

# TIME BOUNDARIES AND LANDSCAPE CHANGE: COLLECTIVE FARMS 1947 - 1994

Hannes Palang<sup>1</sup>

Received 6 October 2010; Accepted 15 October 2010

**Abstract:** The paper explores time boundaries in landscapes on the example of collectivization of Estonian agriculture after the Second World War. It argues that changing political regimes leave their imprint also in landscape, causing temporal boundaries. These temporal boundaries work as screens that influence our understanding of the past landscapes. The paper explores the “transparency” of these boundaries in the context of landscape change and continuity and tries to explain the essence of landscape change, combining different approaches to landscape.

**Keywords:** Landscape continuity, landscape change, time boundaries, collectivization

**Teesid:** AJALISED PIIRID JA MAASTIKUMUUTUSED: ÜHISMAJANDID 1947-1994. Artikkel käsitleb ajaliste piiride kujunemist maastikus, nende teket ning tugevust Eesti põllumajanduse kollektiviseerimise näitel. Väidan, et muutuvad poliitilised tingimused jätavad oma jälje maastikusse, tekitades ajalisi piire, mis omakorda mõjutavad minevikumaastike mõistmist. Esitatakse ajaliste piiride kujunemise mudel, uuritakse nende piiride “läbilaskvust” maastike püsivuse ja muutuse kontekstis ning üritatakse eri meetodeid ja lähenemisviise kasutades selgitada maastiku muutuste olemust.

**Võtmesõnad:** Maastike muutus ja püsivus, ajalised piirid, kollektiviseerimine

## 1. Introduction

The European Landscape Convention defines landscape as an area, as perceived by people, whose character is the result of the action and interaction of natural and human factors. The Convention, however, does not define any boundaries, either spatial or temporal. At the same time, borders have been one of the major topics in landscape research. Most of that research has, nevertheless, focused on spatial boundaries, i.e. defining landscape regions or areas. Much less attention has been paid to temporal span of a landscape, although there exists an understanding that landscapes are ever-changing, yet different development phases can be distinguished. What, how much and how fast needs to be altered to be recognized as successive development stage? What changes become to be perceived as a different landscape? Delimiting these kinds of borders can be tricky as some landscape features do continue on the other side of the boundary, persist change, change with slower pace or persist with adaptations.

<sup>1</sup> Hannes Palang, Professor of Human Geography, Centre for Landscape and Culture, Estonian Institute of Humanities, Tallinn University, Uus-Sadama 5, 10120 Tallinn; e-mail: palang@tlu.ee

This paper stems from a presentation that was held in a session that focused on the transformation of landscape from centrally planned to a capitalist one in 1990s. The transition is apparent. A similar transition, although in opposite direction, was carried out half a century earlier, when private farming was collectivized. What changed when these landscapes emerged?

In this paper I will examine three closely related issues of time boundaries and landscape change illustrated with the case of collective farm landscapes 1947-1994 in Estonia. I will first examine what time boundaries are and how they are formed in landscape. Second, I will touch how changed landscapes affect our perception. Finally, I will comment upon the contested nature of landscape itself.

## **2. Spatio-temporal extent of landscape**

The Nordic landscape geographers of the 1920s (see Granö 1929/1997 for an example, Jones 2003 for a review), but also Soviet physical geography of the 1950s and 1960s (see Pedrolí 1983 for an overview) and landscape ecology of 2000s (see Wascher 2005) have tried to identify landscapes as territorial units, the boundaries of which are mainly defined by the spread of some natural features (such as land forms or soil types, for instance). Granö concentrated on finding the core areas of landscapes, where the distribution fields of landforms, waters, vegetation and human features coincided. In between those core areas Granö left so-called transition zones. In Estonian conditions the width of these transition zones could be from some 100 meters up to five kilometers. Later, especially when computing equipment and GIS became available, both physical geography and landscape ecology have focused first on narrowing these transition zones into borders and then locate those borders as precisely as possible. Roosaare (1989) has brought forward three limitations to this approach that researchers often tend to forget. First, static classifications are unable to handle landscape components that occur as more or less continuous fields with fuzzy borders. Second, units classified on the basis of genesis, leading component, spatial relations etc. do not form uniform systems. And third, spatially well-defined landscape regions lacked inherent dynamics; they were treated as frozen moments of time like maps.

At the same time, Sauer (1925) showed how cultural landscape is fashioned out of natural one by a cultural group. He also stated that “Under the influence of a given culture, itself changing through time, the landscape undergoes development, passing through phases, and probably reaching ultimately the end of its cycle of development. With the introduction of a different – that is an alien – culture, a rejuvenation of the cultural landscape sets in, or a new landscape is superimposed on remnants of an older one” (Sauer 1925: 46). This much quoted and debated passage was eventually rejuvenated by Cosgrove (1984), who showed how each socio-economic formation during time creates its own landscape, by wiping off the land uses and symbolic values of previous formations and replacing these with its own. A formation should here be understood as a set of political, economic, social, cultural and also ecological conditions prevailing in a society (Palang et al. 2006).

Landscape studies tend to focus either on space or time but seldom on both. Combining these two ideas – that landscapes have either spatial extent or temporal duration – one could imagine a landscape as a spatio-temporal “bubble” or rather “fluff”: as a unit that has limits both spatially and temporally. These boundaries are however not sharp, crisp, linear, rather they are fuzzy transition zones as described by Granö.

