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Animals in the landscape drawings of Finnish and Russian young people – in the landscape they want to conserve

Abstract

This research was carried out in connection with "The Finnish-Russian Country School Project". The aim is to compare Finnish and Russian pupils' values in their drawings of the landscape (n=946) they want to conserve, and to pay attention to the animals they draw. The pupils were 7–15 years old. The landscapes were classified by the variables (country, age, sex), and analysed according to landscape type. The most prevailing landscape was nature (82%). The existence of animals was few in species; but there were more animals in the Russian drawings. The most frequently drawn groups were the "wave birds" and mammals. The Russians often presented the forest animals whereas the Finns drew the domestic species. With increasing age, the frequency of the animals decreased clearly in the Russian landscapes. A similar age distribution was not seen in the Finnish drawings. In conclusion, the animals were well placed in their ecological environment, indicating children's good understanding of the natural habitat they were drawing.

INTRODUCTION

The aim of this study is to survey and compare the animals which the 7-15 years old Finnish and Russian pupils have drawn into the landscapes they value and want to conserve. Empirical material has included drawings in many studies (Alerby, 1996; Palmberg & Kuru, 1998; Palmer, Suggate & Matthews, 1996). The use of the drawings has been justified, e.g. by the fact that children like to draw, it does not make them feel nervous. It is an easy and quick way to get the information despite any language barriers. This method is suitable for comparing things, and it discloses the children's feelings and thoughts about the world. This method is a window to their values and thoughts, reflecting their inner perceptions (Thomas & Silk, 1990). According to van Manen (1990), the productions of art could be seen as lived experiences, which have been drawn as pictures.

According to the ideology of the German Landschaft-geography, a landscape was defined as *a certain uniform geographic area that could be marked off on a map, and had its own character-istics different from the neighbouring landscapes.* These were mainly landscapes of Nature (Raivo, 1995, p. 8). Later on also human activity and cultural features were included in the concept of landscape. "In our minds we define a landscape as a neighbourhood that has characteristics derived from natural and/or man's activities and interactions" is one of the definitions set by the Finnish Ministry of the Environment (http://www.ymparisto.fi/aluekayt).

Kellert (1996) views the biodiversity and values of nature in his book "The Value of Life". The naturalistic values emphasize the satisfaction people get from their direct experiences in nature. It has been shown that certain animals and landscapes attract aesthetic pleasures regardless of cultures and geographical circumstances. Natural landscapes are superior in this respect compared to city environments. A blossoming rose, a magnificent mountain peak or a flock of birds flying by are equally enjoyable to spectators from different cultures (Kellert, 1996). "Although the basic values of nature are rooted in human biology, they are shaped by the formative influence of experience, learning and culture" states Kellert (1996).

FACTORS BEHIND THE DRAWINGS, THE VISUALISED MENTAL PICTURES

Barrazza (1999) explains that the drawings of children are useful tools in evaluating their perceptions of their environment. King (1995) is of the same opinion. Alerby (2000) has used pictures in his studies, with good results, to visualise young people's thoughts about the environment. Palmer (1998) states that in educating people to take care of their environment, the outdoor experiences are the most important sources of environmental responsibility, especially in early childhood. Palmer presents, as the basic question, the importance of formal and informal education in constructing the model of environmental education. Both these methods of education, the official knowledge of the school programme and the skills learned in school, as well as the home education and the media have an influence on both one's attitude to and value of the environment, and also on the image one gets from the environment. Not only our knowledge of, but even more our various experiences from and our activities (action) in the environment, are important factors affecting our aesthetic image of the environment (Palmer, 1998).

Do the drawings differ according to culture? This is an interesting question also concerning this study material. Researchers have proposed slightly differing opinions about the influence of culture on children's drawings. Kellogg (1970) claims that there is a universal model of development in the drawings and art of children. Alland (1983) states that there are differences in the drawing style. Wales (1990) gives another perspective; the culture plays a basic role in how the ways of describing things by symbols have developed. Wales refers to Alland's theory, "the influence of regional symbols on the drawings of children", i.e. although the mental representation of the person is essentially the same, there are regional, cultural influences on the drawings. Grieve (1990) quotes Kellogg and Odel; "The cultures around the world...use similar patterns when describing what they want to explain. The forms may appear to change from one country to another but at heart they remain alike. The art of young children everywhere is identical".

