

# Landscapes Lost and Gained: On Changes in Semiotic Resources

Kurt Viking Abrahamsson

Department of Human Geography  
Umeå University  
S-901 87  
Sweden

---

## Abstract

*There are many symbolic values in a landscape, symbols that vary greatly between people who live in, and those who visit that landscape. These are the semiotic resources of the landscape. They change over time, and change in the mind of a person during his/her lifetime. This paper deals with these changes: how "inner landscapes" are lost and gained over time. Landscapes are reflections of cultural identities, rather than of the natural environment. The physical environment is transformed into landscapes, and cultural groups transform it through the use of different symbols, symbols that bestow different meanings on the same physical objects. Finally, this paper discusses the loss of landscapes — by "fading out" or being "battled down."*

**Keywords:** *inner landscapes, semiotic resources, landscaping, mindscaping, landscape persistence*

## Prologue

Looking out over the landscape from my office window, I see the birch trees turning yellow in late September. Soon the leaves will fall, and the first snow will change the landscape into its winter variation. Spring, with its snow melt, is many months away. These are some obvious changes in the physical landscape over the year. But there are many symbolic values in that landscape, symbols that vary greatly between people who live in, and those who visit, that landscape. These are the semiotic resources of the landscape, which change over time and in the mind during a person's lifetime. This paper deals with these changes: how "inner landscapes" are gained and lost over time.

## Introduction: What's in a Landscape?

"Landscape is an important national resource . . . an outstanding natural and cultural inheritance which is widely appreciated for its aesthetic beauty and its *important contribution to regional identity and*

*sense of place.* Although it is subject to evolution and change, the landscape is recognized as a resource of value to future generations."

(Dept. of Transport, London 1993, quoted in Morris and Therivel 1995, 78.) (*italics added here and in the rest of the paper*)

"The vast majority of landscape is *cultural*, rather than natural *heritage*, and its national, regional or local identification depends very much on *the values and associations* of residents and visitors. It is appropriate, therefore, to consider "*cultural heritage*," both as formally designated, and in terms of popular recognition, as an integral element in landscape evaluation and assessment" (Morris and Therivel 1995, 78).

The above quotations, taken from a text on Environmental Impact Assessment, shows clearly that in dealing with environmental preservation "The Landscape" is the physical feature, the *panorama* you see from a vantage point. But identity and sense of place, as well as values and associations, are also recognized. After mentioning the physical features and the human impacts, such as land use and buildings, the British Countryside Commission also lists aesthetic factors, including texture, color, sound and smell, and *associations*, particularly historical and cultural. The latter would include literature, painting and music.

The English word "landscape" implies both a physical scene and its pictorial representation. The early form of the word, *landscipe*, recorded in the 8th century as meaning an area, developed into *landscape* in the 17th century, when it referred to both an area and a painting thereof (Keisteri 1990, 33). The latter meaning entered the language through the usage of English artists, who applied the term to Dutch landscape paintings. The word in Dutch at that time, *lantschap*, meant the everyday surroundings in which farmers lived, and the English equivalent, in the form of *landskip*, a picture of such surroundings, a rural scene. Thus the word "landscape" in its very early meaning, denotes the manner in which an environment is observed (Keisteri 1990, 33), but also shows a clear connection to the cultural landscape associated with human activities.

The contemporary geographical concept of landscape is illustrated and discussed by Keisteri in her “multi-level model for the concept of landscape” (Keisteri 1990, 46-52). She includes three “viewpoints”: a) the *material* landscape, or area, as seen by a human observer, b) the *experience* of landscape aroused in the human mind by the area, and c) the underlying *processes at work* in shaping that landscape. She studies the changes in the cultural landscapes in several villages in southern Finland and Peru. Her landscapes are visible areas as perceived by the human observer, the mental experience of those areas, and the underlying processes giving rise to both, i.e., natural and human processes, with all the interaction between these two.

