

Caring for nature in Waldorf education

A pedagogy of imagination, love and ethical thinking

by Arve Mathisen and Marianne Tellmann, 2018¹

People usually consider walking on water or in thin air a miracle. But I think the real miracle is not to walk either on water or in thin air, but to walk on earth. Every day we are engaged in a miracle which we don't even recognize: a blue sky, white clouds, green leaves, the black, curious eyes of a child – our own two eyes. All is a miracle.²

A deeper aim within Waldorf education is to foster and encourage feelings of love to awaken towards nature and fellow human beings.³ With regard to today's ecological crisis, questions arise on how education can take an ethical stance towards approaching all beings in nature with the respect and care necessary for creating a mutually sustainable future. How can teachers sow seeds of love and responsibility towards nature in their pupils? The formation of identities and new relationships during adolescence highlights these years as especially important concerning issues of sustainability. In Norwegian Waldorf schools, there is a long tradition of spending extended time outdoors; of being active in multiple natural environments and of letting pupils experience landscapes and natural forces through the joys and challenges they face when being out in the open.

In relation to selected ideas from Rudolf Steiner's 1919 lectures, *The foundations of human experience*,⁴ we investigate the possibilities of deepening adolescent pupils' experiences of connectedness and love towards beings and phenomena in nature. We will take Steiner's thoughts on imagination and moral development in the pedagogy of early adolescence as a starting point. Based on these initial ideas, the chapter will provide stories of educational outdoor activities with glimpses of images, feelings and love that intend to connect children and teenagers with the natural world. Since the educational principles pertaining to adolescents build on foundations laid during earlier years at school, we will include nature activities and relation-building examples from primary school, as well. The mentioned core ideas from Waldorf education will be related to contemporary works on nature, environment and sustainability. These are mainly by Arne Johan Vetlesen and Andreas Weber. In addition, Ernst-Michael Kranich's ideas on the anthropological foundations of Waldorf education will be taken into account.

¹ A shorter version of this text will appear as a chapter in a forthcoming book on The foundations of human experience in the cultures of the world.

² Hanh, Thich Nhat. (1987). *The miracle of mindfulness: A manual on meditation*. Boston, MA: Beacon Press.

³ See Steiner, Rudolf. (1996). *The child's changing consciousness as the basis of pedagogical practice* (GA 306). Hudson, NY: Anthroposophic Press.

⁴ Steiner, Rudolf. (1996). *The foundations of human experience* (GA 293). Hudson, NY: Anthroposophic Press.

Developing heart-thinking

During adolescent years, the capacity to think in a more abstract manner and to evaluate or judge one's experiences come increasingly to the forefront of Waldorf education.⁵ However, this is no straightforward educational process. Steiner's guidance for teachers contains subtle advice on how to properly mediate adolescents' emerging reflective and thinking capacities. The danger that Steiner wants to counteract lies in the possibility of thinking to become cold, detached and heartless. Here, Steiner critically relates to a century-long tradition of proclaimed value-free and detached knowledge. Steiner's attitudes can be interpreted as not only respecting the freedom of thought in individual pupils, but also laying the ground for an ethical thinking founded in a solidarity with all beings: a heart-thinking, where love and understanding come together in balance.

In *The foundations of human experience* and the parallel lectures *Practical advice to teachers*,⁶ Steiner contributes to the intricate and ethically charged process of integrating the power of judgement into the minds, lives and identities of adolescents. He points to how all teaching these years should relate to feelings and include imaginative elements. The ability to love the world should be developed at the same time as the capacity to judge its phenomena. This implies an explicit inclusion of morality into the pedagogy for adolescence. Steiner regards imagination as a main mediator in the process of linking understanding to love and respect. Repeatedly, he maintains that all teaching at this age should be imaginative and appeal to this age group's imaginative abilities.

In the same lectures, Steiner emphasises that silence and what is *not* talked about is important for early adolescent pedagogy. We relate this to being out in the open, sensing and using our bodies, but not necessarily talking about everything we experience there. Living silently with experiences, questions and reflections is seen as part of developing respectful attitudes towards oneself and the surroundings. Being silent can mean not jumping to swift conclusions but instead, letting experiences mature slowly within. Being silent can be a way of listening, of cultivating attentiveness, both inwards and outwards.

Finally, according to Steiner, the development from childhood's more instinctual and altruistic relations with the world to adulthood's inherent egoism enters an intermediate phase during years 12 to 15. He maintains that this pre-adolescent period offers the possibility of developing lifelong non-egoistic attitudes towards nutrition and other health issues. Our argument is that this capacity for selflessness can be expanded to all beings in nature in a similar way. A respectful and non-egoistic relationship to nature is the aim. This means treating beings and phenomena in nature as having intrinsic value, dignity and inherent meaning, instead of seeing them primarily as resources for humans.

In conclusion, we can say that these approaches share a careful mediation and balancing of the activity of thinking in relation to other aspects of human life and mind, and carefully attune this thinking to love and respect for nature. Imagination, certain ways of being silent and the awakening of possible altruistic relations to nature in early adolescence can be seen as core elements in a contemporary education for moral development.

