

Social learning in action: a reconstruction of an urban community moving towards sustainability
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Introduction

“By now I should have gotten used to it, but the thrill is still there every time I pass Lunetten station and get off the train in Culemborg to take that short walk home and to enter this ocean of flowers. And even though I had all kinds of dreams of this neighborhood before moving here, I never imagined that it would be such a paradise to live in for Keri and Job.” (Jan Willem, father of Keri and Job, inhabitant of Eva-Lanxmeer)

In the late nineties, the Dutch Ministry of Environment, Housing and Spatial Planning developed legislation that encouraged municipalities and individual citizens to promote sustainable housing. Citizens could get all kinds of subsidies, for instance, to move towards energy efficiency, while municipalities could get national grants when allocating municipal land for housing development that met certain sustainability criteria. In 1999 a few sustainability-minded citizens were interested in developing an entire neighborhood (over 200 households) founded on principles of sustainable living as outlined by themselves (i.e. a community garden owned, designed and maintained by all members) and by the government (i.e. with regards to the building materials used, double water system, solar energy, triple pane glass, etc.).

The group was given seed money by the town of Culemborg to organize themselves and to hire a process facilitator. The process of reaching agreement about what a sustainable neighborhood actually means and the design and implementation of the generated plans required a lot of interaction and mutual learning among the various stakeholders. In this chapter, we will reconstruct the making a ‘sustainable’ neighborhood as a social learning

process of civic engagement in sustainability. This reconstruction is in part based on a study¹ carried out five years after the initiators found a strong enough support based to start the creation of the new neighborhood in Culemborg (Noorduyn and Wals, 2003) and on mirroring the outcomes of this study with recent thinking on social learning in the context of sustainability (Wals, 2007). First, we present some of the unique features of the neighborhood and then we will zoom in on the process of interaction that took place when the first people who moved in collaboratively designed the community garden that forms the heart of the neighborhood. Finally, we will distil some key learning principles or stepping-stones from the Culemborg experience that might have some transfer value (i.e. might be useful elsewhere).

The origins of a ‘sustainable’ neighborhood

In 1994, people with different backgrounds but with similar concerns and interests meet in a series of workshops focusing on creating a sustainable urban neighborhood from scratch. During the workshops the idea of an exemplary development project emerges which combines ecological construction, organic design and architecture with active citizen participation. In the fall they create the EVA Foundation (Ecological Center for Education, Extension and Advice) to further develop this idea. EVA identifies the principles of permaculture as key guiding principles in the design process (Mollison, 1991). One consideration was the scale of the community they wanted to create. Founder Marleen Kaptein: “If you really want to show what sustainable building and living means then we need to move up in scale. Not just, create few unique buildings but an entire neighborhood with hundreds of houses. Only then citizens can come to know what a sustainable community looks like.”

The town of Culemborg (27,000 inhabitants), just South of the city of Utrecht, is sympathetic to the idea of experimenting with sustainable design at the neighborhood level. Culemborg was already actively supporting energy efficient housing and ecological

¹ Special recognition should go to two former graduate students of Wageningen University: Jitske van Diepeningen and Melanie Brunings whose thesis work key input for this chapter.

management of green spaces within the city boundaries, but never at the neighborhood level in an integrated way. The local government is also keen on experimenting with creating (more) space for citizen participation. They would like to see citizens have more influence on the design of their houses and the layout of their neighborhood. With the newly envisioned neighborhood – by now called Eva-Lanxmeer (www.eva-lanxmeer.nl), the town can realize both ambitions at once. The experiment also would provide experiences that would be valuable for improving the quality and sustainability of existing neighborhoods but also that of future ones. In the words of one of the local officials: *“We came aboard because we wanted to go one step further. We already had neighborhoods with ecological park and green border maintenance and did promote energy efficiency, but now Eva-Lanxmeer gave us an opportunity to realize everything in one neighborhood.”*

In 1995, the EVA Foundation presents its plans to develop a sustainable neighborhood in the polder ‘Lanxmeer’ to the Municipal Board of Culemborg. The foundation develops and fine-tunes its plans interactively with high involvement (e.g. through consultation meetings and workshops) of a project group consisting of potential future inhabitants. The plans call for development of an area consisting of 24 hectares 200 houses and apartment buildings along with a number of businesses, offices and ateliers. Furthermore, a green conference center and an ecological city farm is envisioned. The housing will consist of a mix of social or public housing (30%), middle-income level rental and private property (20%) and upper middle / higher income level private homes (50%), in line with one of the guiding principles that calls for a socio-economically integrated neighborhood. The entire neighborhood is to be created between the year 2000 and 2002 with the conference center and city farms following shortly thereafter.

Overall design

The final design of EVA-lanxmeer calls for a spatial zoning (Box 1) of the buildings that will encourage social interaction, while the location and design of the green zones or corridors calls for near-natural transitions and connections between the different

functional zones². The agricultural zone, which surrounds part of the neighborhood, for instance, transitions from intensive agricultural use to extensive agricultural use. The design and management of these different uses corresponds with these different uses (i.e. management of the extensively managed zones focus on promotion of (agro)biodiversity, natural dynamics, compatibility and connectivity between the various (landscape) elements, places and processes (i.e. natural cycles). All the zones are connected in different ways:

- physically: by the design of the waterways, green corridors and the cycles of nutrients, organic materials and products;
- spatially: by an enhanced perception of unity or 'wholeness';
- ecologically: by an increased biodiversity and vitality of the entire area;
- socially: by collaborative use and management by those living in the area.