Seeing landscapes as *semiotic resources*, resources with symbolic functions, is the basic principle for discussing lost and gained landscapes. Understanding symbolic systems is essential in order to understand relationships between human societies, nature, and the environment. Semiotics, *the study of signs and sign systems*, is an analytic tool of critical theory used to interpret cultural creations (Hopkins 1998, 68). Viewed from a semiotic perspective, culture is the constant process of producing meanings. Cultural landscapes, such as a terraced rice field or an English park, are creations that may be interpreted semiotically, i.e., as a collection of signs or as a “text.” “Signification” is the process whereby “something” comes to stand for “something else”: a social process whereby objects taken as signs are given meaning (Hopkins 1998, 68).

Socio-semiotics studies both *signs and social contexts*: the connection between ideologically charged sign systems and the material culture of everyday life. “Ideology” is any system of values, beliefs and norms that facilitates the interests and dominion of a particular group, class or society. Hopkins (1998, 69) presents a study of symbolic landscapes, or countrysides, where he finds that the tourism industry operates with a sign system that advances its own ideology of consumption by trying to persuade people to buy commodities: “tourist places.” The codes and myths identified in tourist slogans convey images that combine to create place myths of a symbolic landscape. Hopkins summarizes by commenting on the value of being “rural.” A landscape described as “rural” in the tourist propaganda represents some place other than urban, some time other than the present, some experience other than normal (Hopkins 1998, 78). Because the “rural” is both a commodified sign and a consumable symbolic place, Hopkins finds it possible to speak of the “*post-rural*.” This term refers to both the aestheticization and the symbolization of the material countryside into a “postmodern good” by virtue of its commodified sign value (Hopkins 1998, 77). Today in a post-rural, post-modern time, the old, gray, and disintegrating windmills of last century, symbolize very different values than in the agricultural land-

scape of last century Sweden. They represent something of the “good old days,” that in reality were not so great, and are compared with the post-modern, white and sleek windturbines that “distort” the landscape.

The sociological approach to landscape is also well illustrated by the environmental sociologists Greider and Garkovich (1994). They too see landscapes as “the symbolic environments *created by human acts of conferring meaning to nature*” (Greider and Garkovich 1994, 1), of giving the environment definition and form from a particular angle of vision and through a special filter of values and beliefs. Every landscape is a symbolic environment. They regard the landscape as a reflection of cultural identities, which are human, rather than natural. A central point in their discussion is that the physical environment is *transformed into landscapes*, and that cultural groups transform it through the use of different symbols, symbols that bestow different meanings on the same physical objects. “Every river is more than just one river, every rock is more than just one rock” (Greider and Garkovich 1994, 1).

A structured, but also complicated, approach to the relationship between human beings and the landscape is presented by Bladh (1995). On one side he places the physical, *material landscape*, the one we can see with our eyes. That is the landscape we are tied to for our living; it contains the plants and animals, as well as soil and water. On the other side, but tied to the first, he places what he calls “the meaningful aspect of the world” (Bladh 1995, 43). There we find the *institutional* landscape, i.e., how social relations and institutional regulations shape an abstract landscape that determines who owns what, what we can do, and what we must do in the landscape. This “landscape” is what often transforms the physical landscape into an arena for conflict.

Bladh translates the “meaningful landscape” into a semiotic landscape, a landscape shaped by the complicated interrelation between perceptions, actions and experiences related to language, and culture. Between the two latter landscapes and the material landscape, Bladh places what he calls the *landscape of action*. This is the cultural landscape, a mirror of man’s actions upon the physical surface, a constantly changing reflection of actions and non-actions (Bladh 1995, 41-44).

## On Cognitive Landscapes and “Landscaping”

Even when we are not actively viewing, hearing, or smelling an environment, a landscape, we can still experience it mentally. The mental representation or *cognition* of the layout of a familiar landscape is termed a *cognitive map*, and the way of thinking about and organizing the layout is called environmental cognition. Without a cognitive map, telling us how things are tied together, we would have to search for

locations and roads in a haphazard manner, in order to find our way to a place in the landscape. The more experience we have with an area, and the more mobile we are within it, the more thorough our cognitive maps are likely to be. So the major factor determining cognitive maps is familiarity.