## **3. Time layers and boundaries in landscape**

Alike natural features forming constant fields with fuzzy borders, temporal changes also do not happen instantly, but take time. Cosgrove (1984) explained this with example of Italian renaissance landscapes, where the transition from one formation to another took more than one century to complete. In Western Europe, landscape change has been gradual, transitions taking decades, if not centuries. Each formation has had time to develop its own landscapes. Thus, temporal layers are created in a landscape. And therefore we can speak of Antique, Mediaeval, traditional agricultural, industrial and postmodern landscapes (Vos and Meekes 1999).

Somewhat differently, the central part of the continent has in only the 20<sup>th</sup> century witnessed three rapid turnovers from one formation to another (Palang et al. 2006). The changes of the 1990s have been best documented in terms of land use changes and their consequences – much less is known and remembered about the transformations regarding meanings and symbolic landscape values, as well as about the results of the former turnovers. The result of these modifications is four thin time layers. Each of these layers has its own values and meanings that were re-coded when the socio-economic formation that created them, changed. We can speak of imperial landscapes created prior to 1918, when the Russian and Austro-Hungarian Empires were at their peaks. This was followed by the emergence of national states, the increase of nationalist values. The post-World War II (WWII) eras brought forth socialist values, scenery, practices, ecology and representations. The 1990s brought along another turn with a return to the West, a rapid decline of agricultural practices, and a new recoding of the meaning of the landscapes. Sometimes such turnovers accelerate or slow down processes that would happen anyway, e.g. modernization, industrialization, urbanization, globalization and tourism.

In Central and Eastern Europe the time layers in landscape have sharper limits compared to those in Western Europe. Sometimes the production of a new kind of landscape can be set with a date coinciding with the change in socio-economic formation. These short-term disruptions that draw a clear line between two landscapes could be called time boundaries. Research could focus on how the time boundaries work: how well delineated can they be, in which order changes happen and how they filter the information that passes through the limits.

#### **4. How landscapes become changed?**

A political organization defines land use patterns that reflect the legal system of the country (see Olwig 2002, Mitchell 2003). Landscape ideal, however, is created through arts and communication, and together with land use pattern it later becomes the yardstick for policy and tourism. It contains memories of the past (as described by Schama 1995) and preconditions for the future and often defines our attitudes towards certain features.

The change from one landscape to another seems to follow a six-step pattern. The preconditions for a change are created by political turnovers. Often the new power then creates its own representation of the new, desired landscape<sup>2</sup>, using different media, planning, economic instruments such as taxes, and other “tools”. Subsequently, the desired changes – land use patterns, monuments etc. – are carried out, patterns and practices in “real” landscapes change. Gradually, the new landscape gets accustomed to, people adapt to the changes and the patterns also adapt. However, there is a stabilization time involved, no changes are enforced instantly; old patterns and practices “glow” through the new ones – people still remember “how it was before” and not all screens are removed, at least not from memory (see also Maandi 2009). Finally, former innovations become heritage – features that were once fought against as the unwanted new are taken under conservation when a sufficient period of time has passed.

Estonia is a particularly good place for studying this theme. The three changes of political order that happened during the 20<sup>th</sup> century have created a well-defined layered structure of the landscape, which is relatively easy to study due to the abundance of visual evidence, documents and maps and oral and written memoirs (Palang et al. 2006). Let me illustrate how landscape change happens with a closer look at how collective farms were created in Estonia in 1940s.

##### **4.1 Background– political and economic change**

By the late 1930s the Estonian countryside had reached what we call the golden era these days. The land reforms of the 19<sup>th</sup> century had created the possibility for peasants to acquire land; from 1838 onwards the former common lands were divided into plots and sold to peasants

---

<sup>2</sup> One has to admit that very seldom has there been an explicit landscape policy; landscape usually tends to be a “side-product” of some other project. A discussion whether landscape change is planned or chaotic could be found in Antrop (1998).

– a move that changed radically the former village structure and landscape appearance. Additionally, the Baltic German estate owners started to sell their land to peasants. This process was rather slow, but the 1919 land reform that followed Estonian independence, nationalized all the lands formerly belonging to the Baltic German landlords. As a result, by 1939 Estonia had more than 139,000 (different sources give two different figures – 139,984 and 146,205, see Mander and Palang 1994: 49) private farms and a confident class of landowners.

The preconditions for the collectivization of agriculture were created by the agreement between the Soviet Union and Nazi Germany on August 23, 1939 that divided the zones of influence of the two powers in the Eastern Europe, which ignited the WWII. After the occupation and division of Poland, a non-aggression pact was signed between the Union of Soviet Socialist Republics (USSR) and Estonia on Sept 28, 1939, following which Soviet military bases were created on the territory of Estonia. This culminated with the overthrow of Estonian government in June 1940 and later annexation to the USSR in August 1940. In the first half of 1941, all land was nationalized, but the former owners were given exclusive right to use the land “forever”. The former state-owned estates were renamed sovkhoses – soviet enterprises. On June 14, 1941, just one week before the war broke out between Nazi Germany and the USSR, the soviets deported some 10,000 Estonians to Siberia – those selected were the political and economic elite of the independent Estonia. Also the first kolkhoses – collective farms – were formed on the right bank of the Narva River, an area populated by ethnic Russians. In August 1941, WWII reached Estonia, and the German occupying force stopped and reversed all reforms initiated during the “red year”.

