Collaboration based on Shared-Stewardship Principles in collective (industrial) value chains for local linen - From a Transactional Chain to a Relational network

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Abstract:

The brokered nature of supply chains in the global textile industry leads to a division of production practices and responsibilities, leading to a disconnection between people and their environment. Forms of collaboration that emphasise a relational understanding are required in partnerships that respect social and ecological values (instead of focusing on economic values). Such collaboration is evident in 'the commons': dynamic social systems where people meet shared needs through self-organisation. The Shared-Stewardship program from The Linen Project embraces commoning, allowing an organisational structure to emerge. In the 'Collective Value Chain of Local Linen'-project, partners experience processes from flax cultivation to linen textiles. We explore how the collaboration between different actors emerges while creating a collective (industrial) value network. In doing so, we adhere to the values of proximity and collectiveness, referred to as principles of shared-stewardship. We suggest four practices for collaborating in a relational network: dreaming, feeling, understanding, emerging.

Keywords: Collective value creation; Shared-Stewardship; Collaborative Business Models; Relational Network; Sustainable Linen Textiles

1 Introduction

The current global textile and fashion industry is linear and unsustainable. Outsourcing and relying on subcontractors lead producing parties to focus on their own interest, taking little or no responsibility for the negative impact of textile production such as environmental damage or exploitation of farmers and tailors. The relationship between producing parties is characterised by financial transactions, where economic values such as price and profit have become dominant. Relationships grounded in a monetary understanding of transactions, together with the internationally brokered nature of supply chains, have an amplifying effect on social and ecological disconnections in the system. The resulting system caused a fragmentation of skills, knowledge and expertise throughout the chain. Countering these destructive modes of production requires restoring and building social and ecological connections. Social connections are, among other things, formed during shared ambitions, collaboration, mutual respect and reciprocity. By working together and truly joining forces, partnerships are formed in which knowledge and ideas can be shared, exchanged and created (Jonker et al., 2018). These formations of collaborations are seen as vehicle for building social connections and contribute to sharing knowledge and bringing expertise together. Partnerships that start with an intrinsic motivation and a shared vision tend to use a more holistic approach while putting people and nature at its core (Janssen et al., 2022). Rebuilding ecological connections involves integrating a more relational understanding of natural materials in different aspects of our lives.

The conventional textile market is lately dominated by synthetic fibres and textiles, which could be produced more cheaply. In the Netherlands for instance, towards the end of the 19th century and into the 20th century, the cultivation of flax gradually declined. Nowadays, however, there is a renewed interest in more sustainable and natural fibres, which has led to a revival of flax cultivation in some regions. An initiative by ArtEZ MA Practice Held in Common and the Crafts Council Nederland, called 'The Linen Project', investigates and works towards reactivating the economic viability of local flax cultivation and linen production in the Netherlands. 'The Linen Project' is committed to identifying, evolving, and strengthening socio-economic patterns and behaviours that are rooted in a commoning approach. Their latest project 'Collective Value Chain of Local Linen' focuses on creating a collective (industrial) value chain for local linen in the Netherlands. Different actors/partners will together experience the processes of farming, spinning, weaving, and design and make a linen end-product. Through participatory research and using our tool for developing Collaborative Business Models, we explore how the collaboration between different actors emerges, while creating a collective (industrial) value network. In doing so, we adhere to the values of proximity and collectiveness, referred to as principles of shared-stewardship.

2 Literature

Collaborative Business Models

To build social and ecological connections in a value system, collaboration is important. Working together and sharing knowledge, companies in the value system can foster

positive impact beyond their own activities resulting in a more holistic approach to production while being attentive to the social and ecological values involved. Collaboration has a lot of benefits, like increasing knowledge flows, better access to resources, sharing risks and more sustainable production. Brown at al., (2019) indicate that a high level of collaboration supports more creative space and system innovation. Communities are formed in which knowledge and ideas can be shared, exchanged and created (Jonker et al., 2018). Far-reaching collaboration in a value chain requires to be decisive and conscious of sharing resources and risks over involved participants in the value network, in which transparency and trust are essential (Janssen and Stel, 2018). This means that both for the network and for the different people involved, the business model must create added value (Kraaijenbrink et al., 2019). Business models need to be shaped by different actors as a collective endeavour, referred to as collaborative business models. Collaborative business models can produce various social and environmental benefits, along with economic value, by focusing on better-aligned collaborative and collective approaches (Jonker et al., 2020; Planko and Cramer, 2021) For this, organisations have to 'rethink' how they organise their business, which involves a movement towards an economy that no longer sees human and nature as a resource for profit-maximisation, but as a partner in creating well-being for everyone in harmony with the earth (Spaas, 2020).