Zone 1: The immediate area bordering the physical structures (houses, offices, etc) includes, for example, the private gardens and terraces. Inhabitants may place a border between their own garden and their neighbors' to create some privacy and quietness. However, the border may not be too high and will need to be made of 'sustainable' and 'natural' materials (for instance a fence constructed out of willow shoots or made out of non-tropical, local hardwood)

Zone 2: The semi-public space in between the private gardens and the public green area that forms the core of the neighborhood. This area is considered semi-public, since the owner of this land (the town of Culemborg) has given the inhabitants the right of passage and the responsibility of maintenance for a nominal fee. This space is considered highly suitable for fruit trees, play areas and common hang-out places.

Zone 3: The public area, accessible to anybody. This public area will contain a jeu-de-boules field, a vegetable garden and a 'natural' water playground. This public green space is characterized by ecological connectedness, biodiversity and edible gardens that follow the permaculture principles.

Zone 4: A peripheral functional area containing water retention basins (also of naturally, helophyte-filtered waste water from the houses), the ecological city farm which produces fruit and vegetables and holds small life-stock, but also provides educational and recreational functions.

Box 1. The zoning of EVA-Lanxmeer

² For a detailed description of the more technical and environmental design aspects of Eva-Lanxmeer refer to van Timmeren et al., 2007.

The principles underlying the design are not only translated spatially into different zones but also physically into the construction of the homes and the functional systems supporting the neighborhood. Below we list a few examples of how this was done.

Energy: energy use is to be as low as possible. The aim is to have an ‘energy neutral’ and ‘CO₂-poor’ neighborhood by using cutting-edge insulation techniques and materials, recapturing heat-loss, use of solar panels and solar boilers. The design of the houses enhances energy efficiency is enhanced. For instance, the roofs are high, sloped at an angle, and oriented spatially in such a way to allow for optimal use of solar power. Some houses, facing north, have an extra double glass wall as a buffer to trap heat. Wind energy and a local biogas- energy plant that uses sewage water and other organic ‘waste’ (food waste, garden waste) further help the neighborhood become energy neutral.

Water: water conservation is a key principle. The inhabitants agree to reduce the use of tap water, to minimize wastewater and to slow down the drainage of rainwater. They even want to go further by closing the water cycle. In order to do so, the houses have separate water systems in their houses each having their own taps. Clear drinking water can be accessed in the kitchen and bathrooms. The second system contains so-called household water that is used for flushing toilets and for cleaning and washing purposes. The used household water of ‘grey’ water has a separate drainage systems, which takes the water to a field with helophytes where it is filtered and turned into, again, household water. There is the so-called ‘black’ water or sewage water which enters yet a third system. The black water is piped to a local biogas plant where it generates energy that again is made available to the people living in Eva-Lanxmeer. In order to make this all possible it was important that the neighborhood’s infrastructure included the piping for these three systems.

Green ‘waste’: the so-called city farmer who also collects the green waste created in other neighborhoods of Culemborg collects the green waste created by the households

and the maintenance of the gardens. The city-farmer brings this organic waste to local biogas plant (also referred to as the Sustainable Implant).

Mobility: the initiators felt it was important to minimize the number of cars entering the neighborhood. On the outskirts of the neighborhood, there are special parking areas: it is not possible to park your car on or near your own property. Only in special circumstances (i.e. accidents or when moving in or out) can cars get close to the homes. There is no through traffic going through the neighborhood. Short and high quality bike and walking paths to the town's railway station and to the town's city center stimulate the use of bikes and public transportation. The parking lots are made of so-called 'wadis': a layer of water draining stones that prevent rapid run-off and allow for gradual infiltration.

Chain management: the use of natural resources is minimized. The use of durable materials is mandatory in the building and construction of both the homes and the public spaces. At the same time, the re-using of materials is promoted.

In order to have all these elements become a living part of the entire community the neighborhood association BEL has translated these guiding principles into an agreement that all future inhabitants will have to support and sign before being allowed to buy or rent a house.

This chapter focuses on the creation of the so-called green commons that form the publicly accessible heart of the community (zone 3 in Box 1). The green commons were designed while the first houses were built and created while the first inhabitants were moving in.

Designing the green heart

Most of the neighborhood's design principles and distinguishing features have already been decided upon when the neighborhood's infrastructure is created, and the houses are actually built: before people actually move in. Up until that point, the community

participation consisted mostly of those who were a part of the foundation of EVA and already knew for a long time that they wanted to help create and live in a sustainable neighborhood. As the houses are being built, however, new people come in who are attracted to the concept of EVA-Lanxmeer but have not been a part of its creation and do not yet know one-another. EVA therefore creates a support group for guiding the design process of the public space that forms the green heart of the community. This support group also helps the new inhabitants become more familiar with the principles of permaculture. The town of Culemborg makes money available for this design process (money the town otherwise would have spent on designing and developing this public space). This money is mostly intended for assuring that the design process is done in a participatory and professional way.