The cancelled reforms continued after the WWII. The first collective farm in Estonia was established on island of Saaremaa in 1947. But since the rural population was suspicious about the new power and owning a piece of land has always been part of the Estonian national narrative, collectivization was not as enthusiastic as the new rulers would have liked. On March 25, 1949, another 20,000 people were deported, this time mostly the rural elite. This finally gave the boost to collectivization, and by the end of 1951, it was effectively finished. By the end of 1949, instead of the 140,000 private farms the country had 2,898 kolkhoses (together with state farms – sovkhoses – and fishery kolkhoses the number totaled 3,122 (Kasepalu 1991)).

The 1950s were the stabilization time – the number of kolkhoses gradually diminished and their size increased. By the end of 1951 there were just 1,051 kolkhoses left; in 1950s and 1960s economically weaker kolkhoses were annexed to state farms, in 1970s adjacent kolkhoses were united, and thereby the number of enterprises reached 302 between 1976 and 1985. From there on, deconcentration started again. Size-wise, a private farm of 1939 averaged 22.4 ha. The average size of a collective farm of 1949 was 567 ha. In 1950s this number reached 900 ha, in 1960 – 2,700 ha; 1970 – 4,900 ha; 1980 – 8,321 ha (Kasepalu 1991).

Collectivization and deportation were also accompanied by a rapid urbanization, which together left countryside rather empty, while those who stayed were mostly less skilled in agriculture (Mander and Palang 1994). Between 1945 and 1959, the share of urban population grew from 31% to 47% (Marksoo 2005).

By the late 1950s land amelioration started and from early 1970s salaries in kolkhoses started to exceed those in industry and service in towns. That tendency also reversed the migration pattern – many young families moved to the countryside.

## **5. What changed?**

To study the landscape changes during the collectivization, let us focus on three topics. First, focusing on representations gives us information about the planned change was supposed to look like. Second, exploring on mappable changes allows studying the “actual” changes. Third, studying stories provides material on how people understood and coped with the changes.

### **5.1 Changed representation**

Olwig (2004) has demonstrated the way circular referencing works with landscapes. He showed how a landscape representation starts influencing the “real, actual” landscape that should be

similar to the one on the representation, in order to meet the expectations. And in the very end the distinction between the representation and the represented becomes fuzzy.

The Soviet propaganda glorified the collectivization of agriculture and collective farm life in every possible way. Placards such as one on Fig 1 called to join a collective farm. Scientists were mobilized to do research that described the better functioning of a collectivized landscape, as compared to the privately managed one. This sometimes reached a level of absurd – so Kalesnik's textbook on *Basics of Earth Science* contains a sentence telling that “in the conditions of socialist order the formation of V-shaped eroded gullies will cease by itself, due to the peculiarities of the socialist order” (Kalesnik 1961: 469). What he meant was that bigger fields allow for better use of advanced cultivation techniques that indeed might help preventing erosion. Newspaper articles described the advantages of collective farming in other parts of the USSR. Even the art of cinema – claimed to be “the most important art for us” by Lenin – was involved.

One of the best examples of this style of propaganda is the novel by Hans Leberecht and the following movie directed by Herbert Rappaport, titled *Valgus Koordis – Light in Koordi*. Leberecht wrote the book for an Estonian novel competition in 1947, but the jury left it without any attention. Then Leberecht sent the manuscript to Moscow, where it somehow caught the attention of Stalin. Consequently the jury of the competition was dissolved, a new one appointed and Leberecht won the Stalin award for the novel. And until these days this is the most translated Estonian book worldwide. The novel tells a story of a soldier returning from the WWII, who used to be a farmhand at the biggest local farm. In the army he had made friends with somebody from Russia who had told him about collective farms. While reaching home, the former soldier gets land from the Soviet government, tries to cultivate it, but there is no equipment available, no animals, no seeds for crops. And he is not the only one in the village; most of the former farmhands got land from the government and faced similar troubles. Then the former soldier remembers his friend in Russia; a delegation is sent there to see how a collective farm works; and despite all difficulties, such as attacks from bandits<sup>3</sup> a collective farm is formed in the village of Koordi – light has reached Koordi.

Based on that novel, a movie was filmed in 1951, directed by Herbert Rappaport, a man with Hollywood experience. It quickly reached the blockbuster status, but was forbidden soon after Stalin's death. The film is a masterpiece of Soviet propaganda<sup>4</sup> and glorifies collective farms in all sorts of ways. For this paper the most interesting feature is the contradistinction of two landscapes, the privately managed one in Estonia and the collective one somewhere in Russia. The privately managed landscape looks gloomy and abandoned. Roads are muddy, fields are small, houses badly maintained and lonely people work horses to earn modest livings. In a collective farm, on the contrary, kolkhosniks drive cars and motor bikes on paved roads, many people together use all sorts of machinery to store heaps of grain outdoors in the autumn – no storage can house so much. In a meeting hall, workers listen to a lecture on new methods in agricultural production (that cites the slogan raised in 1930s by the Soviet biologist Michurin that “one must not wait for gifts from nature, to demand them is our task”). But in the end of the film, when the collective farm was created, big machinery and help of townspeople is used to drain the bog that a man was fighting with a spade in the early stages of the movie<sup>5</sup>.

---

<sup>3</sup>After the WWII many Estonians (and Latvians and Lithuanians) who had troubles with the Soviet power fled to forests, as there was a common belief that the Soviet regime could not last long. Very often these people launched attacks against the Soviet authorities.

<sup>4</sup> It is interesting to know that the director, Rappaport, used all his experiences in Hollywood

<sup>5</sup> (<http://www.youtube.com/watch?v=Dfry8Ozfl1A>).



Fig 1. A placard from the late 1940s glorifying the life in a collective farm. The text says "Come, comrade, to us in the kolkhoz!" Source: Internet.