The environment and one's experiences influence the mental pictures one draws up. According to the model of Hungerford and Volk (1990), the 'basic factor' in environmental education is the sensitivity to the environment, and this is what environmental education is based on. In this process, one's experiences, education and action in the environment are the key factors. In children, this process in relation to the environment, is still going on. Several studies have revealed mainly emotional indicators of environmental problems and attitudes. Of course, also these results can be studied critically, while the research questions have often been built so, that the children have to express their opinions on the environmental crisis, e.g. "... had to save the planet" (cf. King, 1995).

Positive and favourite elements of nature can also be found in studies by Kaivola and Rikkinen (2003). Places where you find peace, like the atmosphere of a summer cottage, and especially the water element, appeal to young people. Environmental psychologists have noticed that natural landscape is important in psychical recovery (Aura et al., 1997). A favourite landscape should not be too trivial or too complex. A positive landscape should not contain risk factors, e.g. a cliff or thunderstorm, but instead, water or vegetation should be the main items in the scene.

According to Kaivola and Rikkinen (2003) the favourite environments of adolescents were close to a summer cottage, in a coastal area or in the forest. It was important that the place was peaceful (cf. Barraza, 1999). The study shows that nature was a safe environ for young people, almost a mystic, sacred place, and also an important place for meditation. Answers (especially by boys) to questions related to the environment even revealed various activities connected to nature, and appreciation of the four seasons (Kaivola & Rikkinen, 2003).

Drawings of cultivated countryside like parks or green gardens, sometimes with animals and people in them, were also included in the drawings of "a good world" in the study by Alerby (2000). By using the dimensions of a "good" and "bad" world or environment he found differences according to gender and age. "A good world" was found more often in the drawings of girls than boys, and more often by younger than older adolescents.

What about age, relations to nature and drawings? According to Piaget (1969), there is an analogy between children's intellectual development and the development of their drawings. As the children grow older their drawings become more and more detailed, realistic and have dimensions. Kellert (1996) observed age-dependent changes in the relation to nature of American children: a rapid increase in the knowledge of about nature in early adolescence (9-12 years), and at the same time, an increasing interest in animals and nature. At the age of the 13-17 years, the understanding of the abstract and conceptual as well as of the ecological and moralistic aspects of the nature increased strongly.

Alerby's interpretation (2000) is that "a good world" is seen as a beautiful and idyllic natural landscape, e.g. as a forest, a meadow or as natural water features / systems (seas, lakes and rivers). The youngest children studied expressed their own concrete positive view of the world, while the older children had a more global view of the world (Alerby 2000). The oldest ones presented, among other things, the greenhouse effect, the loss of or a hole in the ozone layer, and the destruction of the rainforest. The youngest ones (7–year-olds) expressed "a here and now perspective", while the older children also expressed "a future perspective". The welfare of animals was emphasized especially among the youngest ones. It should be stressed, however, that in all groups, including the oldest already teenage children, the well being of animals was more important than the wellbeing of human beings!

The research questions

The background hypotheses of this study comprise the idea, that the landscape which somebody would like to conserve, is in one way or another important and valuable to her or him. The person undoubtedly has positive experiences and images of this environment.

This is a qualitative, descriptive and comparative study so only suggestive working hypotheses are presented for the studied phenomenon. The working hypotheses reflect the expectations of the researchers and are based either on theory or earlier studies (Borg & Gall, 1989). The aim of the study is to disclose and describe the mental representation of Finnish and Russian children and young people. The description is based on the drawn landscape the children want to conserve.

The existence of and the context of the existence of the animals in these landscapes drawn by children of different ages were studied by the following questions:

1. What animal/animal species, and in what numbers do they appear in the drawings of Finnish and Russian young people?

According to earlier studies, it could be expected that domestic animals and pets, like dogs and horses, are popular (cf. Kellert, 1999; Kaivola & Rikkinen, 2003).

2. What effect has the age of children on the presence of animals in the drawings?

A working hypothesis is that the animals appear more often in the drawings by the younger children than the older ones (Alerby, 2000; Eloranta, 2000).

3. In what kind of landscapes do the animals appear?

The expectation is that the informal influence of everyday experiences and of the living environment, and also the formal influence of the school curriculum (ethos), have their own effects on this (Palmer, 1998).

Methods

This is a qualitative, descriptive and comparative study. In the comparison the country and the age are important, the gender is taken as a background variable in some cases. The study has several 'survey design' features. According to Cohen, Manion and Morrison (2000), the survey studies have to fulfil the following prerequisites: 1) specification of the exact purpose of the inquiry, 2) the population on which it is to focus, and 3) the resources that are available. The present study meets these three criteria. The exact goal of this study is to describe the fauna of the landscape, that the pupils want to conserve.