According to Bruun, a *cognitive landscape* is “a more or less coherent, geographically grounded *frame*, through which we interpret the meaning of objects and events that can be connected to a specific area” (Bruun 1996, 8). He adds that cognitive landscapes have an emotive charge that allows us to organize them into elements that we like and elements that we dislike.

An excellent literary presentation of cognitive maps appears in Brody’s “Maps and Dreams,” which describes “a journey into the lives and lands of the Beaver Indians, hunters of the Canadian sub-arctic” (Brody 1988). The book contains maps that the Indians drew to demonstrate the tenacity of a hunting and trapping economy in collision with the dreams and plans of White people. The Indians on two reserves mapped their land by marking every place they had hunted, fished, trapped, picked berries, and camped. The total area of land use shows where these activities had been carried out within living memory. These land use maps are examples of Indian cognitive landscapes, “inner maps” that represent the very important knowledge of where things are during the year cycle. Knowledge of the land makes the difference between life and death, without much room for errors of judgment. The beavers must have their dams where they are in the cognitive landscape; the caribou must pass along the valley as they have for centuries. In sum, cognitive maps are *mental representations of spatial relationships in the landscape*, and the more familiar we are with an area, the more accurate and thorough our cognitive landscapes will be.

A related but different process can be called *landscaping*. Krogh (1995) calls the process by which environmental interpretations are formed “landscaping,” defined as “man’s process of creating meaning in interaction with his environment” (quoted in Bruun). Landscaping in this sense is above all *discovery of the landscape* and involvement therein. It “gives rise to emotive bonds to the landscape, as well as silent knowledge about it, the landscape acquires meaning” (Bruun 1996, 3). This “inner landscaping” has very little to do with the planning that landscape architects do.

Good examples of landscaping can be found in “A Few Acres of Snow — Literary and Artistic Images of Canada” (Simpson-Housley and Norcliffe 1992). In the essay on Hugh MacLennan, Peepre-Bordessa writes that: “he gave them landscapes they could step into, with a recognition of being home at last” (Peepre-Bordessa 1992, 19). She explains how artists in control of their language can effectively replicate in words a scene they have observed, how

they can project a literary image of the landscape — enabling readers to become part of that landscape:

“Experiencing these landscapes, Canadians could come to a better understanding of themselves and the land that had bred them: a landscape of the mind was written into being” (Peepre-Bordessa 1992, 22).

Landscaping is thus *a process* that creates meaning in the landscapes and helps us to fill our cognitive landscapes with details, with areas we like, topophilia, and some that we dislike, topophobia.

## To Whom It Belongs

The Norwegian philosopher Jakob Meloe has somewhere said: “A landscape belongs to those who belong to it.” The highly influential, but also controversial, German philosopher, Martin Heidegger often wrote about the nature and people of the Schwarzwald, where he had a secluded hideout. The people he meets there, the rural, “real” peasants are very down-to-earth. The people in this landscape do not contemplate and observe the landscape they work in; they live in it and they belong to it.

Finland is one of very few nations so far to have selected “locations,” or areas, as “National landscapes.” In Finland the idea of “national landscapes” goes back to the literature and art of the Romantic movement of the early 19th century, reflecting the political and social events of that time. Having been a Swedish province, Finland had become an autonomous part of the Russian empire in 1809. In the atmosphere generated by Finnish nationalist literature and painting, there also gradually developed “the landscape” regarded as a national asset. The landscapes selected as national, represent “the finest natural and cultural resources of various regions . . . The national landscapes have *tremendous symbolic value* . . . They are a resource and a source of inspiration for upholding our cultural heritage” (Ministry of the Environment, National Landscapes 1993).