⁵ See Steiner, Rudolf. (1996). *Education for adolescents: Eight lectures given to the teachers of the Stuttgart Waldorf School, June 12-19, 1921* (GA 302). Hudson, NY: Anthroposophic Press.

Steiner, Rudolf. (2004). *A modern art of education* (GA 307). Great Barrington, MA: Anthroposophic Press.

⁶ Steiner, Rudolf. (2000). *Practical advice to teachers* (GA 294). Great Barrington, MA: Anthroposophic Press.

Spirituality and values in Waldorf education

Before going into more detail concerning the mentioned educational ideas, we include a short reflection on how to relate to Steiner's spiritually-founded educational ideas. No doubt, these and many more of Steiner's statements are metaphysical in their nature. Questions arise as to how an educational option open for all children can relate to ideas of this kind.⁷ Here in Norway, a turn to normativity, to values and intentions within Waldorf education, has been one way of dealing with such challenges. In the Norwegian Waldorf school curriculum⁸, Steiner's anthroposophically founded views on education and the developing human being are dealt with in a normative manner.⁹ This means that values, intentions and an invitation to follow a certain design of progression are treated as choices: reflecting what Waldorf education stands for and has to offer. In this sense, Waldorf pedagogy becomes an invitation to learn, develop and teach according to the principles Steiner laid out in his educational lectures. When seen as values or intentions, leading ideas in Waldorf education can become transparent, and can be dealt with on an equal par with insights from other educational thinkers; for example, John Dewey or Lev Vygotsky. In addition, such a turn towards normativity is in line with Gert Biesta's reasoning when he argues that all education is normative, deep down.

I believe that the only way to regain ground is by posing the question of good education openly and explicitly as a normative question—a question of aims, ends, and values—and tackling this question head-on rather than in an indirect or implicit manner.¹⁰

We regard a turning to a value orientation as a possibility wherever Waldorf education takes place—even if this attitude is especially connected to the cultural life of Norway. It was here, in the early 1970s, that Arne Næss developed the ideas of *deep ecology* and its “concern with an ethic respecting nature and the inherent worth of other beings”.¹¹ Both Vetlesen and Weber argue strongly for setting values at the forefront of the philosophy and debate on nature and sustainability.

Imagination for adolescents – “to fill things with inner love”

In the fourteenth and last lecture in *The foundations of human experience*, Steiner emphasises how a loving attitude towards the world can be nourished by imagination. He encourages teachers to “appeal to the power of imagination”, in a specific sense, of pupils from the age of twelve to fifteen.

An activity of imagination and a permeation of inner warmth announces what the soul develops toward the end of elementary school at the age of twelve to fifteen years. You

⁷ For a short argument on how to relate to Steiner's esoteric writings, see page 62 in Mathisen, Arve. (2015). Rhythms as a pedagogy of becoming: Lefebvre, Whitehead and Steiner on the art of bringing rhythmical transformations into teaching and learning – part II. *RoSE - Research on Steiner Education*, 6(2), 52-67.

⁸ Mathisen, Arve. (2014). *A curriculum for Norwegian Waldorf Schools: Overview – Ideas and Practices in Waldorf Education*. Oslo: The Norwegian Waldorf Federation.
<http://arvema.com/tekster/Ideas and Practices Introduction Norwegian Waldorf curriculum 2014.pdf>

⁹ Mathisen, Arve. (2014). *A curriculum for Norwegian Waldorf Schools: Overview – Ideas and Practices in Waldorf Education*. Oslo: The Norwegian Waldorf Federation.

¹⁰ Biesta, Gert. (2010). *Good education in an age of measurement: Ethics, politics, democracy*. Boulder, CO: Paradigm Publishers (p. 2).

¹¹ Drenghson, Alan. (2012). *Some thought on the deep ecology movement*. Retrieved from <http://www.deepecology.org/deepecology.htm>

must emphasize particularly anything that depends on the soul's capacity to fill things with inner love; that is, everything expressed by imagination.¹²

The aim of developing a widest possible love of the world in adolescence is described by Steiner in several of his educational lectures.¹³ Complementing the tendency to love very few fellow humans in erotic love, Steiner argues for education to evoke an encompassing compassion towards all beings. In the above-mentioned series of lectures from 1923, Steiner relates imagination to artful teaching and to the creative, etheric forces in humans and in nature. In this regard, imagination can be seen as a bridge-building activity linking the creative human mind to its living bodily and natural foundations. However, the connection Steiner makes between imagination and loving the world, in the fourteenth lecture of *The foundations of human experience*, is to our knowledge less known and less elaborated in terms of educational practice and its didactics.