The starting point of this qualitative study is to test neither a theory nor a hypothesis but to carefully analyse the collected material. The material includes drawings, classification of the drawings and inductive analysis (Hirsjärvi et al., 1997; Eskola & Suoranta, 1998).

It is also beneficial to have a theory, a so called background theory in a qualitative study. The theory is a helping tool for the analysis of the material, and can be used as a reference in the examination (Eskola & Suoranta, 1998). In the present study the background theories (statements) are: Kellogg's (1970) universal model of the drawings; Wales⁻ (1990) ideas about the possible differences in the cultures of the drawings, the aesthetic component (Palmer, 1998) and the sensitivity to nature of environmental education (Hungerford & Volk, 1990); and meaningful, personal experiences.

This project focuses on the school children and research has been carried out in connection with "The Finnish-Russian Country School Project" organised by the Finnish National Board of Education starting in 2002. The exact study group was a sample of the schools which joined the project, and its 7-15 -year-old children and young people. The study material was obtained from 10 Finnish schools and from 3 Russian school districts. The Finnish schools were situated in southern Finland, more likely at the eastern side, and the Russian school districts in northwest Russia, between Saint Petersburg and the Finnish border. Both schools from middle-size cities, and country schools were included (despite the name of the project). The schools had specialised differently according to their curricula, but there were several schools, which had focussed on environmental education. Most of the children were from primary schools (classes 1-6), while some were from secondary schools (classes 7-9).

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Data, collection and structure

The study material was collected as drawings. Thus, language barriers were eliminated. The exact number of pupils participating in the project remained unclear. The pupils were asked to draw on an A4-paper "*The landscape they want to conserve*". The idea behind this was that the drawings of the pupils are based on their values, on why the landscape, the environment, is important for them. Animals were not mentioned in the instructions. The technical realization was open, because the study was supposed to be as part of the normal school programme.

In this study, 946 of these drawings have been analysed, of which 611 (64,6%) were from Finland and 335 (35,4%) from Russia (Table 1). There were slightly more girls than boys (53% vs. 47%). The material has been divided into four study groups: 7-8, 9-10, 11-12, and 13 years or older. The age group of 9-10 years was the largest, close to one third of all the pupils. About 85% of all the children were from primary school (classes 1-6; aged 7-12 years). There were proportionally more pupils of secondary school age (about 30%; 13 years or older), and fewer pupils of primary school age in the Russian study group compared with the Finnish one (Table 3).

Data analysis

First the drawings were categorized according to the three background variables: country, age and gender. Then they were classified into the three categories: (1) the landscape which preferentially represents the natural environment, (2) the one which represents the built up environment, and (3) the one which represents an environment where the presence of man can be seen (Rikkinen, 1992; Aura et al., 1997). The pictures were named according to the main content of the drawings. After this, the analyses were focused on the animals drawn. The material has been analysed simultaneously by two researchers who have reached a mental agreement.

Results

1. What animals and what species of animals appear in the drawings?

In this study, out of 946 drawings 31% included some animal figures. Generally, the existence of animals was not conspicuous and it was often scanty in species. In the drawings of the Russian pupils there were significantly more often animals (in 37% of the drawings) than in the drawings of the Finnish pupils, in which animals were found in one fourth of the drawings (27%) (Table 1).

Nationality	Number of drawings		Number of drawings with animals				
-	Ν	%	Ν	%			
Finns	611	64.6	167	27.3			
Russians	335	35.4	125	37.3			
	946	100	292	30.9			

Table 1. The appearance of animals in the drawings of Finnish and Russian young people

In the drawings of landscapes that young and adolescent children want to conserve, the most common group of animals were the birds, followed by the mammals. Fish and invertebrates were also present in the drawings. On the contrary, very few reptiles or amphibians were presented in the landscapes.

According to species, the most frequently drawn group were the mammals, altogether 25 different species. There were 18 species of mammals drawn by Russian school children, and 19 by the Finnish ones. The rabbit was the most popular mammal among the Russian drawings, followed by the squirrel, bear, cat and dog. The most common mammal in the drawings of the Finnish young

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people was the dog, followed by the rabbit and horse with the same frequency, and then the reindeer and fox (Table 2). Thus, there was a clear difference in the prevailing animals between the study groups: the perceptions of the Russian young people were focused on animals living in the forest, whereas the perceptions of the Finnish children were focused, in most cases, on domestic animals and pets.