Fig 2. A meeting for organizing a collective farm. The slogan reads: "The way of kolkhozes, the way of socialism is the only right way for the working peasants!" /J.V. Stalin/. Source: Internet

## 5.2 Changed land use

There are two previous studies that usefully describe the "actual" landscape changes that happened in Estonia in the second half of the 20<sup>th</sup> century. The land use study (Mander and Palang 1994) was done using the official land use data from state registries. However, due to turbulent times and possibly differing data collection methods there might be differences in interpretation of land use categories. Also, data was available on county level, and the number of counties had risen from 11 in 1939 to 39 in 1955. Nevertheless, comparing the data of 1939 and 1955 shows a decrease in the share of agriculturally used land during the 1940s. In the western part of the country the share fell from more than 65% to less than 15%; while in other parts this decrease has been less dramatic. The main reasons for the rapid change in the west are, first, population loss due to war casualties (incl. fleeing overseas) and deportations, and second, establishment of a border zone with restricted access and limited range of allowed activities, which in turn also lead to declining population. The decrease in the share of agricultural land happened mostly at the expense of grasslands (pastures and hay meadows) while the share of arable lands has remained about the same. Also, most of the agricultural activities in the western part of the country were more extensive in character, the used land included wooded pastures and hay meadows on less fertile soils, and these marginal areas are usually the first to be abandoned during hard times.

Landscape diversity changes were studied (Palang et al. 1998) by using area/perimeter indexes measured on 56 randomly selected test areas based on maps from four different time periods (due to availability of maps – ca 1900, 1935, 1960, 1989). To study the impact of collectivization, the difference between maps of 1935 and that of 1960 is meaningful – the map of 1960 summarizes the changes happened between the two surveys (gig 3, 4). The assumption was that the land use changes should reflect also in diversity indices. However, although the test sites, taken separately, have each gone through rather big changes, these changes "level each other up", so that statistically the changes in indices become insignificant. Still, one can observe that compared to 1935, the number of patches on test sites has somewhat decreased and they have become rounder in shape (table 1).

Index	1935	1960
Number of patches	69±32	62±21
Edge index (1)	164±96	123±58
Edge index (2)	52±27	53±25
Heterogeneity	0.56±0.10	0.54±0.11
Evenness	0.77±0.12	0.76±0.13
Arable land %	31±17	33±20
Forest %	36±20	37±19
Complexity (1)	0.49±0.03	0.50±0.03
Complexity (2)	0.66±0.15	0.60±0.11
Curvature (1)	1.55±0.07	1.52±0.07
Curvature (2)	1.26±0.14	1.31±0.14

Tab 1. Average values and standard deviations of measured indices (from Palang et al. 1998).

Remarks: Heterogeneity:  $H = \sum (n_i/N) \log(n_i/N)$ , where  $n_i$  is the number of patches of type  $i$ ,  $N$  being the total number of patches. Evenness:  $e = H/\log S$ , where  $S$  is the number of types ( $H$  – heterogeneity). Edge index:  $I = \sum [(L)/A]$ , where  $L$  is the length of ecotones,  $A$  being the area of the patch. Complexity (Patton index):  $T = 4\pi A/p^2$ , where  $p$  is the perimeter of the patch. Curvature:  $P = p/2(\pi A)^2$ .

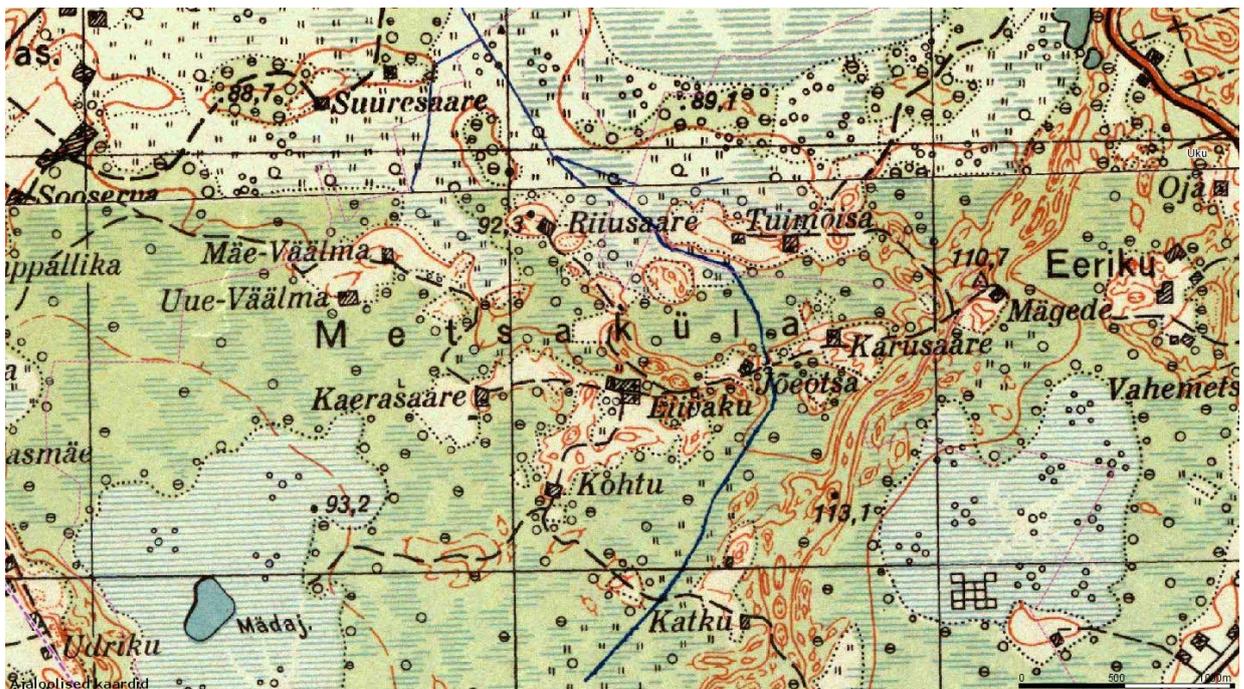


Fig 3. A fragment of the 1935 topographic map showing the village of Metsaküla before collectivization (Map from the Estonian Land Board).

