebærer også et intervju på 30-45 minutter. Spørsmålene i intervjuet vil i hovedsak omhandle din deltakelse i kommuneinkubatoren og arbeidet ditt knyttet til dette, oppfattelse av endringsprosesser og «mindset shifts», samt syn på og erfaring med bærekraft. Hvis du samtykker, vil det bli tatt lydopptak av intervjuet.

**Det er frivillig å delta**

Det er frivillig å delta i prosjektet. Hvis du velger å delta, kan du når som helst trekke samtykket tilbake uten å oppgi noen grunn. Alle dine personopplysninger vil da bli slettet. Det vil ikke ha noen negative konsekvenser for deg hvis du ikke vil delta eller senere velger å trekke deg.

**Ditt personvern – hvordan vi oppbevarer og bruker dine opplysninger**

Vi vil bare bruke opplysningene om deg til formålene vi har fortalt om i dette skrivet. Vi behandler opplysningene konfidensielt og i samsvar med personvernregelverket. Det er kun masterstudent og veiledere som vil ha tilgang til materialet. Navnet og kontaktopplysningene dine vil jeg erstatte med en kode som lagres på egen navneliste adskilt fra øvrige data. Du vil anonymiseres i publikasjon.

Det vil bli gitt mulighet for sitatsjekk før eventuelle sitater inkluderes i oppgaven. Opplysninger om ditt navn, yrke eller eksakt alder vil ikke inkluderes i oppgaven. Selv om ingen direkte personidentifiserende opplysninger inkluderes, så vil opplysninger om kommune og deltakelse i inkubatorprogrammet kunne være indirekte personidentifiserende.

**Hva skjer med opplysningene dine når vi avslutter forskningsprosjektet?**

Opplysningene slettes når prosjektet avsluttes/oppgaven er godkjent. Prosjektet er planlagt avsluttet i juni 2021. Alle lydopptak vil slettes, og personopplysninger anonymiseres.

**Dine rettigheter**

Så lenge du kan identifiseres i datamaterialet, har du rett til:

- innsyn i hvilke personopplysninger som er registrert om deg, og å få utlevert en kopi av opplysningene,
- å få rettet personopplysninger om deg,
- å få slettet personopplysninger om deg, og
- å sende klage til Datatilsynet om behandlingen av dine personopplysninger.

**Hva gir oss rett til å behandle personopplysninger om deg?**

Vi behandler opplysninger om deg basert på ditt samtykke. På oppdrag fra Universitetet i Oslo har NSD – Norsk senter for forskningsdata AS vurdert at behandlingen av personopplysninger i dette prosjektet er i samsvar med personvernregelverket.

**Hvor kan jeg finne ut mer?**

Hvis du har spørsmål til studien, eller ønsker å benytte deg av dine rettigheter, ta kontakt med:

- Emilie Asplund Lindøe på telefon 40631055 eller e-post emilie.lindoe@student.sv.uio.no.
- *Universitetet i Oslo* ved veileder *Karen O'Brien på telefon 22858480 eller e-post karen.obrien@sosgeo.uio.no eller Dina Hestad i cCHANGE på telefon 92462813 eller e-post* dina.hestad@*cchange.no*
- Vårt personvernombud: *Roger Markgraf-Bye. Personvernombudet kan nås via e-post: personvernombud@uio.no.*

Hvis du har spørsmål knyttet til NSD sin vurdering av prosjektet, kan du ta kontakt med:

- NSD – Norsk senter for forskningsdata AS på epost (personverntjenester@nsd.no) eller på telefon: 55 58 21 17.

Med vennlig hilsen

*Prosjektansvarlig*                              *Student*

(Forsker/veileder)


Karen O'Brien og Dina Hestad                    Emilie Asplund Lindøe

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**Samtykkeerklæring**


Jeg har mottatt og forstått informasjon om prosjektet «*Følgeforskning av SoCentral's kommuneinkubator*», og har fått anledning til å stille spørsmål. Jeg samtykker til:


☐ observasjon av prosessen i kommuneinkubatoren

☐ å delta i intervju

☐ at opplysninger om meg publiseres slik at jeg indirekte kan gjenkjennes (du vil anonymiseres, og ingen direkte personopplysninger vil inkluderes) om noen kjenner til min deltakelse i kommuneinkubatoren


Jeg samtykker til at mine opplysninger behandles frem til prosjektet er avsluttet juni 2021.



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(Signert av prosjektdeltaker, dato)

**D The consent form participants**

<div align="center">

**Vil du delta i forskningsprosjektet**
*"Følgeforskning av SoCentral's kommuneinkubator"?*

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I forbindelse med min masteroppgave i samfunnsgeografi ønsker jeg å be om samtykke til å kunne foreta feltarbeid i forbindelse med din deltakelse i kommuneinkubatoren 2020/2021. Formålet er å studere hvordan hvert enkelt individ kan skape endring i en gitt kontekst eller organisasjon. I dette skrivet gir vi deg informasjon om målene for prosjektet og hva deltakelse vil innebære for deg.

