Learning as a relational field
part 4 Ingela Elfström

Life - Death and Rebirth
Children explore the cycle, breaking-down and lives processes
What does it mean when teachers really begin to listen to children's questions and theories in the field of science?
What is the goal of knowledge - "pure fact of science" or...?
Can children's own theories and their experience-based knowledge be the way for an extended knowledge of science?

“Listening” and “the relational field”, what possibilities do they open up for - according to new understandings and perspectives in the field of science?
A project work in a preschool
with 20 five-year-olds, 7 girls and 13 boys.

The very origin was when the children in early springtime found a dead roe deer in the wood. The preschool group returned to the roe deer several times and finally only parts of the skeleton remained. The children were fascinated and talked a lot about what had happened with the roe deer’s decaying carcass.

Based on this apparent interest, the teachers decided that the roe deer, and questions of life and dead, should be the theme for the next project.
Why did the roe deer die?  A Knight/Hunter shot it.

It was old and died.

It tumbled down the mountain and hit his head on a stone.

An Eagle dropped its prey in the head on it.
Why did the roe deer die?

"The ‘space-scock’ come from space. It sucks all air out of the roe-deer, so it cannot breathe. The roe-deer chokes and die."
What is possible to explore?

• What happened to the body?
Life and Death

• How can life go on?
• What is the problem/issue that the children seem to explore?
• How will we be able to catch onto it?
• What is needed then of materials, more knowledge of the subject, curiosity etc?
Many of the children are wondering:
- What are the blacks on the roe deer?

But no one knows. Then take the help of a parent who is a biologist and ask what the blacks on the roe deer can be. He answers:
- It can be black mould.

The children are very interested because a few of them are aware of mould. There will be a new track which is possible to explore:
The first episode is a dialogue which takes place in the forest: Elin shows the mushrooms. They are black and mouldy.

**Elin**: Look, it is the same mould mushrooms that we found on the roe deer.

**Teacher**: Where does mould come from?

**Elin**: Pieces of mould come from the mushroom.

**Ture**: The mould bounces down to the ground and float around.

One child says that there can be mould on food in the fridge. Another child sees mould on a pine tree.

**Ture**: If you get mould inside your body it starts to ferment, and then you crack in two pieces.
Some days later at circle time, the group starts to tell stories about mould, like horror stories:

- Mould can bounce down from the table or flow down onto the floor, it flows and flows, it grows and spread and the whole house turns into a mould bath.
- But if you lock the mould inside a small space, then it can only spread in there.
- If you pour water on mould, it grows.
Breaking-down and lives processes

The children starts to collect different kinds of fruits, vegetables, cheese and explore and investigates different kinds of mould.
In the microscope they saw whole worlds of mold
The aesthetic and visual formation

- Gives children the opportunity to make images with greater complexity
- Enlarge – to get a different perspective
- Use both fact and fantasy
- At the same time more and richer concepts both of the children's drawings and told stories
"Mould comes from a star and falls down to earth. When you get old you get mouldy, I think".
"First, the mould is in the forest, then it flies into the house, jumps into the fridge, spits the mould onto the sandwich and other things".

"The mould bacteria spits out mould on the sandwich. The mould grows and then the sandwich is covered by mould, the mould bacteria flies back to it’s home in the forest".
"This is a piece of mouldy bread. The mould grows and grows to a whole city of mould. The mould sings and you can hear the mouldmusic through the 'mouldspeaker'."
This means that the object of education is seen not as an object but as a 'relational place'.

//..// this re-knowing of the object is not only 'historical’, that is, reproducing what is culturally known about the object (for example what we know about three in its disciplinary interpretations: biology, architecture, poetry, and so on). It is also a living organism because it comes to life in vitality, freshness an unpredictable ness of this encounter, where the children can give new identity to the object, creating a relationship for object and for themselves that is also metaphorical and poetic” (Carla Rinaldi, 2006).
To take advantage of all the ideas and let them meet each other: Children's common documentation
Existential questions and ecological systems

Children's issues touch many disciplinary fields

- Life and death
- Protection against hazards
- Get new life
- How life can go on?
- Breaking-down processes and relations – friends
- Communication
- Mutual dependencies – reciprocity and dependencies
- Transformations
The idea of “learning as a relational field” not only involves children and teachers, but also the content of knowledge and the pedagogical milieu; learning takes place between all those involved (Olsson, 2008). It is a kind of relational situation where the children and teachers as much as the content of learning are intertwined and keep evolving continuously moving.
This doesn’t mean that the content of knowledge is neglected - on the contrary it is central in the learning process but with a deeper and more complex approach. In the middle of the relational field the children and teachers meet around a problem sprung from the content of knowledge.
The exploration in this project circle around life processes and transformations. We have seen when children own the questions together with curious adults the interest and the engagement for science grow, deepened and extended knowledge occurs.
Pedagogical documentation

• As a teacher "LEARN to LISTEN" on children's theories, hypotheses, and dreams.

• Follow and understand the teaching strategies that children use when they explore and construct the world.

• Focus on processes - follow and highlight children's and teachers' meaning-making within different subjects and themes.

• Grounds for challenge of children's learning
Learning as a relational field

Children, preschool teachers, working methods, communication, ways of expression, content, time, location, material interact, affect and change in a relational field of events

Pedagogical dokumentation — is a part of the relational field
The preschool's complex mission today

Passing on knowledge and the traditions and give children opportunities to own knowledge creation

To have room for both the planned and the knowledge we already know and at the same time for the unexpected and unpredictable based on the children's own questions and curiosity in the midst of the ongoing events