What is meant here by imagination? Imagination is a word with many uses and meanings. One way of clarifying the concept in this context is to look at Steiner's examples given in the 1919 lectures. They all seem to be rather down-to-earth and deal with how teachers can invite pupils to visualise or otherwise connect to concrete phenomena in their learning. The example Steiner most often uses is how the Pythagorean theorem can be taught by letting pupils imagine how much powder or chalk is needed to cover each of the squares in this well-known figure. In another lecture, Steiner similarly uses areas taken up by growing potato plants to visualise the three areas in this geometrical figure.¹⁴ He undoubtedly wants pupils to get a tactile, sense-related, imaginative experience of the surprising fact of the Pythagorean theorem. We regard this as a preparation for the later geometrical and algebraic treatment of the same topic. The intention is to let later understanding build on a very simple visual rendering of the geometrical law at stake in this instance.

Steiner continues to suggest that everything taught in history and geography should stimulate pupils' imagination in a similar way. In other words, events in time and space should be presented and comprehended through the imagined sensual vividness of concrete phenomena. All his examples of how to include imagination in teaching adolescents are of a basic, non-romantic nature.

The formula seems to be that of a metaphor: concrete, sense-based or bodily phenomena are coupled to more abstract concepts. Today, there is a huge and complex field of research showing how metaphors are grounding thinking in the body, in meaningful interaction with the world, and have functional foundations in human neurology. Metaphors are at work in the deepest layers of language, in creativity, in feeling and a host of other ways where the mind connects to the world.¹⁵ We argue that the central role and ubiquity of metaphors show how connected human minds are with the body and the wider world. When using metaphors imaginatively in their teaching, teachers not only help pupils learn better; they also show how interrelated we are.

¹² See pages 208-9.

¹³ See also Steiner, Rudolf. (1996). *The child's changing consciousness as the basis of pedagogical practice* (GA 306). Hudson, NY: Anthroposophic Press.

Steiner, Rudolf. (1996). *Waldorf education and anthroposophy 2* (GA 304a). Hudson, NY: Anthroposophic Press.

¹⁴ See page 85 in Steiner, Rudolf. (1995). *The kingdom of childhood* (GA 311). Hudson, NY: Anthroposophic Press.

¹⁵ For an overview, see: Gibbs, Raymond W. (2008). *The Cambridge handbook of metaphor and thought*. New York, NY: Cambridge University Press.

In his book examining how imagination is at work in human understanding,¹⁶ John Kaag presents a view on imagination as relational towards nature and born of love. Building on Schiller and Peirce, Kaag maintains that imagination belongs to both human thinking and to an inherent living creativity in nature: “To say that human thought and organic life are continuous is to say that the patterns of imaginative consciousness emerge in the biological rhythms of the natural world”.¹⁷ As soon as imagination is taking place, an ethical relation is afforded, maintains Kaag: “... a relation where the world is encountered as a *thou*, and not as an *it*.” He points to a “warmly intimate”¹⁸ quality within this encounter and goes on to develop the loving aspects of imagination based on Schiller’s play drive and his concept of agape, divine love: “Indeed, agape and imagination go hand-in-hand”.¹⁹ It is noteworthy how Kaag’s philosophical argument, regarding the loving and relational aspects of imagination, supports Steiner’s educational ideas linking imaginative teaching and the fostering of loving attitudes towards the world.

To see is to love

In Steiner’s educational examples of imagination, we see that teachers’ attention is drawn towards making imaginative connections to simple, well-known, concrete phenomena. And these phenomena should have an explanatory metaphorical power to connect more abstract understanding to things in the world. We contend that imagination for adolescents can be nourished in fruitful ways by spending schooldays out in the open, by letting pupils experience nature’s many faces and tempers. Simply stated, adolescents will take advantage of a rich repertoire of nature experiences when participating in lessons with imaginative teaching. The concrete, sense-based, natural ground of metaphors must come from somewhere. A colleague told of an adolescent boy out in the forest, lighting a bonfire for the first time in his life. Being primarily used to computer game images, the boy exclaimed, looking at the flames: “Wow, the 3D quality is really impressive”. He is right: the sensual crispness and magnitude of even everyday nature experiences is impressive. And they do form a reservoir of images that can be used educationally to enliven, to explain and to admire phenomena and beings in the world. In the next section, we will look more closely at the connection Steiner makes between imagination and loving the world.

The motive of linking imagination with love can already be seen in Steiner’s second lecture in *The foundations of human experience*. Here he develops thinking, feeling and willing out of the polarising forces of sympathy and antipathy. Out of antipathy, Steiner lets cognition, memory and concept formation arise in three subsequent steps. Likewise, willing, imagination and living pictures belong to sympathy. The basic power of will is seen by Steiner as transformed into imagination and into the “normal pictures which enable you to think of external things”²⁰ with increasing sympathy. Here, we see how Steiner connects the seemingly simple ability to see the external world as a fruit of sympathy, as springing forth from the warmth of will.

¹⁶ Kaag, John J. (2014). *Thinking through the imagination: Aesthetics in human cognition*. New York, NY: Fordham University Press.

¹⁷ Ibid. page 203.

¹⁸ Ibid. page 208.