Table 2.	The most	common	mammals	in t	he	drawings	of	landscapes	that	the	children	want	to
conserve	(number (of drawing	gs with one	e or i	то	re animal	in	them)					

Mammal	Landscapes drawn by Russians	by Finns
Mountain hare	20	8
Squirrel	9	
Bear	7	
Cat	5	
Dog	4	16
Horse		8
Reindeer		7
Fox		5

The species of drawn mammals varied from the northern forest animals (e.g. fox, wolf, elk) or domestic species/pets (horse, pig and cat) to animals living in the savannah (lion and zebra) or in the ocean (whale and dolphin).

The most common landscape with animals in it was the landscape including birds, especially those flying with their wings looking like waves (44 Russian and 34 Finnish drawings) (Figure 3). These flying "wave birds" were the most common animal figure in the Russian drawings (35% of the drawings). In the Finnish drawings these birds were found in only 17% of all the drawings with animals. The variety of animal species in Finnish drawings was larger compared to the Russian ones.

In the drawings, there were also many birds which could not be classified as to species, and often these birds had a nest in the trees. Eight Finnish children had drawn ducks or water birds, which could not be identified, and six children had drawn swans. The Russians had water birds in only two drawings, and a swan in one drawing. The Finns had drawn fishes in the landscape with ponds, lakes or rivers about three times more often than the Russians. Even the fin of a shark appeared in the landscape of some drawings.

Butterflies were the most frequent invertebrate (in 13 Finnish and in 7 Russian drawings) and were mainly drawn by girls. Anthills were present in five Finnish landscapes, but in only one Russian landscape.

2. What animals are drawn by different age groups?

Depending on the age group, the Finnish and Russian young people did draw animals in their landscapes in different amounts. With increasing age of the child, the frequency of animals decreased dramatically in the Russian landscapes; the number of drawings with animals was 64% in the of 7-8 year age group, but only 20% in the oldest age group. The number of drawings of animals according to the age of the Finnish children roughly followed the normal distribution, i.e. the number was highest (33%) at the age of 11-12 years, while in the younger and in the older age group the percentages were lower (23% and 19%, respectively) (Figure 1.).



Figure 1. The drawings with animals in percentages

The animals drawn by the youngest age group of the Russian young people were the following: "wave birds", other birds, rabbit, (teddy) bear or squirrel, and also some invertebrates like butterflies and ants. In the same age group of Finns, the children drew "wave birds", other birds, duck, dog, cat, squirrel, reindeer, rabbit, horse, fish, and also invertebrates, e.g. butterflies, bumble bee, ant, spider and fly or mosquito. The variety of animal species was wider in the drawings of Finns.

3. In what kind of landscapes did the animals appear?

The most prevailing landscape was the landscape of nature (82%), which was more often present in the Russian landscapes (92%) than in the Finnish ones (77%). Instead, the built-up environment was more frequent in the Finnish drawings than in the Russian ones. There were two types of drawings with animals studied here: the landscapes of the local nature exhibiting surroundings with water, mountain, tree and forest elements, and the landscapes from distant lands' seashores and savannahs. Most of the examples of a built-up environment were from the home and yard surroundings.

The water elements were very often present also in the nature environments, and "wave birds" and fishes appeared in some of them. Some of the names given to the drawn landscapes are listed here:

Fishes in the sea, A duck on a lake, A swan swimming on the lake

Among the landscapes there were repeatedly mountain scenes or mountain peaks with reindeers, wolves, eagles or "wave birds". The following names of the drawings explain these scenes:

Wolves in nature, An eagle on the branch of a tree

Trees generally and **the forest** were popular landscape elements. Moreover forest landscapes in winter were drawn especially by the Russian young people. In the landscape, for example rabbits, squirrels, butterflies, "wave birds" and bears were drawn. The following names of the drawings describe these landscapes:

A rabbit in the forest, The forest of the animals, The bears in the forest (Figure 2), The spruces (Figure 3).

The following pictures demonstrate the animals in these drawings.



Figure 2. The bears in the forest (V 738)



Figure 3. The spruces, with hedgehog, butterfly and birds flying with their wings looking like waves (S 110)

Home environment and **yard formed** one category of the landscapes. In this category the nature and man made elements in the landscape were combined. In these landscapes appeared "wave birds", brown hare (Lepus europaeus), mountain hare (L. timidus), squirrel, horse, dog, cat, duck, mouse, rabbit (Oryctolagus cuniculus) and chicken appeared. The following names of the landscapes are examples of these environments:

A brown hare yard at home, Animals in the field, Horses in the paddock (Figure 4), A fence for the dogs, A cat in the park lane, Life in the farm yard.



