Exploring with the non-human

A toolkit to introduce a non-human perspective to children
Abstract

This is the report of a thesis project by a Design +Change bachelor student that strives to introduce a non-human perspective to children. With the hope of it staying and growing with them to be used in the future to improve our environments and ways of living to be more sustainable. This was done by developing and prototyping activities for a workshop. These activities were then tested with a kindergarten class and ended up being a basis for a toolkit. This toolkit will be used by teachers and pedagogues to introduce and explore a non-human perspective and how it could be used to improve our environments with children in kindergarten.

Key words
Speculative design, non-human, toolkit, children, nature
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Introduction

The project *Exploring with the non-human* aims to introduce the idea of nature and humans as part of a collective and a non-human perspective to young children through a toolkit. *The children’s toolkit for thinking with nature* includes everything a teacher or pedagogue needs in order to introduce a non-human perspective to children. It has the goal and hope of enabling them to see how all living things on the planet affect each other. Understanding that we belong together and that our actions affect more than ourselves. Being able to emphasize and see the needs of other species is, what I believe, a step in the right direction towards a sustainable future. By thinking about the wants and needs of more than just humans and taking the consequences of our actions for other species into consideration we can think about solutions and changes needed for sustainability. Through this the continuation of life for every species is thought of as all species are needed and play important parts in the ecosystem. Planting the seed of a thought process into the children that can grow with them and hopefully bloom into a consideration for the non-human life we share the planet with as we shape our future.

The project touches upon the four spheres of sustainability: economy, ecology, social and cultural. With its focus on the environment it has strong roots in ecological sustainability but by encouraging the consideration of other species in our decisions it also has a clear connection to the social and cultural sphere. It does this by encouraging the agency of other species which is contrary to our current social and cultural norms. It ties to the economic sphere which can be found in consideration of nature as it moves away from the perspective of only seeing nature as a resource.
Pictures of the finished toolkit and its content

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Thelma Cervin
There is a disconnection between humans and nature nowadays. Where the two are being perceived as distinctly different and separate things. One being the humans, the cities and all other things we build and create. The other being the other species we share the planet with, but not the ones we invite into our cities such as specifically placed trees or flowers, but the living world not made or designed by humans. The complex system that supports itself but is often nowadays disrupted by human intervention. This division between humans and nature has not always existed but has become more visible in recent years. One explanation for this move in the Western world could be found in the step towards scientific and democratic ideas from the old theological explanations. Our move towards development pushed nature to the side and it is nature that pays the biggest price for our use of fossil fuels (Lindvall, Vowles, and Hultman 2020, 8-12). With this development came other changes and today more than half of all humans live in cities. We have pushed nature aside and it also stays away because the role it plays in our search for new ideas and development is a minor one where we as humans have the center stage (Ibid., 13-14).

This separation can be seen in most parts of the developed world. But even with this so-called clear line between humans and nature, many Swedish people say that they have a connection to nature, specifically the forest. It relaxes them and gives them a moment of solitude to lower their guard. David Thurfjell, in his book *Granskogsfolk*, looked at existing studies and talked to people in the Swedish forests. Those interviews showed similarities to the study’s result. That for people who do not feel well or are in a bad mental place nature is a place that offers the feeling of protection and wilderness, a contrast to the norm where they can let go of their worries (2020, 61-62). But even with this connection and its soothing effect on humans the forest in Sweden still faces threats to its well-being from humans, as the Swedish forestry industry has led to more forests being replaced by monoculture production forest. This has consequences for the local biodiversity and ecosystem as species will eventually disappear from areas as the quality of their habitat worsens (Roberntz and Berglund 2020, 50).
Even though the forest and nature are something we need to preserve, keep healthy and take care of, we still affect and change it for monetary gain. This despite the fact that continuing this will affect us in the long run as the true consequences become apparent. This perspective of only looking at decisions from the consequences and (short term) gain for humans is rooted in human-centeredness and will not be sustainable in the long run. Val Plumwood wrote that “[h]uman-centredness is a complex syndrome which includes the hyperseraparation (sic.) of humans as a special species and the reduction of non-humans to their usefulness to humans, or instrumentalism” (2009). I connect this human-centeredness to the divisions between humans and nature. A division that, unless we bridge it, will make it near impossible for us to tackle our future problems as:

A rigid division that makes us choose between human and non-human sides precludes a critical cultural focus on problems of human ecological identity and relationship, and is also bad for activism. It assumes a fallacious choice of self/other, taking an us-versus-them approach in which concern is contaminated by self-interest unless it is purely concern for the other. Most issues and motivations are double-sided, mixed, combining self/other, human and non-human interests, and it is not only possible but essential to take account of both. Both kinds of concerns must be mobilised and related. (Plumwood 2009)

This underlying issue is what my project addresses. I will use speculative design to explore together with children what changes we could implement and how we can adapt our environments for the other when we take the non-human perspective into account, the wants and needs of the life we share the planet with. Such adaptations or changes for the better of non-human life have in some places already been added, as things such as birdhouses and insect hotels have the aim of providing shelter so that other species also can live in the area. The aim of the project is to bridge the gap between humans and nature by introducing the idea of thinking of them as part of the same group that has common interests and emphasizing with the other non-human individuals in it.
The Group

The idea of thinking of nature and humans as a part of the same group that is dependent on each other and therefore needing to have all members of the group being healthy was inspired by kincentric ecology (Salmón 2000). Salmón, who is a part of the Rarámuri or Tarahumara, an indigenous group from the Americas, specifically Mexico, describes it as an indigenous way of thinking about the relationship between human and nature. Where all things in the ecosystem are related to and affect each other, the impact humans have on the environment and the change they bring enhance and perceive the ecosystem.

As someone outside of this culture I am not able to fully understand, nor do I claim to be able to accurately represent it. I was merely inspired by this way of thinking of nature and how changing the way we see nature also would change how we act towards it. From my own understanding of kincentric ecology the person considers their actions and the consequences for nature as if it was something you were going to do to your family. Does it only benefit yourself or does it benefit the family? What consequences does the family get and how can you make life better for all of you instead of just one. You may do something that changes or alters some aspect of your family as long as it is not a negative change to some or one of your relatives, because without your family you lack that safety net and support they provide. This understanding of the relationship is based on a functioning family.

While kincentric ecology was the first inspiration for the project I eventually moved away from thinking of nature as a family and towards collectivism. Collectivism together with individualism are not ideologies but simply different ways of looking at life. Collectivism means looking at life in the context of groups where we all are members of different groups. Many actions and changes happen together with these groups and the groups may also have goals and priorities that differ from the individual goal and priorities of the members (Spicker 2019, 1-2). This viewpoint was closer to what I wanted to achieve and how I saw the relationship of humans and nature. It also makes it more approachable and understandable for people living in Western parts of the world where this project also is placed. Since families also come in all shapes and sizes the family thinking was less accessible then the collective thinking.
At first glance it may be hard to see how humans and nature belong together as a line has been drawn between them. But after thinking more about it one can clearly see that both parties belong together and how the needs of the group circle back and also benefit the individual species. My own perception of the group is that the different species in nature such as plants, animals, insects and so on, need each other for food, shelter and to continue living as the balance of the ecosystem keeps them alive. Humans depend on nature and other species for food and materials in order to keep living, while nature on the other hand right now is dependent on humans for its continuity. That is, it is dependent on us changing our destructive behavior and actions towards it. Our actions in order for our own survival and the natures well-being need to change as if our actions harm nature beyond repair it will come back and be harmful to us. So we both are dependent on each other to continue to live and therefore connected to each other and belong in the same group. A group that has the goal of continuity of life for all species and the well-being of our planet.