¹⁹ Ibid. page 133.

²⁰ See page 55 in *The foundations of human experience*.

In a lecture from 1908, on the Gospel of St. John, Steiner deals with this same topic in a more esoteric manner.²¹ He contends that the sunlight, in addition to bringing warmth and life, also lets divine love stream towards earth. Visibility is understood as connecting those who see with divine love. In this sense, seeing, in itself, can be an act of love. Such a view can be termed a spiritual phenomenology, whereby simply seeing the world's phenomena, as they become visible in light, implies being invited into loving relationships. Love of nature is something that cannot be taught, according to Steiner: love must be awakened.²² Turning Steiner's statements into a normative question, we ask: Can being out in nature, sensing and experiencing its rich diversity and light-filled existence, be regarded as an invitation to love? We believe this is so, and see Steiner's use of imagination in adolescence pedagogy as an invitation to awaken and connect to the world with sympathy, with warmth and love.

Imagination, silence and the beauty of nature

To complete the picture of Steiner's examples of imagination in teaching adolescents, we will mention his advice regarding not saying too much as a teacher. In a parallel lecture held the same day as the last lecture, in *The foundations of human experience*, Steiner provides more interesting detail regarding the role and practices of teaching for imagination. Here he guides teachers to be conscious about what they are not saying. They should avoid boring pupils with too many details and instead, appeal to imagination in their teaching and "leave a good deal unsaid".²³ By leaving things unsaid, Steiner displays an interest and a reverence towards the silent, the void or openness that can play an important role in learning. The German sociologist Karin Knorr Cetina has investigated how just lacks and what is unknown drives the urge to gain knowledge in an emotionally engaging way.²⁴ The not-said, the unspoken, can be understood to combine engagement, fascination, even feelings of love, with the spur to find things out, to investigate.²⁵

Since a central topic in this chapter regards pupils' outdoor experiences, it is noteworthy that Steiner points to the difference in being out in fields, forests or mountains compared to what can be done within the classroom. While indoors the focus can be on understanding and analysing specific parts of nature, for Steiner, being out in the open is about experiencing the beauty of nature, of being delighted:

We should never forget to point out to them that we take them out into the open air so that they can experience the beauty of nature and we bring the products of nature into the classroom so that we can dissect and analyze nature.²⁶

The combination of learning about nature in classroom teaching and the experiencing of nature's wonders, beauty and forces, when being outdoors, can equip adolescents with a loving understanding. We interpret Steiner as letting non-verbal, tacit, bodily - as well as spiritual - qualities

²¹ See lecture 3 in Steiner, Rudolf. (1962). *The Gospel of St. John* (Vol. GA 103). New York, NY: Anthroposophic Press.

²² See page 129 in *The child's changing consciousness*.

²³ See page 179 in *Practical advice to teachers*.

²⁴ See Knorr Cetina, Karin. (1997). Sociality with objects: Social relationships in postsocial societies. *Theory, Culture & Society*, 14(4), 1-30.

²⁵ For an exploration of the phenomenology of silence, see Mazis, Glen A. (2016). *Merleau-Ponty and the face of the world: Silence, ethics, imagination, and poetic ontology*. Albany, NY: SUNY Press.

²⁶ See page 45 in *Practical advice to teachers*.

come to the fore when being outdoors. By silencing the analytical or interpretive mind, other aspects of life and of forces and qualities in nature can speak their own language. Being silent invites attentiveness and opens up to subtle and nourishing experiences, both outdoors and in classrooms. The teacher simply has to know when and how to let silence reign.

A twilight zone in human development

Bridging childhood and young adulthood, the years from 12 to 15 hold the potential for altruistic learning, contends Steiner. A child's more instinctive and holistic attitude goes through an intermediate phase where life-long non-egoistic relations to nutrition and health can be established. Through different examples associated with bodily wellbeing, in *Practical advice to teachers*, Steiner describes that when such topics are addressed in the early years of adolescence, pupils will apprehend them in a more selfless way. Up to the age of twelve, Steiner maintains, children can "study the animal and plant kingdoms" with "a certain instinctive sense of the relationships that play into these realms".²⁷ From twelve to fifteen years of age, there is a twilight zone in human development where deeper imaginative forces from earlier childhood can connect selflessly with the dawning judgemental capacities. In Steiner's view, this implies a window or passage in the development from childhood when an ethical relation to one's own health can be established on a life-long basis. In relation to the concerns of this chapter, we find it useful to expand Steiner's ideas regarding personal health into the health of the world.

Learning about nutrition can be about how humans relate, respectfully, to what they eat. Health can be dealt with relationally, with care for the environment, or it can be narrowed down to individual wellbeing. We see the same gestures at stake regarding creating relations to nature in a larger perspective. Also here, the focus can be narrow and anthropocentric in the sense that nature is seen, foremost, as offering resources for humans. Or nature can be seen as a wonderful network of relations where all beings belong together. In this view, the central issue is not that of give and take, but instead, of existing and living as brothers and sisters on a shared planet.