Figure 4. The horses' paddock in the yard at home (S 106)

Distant lands, southern holiday beaches or **the African savannah** formed another separate category of landscapes, not a very big one, but clearly of its own type. These landscapes might include various coastal and water animals (flamingos, crabs, fishes, sharks, dolphins) or savannah animals (monkeys, parakeets, zebras, giraffes and lions). The names, which describe these landscapes:

Scorpion on the beach, The Southern shore (Figure 5), Life on the beach, The Savannah



Figure 5. The Southern shore (F 256)

Discussion

The term 'landscape' is not unambiguous, as is clearly seen in this study comprising 7-15 -yearold pupils. The drawings of the landscapes, that the children and young people want to conserve, were divided into several types of landscapes: about 4/5 of the landscapes drawn by Finnish and Russian children and young people represented the natural environment, while the rest represented the built up environment, and an environment where the presence of man can be seen (Eloranta, 2004). In this study, the nature of the landscape is also meaningful because it tells about the environment in which the animal exists. So, has the animal been placed in its ecologically correct environment, or is it just a question of a totally imaginative representation. According to our results, there were animals more often in the Russian landscapes than in the Finnish ones. This is explained partly by the fact that the animals in them were more often simply drawn "wave birds" in the sky or a hare figure from fairy tales.

The most popular animals were mammals. The species of the drawn mammals varied between the study groups: the northern forest animals prevailed in the images of the Russian children, whereas the most common mammal drawn by the Finns was a dog. This result of the present study was as expected and confirms earlier Finnish studies. Kaivola and Rikkinen (2003) studied the interest of young Finnish people in nature using photos of various landscapes. According to their study, the young people chose the photo representing a dog as the most or the second most positive of the ten photos. Their result that the Finnish young people favour domestic animals and pets confirms the results of the study of Kellert (1996), in which he showed that the dog and the horse were the two most positive animals of the 33 species chosen by American subjects. This means that animals connected with the hobbies of the children or pets are the most popular in their images.

It has been shown that an aesthetic longing for nature is connected with the big wild animals like mammals, and the birds (bears, wolves, wild reindeers, antelopes, cranes, swans etc). An aesthetically attractive appearance seems to be connected to several big, colourful and fast-moving species (Kellert, 1996). The results of this study are partly in keeping with those of Kellert.

The flying "wave birds" were absolutely the most common animal figure in the Russian drawings (35% of the drawings). In the Finnish drawings these birds were found only in 17% of all the drawings with animals. The variety of animal species in Finnish drawings was larger compared to the Russian one. There was a difference in the shape of the "wave birds": the Finnish young people had drawn birds with wings like curved waves, whereas the Russians drew birds in the shape of the letter V. The abundance of water birds (ducks, seagulls) in the landscapes drawn by Finnish young people compared to the Russian ones could be explained by everyday experiences and observations from the Finnish summer cottage, often situated by a lake. In all, very few recognisable birds were drawn. The numerousness of the water systems in Finland could also explain why the Finns had drawn fishes in their water landscapes three times more often than the Russians.

There were very few detailed descriptions of the landscapes. For example, anthills were present in five Finnish landscapes, but only in one Russian landscape. It could be assumed that the person, who has drawn an anthill in the landscape, has been walking in the forest and made detailed observations.

Our results emphasizing that the presence of animals in the drawings of the Russian young people was more prevalent in younger age groups than in older ones, confirm earlier findings (Alerby, 2000; Eloranta, 2000). On the contrary, the landscapes with animals in them were more evenly distributed among the Finnish drawings according to age group, being highest in the 11-12-year-old group. However, it is worth noting, that often the drawing was counted as an animal land-scape although it only had a simple animal figure in it.

The drawings of the younger Russian pupils could reflect memories of the fairy tales that had been read to them or games they had played at school. This was not the case in the drawings of Finnish pupils. Instead, the appearance of animals in the drawings of Finnish children could be explained by their own personal everyday experiences and by the topics of the school courses. In the previous study of how Finnish and Russian young people enjoy the forest (Eloranta, 2000), it has been shown that there were many animals mentioned in the answers by both Finnish and Russian pupils of various ages. Even animals the children were not fond of were mentioned, like mosquitoes, ticks and snakes.