The study (Palang et al. 1998: 168) concluded that “despite all kinds of land use changes landscape diversity has remained stable. Thanks to the low population density, Estonian landscapes have had the space to buffer change. Land use dynamics do point towards some overall shift in landscape diversity. This shift has occurred, but only in certain places, while at other places an opposite shift has happened, thus keeping the average diversity stable. The reason for this is that the population of Estonia is so sparse that often, when land is reclaimed, it is quickly abandoned due to the lack of suitable management”.

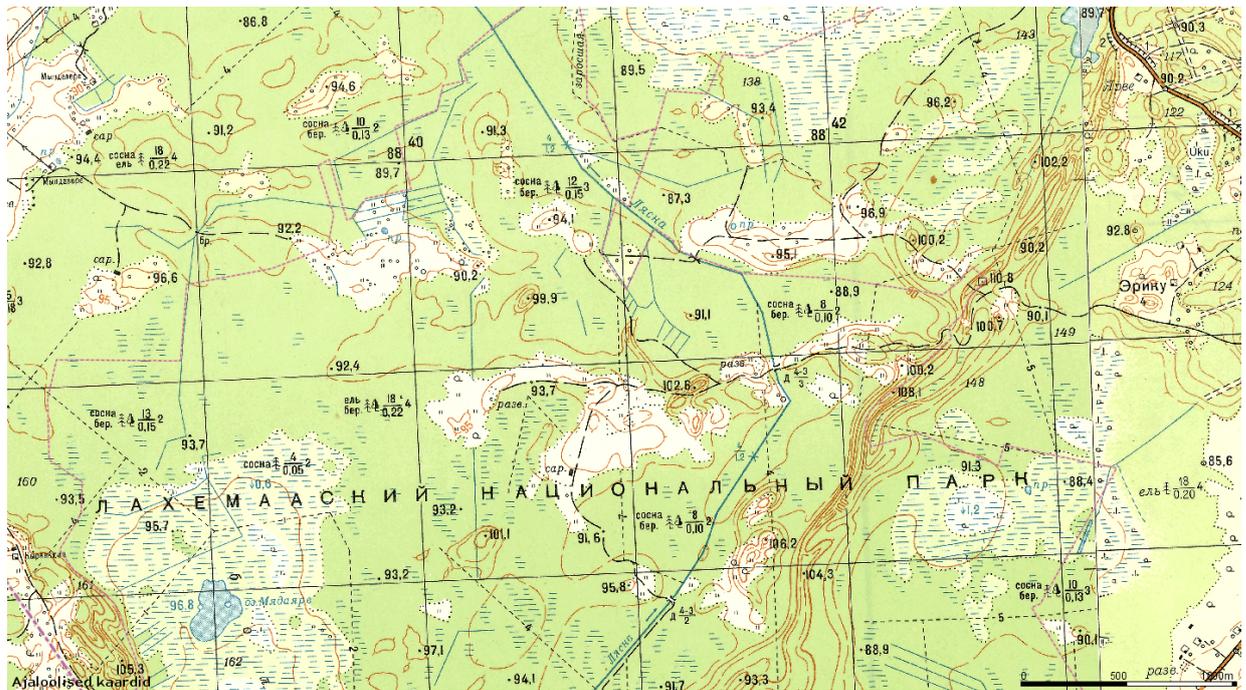


Fig 4. The same village on the Soviet topographic map from the 1980s. Most of the settlement is erased. Map from the Estonian Land Board.

### 5.3 Changes in memory

While using propaganda materials gives insights into “how it was meant” and studying maps and literature provides us with the outcome, using personal interviews and life stories enables one to track the process of change itself.

Mostly in family stories the events of the 1940s are depicted as traumatic. The Soviet power had earlier guaranteed despite land being nationalized, the former owners could continue using it. Collectivization however meant that this guarantee did not last for long. One of these family stories (from the village depicted in Figs 3 and 4, see Palang and Paal 2002) tells how a family that had returned to Estonia in 1922 has built up their farm precisely by the time WWII started and now faced collectivization. The land was nationalized in 1940, the two sons had fled to Sweden already in 1944; after the war the shop that belonged to the father was confiscated, as were the shares in an inn. So in 1948 the pater familias shot himself, their son-in-law and the remaining son were deported to Siberia to serve a sentence for fighting in the Finnish army against the Soviets. In the end the mother – 66 years old by that time – had to manage the farm all alone. The story further describes the emotions of losing the place, the memories the next generations had about their childhood home, and the general feeling of injustice the collectivization had caused them.

A number of similar stories could be found from a collection of life stories published by the Estonian Literary Museum (Hinrikus 2003 I-III, Hinrikus 2005, Paklar 2009). For example, one lady describes the difficulties she faced while working as a farmhand. Others tell stories about starving animals and abandoned fields, forests turning dangerous because of the forest brethren (or bandits, in the official Soviet slang, as described above), misery. The common topic in these stories is the grief for the lost past. Collectivization and deportation touched so many families, numerous people had to move, and numerous places ceased to exist elsewhere than in memories of people who once inhabited those places.