Design field

This project finds itself within the speculative design field since I find it interesting and believe it allows for imagination to flow freely. Speculative design can be described as a field that “thrives on imagination and aims to open up new perspectives on what are sometimes called wicked problems, to create spaces for discussion and debate about alternative ways of being” (Dunne and Raby 2013, 2). It uses imagination, not to solve the problem in the now, but to explore ideas and concepts that differ from our current way of living. By speculating and imagining what our environments could look if we took other species’ needs into account, we can then see a possible future. But this change in behavior and rethinking takes time to be nourished and would be easier to do with children who are not yet stuck in the current ways of thinking. This is the reason why I chose to work with young children, as they are not limited to the current norm of thinking and are more open to new perspectives.
It is first after exploring these speculations and seeing if the outcome is something desirable that we as a group can start to move and make changes in order to get as close to those speculations as possible (Ibid., 6). But that being said, my intent with this project is not for young children to feel responsible and be the ones to solve the problems. Merely to introduce the idea of thinking from other perspectives than the human and using that to explore and see what changes could be implemented to improve life for other species. With the hope of this mindset growing with them and blooming into a future where adults make decisions for the betterment of all life on earth, not just the human. The problems as most know are urgent and we may not have much time to change our destructive behavior, but in order for the change to be maintained a change in thinking and behavior is needed. So, this project does not focus on short term changes but long term changes on thinking that can continue, live on and grow. While this means that the results would not be seen until years down the road, it is my belief that it is an important goal and a good start to simply introduce the idea to children. Taking that first step towards sustainability.

**My role as a designer**

Everyone has something they are interested in and as a designer those interests give me drive and motivation to keep working on a project. By thinking of interests and what I wanted to work with, the role of the designer took form. Early on I only knew that I wanted to work with a focus on nature and the future. Whether that be a good one or not, I knew that there was something I could do as a designer to get a conversation going or plant a seed in people’s minds to get them to think about what we would need to change or implement in order to become more sustainable. Speculative design was a field I found interesting and believed could be used in order to get the ball rolling. As I believe speculating and asking the question of what if opens up possible paths of how to get there. By exploring the question of what if we could later on ask how to get there.
These were my leading thoughts that helped me develop my research question:

How can we, with children, explore what a sustainable society would look like by thinking of both nature and humans as belonging together?

In a project there is always something that the designer wants to achieve, a goal they want to reach. The role you take as a change agent reflects yourself and what you want to achieve. Sometimes you may end up not fully reaching the goal but you always end up learning something in the process.

The change I want to achieve is split into two parts, short-term change and long-term. The short-term change is to use speculative design to explore together with children how we could improve our environments for the species we cohabitate with. The long-term change that I want to achieve is to plant the idea that we are connected to and need nature and the species we share the planet with. That we are part of the same group and are dependent on each other. Sweden (the place I am from and where this project takes place) is an individualistic society where focus is on the individual instead of the group. So, the goal of the project was not only to add nature to the group but also encourage group thinking where we would consider the needs and wants of the other species. I wanted to show that by thinking from their perspective, that of the non-human, we can find ways to move towards a sustainable way of living and a sustainable future.

So, with those goals of short-term and long-term change, my role in this project is that of a designer that develops fun and engaging ways for children to explore a non-human perspective. Allowing them to see the relationship between humans and nature. Connecting and talking to stakeholders that are involved with children and developing the project based on the feedback. But my role as I see it is not to create or introduce an entirely new way of thinking to children. My role as a designer is to make it easy for teachers and people who work with young children to formulate and show how things are connected and how one could at a simple and basic level explore the non-human perspective. Making it easy for the teachers and pedagogues to engage children in this exploration and how to make our environment better for those we share it with. Introducing an idea or way of thinking that can grow with the children.
Methodology

Some of the methods I have used during the process of this project were workshops and prototyping as described in the Universal methods of design (Martin and Hanington 2012, 62-3, 138-39). I chose these methods as they help me try out different things and see what works and what does not. They give me feedback and the ability to try things with the intended target group instead of guessing and assuming. As assuming would not provide accurate opinions and reactions. I would therefore not be able to improve my project and toolkit to better fit and engage the target audiences.

Inspiration and development

The development of this project, as mentioned earlier, started from being inspired by kincentric ecology. It then, through thinking and speaking with people, came to be more about thinking of nature and humans as a collective and belonging together. This switch in words is what made it easier for me to communicate what I wanted to do and find helpful literature and inspiration that allowed me to develop and move my project forward. It was through this change in language that I found collective learning, a model based upon David Kolb’s experiential learning (Brown and Lambert 2013, 7). The model is based on the participants own contemplation and experience and has four steps that are as follows:

1. Asking for the best possible future or the ideal of what should be for each participant.
2. Looking at how it looks now.
3. Taking everyone’s ideas of the ideal together and seeing what could be of those combined.
4. What actions can be done to reach the what could and experimenting to get there (Ibid., 15).