Commoning

An approach that offers a framework in which actors balance social and ecological values, is the approach of the economy for the common goods (ECG), that builds on a holistic, new and sustainable economic model. It aims for the protection of biodiversity, the regionalisation of local resilience, cooperation, and participation on all levels. The commons as described by Bollier and Helfrich (2019) are dynamic social systems in which people meet their shared needs in self-organised ways. People are not previously bounded to organisational structures that set boundaries. The social practice of commoning arises from values that lie in non-market spheres such as in community and care. Commons are grounded in an economic, social, and cultural paradigm based on peer governance, social life, and provisioning (Bollier & Helfrich, 2019; Bollier, 2021). Felber et al. (2021) address the paradox between competition and cooperation in commoning. They state that where competition is recognised to improve efficiency, cooperation outperforms competition in motivating working together, the key to innovation. Innovation in the light of competition can be seen as an engine for competitive market advantage and return on capital investment. On the other hand, innovation can be seen as 'creative adaptation to ever-changing needs in ways that are shared and convivial' (Bollier & Helfrich, 2019:63). Social life fosters a culture based on 'cultivating shared purpose and values', 'ritualising togetherness', and 'practicing gentle reciprocity' (Bollier & Helfrich, 2019). Adhering to these processes requires a relational understanding of one's own position.

Stewardship

The Shared-Stewardship program from The Linen Project embraces commoning allowing an organisational structure to emerge. Since people in an industrial chain are bounded to organisational structures, we adhere to stewardship theories in a commercial and organisational context. An understanding of different approaches of stewardship enables a holistic approach to stewardship for collaborating in a collective (industrial) chain for local linen. The approaches differ in the perceived interrelatedness with land, people and organisations.

In management theories, stewardship has focused on the role of high-level managers within the organisation. Davis et al. (1997) suggested psychological and situational factors that characterise stewardship approaches to relationships in a corporate context. Relational psychological mechanisms, such as intrinsic motivation, and situational mechanisms, such as risk orientation based on trust, long term thinking, and collectivist culture are drivers of stewardship relations. In this context, stewards serve collective economic objectives such as sales growth, profitability, and protecting and maximising shareholders' wealth. Here, wealth is understood as monetary value. An organisational structure that focusses on facilitation and empowerment, rather than monitoring and control, fosters a stewards' autonomy and relational actions (Davis et al., 1997). Focusing on stewardship relations within one organisation, they highlight the relational aspects that underlie stewardship, but are not attentive to the relationship with other organisations, the interrelation with their environment and how social and ecological values drive these relationships.

Going beyond economic objectives and the focus within one organisation, Gavin et al. (2015) described an approach of stewardship that is dynamic and fosters interdependent social-ecological systems. Similarly, Mathevet et al. (2018) argue, in the context of sustainability science and conservation biology, in favour of framing stewardship in the socio-ecological context. Recognising that stewardship is used based on different political ideological and environmental discourses, they argue for social learning through being vulnerable and a systemic understanding of social-ecological dynamics. Gavin et al. (2015) highlight the importance of acknowledging multiple objectives and stakeholders, building partnerships and relations, respecting and incorporating different knowledge systems and worldviews.