**Formål**

Formålet med prosjektet er å forstå hvordan skape endring for å løse komplekse problemstillinger relatert til bærekraft. Jeg ønsker å undersøke hvordan kommuneinkubatoren kan bidra til transformasjon hos deltakerne og innad i hver kommune gjennom ledelse, innovasjon og samarbeid. Jeg vil se på deltakernes refleksjoner rundt programmet og egen rolle i det å skape transformativ endring, ved å se på endringer i tankesett og hva dette innebærer, hvordan de skjer, og eventuelt hvilke konsekvenser de får for politiske og praktiske endringer. Gjennom observasjon av og deltakelse i kommuneinkubatoren, intervjuer, to spørreundersøkelser og tekstanalyse, er mitt mål å samle data for å analysere «motivasjon for endring og tro på egen påvirkningskraft». Denne forskningen vil informere videre drift av kommuneinkubator programmet til SoCentral.

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**Hva innebærer det for deg å delta?**

Deltakelse i studien innebærer at jeg følger den generelle prosessen i kommuneinkubatoren gjennom observasjon som vil kunne variere mellom deltakende og ikke-deltakende observasjon. Det innebærer at jeg kommer til å notere ned opplysninger under observasjoner, men det vil ikke brukes navn under observasjonene. Deltakelse i studien innebærer også to korte elektroniske spørreundersøkelser gjennom inkubatorprogrammet knyttet til å skape endring, og to intervjuer på rundt 30 minutter med noen av deltakerne som selvfølgelig er frivillig å delta på. Jeg skal benytte Survey Monkey for å gjennomføre den elektroniske spørreundersøkelsen. Spørsmålene i intervjuet vil i hovedsak omhandle din deltakelse i kommuneinkubatoren, problemstillingen din kommune fokuserer på og arbeidet ditt knyttet til dette, oppfattelse av endringsprosesser, samt syn på og erfaring med bærekraft. I tillegg kan det bli aktuelt å snakke om syn på verdier. Hvis du samtykker, vil det bli tatt lydopptak av intervjuet, i tillegg til notater. Dine svar fra et eventuelt spørreskjema blir registrert elektronisk.

**Det er frivillig å delta**

Det er frivillig å delta i prosjektet. Hvis du velger å delta, kan du når som helst trekke samtykket tilbake uten å oppgi noen grunn. Alle dine personopplysninger vil da bli slettet. Det vil ikke ha noen negative konsekvenser for deg hvis du ikke vil delta eller senere velger å trekke deg.

**Ditt personvern – hvordan vi oppbevarer og bruker dine opplysninger**

Vi vil bare bruke opplysningene om deg til formålene vi har fortalt om i dette skrivet. Vi behandler opplysningene konfidensielt og i samsvar med personvernregelverket. Det er kun masterstudent og veiledere som vil ha tilgang til materialet. Navnet og kontaktopplysningene dine vil jeg erstatte med en kode som lagres på egen navneliste adskilt fra øvrige data. Du vil anonymiseres i publikasjon.

Det vil bli gitt mulighet for sitatsjekk før eventuelle sitater inkluderes i oppgaven. Opplysninger om ditt navn, yrke eller eksakt alder vil ikke inkluderes i oppgaven. Selv om ingen direkte personidentifiserende opplysninger inkluderes, så vil opplysninger om kommune og deltakelse i inkubatorprogrammet kunne være indirekte personidentifiserende.

**Hva skjer med opplysningene dine når vi avslutter forskningsprosjektet?**

Opplysningene slettes når prosjektet avsluttes/oppgaven er godkjent. Prosjektet er planlagt avsluttet i juni 2021. Alle lydopptak vil slettes, og personopplysninger anonymiseres.

**Dine rettigheter**

Så lenge du kan identifiseres i datamaterialet, har du rett til:

- innsyn i hvilke personopplysninger som er registrert om deg, og å få utlevert en kopi av opplysningene,
- å få rettet personopplysninger om deg,
- å få slettet personopplysninger om deg, og
- å sende klage til Datatilsynet om behandlingen av dine personopplysninger.

**Hva gir oss rett til å behandle personopplysninger om deg?**

Vi behandler opplysninger om deg basert på ditt samtykke. På oppdrag fra Universitetet i Oslo har NSD – Norsk senter for forskningsdata AS vurdert at behandlingen av personopplysninger i dette prosjektet er i samsvar med personvernregelverket.

**Hvor kan jeg finne ut mer?**

Hvis du har spørsmål til studien, eller ønsker å benytte deg av dine rettigheter, ta kontakt med:

- Emilie Asplund Lindøe på telefon 40631055 eller e-post emilie.lindoe@student.sv.uio.no.
- *Universitetet i Oslo* ved veileder *Karen O'Brien på telefon 22858480 eller e-post karen.obrien@sosgeo.uio.no eller Dina Hestad i cCHANGE på telefon 92462813 eller e-post* dina.hestad@*cchange.no*
- Vårt personvernombud: *Roger Markgraf-Bye. Personvernombudet kan nås via e-post: personvernombud@uio.no.*

Hvis du har spørsmål knyttet til NSD sin vurdering av prosjektet, kan du ta kontakt med:

- NSD – Norsk senter for forskningsdata AS på epost (personverntjenester@nsd.no) eller på telefon: 55 58 21 17.