To whom, then, does the landscape in national parks in the USA belong? The land in national parks belongs to the American people, but how about the landscape in them? Commercial moviemakers planning to film in US national parks may in the future have to pay location fees for the use of the scenery, according to the National Park Service. Testifying in 1998 before the Subcommittee on Parks, Historic Preservation and Recreation, Deputy Director of Conservation Policy, Al Eisenberg noted a 10-page National Park Service list of major films and commercials produced in national parks (NPCA, 1998). National parks, while providing a backdrop for numerous commercials and films, including most recently “Star Wars,” “Forrest Gump” and “Thelma

and Louise,” gain almost nothing from their “scenic stardom,” according to the National Parks and Conservation Association. Production companies can tie up roads and cause the closure of portions of parks for days or weeks during a production, and thereby prevent visitors from enjoying the landscape they in principle own. Utah’s Arches National Park alone has averaged 52 filmmakers a year for the last five years of the 1990s. Monument Valley, on the border between Arizona and Utah, is considered The Most Filmed Landscape in the world, starting with John Ford’s “Stagecoach,” including “Easy Rider,” and lately “Forrest Gump.” Heidegger’s and Meloe’s landscapes are rural, cultural landscapes, with people using, and belonging to, the areas through the forestry and agriculture by which they make their living. But to whom does a recreational landscape belong?

Three factors are involved in basic economic theory: scarce resources, human wants, and the problem of choice. The first traditionally classifies resources into natural, labor, and capital resources. In dealing with landscapes, natural resources, i.e., land areas, are of central interest.

When the basic needs — food, shelter and clothing — are met, other increasingly non-essential human wants arise: those associated with the luxury goods and services that are a feature of affluent society. If there is an unlimited supply of resources, every individual can have as many goods and services as he/she wishes. There is no allocation problem, and therefore, by definition, no economic problem. What about a desire to use the mountains in winter for skiing in an undisturbed environment, or to walk along a path in Denali National Park in Alaska without seeing any other human being for two weeks? Those landscapes are scarce. Some groups have these wants, but as the resources are scarce, there is a problem of choice. With a given budget, consumers may maximize their satisfaction by the choice they make within that budget. That is on the personal level. The founder of modern economics, Adam Smith, talks in his “Wealth of Nations” of “an invisible hand” that allocates resources so as to maximize the satisfaction, or economic welfare, of society as a whole. There is an obvious conflict here.

To take a concrete example: if a wilderness area, used only by a few hikers, is opened up for “heavier” use by allowing roads to be built, the solitude-lovers lose the landscape they used for recreation. A larger group may use the same area for mountain-bikes, snowmobiles, and possibly even four-wheel-drive vehicles. That would in theory give a higher satisfaction to society. This is exactly the crucial problem in the on-going debate in Sweden over who should decide how the mountains can be used for recreation.

Snowmobiles in Sweden have, with some restrictions, free access to public as well as privately owned land, as long as it is snow-covered. Because of the rapid increase in the

number of snowmobiles, and a greater awareness of their detrimental effect upon the environment and other recreation-seekers, a government committee has suggested the establishment, or enlargement, of restricted areas, in which recreational snowmobiling is, or will be, either forbidden or allowed only on certain trails. The proposal has met with firm political opposition, especially in communities along the mountain range. It is fair to say that snowmobiling has become an important part of the country rural-side lifestyle in interior northern Sweden. Many people in the North regard the central government’s attempt to restrict the use of snowmobiles as just another imposition in an alleged long history of exploitation and negligence of the region.

Different notions of proper land use is the root of the debate over the need and right to impose restrictions in the landscape. The Swedish belief in free access to the land finds expression in the traditional Public Access Right (“Every Man’s Basic Rights”), which allows access to private and public property for hiking, picking wild berries and mushrooms, and even a few nights of wild camping, as long as no damage occurs. The basic principle is that the mountains are open to everyone. Snowmobiles sharing the area with people opposed to this activity naturally leads to a dispute over land use. We can define this conflict as an “*open-access tragedy-of-the-commons type*” of environmental problem, or a commons-type natural resource problem. The snowmobilers are free to use the land; they pay no fee to the landowners, but the third party involved, the silence-loving skiers, are not free to choose *not to hear* the activity. In Norway the sanctity of the rights of the third party, i.e., skiers and wildlife, is given the highest priority.