The people moving into Eva-Lanxmeer share, at least for Dutch standards, quite a bit of public land that forms the core of the neighborhood that they jointly can design and manage. This was the next challenge in the creation of this sustainable neighborhood. Since not all new inhabitants were known at this stage and not all inhabitants were able to participate in the design process for various reasons, a project group consisting of roughly 10 inhabitants was formed (the number fluctuated over time as people moved in and out over time). One community member puts the challenge ahead as follows: *“How can a group of different people create a joint concept everybody is happy about or that at least everybody is comfortable with and considers a solid base for future collaboration?”* The municipality, as a key supporter and stakeholder of Eva-Lanxmeer, wants to know what the inhabitants will make of the green commons. The town officials are not so concerned about the emerging design but much more about the quality of the *process*, after all one of the town’s conditions is that the creation of the commons is done in a participatory and professional way. In the words of one of them: *“Whether they decide to create one big lawn or fill the commons with play grounds or fruit trees, it’s all fine with us, as long as it is done in a professional way.”* To assure some level of professionalism four experts are asked to help guide the design process:

- A landscape architect who is responsible for the quality of the design and the blending of the green commons with the entire neighborhood which he co-designed;
- a professional landscaper and gardener responsible for overseeing the actual implementation of the design, establishing smooth transitions between the commons and the private gardens and participating in the maintenance of the public green spaces in the neighborhood;
- a technical facilitator who has expertise in permaculture and ecological gardening and landscaping but also knows how to involve citizens in co-designing public spaces;
- a process facilitator who orchestrates and manages the participatory design process and coordinates the work of the other experts involved.

The external experts (many of the future inhabitants are also experts in a range of aspects relevant to the neighborhood's development but they are considered internal experts) play an important role in the whole process. They organize many of the meetings and help set the agenda. They also outline various options and choices and show the potential consequences of each of them, for instance in terms of evolution of a landscape over time, the kind of management required, the financial implications of each design choice, etc. In the words of the technical facilitator: *“Right from the beginning I help them imagining the possible ‘end picture’ even though that picture is not yet fixed. When someone wants a traditional beech hedge then you need to explain what the costs are, what kind of management is required, the way the hedge will look in the various seasons and how it will transform over time in the years to come, but I also show how the maintenance of such a hedge can be shared.”*

The project group divides all activities and meeting in different phases or categories like the starting-up, visioning, designing, execution (i.e. the actual landscaping and planting activities), evaluating and documenting (i.e. keeping records, logs, picture and video database) for both a sense of history and accomplishment but also for future learning.

After this train of activities, the project group gets a clear mandate from all inhabitants to implement the plan.

Guided self-determination

During the first phase of the design of the green commons, the team of experts did take the lead but provided enough space for the project group of new inhabitants to move forward independently. In the words of the technical facilitator: *“The idea was that we would help get them on their way but that we would emphasize that the green commons were their green commons, not ours. They are the ones who will have to manage and maintain the area.”*

Finding a balance between giving spaces for citizen’ self-determination and providing professional input is not so easy. Again the technical facilitator: *“How do you create a situation in which you provide ample support, yet allow sufficient room for people’s own ideas? There is a tension here. To what extent do you take over responsibility when there seems to be a vacuum or a stalemate? And how do you know whether the inhabitants are able to take on that responsibility themselves again?”*

Divergence

The project group organizes an ‘inspiration day’ to generate ideas for private garden designs and the execution of suggested elements of the green commons, but also to help people to get to know one another. The children participate as well (Box 2). To get in the right mood, everybody needs to pick an image from an enormous pile of pictures depicting a range of, sometimes extreme, situations. One picture, for instance, shows a dry bare dessert, another is filled with birds. Everybody picks a picture that is appealing to him or her and explains why to all present. The people who have already moved in the neighborhood give a tour of their part of the neighborhood and share their experiences so far. In the afternoon everybody, the children included, sketch or draw their desired image of the green commons (or the elements thereof they find most important. Later on during a so-called ‘design session’ led by the external facilitators, the participants write down in key words what their expectations are of the green commons. Some emphasize

‘gezelligheid’ – a Dutch catchall word referring to coziness, intimacy and pleasure – others write about the presence of birds, safe play areas for children, etc. They also tell each other stories about gardens and natural areas they have been to that were special to them. Then there is a homework assignment: to make a rough sketch of their preferred designs and design elements using pictures, drawings, models, photographs from magazines, whatever works best. The children too get to make their own rough sketches.