Maandi (2009: 454-455) states that “While the relationship between Soviet-period land reforms and landscape changes in Estonia have been studied by a number of scholars in recent years, few have focused explicitly on the persistence of pre-Soviet property-related elements and practices in the landscape. ... This is not to say that traces of continuity have been ignored; yet they have not been sufficiently explained or treated within the framework of property rights relations. The emphasis on change may be explained by the fact that, in some regions, the societal transformation and physical changes in the landscape during the Soviet years were

indeed overwhelming, ... “. Maandi's conclusion is that “people who owned land before the Soviet occupation kept track of the officially annulled pre-Soviet land rights, by relating to inertial landscape elements as memory-aids. To local inhabitants the landscape, in which past and present structures always merge, provided substantial evidence in support of the idea of legal continuity of pre-Soviet land rights. Hence, the post-Soviet land restitution reform often implied a re-discovery or re-expression of property rights that had been silenced, but not lost.”

There seems to be some correlation between the economic wealth of a collective farm and the sense of loss in these stories. In wealthy kolkhozes people were gathered into new central villages where new houses, mostly apartments, were built and people were handled as workers, not farmers. In areas where collective farms were not that well off, the sense of place is still present, although marginalization and connected processes take place – abandonment, negligence etc. Finally, these places end up in memory (Palang and Paal 2002). They cease to exist physically, they remain in the memories of those who once had some sort of connection with the place, but, as time passes, people die and the fate of these places could be compared to that of American or Australian ghost towns.

#### **5.4 Comparison – reversing changes in 1990**

The stories of the end of collective farms are well documented. Alanen et al. (2001) have investigated the dissolution of the Kanepi kolkhoz in South Estonia with all the social and societal consequences. Rausing (2004) has done a similar study in Noarootsi, on the Western coast of Estonia, but from an anthropological point of view. Annist (2006) discussed the ways community works after the collapse of collective farms in two south Estonian parishes – Krootuse and Mikitamäe. Hedin (2005) discussed the problems of land restitution again on the western coast, where the Swedish-speaking population lived before the WWII. Furthermore, Jääts (2004) comes back to the creation of collective farms and argues that if a kolkhoz found a chairman who understood local circumstances and in addition was a charismatic figure, the collective farm flourished. Lastly, Maandi (2005) has taken a geographer's view and studied landscape consequences of the changes in Muhu and Rapla. The common argument on all these is that past becomes glorified, but only after some time; the uncertainties of a change are initially feared, but then got used to. But the traces of the past are remembered for quite some time – see the argument of Maandi that the former farm boundaries were still remembered in 1970s.

The de-collectivization of 1990s in fact follows a similar pattern as the collectivization of 1940s. First, a political decision was made to dissolve the collective farms. This time the decision coincided for people's anticipation of restitution, as the collectivization was perceived as unfair. The landscape of 1930s was understood as the iconic one for Estonia (see, e.g., Peil, Sooväli 2005), and attempts were made – both emotional and economically-reasoned – to restore that landscape. Restitution was initiated to give the land back to the former owners. It aimed at creating justice; additionally it created a mass of people who felt they had been treated unjust, since they had taken care of the land and the buildings during all those soviet years. In many places restitution also involved national issues, especially on areas formerly inhabited by Swedish (see Hedin 2005, also Rausing 2004, Palang et al. 1999).

Although the Estonian ministry of agriculture recently launched a financial initiative to tear down the unused soviet agricultural buildings that mar the countryside, there are already initiatives by local people to protect some of them, as they have become part of the local identity. After all, collective farms have been a lifework for a whole generation of rural people and ignoring or condemning it unconditionally is not fair to that generation, to say the least.

However, within those layers there is another system of layers, sometimes described as contested landscapes. Different groups of people understand features differently, and thereby even within the same time layer landscapes are contested (see Palang, Sooväli-Sepping forthcoming). The Swedish geographer Mats Widgren (2006) has pointed on two issues of concern. First, that the contested nature of landscape is very often forgotten in landscape research – we prefer to reduce the complexity to the study of the “main” or “ruling” ideology, forgetting “the others” (compare that with Naveh's (2000) similar worry about landscape

ecology). Second, that landscapes are never produced only locally, there has always been some influence from outside. This was explained by Palang et al. (1998), where local people try to adjust to the pressures and influences coming from outside, or, in other words, try to translate political changes into new patterns and practices.

## 6. Conclusion – whose truth?

The paper has shown that, first, there are barriers between different time layers and these barriers influence the way past is understood, and, second, that political changes are finally inscribed into physical landscape patterns through a 6-step process.

One can easily conclude there are different truths behind this landscape change and also many ways of handling it.

The currently prevailing historical narrative treats 1930s as the golden era and everything that happened afterwards is unconditionally bad and unjust. The Soviet narrative, contrarily, depicted the 1930s landscape as unjust and the Soviet one as just and progressive. The way the society perceives the landscapes of the 1930s and the Soviet times have changed drastically. So the way landscape change is understood is ideologically driven and the “transparency” of the barriers depends on how contrasting the ideologies that define the barriers are.