We are fascinated by possible implications of what Steiner understands as a twilight zone of development, where resources of immediacy, openness and naiveté from childhood can be taken into account for fostering ethical relations to nature. Thus, by imagining natural phenomena during these years, in Waldorf education there is an opportunity to promote caring, loving and respectful relations to air, water, landscapes, plants and animals, and at the same time nourish an increasing intellectual understanding of the same phenomena. We see this as a particularly interesting moment in the moral development fostered by Waldorf education. This requires teachers to be sensitive to developmental intermediaries, to dawning or twilight phases where both the old and the new are at play and can enrich each other. Attitudes from childhood can be kept alive and brought fruitfully into adult life. Experiences of oneness, dependence and belonging might be given due regard and become a life-long guidance in acting ethically towards nature.

²⁷ See page 183 in *Practical advice to teachers*.

Deep ecology, feeling and imagination

In this section, we will introduce the themes of feeling and imagination with regard to the deep ecological works of Andreas Weber²⁸ and Arne Johan Vetlesen.²⁹ They pinpoint our human relations to nonhuman nature as a decisive element in today's ecological crisis. We will also include Ernst Michael Kranich's views on life science teaching in Waldorf schools.³⁰

Andreas Weber, biologist and philosopher, calls for a new science of the heart that sees nature not primarily as an object of research but as subjects of experience, even of subjective experience; a First-person ecology.³¹ Weber calls for a paradigm shift, from coining neutral, value-free laws to the living and seeing nature as existing for human usefulness, to sensing, experiencing and feeling in meeting all nonhuman beings. Feelings are the sensing system of our contact with reality, and an ecology of feeling, a poetic ecology, will pave the way for new ecological ethics that dissolve the border between humans and nature and widens the experience of deep entanglement with the rest of creation. Creation can be grasped only by being creative: imagination can be echoed only by imagining, writes Weber. "The world, then, is imagined rather than observed".³²

At the core of the matters discussed here is the following question that Weber encourages us to repeatedly ask: What is a living being, and what constitutes aliveness? He points to the connection between imagination and the shared health between humans and their environment.

Preserving nature means to remain healthy in a healthy environment. "Healthy," however, does not translate into whole and undamaged but rather into the freedom required to carry out necessary embodied imagination. This poetic imagination is a requirement of a healthy system. It is, if present, something that has a healing effect because it instils aliveness. Aliveness means to be able to creatively participate in the ongoing imaginative processes in an ecosystem.³³

The whole of nature becomes a 'thou' that opens for meeting oneself, a deep bodily experience of mutuality: "Plants and animals help us discover significant things about ourselves. In them, we find our own inwardness".³⁴

In view of the irreversible changes in habitats across the earth, a poetic ecology implies that preserving nature is about preserving our own identity. And about love. "We should protect other beings because we love them. We love them because we are part of them, and even more because they are part of us."³⁵

²⁸ Weber, Andreas. (2016a). *The biology of wonder: Aliveness, feeling, and the metamorphosis of science*. Gabriola Island: New Society Publishers.

Weber, Andreas. (2016b). *Biopoetics: Towards a biological theory of life-as-meaning*. New York, NY: Springer.

²⁹ Vetlesen, Arne Johan. (2015). *The denial of nature: Environmental philosophy in the era of global capitalism*. London: Routledge.

³⁰ Kranich, Ernst-Michael. (1999). *Anthropologische Grundlagen der Waldorfpädagogik*. Stuttgart: Verlag freies Geistesleben.

³¹ See Weber, 2016a and 2016b.

³² See page 78 in Weber, 2016a.

³³ See page 307 in Weber, 2016a.

³⁴ See page 38 in Weber, 2016a.

³⁵ See page 30 in Weber, 2016a.

As teachers, we ask ourselves where the wellsprings of such imaginative experiences of mutuality and love towards nature may be found. The Norwegian philosopher Arne Johan Vetlesen, also deeply concerned with the rapid extinction of species, contributes to this question. With reference to Mathews,³⁶ who pleads for “the priority of encounter over knowledge” in meeting the non-human world, Vetlesen asks: Are we *really* touched by the fact that the eagle owl may disappear from the forests? Or, perhaps more challenging: Do we care that the maidenhair fern may soon be history if we cannot see any negative consequences for our human activities? Vetlesen warns that humans who have not experienced close and direct experiences with inhabitants and elements of nature will not be inclined to fight for their survival. What I have not experienced closely and directly, I will not miss and thus not be concerned with.