A few weeks later, the rough sketches are exhibited in the local school. In groups, the inhabitants walk by every exhibit where its creator clarifies and explains. One of the facilitators: *“All these images do quickly give a sense of what people want and do not want... One thing that became clear was that everybody wanted it to be possible to walk the green commons bare footed! ... But there were differences as well: some people wanted a low-maintenance wild flower garden, with natural lawns, fruit trees and hay. Others wanted small paths meandering through fields of herbs that allowed for intensive gardening. Those are fundamentally different views!”*

After over one year of meetings, design ateliers, town hall meetings, workshops, excursions and feedback sessions, a design of the green commons is ready that all are happy about. This is not the only result they are happy with. The preparation year has strengthened the social cohesion between the new inhabitants. One of them states: *“We not only now have a designed a wonderful green heart for our community, we have also strengthened our social ties because you do meet each other a lot.”* And in the words of one of the facilitators: *“Half of what we want to realize is the product itself, the other half is the process which allows the people to contribute and get to know each other.”*

For the children the project group and the external facilitators also organize a separate meeting. Every child ages four and up gets a personal invitation. “You will not only move into a beautiful new home but there will also be a big garden for the whole neighborhood. With all the adults we have been collecting good ideas for this garden. We believe that you can think of some good ideas as well” (quoted from the original invitation). First the 4, 5 and 6 year olds get to work, followed shortly thereafter by the 7, 8 and 9 year olds. The younger group focuses on the inner- part of the green commons that borders with private gardens. The idea is that the parents will want to be able to keep an eye on them when they play. The older kids primarily focus on the outside periphery of the commons as it is assumed they will their physical play boundaries will

be wider. The younger kids tell each other in a circle what they like to do at home, at school, inside and outside. The older group watches slides, makes drawings and discusses. They conclude that flowers are important, as is a swing, a climbing wall, a tree hut and hiding places for playing hide-and-seek and for pranks. They also agree on their favorite color: pink! The children all think it is wonderful to contribute and feel very important. One proudly reports to his parents that he attended a 'real meeting.'

Box 2. Children's participation

Convergence

During all the sessions, the landscape architect observes what is going on and takes note of the key outcomes. All comments, ideas, desires, concerns, expressions of consent but also of disapproval, and sketches, he takes home. Using the input from the inhabitants, adults and children alike, the previous rough plans made by the project group which he helped shape, and taking the overall principles and foundation of Eva-Lanxmeer at heart, he creates an integrated and coherent design. This much-anticipated design is then presented to all involved. *"This was a suspenseful moment,"* one of the inhabitants states. *"You do wonder what he will have done with all our input."* The general response to the composite plan is one of approval. *"In the design the fundamental differences that indeed were there have been camouflaged more or less. There is something in this design for each of us. To divide the commons in eight distinct squares and a half circle is ingenious,"* in the words of another inhabitant.

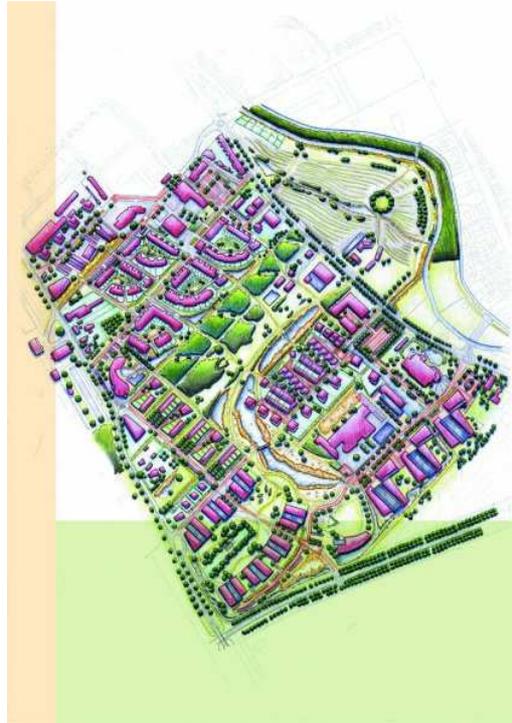


Figure 1: Final spatial design of Eva-Lanxmeer

There are a few dissonant voices however, that raise some objections to parts of the design but since time has become a factor, these objections are not discussed any further which results in some participants going home disappointed. Later a few changes are made to the design still, which led to general acceptance of the master plan. In retrospect, some of the unhappiness was a result of different interpretations of the status of the design. Some thought it was a binding and prescriptive plan which would leave little room for own initiative and interpretation, whereas it was meant as a guiding framework that still would require the creative input of the people living there to make it work.

The disagreement did lead to a discussion about the decision making process. How can decisions formally be made? A few of the participants decide to focus on this question as they suspect that this question will likely surface again in the future. They come up with the following proposal: a decision is only made when there are no longer any well-founded arguments presented that go against the proposed decision. This directive does not mean that everybody has to agree or that full consensus is required for decisions to be

made. The strong point of this way of making decision is that underlying reasoning for being against a proposal will need to be made explicit, whereas full consensus, which may never be reached, is not necessary for things to move on. One inhabitant notes that in most cases formal decision-making was not necessary and things happened in a more or less fluid and natural way: “Things happened by themselves, without problems. So than there is no reason to be formal.” It also became clear that the social cohesion formed during all the common activities, allowed for this informal decision-making to blossom. Partly, because the established ‘chemistry’ and trust between the people involved made them more open to others and made them more willing to engage with ideas different from their own. This chemistry proved to be crucial, as people were more willing to share, open-up and, indeed, make themselves vulnerable: all ingredients for creativity and a genuine participation process. The people working together to create Eva-Lanxmeer shared a common vision, even though they had different ideas about the operationalization of this vision and certain elements of the design. This common vision and the social connections proved stronger than the emerging differences. The safe and open environment in which the process took place made it possible to confront and discuss them. In the end, not everybody agreed with one another but the people involved became more understanding and accepting of the differences that remained.