In Alerby's study (2000) the youngest children studied, expressed their own concrete positive view of the world, while the older children had a more global connection with to the world. This trend was not observed in the present study. However, the study designs and the age distribution of the children differed in these two studies.

Is the effect of the education on the natural environment, the ethos of the school or the influence of the prevailing culture seen in the animal landscapes? The question is important because, as background variables, then were two different cultures, Finnish and Russian and different countries, Finland and Russia. Furthermore, the various schools, the curricula and teaching methods give a formal impression to the experiences of the study groups. The children and young people chosen for this study were growing up in different surroundings and obtaining their knowledge and experiences in their own environments.

The results show that in the animal landscapes there are signs of the formal world of the knowledge and experiences of the study groups, and furthermore, signs of their experienced world (Palmer, 1998). This study gave the impression that the Russian drawings contain more features from the school culture, and the Finnish ones more impressions from free-time experiences: the artistic level of the Russian drawings of the landscapes was high – often water colour drawings. The animals in the landscapes of the Russians were often drawn like in the fairy tales, especially in the younger group, whereas the Finns had plenty of impressions based on their own experiences of the landscapes including lakes, summer cottages and domestic animals in the yard.

The abundance of water systems and their animals in the drawings can be interpreted in such a way, that water is an important element of the natural landscape for young people (Kaivola & Rikkinen, 2003). Typical of the Finnish landscape is the great number of waters, systems, especially in the Lake District and Eastern Finland. Also the summer cottages situated by the lake or on the seashore have an essential role in the Finnish society and in family holiday activities of the families. The children are sensitised to, they perceive and make observations in such kind landscapes (Hungerford & Volk, 1990).

It is difficult to interpret what the child has had in mind when drawing the landscape. Is it a question of some kind of "stereotypic" memory or a dream of a trip to Lapland, or perhaps the image of some animals that belong to this kind of landscape. It is quite natural that there were high numbers of forest landscapes with animals among the drawing of the children, as the forest is common in the everyday landscape both in the eastern part of Finland and in Russian Karelia.

The home environment and yard formed their own category of landscapes. In this category, nature and man-made elements in the landscape were combined. They were clearly based on memories of concrete observations of the environment made by the young people. Distant lands with their animals can describe the dreams of a holiday and the desire of getting away from the daily home and school environment. On the other hand, TV-programmes offer plenty of content to these landscapes, and these themes are even taught in geography courses in school.

The target of this study, was to describe and compare the appearance of animals in the landscapes the Finnish and Russian children and young people want to conserve. The general understanding is that children as a rule like animals. This is supported by several studies (e.g. Kellert, 1996; Alerby, 2000). However, what importance do, which animals have in the landscape the children like and feel to be positive? How do the children see the position of animals in the landscape they want to conserve? Can the answer be deduced from their drawings? No previous data are available from this kind of research.

In this study, where the central background variables were two basically dissimilar cultures, Finnish and Russian, the favourite landscape that children and young people wanted to conserve was the landscape of nature. The animals appeared, on the one hand, in the landscapes dominated by natural elements like water, mountains, trees and forests, and on the other hand, by the sea shore and savannah of distant lands. Both Russian and Finnish children and young people felt it was important to save the landscapes and the animals existing in these landscapes. Why? This can partly be explained by the aesthetic longing for nature, but it can also reflect concern about of the conservation of nature and animals, and in this way show the growing importance of the value of nature in both cultures.

CONCLUSION

The analysed data of the drawings of the landscapes that the Finnish and Russian children and young people want to conserve, is not contradictory with Kellogg's (1970) universal model of the drawings. However, they give support in some cases to Wales' (1990) understanding of the regional culture symbol, and what kinds of effects it has on children's drawings. The meaning of school education, knowledge of the environment, and environmental experiences can not be denied by the results; consequently, the aesthetic image of the environment is formed via formal and informal learning processes (Kellert, 1996; Palmer, 1998; Hungerford & Volk, 1990). This phenomenon needs to be clarified in further studies with these two study groups.

The aforementioned examples of the animals in different landscapes indicate that the children have placed the animals ecologically rather well in their proper environment. The pupils have drawn the animals surprisingly well in their own biotope and ecosystem. This was a very interesting and valuable finding. It might indicate, that the children and young people have had the correct, dynamic landscape in their mind during when drawing. Not only their own experiences, but also the effects of different picture materials, had an impact on the children's drawings of the landscapes, like signs from fairy tales and TV, perhaps from books and naturally also from school education which has stressed the interaction between the right environmental values and factors.

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