This model inspired me and helped me lay a foundation for the workshop I wanted to do with children, where we would explore the non-human perspective and think of possible what if questions and changes that could be implemented to make our environments better for all living in them. Thomas Thwaites’ (2016) project GoatMan was another project I found inspiring. As he in the project immerses himself into the animal and tries to be a goat. I found this to be inspiring as I saw it as a way humans can try to understand and empathize with the non-human.
With the inspiration and the idea of what I wanted to do with the project (introduce and explore a non-human perspective with children) becoming more concrete I started to reach out to potential collaborators. After some initial struggle, I managed to get into contact with a kindergarten teacher that was interested in helping and being a part of the project. Through this collaboration I developed activities for explorations and introduction of the non-human perspective on the children’s level, inspired by the collective learning steps. The teacher helped me make the activities more concrete and understandable for the children and helped me tie the workshop and project into their educational plan. It fits in as their education should have a positive view of the future and should give the children the opportunity to have an ecological and gentle approach to their surrounding environment and society. The children should also get the opportunity to develop their knowledge about how the choices that humans make contribute to a sustainable development that includes both economic, social and environmental sustainability (Skolverket n.d).

It is in these connections between my project and their goals, that I find motivation for this collaboration and what makes it successful. As I got a relevant and helpful source of knowledge and feedback, they in turn got a new way and new ideas on how to approach their values and mission. I came up with ideas for activities and made prototypes that the teacher looked at and gave me feedback on. I then improved them and in the end ended up with four activities for the children that would introduce a non-human perspective and help them explore it. These were then tested together with the children in the form of a workshop.
These activities build upon each other and are meant to make the children think while still being both playful and educational.
Workshops

Trying out the tools and activities that I had developed was done in two workshops. One with my niece and nephews who are in the same age range, and a second one with the teacher’s kindergarten class. The first workshop was to see if the things I wanted to do worked and see if some changes were needed or if something should be modified. This first workshop turned out well and the kids had fun. I found that the planned activities were on their level and that the tools helped them stay focused and made the whole thing engaging for them. From this I also learned that I needed to have a more structured and well thought out plan, as when I was unsure they also became confused and became less engaged. I learned that my initial plan with time was way off as it turned out they needed more time spent on each activity than I had assumed. But the workshop also led to fun and creative interpretations of the activities.

A fun thing my nephew did to make the town better for everyone was making animals and people have a pool party as then everyone would have fun.
With the second workshop, the one with the kindergarten class, I also had their teacher there as support who helped keep the children engaged and focused. Throughout the workshop the children were focused and seemed to have fun. We did the planned activities and they could see how things were connected. They also came up with their own ideas and thoughts on how the different species and humans connect to each other, things which I had not thought of. The activities and tools created kept the learning and exploration at their level while having room for creativity, fun and their own interpretation. In the end the workshop went well and showed me that the activities and tools served their function. Their teacher was also enthusiastic and told me that they would continue to use the material more in the future. This workshop showed me that this is a way to introduce a non-human perspective to young children and showed me that this is something that kindergarten teachers can use. This is what I took with me as I developed the final toolkit.

Images taken from the workshop conducted with the kindergarten kids
The Toolkit

*The children’s toolkit for thinking with nature* is the outcome of this project and it is based upon the workshops conducted. It includes everything a teacher or pedagogue needs in order to hold the workshop and introduce a non-human perspective to kindergarten children. Besides the material needed for the activities it also has a manual with explanations and pictures to make it easier for the teacher to understand how and why the steps are done.

The final toolkit with all the tools inside it
The first activity is to match species to the silhouette, the lines in between show how the species are connected to each other through nutrition (who eats what). This to show how everything is interconnected and dependent on each other. Pictures of humans are then presented and they start to talk about how humans are connected to nature and how we also need it.