Implementation

Once the first houses are completed and people move in, the social ties strengthen even more and the informal contacts increase. There are social-get-togethers, housewarming parties, ‘get-your-hands-out-of-your-sleeve’ days with coffee and sandwiches. The people of the adjoining neighborhood completed a few years earlier throw a neighborhood party to which the people moving in are invited as well. The making of the green commons always surfaces in the conversations at one point or another. Now that the design is actually implemented people can see the impact of their actions immediately, whereas the impact of the hours, days and, indeed, months of meetings was oftentimes hardly noticeable. People seem to forget the long road that proceeded.

The seemingly endless meetings within the project group and later with the other inhabitants prove to be necessary to lay the social groundwork before the first spade penetrates the soil. In the words of one of the participants: *“Having meetings really is essential. You need to explore the extremes in order to grow closer to another. It is much easier to accept a dissenting voice from someone you actually know a little. By getting to know each other, you become more tolerant and flexible. As a result, it is easier to find common ground. Should some tensions remain under water, then they need to be made explicit and openly discussed.”* The latter is important otherwise tensions might come back to haunt the whole process later on. Having meetings also provides a space for, literally, meeting but also for the expression of ideas and the ventilating of feelings and concerns. The facilitators were very aware of creating this space and the kind of atmosphere required to stimulate openness, honesty and transparency. Altogether, the entire process of creating the green commons in Eva-Lanxmeer took two years of preparation. By scheduling regular meetings and by frequently reporting outcomes, sharing ideas, distributing an electronic newsletter, and so on, the project group was able to keep fire burning.

Continued involvement turns out to be essential, not only during the design and during implementation of the commons, but also when all appears to be done. Daily, weekly and annual management activities are required to allow the design to become what was envisioned. Some earlier working groups cease to exist, as they were mostly concerned with design aspects (i.e. the group pre-occupied with equipment for the children’s playgrounds or the group focusing on transitions between private and public green space). New working groups are formed: a tree-trimming group, a garden group, a playground maintenance group and so on. Also new structures are needed for communication and decision-making. Who will take the lead? How do we bring in new people who have just moved in or will move in the future? Will they be equally committed and enthusiastic, even when they were not a part of the process that led to the green commons as they are today? New inhabitants likely bring in new ideas and help determine future directions of the neighborhoods development. In all likelihood, they will share the basic ideas underlying the neighborhood as they will have consciously chosen

to live in the neighborhood and will have signed the memorandum of understanding. At the same time the 'pioneers' will also continue to help shape the neighborhood if only because they are aging, as are their children. A new phase in their walk of life will likely lead to new ideas about the way the commons should develop. Playgrounds for children may come and go over time as the demographics of the neighborhood change over time. Perhaps the neighborhood will become more multi-cultural overtime as which given the 'multi-culturalization' of Dutch society is very likely. This too will likely affect the development of the commons.

Lessons learnt

There are no recipes for successful citizen involvement in moving towards a sustainable neighborhood. The circumstances, participants and challenges just are just too varied to allow for a kind of blueprint or roadmap. In fact, it can be argued, that this is precisely why a participatory approach is required in the first place. Nonetheless, there are some lessons to be learnt from the Eva-Lanxmeer experience may help increase the odd of realizing a fruitful learning process with worthy outcome and meaningful impacts.

Not everything needs to be done interactively

Interactivity may be the preferred modus of operandi when seeking a sustainable world, but this does not need that every decision needs to be made interactively and that there is no place for, for instance, instruction and more authoritative decision-making. Interactivity needs to be applied selectively depending on a number of variables like scale, history/baggage, sense of urgency, complexity of the issue at stake, make-up of the group, perceived interdependency among stakeholders, and the various 'stakes' people or groups of people bring to the table. What often happens is that the easier issues (i.e. issues that are not threatening and non-controversial) are tackled in a participatory way, while a small group of insiders makes key decisions about more important issues that are the presented to the larger group as a fait accompli. Indeed, sometimes it is better (i.e. more efficient) to make key decisions in a small group. The key is that this small group has been given a mandate by the larger group, but also that there is transparency in what issues the smaller group tackles and in the way they go about tackling them.

Harmonize expectations

Another lesson learnt here is that different people have different expectations about what the process will result lead to and to what extend they themselves can influence the process and the direction it takes. These expectations vary from very low (the cautious, the pessimistic, the realistic, etc.) to very high (the empowered, the optimistic, the dreamers, etc.). Some have modest expectations (i.e. everybody will compost in the neighborhood and the compost will be used in the community vegetable garden) while others have very high ambitions (i.e. a model sustainable neighborhood based on permaculture principles, closed cycles, social well being and ecological integrity). It is crucial to have participants express these expectations at the beginning to begin harmonizing them a bit early on, in order to avoid disappointment later on when people find out the process is not at all going where they thought it was supposed to be going.