Estrangement from nature is a source of human-created destruction, as emotional distance and feelings of human supremacy keeps us at a distance from feeling guilty.³⁷ Knowledge, however much, will not do, claims Vetlesen. Neither will technology or, as is usually the case, taking human and economic needs as a starting point. “New technologies nourish the illusion of human omnipotence and instant gratification”.³⁸ Being in nature, on the other hand, listening and seeing, needs time and does not give the instant feedback of an online game. It takes time, perhaps even silence and the absence of strong artificial visual inputs, until nature responds and opens up. Meeting the gaze of a wild animal may turn out to be a life-changing experience, as may finding the right pathway up a mountain, or ‘reading’ the wind and weather conditions on a hiking expedition or sailing the waves. Acting in accordance with and respecting the elements, not ruling them, may open nature’s closed doors and reveal nature as our own inside turned out, as Weber describes. This may be a starting point of an ecology of the heart; a first-person-ecology.

With reference to Shepard,³⁹ Vetlesen points to the irreplaceable importance of childhood experiences with a non-human environment, both first-hand and through stories, dance and song. The richness of nature’s creatures may unfold for the child; some animals flying, others swimming, some hiding in the dark earth, others running boisterously across the plains. Trees stay put with their roots firmly set, while their seeds free themselves from restrictions. Brooks follow their constant longing for the ocean. Before society’s censorship sets in, childhood is a time that makes a unique closeness possible, when nature, in its fullest richness, is sensed and acknowledged. Vetlesen refers to his young son to describe this deeply-felt closeness to nature in nature: as a three-year-old, he would happily greet the trees in the forest and say goodbye when leaving. This talent of imagination and emotional identification was then culturally de-learned and gradually replaced by ‘real’, i.e., more distanced knowledge.

Being in nature - walking, hiking, tenting, skiing, climbing - occupies a strong place in Norwegian culture. It is often claimed that, for many, hiking or skiing in the almost untouched wide alpine plains in Norway is akin to a religious experience. Whether by the sea, in the forest or on the mountain plains; whether winter or summer, the Right of Public Access opens access to nature for all citizens. Even so, a majority of children in our day and age spend most of their childhood indoors, often in

³⁶ See page 204 in Vetlesen, 2015, referring to Mathews, Freya. (2005). *Reinhabiting reality: Towards a recovery of culture*. Albany: SUNY.

³⁷ See page 23 in Vetlesen, 2015.

³⁸ See page 99 in Vetlesen, 2015, referring to Shepard, Paul. (1982). *Nature and madness*. Athens, Georgia: The University of Georgia Press.

³⁹ Shepard, Paul. (1982).

front of screens.⁴⁰ They lack exactly those close, personal, emotional, imaginative experiences with non-human nature that may open the soul to feel the intrinsic value of non-human nature and the mutual dependence of all living beings.

Kranich on imagination in classroom teaching

Ernst Michael Kranich similarly expounds ways of working towards developing living concepts in the life sciences.⁴¹ To establish an emotional relationship, even feelings of admiration and wonder, precedes understanding, underlines Kranich. The teacher's task is not to pass on definitions and abstract concepts. A pedagogy that focuses on presenting the world in abstract terms and concepts sees the human being as a distanced observer. All personal and emotional experience in meeting phenomena and beings in the world is then eliminated in order to secure the objectivity of scientific statements. This leads to an emotional deficit, starting in school, claims Kranich.⁴² The experience of the world must be expanded with emotional experiences, the personal taking part and being part that may emerge. When the animal or the plant (whether the cow, the mouse or the rose hip) arise in the pupils' imaginative thinking through the teacher's dedicated characterisation, the life of emotions permeates the emerging thoughts.⁴³ Thinking will lose some of its abstract character. These personal, feeling-based experiences can be an impulse for the ability to judge and the development of concept formation, as was Steiner's aim for the young adolescent pupils in 1919.

The appearance of a single phenomenon speaks out and awakens the experience that every being is a riddle, an enigma that may open a window to the general laws in nature. The riddles that the beings in nature represent, each with their characteristic traits and beauty, are not to be solved by the teacher and not to be solved immediately. They may, however, spur the imagination and ignite an inkling of the hidden being in the factual phenomenon. In Weber's words, leaning on Aristotelian tradition: "The outside reveals the inside. (...) The essence of a being is hidden within its flesh."⁴⁴ And the 'outside' of nature has a metaphoric power for "man (...) as the poetic animal."⁴⁵ Darkness is a bodily experience and metaphoric expression, alike. When a word is sharp or soothing, when life challenges us with its waves of happiness and sorrow, when life is stormy, or our fellow human being is shining like the sun or cold as ice, we meet the poetic first-person-ecology of nature. Meeting nature is, indeed, meeting oneself.

Experiencing nature with pupils

In Norway there are strong traditions in spending time outdoors, enjoying the peace and beauty of nature with a near-to-religious devotion. The Right of Public Access secures every citizen the use of field, fjord and forest. Yet, as referred to above, childhood in Norway is increasingly spent indoors.⁴⁶ The Waldorf schools make a conscious effort to allow for first-hand, personal experiences with nature. We will present glimpses of outdoor nature experiences, as we have practised them and as

⁴⁰ See page 221 in Vetlesen, 2015.

⁴¹ See pages 137-179 in Kranich, 1999

⁴² See page 174 in Kranich, 1999.