3 Method

Case: Collective Value Chain Local Linen

Our research is part of an 18-months project (Collective Value Chain of Local Linen, CLICK NL), referred to as 'ColLin' in which the consortium partners share the ambition to design and produce products with flax cultivated (and linen woven) in the Netherlands. The consortium consists of three Dutch textile retailers and a small-scale industrial weaving mill in the Netherlands, guided by The Linen Project, with participation of the Centre of Expertise Wellbeing Economy & New Entrepreneurship of Avans University of Applied Sciences. The project aims to create, deliver and capture the value of local linen, meaning the ability to ensure that the love and attention a partner adds to the material are received and shared throughout the chain. The initiators relate to their 'Shared-Stewardship' approach, in which a group of stewards collectively and by hand experienced the process of cultivating flax, processing fibres, and creating linen products. This Shared-Stewardship approach is inspired by the commons and is grounded in an understanding of working with nature rather than working on nature. This requires a

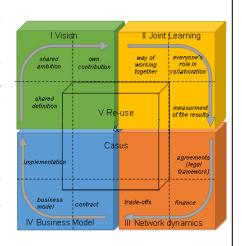
different approach from the linear economic system which sees nature as resource. Shared-Stewardship is seen as a self-organising participation model, based on principles as collectiveness and proximity. People learn by doing, building relationships with each other and the material overtime. It aims for an increasing involvement in the living environment with a focus on knowledge development transfer, shared responsibility, and active citizenship. In practice, it means that people jointly make decisions, set boundaries, establish rules, and develop methods to deal with conflict. Overcoming challenges and finding coming ground in a shared interests gives rise to inspiring each other and finding new ways to work together. It is important that each participant (steward) is giving time and space to allow reciprocal connections to emerge, both socially and ecologically.

Research design

We use a participatory research approach to explore how collaboration between different actors emerges, while creating this collective (industrial) value network. Participatory research is a research approach in which researchers work with community participants or stakeholders to formulate research questions, collect data, conduct analyses and draw conclusions. The goal is to create knowledge relevant to the partners involved and to promote change based on this knowledge. To achieve this, the consortium went collectively through the entire chain by organised fieldtrips and (online)meetings. Space was given for asking questions, experiencing the work and taking notes. In addition, two rounds of semi-structured interviews were organised to explore the challenges and opportunities of establishing a collective value chain in which all stakeholders actively participate, feel responsible and connect to each other. We started the first interviews by mapping all partners that are involved in the process of making a linen product, using backcasting. Backcasting starts with defining a desirable future and then working backwards to the present. Partners created an overview of the (ideal) processes and people needed to work towards the desired future. While mapping all partners in the universe, we discussed how they would like to build and design the value chain. We specifically paid attention to the relational aspect in the system, like perceived proximity and collectiveness. Our Tool for Developing Collaborative Business Models was used to guide these conversations.

In step 'I Vision', partners discuss their visions on circular possibilities. Partners need to agree on what they want to achieve and define their 'point on the horizon'. Defining a vision provides coordination between the partners and provides guidance and orientation on the joint actions and collective goals. Future visions contribute to the transition to a circular construction sector, for example, through pilot projects and demonstrations that showcase the potential gains.

In step 'II Joint Learning', partners share information that individuals assimilate and apply in subsequent actions for themselves. First-order learning leads to new insights about options for a particular challenge and context, whereas higher-order learning can change problem definitions, norms, values, beliefs and goals of actors. The latter is necessary to implement radically new sustainable solutions and to support required change processes.



In step 'III Network Dynamics' participants will find out how they are linked to each other. Organisations, companies and individuals are connected through different types of relationships. The connections not only arise from a technological transition but are also social. On the one hand, partners look at how they are connected based on their essential contributions to the project, and on the other hand, partners contemplate their relationship in terms of (1) strategic elements, (2) cooperation elements in shared activities and (3) cultural elements such as trust and transparency.

In step 'IV Business Model', partners will redesign their business models. This redesign is essential for creating ecological and social value. A circular business model is defined as the rationale to create, deliver and capture value with and within closed material loops.

Figure 1. A steppingstone tool for Collaborative Business Models (Janssen et al., 2020)

4 Results

Vision

Taking care of the flax

The initiators from the 'ColLin'-project started with a dream to bring the love for flax into an industrial chain and collectively take care of it. They have the ambition to build a more balanced, caring and equitable future and to contribute to the restoration of nature by fostering a local linen economy. They believe that when chain partners engage with all different phases of growing flax and creating a linen product, each participant has the opportunity to convey their love and passion to others.