Make progress visible

At the onset of a process like the one described in this chapter, people are enthusiastic, energized and ready to get going and spring into action right away. However, creating a more sustainable neighborhood does not occur over night: it is time consuming and requires a lot of patience. However tempting it may be to ‘get moving,’ it proves to be wise to reflect thoroughly on what is desirable and feasible and to take ample time to build social capital and cohesion in the group of core participants and the other stakeholders involved (municipality, building & construction company, landscape architect, water board, etc.). This time for reflection and social capital building can easily be seen as ‘stalling’. The initial energy can easily evaporate when the participants do not see any progress and feel there is a lot of talk but no action. Yet, things *are* changing continuously: people get to know each other better (create social capital), develop a joint vision and a sense of ownership, are better at articulating what they want and do not want, and are involving new people and new stakeholders that were out of the picture in the beginning... Therefore, even though no spade has penetrated the ground and no soil has been moved, a lot is happening. The point is that when these changes in views, positions, involvement, ownership, relationships, etc, are not made visible, it will seem as

if nothing has happened. People often define progress in terms of ‘hard’ results like a play ground, compost bins, benches made of non-tropical, FSC-certified, hardwood, a sound barrier to block highway noise, a community vegetable garden, but overlook the ‘soft’ results that are created in the process leading up to these hard results: increased respect, understanding, sense of community, and so on.

Dare to share

Oftentimes a small group of very committed people comes up with a number of creative ideas and solutions who then do not resonate with those who are to approve and/or work with them (i.e. the other people who are to live in the community or even one’s own spouse or children). It is quite easy to form small elites of very motivated, dedicated and inspired people who get along great and communicate very well with one another but forget to share with others and fail to take them along in their thinking. The result might be a kind of innovation elite who, without realizing it, has lost touch with the larger group. This is why high quality communication with all involved is so crucial. All steps, choices and results need to be shared in formal (newsletters, minutes, website, community paper) and informal ways (at the kitchen table, in the local bakery, at the schoolyard where parents wait to pick up their children, etc.). Only then is the process transparent enough so that those who are not at the center of the process but more at the periphery out of choice or out of necessity can follow what is going on and can jump in when they feel their own ideas are compromised or marginalized in unacceptable ways.

Upgrading facilitation

Usually people do not enter a process like this because of the process itself but because of its focus on, what they see, as a high quality of life without compromising the future of the Earth too much. As they participate they value being able to contribute on an equal basis. They do not always appreciate it when one member dominates the process or positions him or herself above the group and takes charge, no matter how knowledgeable or experienced that person may be. This is one of the reasons for hiring a process facilitator who is a relative outsider yet accepted by everyone. Someone who speaks the language of the participants and has a genuine interest in both the process and in what it

seeks to achieve. In order to establish good relationships the facilitator will also need to get to know the life-world of those involved in the change process and come to understand the local context in which process is to take place.

The facilitator is also someone who monitors and stimulates openness and safety (i.e. no intimidation, equal opportunity), access (people should be able to move in and out freely) and transparency (no hidden agendas). At the same time, he or she deals with conflict, asks questions, maintains focus when needed, shows progress, maintains a sense of urgency, and helps create a positive and stimulating atmosphere. As if that is not enough, he or she is also able to introduce innovative methods that are appropriate in certain stages of the process (i.e. brainstorm techniques, creative thinking techniques, role-playing, excursions, etc.). Finally, the facilitator has to be socially and emotionally competent as well: a good listener, empathetic, an animator, sense of humor, navigator of force fields, diplomatic, etc. All these qualities are hard to find in one single person which is why for processes like these, it might be best to have two or even more facilitators. At the same time it should be acknowledge that many of these qualities are, sometimes latently, present among the participants and will, under the right conditions, emerge and make the facilitator's job a little easier.

Living with uncertainty

In a process like the one described here the specific outcomes are unclear and only slowly emerge over time. For some this leads to a feeling of unease and causes stress, others accept this as a given and are comfortable or even excited by this. The latter group flexibly adapts to changing circumstances and prospects, whereas the former group can easily become frustrated by the lack of clarity and the seemingly never-ending uncertainty. Much like the harmonizing of expectations, it is important to inform all involved about the uncertainty and, indeed, the risks involved in participating in an interactive process of civic engagement in sustainability. Making this clear at the on-set will make the process more attractive to uncertainty-minded people, and may make those who are not more understanding of what it is going on later on in the process (or may lead to the more certainty-minded people to opt out). Nonetheless, there will always

remain a mix of personalities who jointly will have to create the ‘chemistry’ needed for a collaborative learning process that hinges on things like commitment, involvement, ownership and creativity.

Keep it alive!