“Soft” materials – documents, memories, representations, etc. – suggest that the Estonian landscape has undergone a major change during the Soviet period. The change is perhaps not as radical as the one in Russia, but still widely discussed. But then, the “objective numbers” argue that despite all the drastic changes the historical documents, life stories etc. suggest, the physical pattern for the whole country did not change that much. The area of grasslands has indeed diminished and that of the forests increased, but changes in different parts of the country compensate each other. The latter hints that the amplitude of landscape change depends on the scale changes are studied.

The Soviet propaganda tells a story about how nature was turned into cultural landscape, to paraphrase Lowenthal (1999), and how man’s power prevailed. Bogs were drained, small fields united into large ones, machinery introduced. We must not wait for gifts from the nature, to demand them is our task, was the slogan ascribed to the Soviet biologist Michurin and picked up by the soviet ideology of the time. At the same time, there is an overwhelming misery about that time felt in biographies of people – fear and uncertainty are the other keywords. We admit using biographic materials might seem subjective, but cultural studies have elaborated methods to overcome that subjectivity, plus, why should landscape studies be afraid of subjectivity, if this helps to understand the change?

We have argued that time barriers between the layers finally start working as screens that hinder understanding of the past (Palang et al. 2006), as one cannot fully grasp the processes. Similarly, these barriers can also break the continuity, cause breaks. The problem here seems to be that landscapes should be understood in their right historical context, as Jones (1991) argued. When the socio-political system changes, that very “right historical context” might get lost, people are no longer able to understand how the previous landscape worked. Applebaum (2003: 64) claimed that “collectivization also destroyed – forever – rural Russia’s sense of continuity with the past”. Lowenthal (1985) even titled his book “The Past is a Foreign Country” hinting that we might not be able to fully comprehend the processes having happened in the past.

So the balance between continuity and change seems to be similar to the balance between focusing on more physical or more cultural definition of landscape. The change is driven by social/cultural/political/economic processes and the physical/material layer reacts. Hence, as argued by many scientists, combining approaches is essential.

Finally, despite all efforts this paper still depicts the picture of one side. I miss here the people who arguably benefited from collectivization – the landless ones whom the Soviet regime gave their 10 hectares at the expense of the “kulaks” – the ones that had too much of land and were economically too well off...

## Acknowledgements

This research was supported by the European Union through the European Regional Development Fund (Centre of Excellence in Cultural Theory), the Estonian Ministry of Education target-financed projects SF0130033s07 'Landscape Practice and Heritage' and the Estonian Science Foundation grant no. 5858 and 6856. I am grateful to the anonymous reviewers and my colleagues for the comments to this paper. (ESF).

---

## References

- [1] Alanen, I., J. Nikula, H. Pöder & R. Ruutsoo, Eds. (2001). *Decollectivisation, Destruction and Disillusionment: A Community Study in Southern Estonia*. Aldershot-Burlington: Ashgate.
- [2] Annist, A. (2006). *Seeking community in post-Soviet Estonian centralised villages*. PhD dissertation at University College London.
- [3] Antrop, M. (1998). Landscape change: Plan or chaos? *Landscape and Urban Planning* 41(3-4), 155-161. Doi:10.1016/S0169-2046(98)00068-1
- [4] Antrop, M. (2000). Background concepts for integrated landscape analysis. *Agriculture, Ecosystems and Environment*, 77(1-2): 17-28. Doi:10.1016/S0167-8809(99)00089-4
- [5] Applebaum, A. (2003). *Gulag. A history*. Penguin Books.
- [6] Cosgrove, D. (1984/1998). *Social Formation and Symbolic Landscape*. Madison, Wisconsin: University of Wisconsin Press.
- [7] Granö, J. G. (1995). *Pure Geography*. Baltimore: Johns Hopkins University Press.
- [8] Hedin, S. (2005). Land restitution in the former Swedish settlement areas in Estonia consequences for land ownership, land use and landscape. *Landscape and Urban Planning* 70(1-2), 35-44. Doi:10.1016/j.landurbplan.2003.10.003
- [9] Hinrikus, R. (2003). *Eesti Rahva Elulood I-III*. Tallinn: Tänapäev.
- [10] Hinrikus, R. (2005). *Rasskaži o svoei žizni. Žizneopisanija estonozemeltsev*. Tallinn: Aleksandra.
- [11] Jones M. (1991). The elusive reality of landscape. Concepts and approaches in landscape research. *Norsk Geografisk Tidsskrift*, 45(4), 229–244.
- [12] Jääts, I. (2004). Varane kolhoosiaeg Oisu piirkonnas Järvemaal. *Akadeemia*, 1, pp 132-168; 2, pp. 393-422.
- [13] Kalesnik, S. (1961). *Üldise maateaduse alused*. Tallinn: Eesti Riiklik Kirjastus.
- [14] Leberecht, H. (1949). *Valgus Koordis*. Tallinn: Eesti Riiklik Kirjastus.
- [15] Lowenthal, D. (1985). *The past is a Foreign Country*. Cambridge: Cambridge University Press.
- [16] Lowenthal D. (1999). From landscapes of the future to landscapes of the past, *Norsk Geografisk Tidsskrift*, 53 (2-3), 139–144. Doi: 10.1080/00291959950136858
- [17] Maandi, P. (2005). *Change and Persistence in a Reformed Landscape: A geographical analysis of land reforms and landscape change in Muhu and Rapla municipalities, Estonia, c. 1840 to 2003*. Geografiska regionstudier, Uppsala: Department of Social and Economic Geography.
- [18] Maandi. P. (2009). The silent articulation of private land rights in Soviet Estonia: A geographical perspective. *Geoforum*, 40(3), 454-464. Doi:10.1016/j.geoforum.2009.03.003
- [19] Mander, Ü. & Palang, H. (1994). Changes of landscape structure in Estonia during the Soviet period. *GeoJournal*, 33(1), 45-54. Doi: 10.1007/BF00810135