Creating awareness

Results show that the 'ColLin'-partners share the ambition to create awareness on how a linen fabric is produced. For most of them it is important to be able to tell where the product's material comes from and what it is made off. Being able to tell the story about

the making process allows for explaining the added value of (local) products and fosters a growing appreciation for the material. They collectively state that experiencing each other's processes contributes to tell the story about local linen. As partners serve different markets and engage with different levels of consumers' interest in the story of the product, partners differ in their approach to creating the story. One partner mentioned: 'Customers like the connection with the farmer best. That's where it comes from. They believe the rest.' Partners tent to adjust their story to the needs and the level of critical engagement of the consumer.

Telling the story

Currently, partners are still developing their approach to their story -from the marketing perspective of their own company, as well as the message from the collective. The field visits inspire and contribute to building the narrative. The story of the consortium is about establishing a local linen chain. The perceived proximity, in terms of both geographical and relational factors, influences the perception of local in an industrial chain. Respondents share the idea that not the whole process needs to take place in the Netherlands. Being local is relative and not bounded to regions or national borders: 'If it is dropped off in the Netherlands, we define it as our local chain. But if a company is located in Limburg? Cologne is closer than Amsterdam.' The consortium defines Western Europe as 'local' for manufacturing practices based on the geographic scope of the organisation. This also relates to the social and environmental regulations to which companies in Europe need to adhere (like working conditions and pesticide use), even if this means a higher price for materials or labour.

Connecting to each other

Furthermore, the relational aspect affects the perceived distance, which relies on how approachable people in the chain are and the information access they have. For example, sharing pictures of processes, such as a farmer sharing images of growing flax, has been suggested to foster a sense of connectedness. However, during the start of the project, the consortium had no (shared) understanding of the meaning of a collective value chain for local linen or how it should be organised. One partner mentioned: 'A collective value chain is knowing the added value from each other, knowing what you are doing. Everybody being able to get a fair share. But it also needs to be possible.' Another partner mentioned the importance of reciprocity, while the other partners did not have a concrete idea about it. The common ground is found in the ambition to work with a local linen product and tell this locally grown linen story.

Joined learning

Mapping roles and positions

Understanding one's role in relation to others in the value network is important for determining how one can contribute to building social and ecological connections. Mapping the different activities and partners through backcasting, partners were able to reflect on their own role and position in relation to the flax and the engagement within the network. For example, one partner started by drawing a heart with a circle around it. The heart symbolised the love for flax. The circle represents people who want to take care of the flax and preserve the value of the material. They point out that by putting the flax in

the middle, people organise themselves around the flax: 'Like, what does the land gives us and what do we do with it? Instead of, this is what I need and I have to reason back to what the land should give to me.' This means that designing a linen product emerges from the cultivated flax, and the people actively involved, instead of a previous determined end-product. Another partner started with mapping the steps involved in the production process, by naming the people rather than the process steps involved. This partner ended up in drawing a tree, representing the lively process in which relationships evolve. The roots symbolised the designers' close connection to the patternmaker, as that is the respondents starting point for new product designs. The trunk represented production partners, and new branches represented new relations. Other partners drew more linear processes in which the consumer demand or wishes were more represented. These different approaches show that the level of the partners' engagement with key processes influences relationships in the network and how these translates into possibilities for product design.

Experiencing each process step

Experiencing the process of the farmer, processor, spinner, and weaver allows for growing an understanding what processes influence the quality of the fabric and the opportunities for product design. This engagement contributes to more knowledge and insights into each specific process step which enlarges the perception of proximity and feelings of connectivity. Partners indicate the weaver as an important player in the network and distinguish two ways of working together. They indicate that they can communicate product specifications to the weaver, and let the weaver decide on the design of the fabric, or that they can collaborate more closely and discuss the opportunities for product design together: 'Weavers have a good oversight of what yarns do/can do when making a fabric.' One partner expressed interest in visiting the spinner to learn more about yarns. This helps to understand the weaver better and have more technical oriented conversations about fabric design and quality. Visiting the spinner once is overall considered interesting in terms of educating oneself about the technical processes of fabric production. However, partners indicate they do not aim to establish direct relationship with the spinner. Partners trust and build on the weaver's knowledge and know-how. Similar thoughts are expressed towards the farmer. Farmers have the know-how to work with the land. Partners overall express that everyone should do what they are good at. Understanding what that exactly means requires engaging with each other's knowledge on field trips.