Med vennlig hilsen

*Prosjektansvarlig*                                    *Eventuelt student*
(Forsker/veileder)

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**Samtykkeerklæring**

Jeg har mottatt og forstått informasjon om prosjektet *[sett inn tittel]*, og har fått anledning til å stille spørsmål. Jeg samtykker til:

☐  observasjon av prosessen i kommuneinkubatoren

☐  å delta i spørreundersøkelse

☐  å delta i intervju dersom det blir aktuelt

☐  at opplysninger om meg publiseres slik at jeg indirekte kan gjenkjennes (du vil anonymiseres) om noen kjenner til min deltakelse i kommuneinkubatoren

Jeg samtykker til at mine opplysninger behandles frem til prosjektet er avsluttet sommeren 2021.

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(Signert av prosjektdeltaker, dato)

**E Approval from NSD**

Det innsendte meldeskjemaet med referansekode 937191 er nå vurdert av NSD.

Følgende vurdering er gitt:

Det er vår vurdering at behandlingen av personopplysninger i prosjektet vil være i samsvar med personvernlovgivningen så fremt den gjennomføres i tråd med det som er dokumentert i meldeskjemaet med vedlegg den 25.11.2020, samt i meldingsdialogen mellom innmelder og NSD. Behandlingen kan starte.

DEL PROSJEKTET MED PROSJEKTANSVARLIG Det er obligatorisk for studenter å dele meldeskjemaet med prosjektansvarlig (veileder). Det gjøres ved å trykke på "Del prosjekt" i meldeskjemaet.

MELD VESENTLIGE ENDRINGER Dersom det skjer vesentlige endringer i behandlingen av personopplysninger, kan det være nødvendig å melde dette til NSD ved å oppdatere meldeskjemaet. Før du melder inn en endring, oppfordrer vi deg til å lese om hvilke type endringer det er nødvendig å melde:
nsd.no/personvernombud/meld_prosjekt/meld_endringer.html Du må vente på svar fra NSD før endringen gjennomføres.

TYPE OPPLYSNINGER OG VARIGHET Prosjektet vil behandle alminnelige kategorier av personopplysninger frem til 10.06.2021.

LOVLIG GRUNNLAG Prosjektet vil innhente samtykke fra de registrerte til behandlingen av personopplysninger. Vår vurdering er at prosjektet legger opp til et samtykke i samsvar med kravene i art. 4 og 7, ved at det er en frivillig, spesifikk, informert og utvetydig bekreftelse som kan dokumenteres, og som den registrerte kan trekke tilbake. Lovlig grunnlag for behandlingen vil dermed være den registrertes samtykke, jf. personvernforordningen art. 6 nr. 1 bokstav a.

PERSONVERNPRINSIPPER NSD vurderer at den planlagte behandlingen av personopplysninger vil følge prinsippene i personvernforordningen om: • lovlighet, rettferdighet og åpenhet (art. 5.1 a), ved at de registrerte får tilfredsstillende informasjon om og samtykker til behandlingen • formålsbegrensning (art. 5.1 b), ved at personopplysninger samles inn for spesifikke, uttrykkelig angitte og berettigede formål, og ikke behandles til nye, uforenlige formål • dataminimering (art. 5.1 c), ved at det kun behandles opplysninger som er adekvate, relevante og nødvendige for formålet med prosjektet • lagringsbegrensning (art. 5.1 e), ved at personopplysningene ikke lagres lengre enn nødvendig for å oppfylle formålet

DE REGISTRERTES RETTIGHETER Så lenge de registrerte kan identifiseres i datamaterialet vil de ha følgende rettigheter: åpenhet (art. 12), informasjon (art. 13), innsyn (art. 15), retting (art. 16), sletting (art. 17), begrensning (art. 18), underretning (art. 19), dataportabilitet (art. 20). NSD vurderer at informasjonen om behandlingen som de registrerte vil motta oppfyller lovens krav til form og innhold, jf. art. 12.1 og art. 13. Vi minner om at hvis en registrert tar kontakt om sine rettigheter, har behandlingsansvarlig institusjon plikt til å svare innen en måned.

FØLG DIN INSTITUSJONS RETNINGSLINJER NSD legger til grunn at behandlingen oppfyller kravene i personvernforordningen om riktighet (art. 5.1 d), integritet og konfidensialitet (art. 5.1. f) og sikkerhet (art. 32). SurveyMonkey er databehandler i prosjektet. NSD legger til grunn at behandlingen oppfyller kravene til bruk av databehandler, jf. art 28 og 29. For å forsikre dere om at kravene oppfylles, må dere følge interne retningslinjer og/eller rådføre dere med behandlingsansvarlig institusjon.

OPPFØLGING AV PROSJEKTET NSD vil følge opp ved planlagt avslutning for å avklare om behandlingen av personopplysningene er avsluttet.

Lykke til med prosjektet!

Tlf. Personverntjenester: 55 58 21 17 (tast 1)