The interactively created and managed green commons of Eva-Lanxmeer to a large degree is the result of loads of positive energy and very committed people. Especially in the start-up and implementation phases, the energy level is very high. However, over time these levels are likely to decline. Two factors often are causing this decline. First, the new people who have not taken part in the start-up and implementation, move into the neighborhood, do not feel the same kind of ownership, and do not relate to the commons in the same way. Second, some of the original pioneers who have spent hundreds, if not more, of hours creating the neighborhood are moving on to other challenges, some elsewhere, while those remaining are beginning to think: ‘I have done my bit. It’s time for others to pitch in now!’ How can the process remain alive in light of this? How can it be prevented that the green commons are left on their own and are neglected? In the words of one of the pioneers: *“It is important that the green commons are seen as a living place that is not finished but is continuously changing, also in directions that may not be desirable and undermine some of our original ideas.”* This is why continued communication about what needs to be maintained, how this is done, but also continuous reflection on the functions and functioning of the commons and its various components (as suggested earlier, new people, new phases in life, etc. may lead to a rethinking of some of the original ideas and designs) is crucial. In fact the process has a cyclical nature and needs to repeat itself repeatedly over time, although perhaps at a smaller scale and with a mix of new and old participants.

Nonetheless, there will be moments of “being stuck” which will threaten the process. One strategy that might work to get out of this situation might be to look elsewhere. How did others deal with this? How were they able to overcome adverse conditions? What kind of process did they use at this stage? Careful investigation of such cases could reveal an amalgamation of a variety of smaller actions and a number of critical decisions might be

needed (Monroe, 1990). Social psychologist, Karl Weick notes that since smaller problems are more easily solved than big ones, framing an issue in smaller pieces provides enormous psychological benefit (Weick, 1984).

Conclusion - a case for and a case of social learning

The Eva-Lanxmeer case has been presented as a form of civic engagement in creating a neighborhood that is considered more sustainable than any of the neighborhoods the participants ever lived in before. In this final section, we will interpret the process that helped create this neighborhood from a social learning perspective. Social learning is understood here as a collaborative reflexive process involving multiple interest groups or stakeholders. This process is grounded in the multitude of actions, experiences, interactions and social situations of everyday life (Vandenabeele and Wildemeersch, 1998). Through discursive dialogue and cooperation between people who oftentimes share common interests but act within different configurations or frames (i.e. values, worldviews and contexts) such learning can be intensified and lead to change. Social learning here is an intentionally created purposeful learning process that hinges on the presence of the 'other,' others, and 'otherness' or difference. We should recognize that social learning also takes place in everyday life where intention and purpose may be less clear.

In social learning, the interactions between people are viewed as possibilities or opportunities for meaningful learning. The motivation to participate in a social learning process is not always naturally present, but does play a critical role. Much depends on the collective goals and common visions shared by those engaged in the process. Whether such collective goals and visions can actually be achieved depends on the amount of space available for possible conflicts, oppositions and contradictions to enter the learning process. A main point this contribution is trying to make, based on the Culemborg experience, is that any process that seeks to address sustainable living will inevitably involve diverging norms, values and constructions of reality even when all appears smooth sailing in the beginning. Hence, these differences need to be brought above the

water table. By explicating and deconstructing them, it becomes possible to analyze their nature and persistence. This is an important step in the process since it helps both to improve the dialogue between the actors and helps identify strategies for utilizing conflict in the learning process.

Learning here can be viewed as a change process resulting from a critical analysis of one's own norms, values and constructions of reality (deconstruction), exposure to alternative ones and the construction of new ones (reconstruction). Such a change process is greatly enhanced when the learner is mindful and respectful of other perspectives. In addition, there needs to be room for new views that broaden the realm of possibilities. In other words, when there is space for dialogue rather than the mere transmission or exchange of points of view. Sustainable living seems to require a kind of dialogue that continuously shapes and re-shapes ever-changing situations and conditions. A dialogue here requires that stakeholders involved can and want to negotiate as equals in an open communication process. Such dialogue rarely emerges spontaneously but requires careful designing and facilitation.

One critical aspect of social learning is working on the edge of people's comfort zones (Wals, 2007). Both in helping people confront the normative underpinnings and limitations of their own positions, views, ideas, and values and in helping them reconstruct alternative ones, facilitators need to be mindful of these zones. "Confronting people with ideas that are radically different from their own – no matter how good they might be - can be threatening in which case it might be more fruitful to introduce mildly dissonant voices that are strong enough to lead to the questioning of people's own thinking and acting" (Wals and Heymann, 2004, p. 239). Some people are very comfortable with dissonance and are challenged and energized by radically different views, while others are much less tolerant of ideas conflicting with their own. The trick is to navigate the learning process towards the edges of peoples' individual comfort zones with regards to dissonance. If the process takes place too far outside of this zone, dissonance will not be constructive and will block learning. However, if the process takes place well within peoples' comfort zones, as is the case when homogenous groups of

like-minded people come together, learning is also likely to be blocked. Put simply: there is no learning without dissonance, and there is no learning with too much dissonance. Ideally facilitators of processes like these become skilful in reading peoples' comfort zones, and when needed, expanding them little by little. An important task of facilitators and, ideally, of the participants themselves, is to create space for alternative views that lead to the various levels of dissonance needed to trigger learning both at the individual and at the collective level.