Recognising embodied knowledge

The project initiators experienced working on the field with farmers (in a previous project) and stressed the importance of 'embodied knowledge' in relation to the disconnection with the farmer. Embodied knowledge refers to knowledge that is not just the result of intellectual processes but knowledge that is embedded in our bodies, actions, and experiences, which arises from one's physical interactions with the environment. Recognising each other's embodied knowledge contributes to understanding the value that is inscribed in textiles and growing appreciation for it. For example, when visiting the flax processing organisation, the partners learned about how the quality of flax is expressed through the character of the flax. The quality of the flax is judged by experienced people. They feel, look at, and listen to (the sound of) the flax. An indication

of the strength of the flax is a sound that is produced by making a quick 'pull and push motion' with flax in both hands.

Reaching homogenous quality

Feeling the material is also important throughout the chain, all the way to the consumer. Feeling the fabric tells a lot about the fabric and its quality. One partner expressed: 'That's why in the process of selling the product we let people feel [the fabric]. The more tactile, …, the better.' Partners state that they believe that consumers prefer a constant, homogenous quality of linen: 'If I buy a linen product that I like, I want to be sure that if I buy it again, it will be exactly the same.' This requires blending flax from different years, different farmers, different regions since flax is not a homogeneous product. It is sensitive to the environment in which it is grown. Farmers deal with factors beyond their control, such as the weather. Changing climate conditions are impacting the quality of their harvest accordingly, which influence the look and feel of every harvest (e.g. colour, strength, fineness, brilliance, and weight). The journey of turning flax into a linen product can therefore be a layered story. The narrative is about the so-called local product (Dutch Linen), made by combining the harvest from different Dutch farmers. 'I do not see added value in linking to one farmer or field, we need to provide consistent quality over several years.'

Acting instinctively

This notion of consistency is also reflected in the scope for organisations to experiment. Larger organisations are caught in retail choice (consumer demand) and have less room for sustainable innovations (within a certain bandwidth). Results indicate that partners also inspire each other with how they engage with their embodied knowledge, as the following example illustrates. A larger organisation brought up that they were inspired by the 'intuitive way of working' of an independent designer. They saw that self-employed designers could act according to their own insight and intuition. This instinctive acting worked inspiring: 'We operate in an organisation with a solid framework. From the project, I now bring in acting according to intuition. [...] Let's just indeed try something new, without always having to know the answers beforehand.' The company experiences that this way of working created interest and inspired a way of thinking that stimulates going beyond the known. Results indicate that engaging with each other's embodied knowledge influences the way of working together.

Network dynamics

Focusing on learning together

Learning to work outside conventional ways requires making room for experimentation. To encourage paying attention to social and ecological connections, the project initiators proposed a range of different models to connect to farmers or materials to the consortium. For instance, partners could collectively invest in a farmer's field, care for it together and use the harvest outcome for their products. Discussion of the models showed that the partners could not yet imagine how it would work if they connected to one farmer. In addition, most partners did not express the need to take care or share risks with farmers in such a (financial) partnership. They indicate to focusing on learning how to work with local linen fabric.

Defining scale

Moreover, while discussing the possibility of investing in a farmer's field, the question arose of how much land they together can take care off. One partner had an idea about how many products they wanted to produce, reasoning the hectare of land from there. During the calculation, the processor asked questions about what part of the flax (long versus short fibres) the consortium wanted to use and what the required quality needed to be: 'As a harvest is never sure, the envisioned end-goal determines the number of acres you would like to invest in.' This dialogue learned the partners that the scale on which they want to operate is not suitable for working with one farmer. While discussing the amount of textile products partners make, one partner indicated that the amount of what they produce in one year comparable to what the processor converts in one day. That difference made the partner doubt the usefulness of investing in the land of one particular farmer. A similar tendency was seen when discussing the role of a different partner in the project. This partner mentioned that their share in terms of order quantity of linen in the project was little and expressed that their role is mainly to convey the message of local linen. Building on this, partners express that they are open to new ways of collaborating, and it would help if there were clear questions with clear understandings of how one could contribute to the system: 'Knowing what the possibilities are. Knowing how big or small I am. What my contribution could or should be.'