In the next step the children make and put on their own mask of a different species and pretend to be it. The aim of this is to emphasize and start to think from that species’ perspective, what that species would want and need in order to live a good and happy life.
The third step has cards that the children together sort based on whether it is good or bad for nature and the non-human while they also talk about why.

Cards that the children sort based on how they affect nature and other species

Lastly the teacher or pedagogue builds up a little town and asks the children to move, take away and put in pictures to make the town better for the non-humans and the people living there. They then use that non-human perspective to see what the different species might need or want and how it affects other things already there. Opening up for talks about how things are connected and their effects on each other.

How the activity would start (left picture) and example of how it could look like after adding and removing images (right picture)
All these steps can be found inside a wooden box that is designed to look like a gift as it has the connotation of something exciting and fun. So that the children can get excited about what is to come by looking at it. It is made of wood so that it can be used and customized after the exploration. The manual also includes some ideas of what can be made of it like for example a birdhouse, insect hotel or be used as storage. This is also why the lid is not attached but removable, as not to limit what can be made of it. The box also includes a large piece of fabric that is water resistant. That fabric can be used to hold the activities on in case the ground is wet or moist as the toolkit is meant to be used outdoors.
Sustainability and metadesign levels

Throughout the project I have kept metadesign and holistic sustainability in mind. As change and sustainability are complicated one must see the big picture and move between different levels when looking at a project. Metadesign is a practice that moves between levels and sees how a project not only affects the personal, the local community but also on a global level (Tham, Ståhl and Hyltén-Cavallius 2019, 28). It is, as I see it, more fluid and allows for adaptation and mixing of practices where one can see how many problems interconnect. But besides that metadesign also, instead of rigid fixes, produces seeds that can adapt depending on needs (Ibid., 27-28). This is something that my project does. It plants a seed of thinking from a non-human perspective within the children that can grow and be adapted depending on future needs and situations. It does not say this is how you fix it but provides a new perspective to explore that can be used and grown to find new opportunities. When it comes to the different levels the project can be broken down and placed on the different metadesign levels of product (me), system (we) and paradigm (world). How it fits in in these levels is shown in figure 1 that is inspired by the metadesign map found in Oikology - Home Ecologics a Book about Building and Home Making for Permaculture and for Making Our Home Together on Earth (Ibid., 30-31).
Holistic sustainability is an important thing to consider. In order to achieve a sustainable future for all, many areas must be considered and it is not just the environment. For humans to live sustainably, the economic, the cultural and the social is just as important as the ecological. The project considers these four spheres and while it is stronger in the ecological, cultural and social it still finds a way into the economic. By looking at figure 2 below, one can see how the project as a whole, not just the toolkit itself, fits into the different sphere of sustainability and while one can argue that this is long in the future and not how the toolkit would fit into the spheres. I would say that the toolkit is part of a larger project that sows seeds and it is possible for those to be nourished and allowed to grow. This project has potential to continue and grow beyond the toolkit. One must only be open to see the potential and be open to change.

Figure 2 depicting how the projects different parts fit into the four spheres of sustainability.
Summary

*The children’s toolkit for thinking with nature* is a toolkit that is designed to be used by teachers and pedagogues together with children in kindergarten. It is used to introduce a non-human perspective to the children and has tools and activities to explore how humans and nature are connected to each other and how different species affect each other. It was created by using prototypes and workshops to make the steps more fun and engaging to the children. While it remains to be seen if the project manages to reach its long-term goal of the children using this perspective in the future, it did reach the short-term goal of introducing the non-human perspective on the children’s level in a way that was fun and engaging to them. The toolkit itself is a first step towards a future where humans use a non-human perspective and consider the wants and needs of more than just humans to improve sustainably. It provides the teachers and pedagogues with a fun way to talk about how things connect and affect each other and lets the children explore new perspectives. While we will not know now if this perspective will be used in the future, the seed for change planted could grow if nourished and taken care of. Different ideations of this project can in the future be used and developed that target different age groups so that the seeds get that chance to grow and bloom into a more sustainable approach and relationship with nature and other species.
References