- [20] Mander, Ü., Palang, H. & Tammiksaar, E. (1994). Landscape changes in Estonia during the 20<sup>th</sup> century. *Analysis of Landscape Dynamics - Driving Factors Related to Different Scales. Proceedings of the 4<sup>th</sup> Seminar of EUROMAB Network on Land-Use Changes in Europe and Their Impact on Environment – Comparisons of Landscape Dynamics in European Rural Areas* (pp. 73-97). Bad Lauchstädt.
- [21] Mitchell, D. (2003). Cultural Landscapes: Just Landscapes or Landscapes of Justice? *Progress in Human Geography*, 27(6), 787-796. Doi:10.1191/0309132503ph464pr.
- [22] Naveh, Z. (2000). What is holistic landscape ecology? A conceptual introduction. *Landscape and Urban Planning*, 50(1-3), 7-26. Doi:10.1016/S0169-2046(00)00077-3
- [23] Olwig, K.R. (2002). *Landscape, Nature and the Body Politic: From Britain's Renaissance to America's New World*. Madison: University of Wisconsin Press.
- [24] Paklar, V. (2009). *Estonia – moi dom. Žizneopisanija estonozemeltsev*. Tallinn: Tänapäev.,
- [25] Palang, H., Mander, Ü. & Luud, A. (1998). Landscape Diversity Dynamics in Estonia. *Landscape and Urban Planning*, 41(3-4), 163-169. Doi:10.1016/S0169-2046(98)00055-3
- [26] Palang, H., Kaur, E. Alumäe, H. & Jürimäe, K. (1999). Conflicts between landscape values as driving force for landscape management. *Norsk Geografisk Tidsskrift*, 53(2), 153-160. Doi: 10.1080/00291959950136876.
- [27] Palang, H. & Fry, G. (2003). Landscape Interfaces. In: Palang, H. & Fry G. (Eds.), *Landscape Interfaces: Cultural heritage in changing landscapes* (pp. 1-14). Dordrecht: Kluwer.
- [28] Palang, H. & Paal, P. (2002): Places gained and lost. In Sarapik, V., Tüür, K. & Laanemets, M. (Eds.) *Koht ja Paik. Place and Location II* (pp. 93-111). Tallinn: Eesti Kunstiakadeemia.,
- [29] Palang, H., Printsman, A., Konsa, M. & Lang V. (2005). Ideology and tradition in landscape change: a case of the Helme parish, Estonia. Peil, T. & Jones, M. (Eds.), *Landscape, Law and Justice* (pp. 288-297). Oslo: Novus Forlag.
- [30] Palang, H., Printsman, A., Konkoly Gyuró, É., Urbanc, M., Skowronek, E. & Woloszyn, W. (2006). The forgotten rural landscapes of Central and Eastern Europe. *Landscape Ecology*, 21(3), 347-357. Doi: 10.1007/s10980-004-4313-x
- [31] Palang, H. & Sooväli-Sepping, H. (forthcoming). Are there counter-landscapes? On milk trestles and invisible power lines.
- [32] Pedroli, B. (1983). Landscape concept and landscape and rangeland surveys in the Soviet Union. *ITC Journal* 4, 307-321.
- [33] Peil, T., Sooväli, H. (2005). Estonian national landscapes – the sum and its parts. In Peil, T. & Jones, M. (Eds.). *Landscape, Law and Justice* (pp. 49 – 60). Oslo: Novus Forlag.
- [34] Peterson, U., Aunap, R. & Eilart, J. (1998). *Eestimaa nähtuna kosmosest: satelliidipildiatlas*. Tallinn: Koolibri.
- [35] Rausing, S. (2004). *History, Memory and Identity in Post-Soviet Estonia. The end of a collective farm*. Oxford University Press.
- [36] Roosaare, J. (1989). Miks ei täitunud maastikuteadusele asetatud suured lootused. In *Looduslikud protsessid ja inimõju Eesti maastikes. E. Markuse 100. sünniaastapäevale pühendatud nõupidamise ettekannete lühikokkuvõtted* (pp. 44-47). Tallinn-Tartu.
- [37] Sauer, C.O. (1925). The Morphology of Landscape. *University of California Publications in Geography*, 2, 19-53.
- [38] Schama, S. (1995). *Landscape and Memory*. New York: Alfred A. Knopf.
- [39] Soini, K., Palang, H. & Semm, K. (2006). From places to non-places. Landscape and sense of place in Finnish and Estonian countryside. In Terkenli, Th. S. & d'Hautesserre, A.-M. (Eds.), *Landscapes of a New Cultural Economy of Space* (pp. 117-148). Springer.

- [40] Vaher, L. (1968). *Päeva palge ees*. Eesti Raamat.
- [41] Vos, W. & Meekes, H. (1999). Trends in European cultural landscape development: perspectives for a sustainable future. *Landscape and Urban Planning*, 46(1-3), 3-14. Doi: 10.1016/S0169-2046(99)00043-2.
- [42] Wascher, D. (Ed.) (2005). *European Landscape Character Areas. Typologies, Cartography and Indicators for the Assessment of Sustainable Landscapes*. Final project report. Landscape Europe.
- [43] Widgren, M. (2006): *Time and Space in European Landscape Research*. Presentation at the 22<sup>nd</sup> session of PECSRL, Berlin.