⁴³ See page 176 in Kranich, 1999.

⁴⁴ See pages 25-27 in Weber, 2016a.

⁴⁵ See page 141 in Weber, 2016a.

⁴⁶ Vetlesen, 2015.

we know Norwegian Waldorf tradition. We also mention some keywords regarding connections with selected life science subjects and activities.

Class 1-3, age 6 – 9

We went for a walk every week, as occurs in most Waldorf classes in Norway, leaning on a kindergarten tradition. A small patch of forest sufficed for many years. The experience of nature evolved with the pupils' age, and the same place never stayed the same through spring, summer, autumn and winter. Sometimes we looked out for something special – what had changed since last week? Memory was supported by the weekly meeting with the same surroundings. Sometimes we brought back flowers for the seasonal nature table in the classroom. Most importantly, though: the pupils could enter into bodily conversation with trees and rocks, beetles and moss and broken twigs on the ground, an occasional squirrel or a singing bird, an ants' heap or a miniature world of deep green fern. The seasons express themselves through ever-changing smells, tastes, touch, sounds, colour and beauty. Feelings are aroused, experiences of kinship with the life of non-human nature is at hand, though not 'taught'. The pupils are not obliged to express their feelings: they live the meeting in their free, individual imagination, as a silent stream in the depth of the soul. Still, there is room for questions, for expressing wonder at the first flowers or a bird's nest in spring, or the joyous laughter in suddenly seeing that the pine tree laden with snow in winter is looking just like a bent old man. Is the pine tree happy for its winter cloak, or does it burden him?

If we listen really carefully: what would the pine tree say to the snow, or what would the squirrel say to the migrant bird who has just returned from Northern Africa? How would the conversation sound between the ever-moving waterfall and the orchid flowers that are nourished by the waterfall's showers, clinging on to the bit of earth that remains? Such questions have many answers and are the themes of so-called Nature Stories for young school children. Next to traditional fairy tales, fables and legends, nature itself lends us ample motives for new nature stories. The images must be 'true', meaning that the beings of non-human nature speak out their true character as pine, snow, squirrel, waterfall or orchid, not as make-believe humans. Steiner expected such imaginative stories to precede the teaching of life science subjects. They create images and they kindle the pupils' imagination. We regard this as an even more important expectation in 2019, compared to 1919.

Classes 4 – 6, age 9 – 12

The weekly walks came to an end, but there was room for occasional longer walks, or skiing, bicycling, rowing, canoeing, sailing, on a day basis, or with a night in a different surrounding than in school. The outdoor experiences contributed to an emotional and imaginative basis for the life science subjects of these school years, be it zoology, botany, geography or geology.

In class 5, we went to (some of) the wellsprings of the nearby river. Water trickled out of the rocks in many places, met and formed a creek, a small stream, a wider stream moving in meanders and eventually flowing into the local fiord. We followed its course. Although no Amazon or mighty ocean, the basic inclinations of water are the same, whether big or small in volume.

The age of 12 marks a transition in Waldorf pedagogy, as presented above. We gave the pupils a task: to follow a tree through a year, to look, listen, feel, smell, draw, write in poetry and prose. And to just sit still and meet the tree. Subjective experiences form what Weber calls 'empirical subjectivity', which is at the core of 'poetic objectivity'.⁴⁷

There is a nationwide tradition in Norway that class 6 groups go for a week's camp, in the mountains or to the sea, often to a different natural environment to where the school is situated. Outdoor

⁴⁷ See page 112 in Weber, 2016b.

sketching of landscapes and of details within it can lift the experiences, as can writing poems or small stories, or a diary, based on the experiences in nature. To describe a plot in nature through sight, and then again through listening, is one of many possibilities to deepen nature experiences.

Nature does not give instant gratification to youngsters used to gaming and googling. Nature offers no repeat button, no cut and paste, no background music. One's body directly encounters the bodies of the surrounding. It takes time to 'tune in' to nature's pulse, sounds and sights. It takes time until one's body converses with the stony, tricky pathway up the mountain side or the snowy downhill slopes in winter: a good thing, therefore, that the hikes and outings are longer and more challenging than in the lower primary school.

On the other hand, a rose in a vase, or the herb pot in the window sill, or the old birch tree at the school entrance, or the little pond, is also nature, with the potential to see, to always see anew, to experience beauty, kinship and, indeed, the metaphoric potential of non-human existence. The fragrance, yet thorny beauty of a rose; the tiny, apparently dead seeds of cress that open up and find their way from the dark earth to the light, stretching their fragile green sprouts towards the sunshine; the birch tree that has seen generations walking to school; the pond that suddenly one winter morning is all ice: they are all nature and metaphors alike. Questions can be asked, without needing an answer. We tried to follow Steiner's advice on 'not saying too much' and 'leave a good deal unsaid'.