Perhaps the essence and success of social learning towards sustainability lies in people's ability and willingness to let go of and transcend their own individual views of what is sustainable and what is not, so that they can reach a plane where they are able find each other and create enough 'chemistry' to feel empowered to work jointly on the sustainability challenges they come to share (Wals, 2007). An important first step in social learning towards sustainability is becoming aware of one's views and interpretations of sustainability. Only then can they become aware of their own hidden assumptions and the resulting blinding insights they provide. When this is done in a collaborative setting, where dissonance is properly cultivated, managed and utilised, participants become exposed to the deconstructed ideas and ways of seeing of others, which will help them rethink their own ideas and ways of seeing and will challenge them to jointly create new ones. This kind of co-creation may well prove to be a central element of moving towards sustainability as it allows for the development of a common vision, a (renewed) sense of community, as well as, a joint action perspective. In the words of one of the participants in the Eva-Lanxmeer case: *"We are all in this process together and as a group we will make things happen even though it is not exactly what I had in mind in the beginning."* This joint action perspective, sense of community and a better understanding of the positions of others makes softening ones own individual demands easier.

The Eva-Lanxmeer case shows that 'sustainability' or 'duurzaamheid' in Dutch, can be a catalyst for the joint contextualization and exploration of meaning when citizens become engaged in, what we have called, a social learning process. Through dialogue, discourse,

negotiation, joint fact-finding, mediation, etc. people can arrive at their own interpretation of sustainable living as contextual and relevant to their own situation. Given that we do not know what comprises the right or best 'sustainable lifestyle', it would be wrong for 'technical experts' or the government to prescribe to citizens how they should behave. Rather governments should support and create space for the development of autonomous thinking and self-determination that will help communities to decide for themselves what counts as sustainable living. This is not to say that policy-makers, scientific experts or other relative outsiders have nothing to contribute. On the contrary, as this case shows they are important resources and stakeholders. Social learning benefits from the collective realization that not all information is available in one's own community and context, and that alternative ways of knowing, acting and valuing, not present at the local level, can provide the necessary imagery to develop new solutions.

Before engaging a community in a process like the one described here it seems wise to first assess whether there is sufficient room and support to allow for it in the first place. In this preliminary phase the initiators of the change process should reflect on the nature of the change process (Jickling & Wals, 2008; Wals, et al., *in press*) and the institutional spaces and support available by asking questions such as: Is the kind of change that is desired of a more emancipatory (we have no clear idea of what is needed, how it is done, etc. but we do know it requires the active participation of all involved) or of a more instrumental nature (we do have a clear idea of what is needed, how it needs to be done and have a mandate to implement them)? And: Is there sufficient political and organisational space available for engaging people in a participatory process characterised by high levels of self-determination and autonomy?, need to be asked in order to be able to confidently introduce and enhance social learning as an important vehicle for exploring pathways towards sustainability.

References

- Jickling, B. & Wals, A.E.J. (2008). Globalization and environmental education: looking beyond sustainable development. *Journal of Curriculum Studies* 40 (1), 1-21.
- Mollison, B. (1991). *Introduction to permaculture*. Tasmania, Australia: Tagari Publications.
- Monroe, M.C. (1990). Converting "It's no use" into "Hey, there's a lot I can do:" A matrix for environmental action taking. In: Simmons, D.A.; Knapp, C. and Young, C.(Eds.) *Setting the EE Agenda for the '90's 1990 Conference Proceedings*. Troy, OH: NAAEE.
- Noorduyn, L. en Wals, A.E.J. (2003). *Een tuin van de hele buurt*. [Creating a Neighborhood Garden] Wageningen, Wetenschapswinkel Wageningen UR, 72 p.
- Timmeren, A. van, M. Kaptein and Sidler, D. (2007). *Sustainable Urban Decentralization: Case EVA Lanxmeer, Culemborg, The Netherlands*. Paper presented at ENHR 2007 International Conference 'Sustainable Urban Areas,' June 25-28, 2007, Rotterdam, The Netherlands.
- Vandenabeele, J. & Wildemeersch, D. (1998). Learning for sustainable development: examining lifeworld transformation among farmers. In: D. Wildemeersch, M. Finger & T. Jansen (eds.) *Adult education and social responsibility* (pp. 115-132). Frankfurt am Main.: Peter Lang Verlag.
- Wals, A.E.J. (Ed.) (2007). *Social learning towards a sustainable world*. Wageningen, Wageningen Academic Publishers, 540 p.
- Wals, A.E.J. and Heymann, F.V. (2004). Learning on the edge: exploring the change potential of conflict in social learning for sustainable living. A. Wenden (Ed.) *Educating for a Culture of Social and Ecological Peace*. New York: SUNY Press. p. 123-145
- Wals, A.E.J., Geerling-Eijff, F., Hubeek, F., Kroon, S. van der & Vader, J. (*in press*). All mixed up? instrumental and emancipatory learning towards a more sustainable world: Considerations for EE Policy-makers. *Applied Environmental Education and Communication*.
- Weick, K.E. (1984), Small wins: redefining the scale of social problems. *American Psychologist*, 19(1), 40-49.