Growing appreciation

This is also seen when partners are discussing opportunities that require adjustments in conventional ways of working together. Working with Dutch linen requires the weaver to experiment a lot to meet the desired technicalities for fabric. The weaver buys yarn from the spinner which is normally determined by a minimum order quantity. For the project, the weaver explained the ambition to the spinner. The spinner understood and allowed the weaver to order an amount of yarn that did not meet the minimum order quantity. Getting to know each other beyond the product allows for growing appreciation. Trust and giving as well as receiving appreciation are perceived to foster collaboration. In this context, partners also expressed that the organised field trips were necessary to better understand each other, and the processes involved.

Encouraging contact moments

By discussing alternative ways of working that adhere to social and ecological values, partners open up the conversation to reflect on conventional ways of working. These dialogues are facilitated partly by the project initiators and continue beyond the project, resulting in more critical dialogue throughout the chain. The project initiators learned about their role in the process of working towards a collective local linen chain. They realised that expressing their love for linen is a continuous process that is translated in encouraging the partners to go on field trips and stimulate dialogue. Recurring facilitated dialogue in a group setting is necessary to work towards a collective.

Managing relationships

Findings indicate that some of the partners face difficulties in the fact that not the entire chain is represented. For instance, the process up to and including spinning is not in the partnership now: 'We need to have the conversation with whether they [the farmer or the spinner] agrees to their own risk, or the story.' For this, managing relationships is

important, visiting each other, discussing quality. It became clear that the quality of the fabric depends on the harvest of the flax (see above) and that this has consequences for the end-product. If chain partners understand why a fabric is not plain, they could have a better understanding of it. This goes in both directions: 'Farmers and seed representatives should also get experience with the final product, then they will know what they are doing it for.' Respondents think that when partners are more conscious about the responsibilities and risks of different activities of the partners, they could help each other. By getting to know each other people learn where you can complement each other. By learning by doing, partners find out how to implement this in an industrial chain. Creating awareness should happen on all levels, as a systemic approach.

Collaborative Business Models

Developing opportunities

In the transactional way of working, collaborations are built on opportunities that are guided by minimal order quantity or a solid (low) price. In relational chains, opportunities evolve around aspects like sharing knowledge, seeking alternative ways of working together, attentiveness and learning unfamiliar concepts and used vocabulary by the others. Cultivating mutual understanding comes from being open to conversations about perceived challenges and reflecting on one's own position in the industrial chain. While being bounded to a financial system in which the partners express the need to be financial sustainable, conversations about sharing risks arose: 'It can go wrong on several aspects. How to make sure risks are shared, and how to prevent damage if risk comes out. What are human errors, what can be prevented. What are ways to share the variables shared by all?'

Engaging socially and ecologically

By engaging with local linen -through conveying the story, fieldtrips, and reflective dialogues- partners were able to ask themselves, and the others involved, critical questions on how the collective chain can be established. One partner indicated: 'You are only open to more information once you have processed the first information.' Reflecting on their own role allowed partners to rethink their role in the system. Getting to know each other is an ongoing process which takes time and space to let things emerge and evolve.

Creating an emerging space

The project initiators and researchers stimulate partners to think out of the box and facilitate possibilities while not forcing commitments to a certain direction: 'I think we are a facilitator and have shown a way, opened a world, where things can emerge.' This is also illustrated by open character of the meetings. They do not perse have a set agenda or defined end goal. One respondent indicates: 'I do not know if we should get something out of it.' How to share and divide responsibilities is yet to be explored and will emerge from how partners find common ground while working and exploring together. For this, the project allowed partners to imagine different ways of working and designing products while learning about one's place in the system at large.