Classes 7-9, age 13 – 15

One of us has many years of experience in bringing youngsters of this age out into nature. During all seasons, we went walking in forests and mountains, bathing or canoeing in lakes and fjords, bicycling to beautiful places, tenting on islands and in forests, skiing or skating in winter, to mention just a few. As a rule, the class had three trips a year; one just after the schools start in autumn, one before the summer holiday, and one with skiing or skating during the winter. Over the years and with the same class, the idea was to cover a wide spectrum of nature experiences relatively close to the school. Sometimes we simply started from the schoolyard and went bicycling into the forests surrounding Oslo, or we took a local boat to an island in the Oslo Fjord. On other occasions, we rented a bus to travel up into the mountains for trekking or skiing. The trips were always low-cost, and aimed at mastering the basics of 'surviving' out in the open with good but simple equipment. Fishing in the fjord is just one example. Sometimes there were subject-relevant activities, such as astronomical observations in the autumn, but most of the time we just had a great time together outdoors. Usually some parents and a colleague teacher joined these trips. Here are a few pictures from being out in nature with classes seven to nine.

The quality of being together around a bonfire lit at the seaside, telling stories, singing and joking or just being silent, is simply so rich that words can hardly describe all that is happening. After a long day of events, pupils and adults often gathered around the fire for a meal.⁴⁸ After eating came singing together or just listening to stories or friendly small-talk. There is something special about sitting around the fire. In front is warmth and light and familiar faces. Behind is darkness and maybe the beginning of a night's cold. An intimacy is created within the vast nature. In a sense, the sitting around a fire together, out in the free, is an archetypical picture of human culture, depicting how it is embedded into nature. The freshness of the air, the sounds from the fire, the smoke, the singing

⁴⁸ Due to outdoor fire restrictions in Norway, in summer, a bonfire can be lit only in specially constructed places or where the conditions are safe.

birds and the darkness that grows around us; all of this can create an atmosphere of vividness, immediacy and belonging that imparts a great deal, without words, about the human condition.

Being out in nature not only delights and opens up for the beautiful, such experiences also challenge adolescents in important ways; letting them face and possibly overcome their own limitations with regard to strength, endurance and courage. Climbing a mountain can be a demanding experience and many decisions must be taken for the safety of all participants. The right choice can be either to give in, because of the day's particular conditions and refuse to climb to the top, or to take the challenge and continue climbing. Usually such decisions are dependent on the weather and other circumstances in nature. They are based on a knowledge of how nature behaves and what can happen under its different circumstances. One of us remembers well how a whole class of 13-year olds had to give up reaching the top of Galdhøpiggen, the highest peak in Norway, because our mountain guide considered the track to be too slippery, that day, to be safe. Being in nature is about taking part in a network of relations; relations to one's own body, to the weather, to the landscape, to the season, and to everyone else being part of its virtually endless ecology. A respectful and practical knowledge is needed to guide such outdoor activities. In this context, humans are not the conquerors or exploiters of nature, but rather its companions, its respectful mates. Attempting to climb a mountain can be regarded as having a tactful dialogue with it.

A last example concerns taking a class of fourteen-year-olds out skating on a lake on an early winter's day when the ice is thick enough and before the snow has covered everything. While skating on the frozen lake and having fun with sliding movements and each other, the pupils can also silently be taken by the wonders of such a frozen lake. What is happening below its surface just now? How can life go on there when everything is cold and frozen above? What are fish and frogs doing now? What is it like to be down there? From on top of the ice, it looks dark and mysterious.

And then, maybe, suddenly the ice sounds with its deep, cracking voice. Small earthquakes in miniature remind everyone that even the hard ice is moving, is alive, and can express itself. Hearing the ice singing can be quite frightening and also a real-metaphoric reminder of the fragility of our lives, that we actually are living on a ground that might also break away. Skating on a lake, laughing and having fun in the fresh early winter air, can simultaneously harbour feelings of wonder and of existential remembrances. This exemplifies the simple fact that everything in nature can talk to us in several different modalities; in metaphors, evoking feelings, and charm or challenge our bodily presence.

Outlook

By viewing Steiner's ideas on imagination in adolescence in relation to today's environmental challenges, current deep ecological literature and Norwegian Waldorf schools' nature experiences, this chapter aimed to create a contemporary vision of how to develop and deepen educational thinking and practice with regard to nature and sustainability. We have not written this text merely to state what is obvious today; the need to connect in ethical and responsible ways with all beings and phenomena in nature. Neither did we want to tell fellow teachers about the importance of being outdoors. We simply regard this as a given, as a starting point.

What we aimed at was rather to share our enthusiasm for subtle nuances in Waldorf pedagogy where deeper strands of moral development are lifted forth. We have reflected on how imagination can contain seeds of love, on how thinking can become warm and ethical, and on how the dawning and emerging of capacities in early adolescence can be a source for altruistic relations. With regard to our experiences with Norwegian Waldorf pupils, we have pointed to the simplicity of being out in

nature. In the end, we could say that what we did and where we did it was less important. Simply being out in the open, showing care and attention to nature's ways and expressions, gave us and our pupils a deep satisfaction and nourishment.