Facilitating education

The project initiators expressed that educating is an important factor in the work they do. By facilitating education, organising meetings, and stimulating dialogue, they allow different parties to be in the same conversation. In doing so, partners are being attentive to the different knowledge spheres from the multiple process steps involved (from seed to end-use). Results indicate that the partnership has not yet decided how they would like to collaborate in the network. They are in the process of gaining insights into all the variables. They indicate that it is first about building relationships and that opportunities emerge while spending time together.

5 Conclusion

From a transactional chain to a relational network

From a transactional chain to a relational network is a dynamic process that needs a holistic approach and requires getting to know each other, learning about each other's embodied knowledge, each other's needs and added value and combining the different knowledge – from seed to end-user. It is important to bring existing or emerging dilemmas and challenges in an open dialogue with each other and find a creative approach to these issues. This requires from all parties the willingness to adapt, by transforming and letting go of old patterns. The conversations should be more about the relationship, behaviour, intention and, most importantly, shared visions. For this it is crucial to invest in each other and built a respectful relational network. Partners need to work together based on knowledge exchange, mutual understanding, while being aware of each other's expectations. By integrating site visits, planning time to get to know each other, sharing honest stories and self-consciousness, the relational chain can be strengthened. We suggest four practices to adhere to when working towards a relational way of working. The described practices are all interconnected and there is no beginning nor an end.

In figure 2 the relational aspects are added to the building blocks of the Tool for Collaborative Business Models. The processes are organised around the flax and linen to adhere to the ecological values.

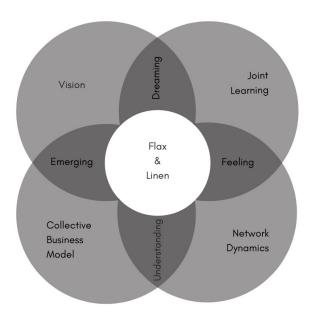


Figure 2. Social and ecological connections in a Collaborative Business Model

Dreaming (Shared vision)

The project initiators started with a dream to bring the love for flax into an industrial chain and to foster (re)building social and ecological connections in a local linen chain. Although partners are bound to a financial system in which they express the need to be financially sustainable, the project centres around social and ecological values. This requires (re)imagining ways of working together and taking responsibility for people, material, and the environment. Partners experience the whole process, make connections, and learn by asking questions to think out of the box. To move beyond assumptions and dream about possibilities, it is necessary that dialogue and gatherings are facilitated, since finding out and formulating the shared values is everyone's responsibility.

Feeling (joint learning)

Exploring and understanding new roles and collaborations is a dynamic process that requires investing in building relationships. Field trips, gatherings, and ongoing dialogues create opportunities for reflection and gaining a deeper understanding of where one's own contribution can meet another's challenge. Being in each other's environment stimulates people to experience each other parts of the network. Adhering to embodied knowledge

allows for growing appreciation towards the people, the material, and the environment. Also, feeling, hearing, and seeing each other in real life allows for multiple knowledge systems to create an openness for creative working methods.

Understanding (network dynamics)

Rebuilding social and ecological connections requires us to slow down and recognise where challenges and opportunities meet. Slowing down is a way to understand our surroundings, the context we're in, and the network that we are a part of. Understanding contributes to seeing connections between things that seemed unrelated, ultimately facilitating the discovery of common ground in shared values. Education on different knowledge systems, including ecological and social values, is necessary to understand one's position and value in relation to others, and to determine one's role, responsibility, and contribution in the larger system.

Emerging (collaborative business model)

The project began with the ambition of engaging partners in various process steps, from farming to spinning and weaving, and designing and creating linen products. Facilitated gatherings and dialogues are essential for partners to learn how to ask the right questions and create space for new collaborations to emerge. Learning is an ongoing process, with knowledge accumulating over time. Throughout the project, new perspectives and insights about one's role emerge, influencing both personal and group processes. Creating time and space allows relationships to develop based on a mutual understanding of responsibility. However, encouraging reflective thinking requires ongoing facilitation, especially as makers are often focused on their own processes.

Future research is necessary to gain more understanding of alternative ways to organise industrial chains that pursue social and ecological connections. This compared to the conventional way of working that disconnects these values. Identifying the challenges and opportunities for moving from a transactional chain to a relational network needs a holistic approach.

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