Those who have come to the mountains to get away from a stressful and noisy environment, and are looking for a silent world, have lost all, or at least an important part, of their “inner” winter mountain landscape. In nature, creating and emitting sound has always been a method for demonstrating presence or for staking out a territory. An obvious problem related to snowmobile activity in a recreational landscape is the noise from the machines. This can be considered an environmental *intrusion*. “Development” often generates visual and psychological, as well as sonic impacts. Intrusion indices have been used to measure these impacts, but *sonic impact indices* for intrusion into the mountain landscape have so far not been developed. The question would be: how much noise can we stand within a specific landscape?

If you are tenting by a mountain lake, and every morning are awakened by planes coming in for landing, bringing in people who have not had to walk in for five days with heavy backpacks, it does take away a part, if not all, of the pleasure of being in the mountain wilderness. By comparison, snowmobiles are nowadays part of the reindeer herding in Scandinavia,

and a skier will be more willing to accept that activity, with its noise, if she/he is aware of that. Reindeer herding is also, especially by urban people, regarded as a positive way of life, close to nature in principle. In this case the noise almost belongs to the landscape, even if you do not like it.

Who, then, has the power, and who has the right, of dominion over a territory, a landscape in the mountains? Is there a social hierarchy in here, or a struggle between center and periphery? The majority of residents in the northernmost communities no doubt feel that a minority, and particularly the people living in towns along the coast of the Bothnian Gulf and in the Stockholm-area, are trying to impose their views, and thereby their landscape, upon the local residents.

In the conflict between skiers and snowmobilers, the winners seem to be the snowmobilers. Their landscape is winning out over that of the non-motorized skiers, who are the losers. And rightly so, many would argue. The local people should have more power in planning for a sustainable society. If they need snowmobiles in order to live and work in the harsh environment of the subarctic Norrland, the local people should be able to do so, within limits. But there is, and will for a long time be, a conflict here.

A similar issue, on sounds and noise in the landscape, has risen in the American west. "All is not Quiet on the Western Front," cries the National Parks and Conservation Association in May of 1998 (NPCA 1998):

"Natural quiet — and natural sounds — are part of the environment and the enjoyment of our national parks. But the opportunity to find peace and quiet is increasingly threatened. The intrusive noise of commercial flightseeing aircraft has been a major problem at the Grand Canyon and the Hawaii national parks for years. With the continued growth of tourism throughout the West, the air tour industry will push further into parks such as Bryce, Zion, Canyonlands and Arches, places where visitors can still enjoy the sounds — as well as the sights — of nature. Places where you can still hear the steps of a deer — or your own steps — click across the sandstone, and listen to the cry of a hawk echo off a canyon wall."

The Association argues that action by Congress and the Parks Administration is needed to effectively protect the parks from unchecked expansion by the air tour industry. The case is in some respects similar to the snowmobile issue in Sweden, but also very different. A small but powerful group in society has so far been able to "deprive" another, larger group — the ones visiting on foot — of the "privilege" of not having to listen to unnatural sounds in a majestic landscape.

## On Design and Designation of Landscapes

The word "design" comes from Latin and means literary "de-sign," i.e., *take away the sign* or the meaning. "Designare" was in old Rome the act of breaking the seal on a document, i.e., when the content, the message, was exposed (Ramirez 1993, 6). It implies, in other words, letting the true message come out. In Spanish "designio" means intention or purpose. To design, then, is really the mental intention of trying to show, to explain, the true meaning or content of something. When somebody is designing something, the intention is to *explain the inner meaning* of the thing — a painting or a house — to people who do not have the ability to do so by themselves.

The 18th Century Italian Giambattista Vico formulated a theory about "*factual verum*" (the true is the made) that contains the idea that people only understand what they themselves have made; the rest only God knows (Vico 1989). We talk about "trees" and "tables" and know very well what we mean. To talk about landscapes is different. According to the theory, as a general rule we understand only those features of the landscape that are man-made, i.e., parts of the "cultural" landscape. We understand what is meant by a "church" — a dominating structure with some characteristic, vertical lines — and we know how a bridge connects places for transportation.

But how about a "natural" landscape — a wilderness area in Alaska? For ecologists "wilderness" symbolizes a natural environment with its entire ecosystem functions, its animals and plants, and adequate, sustainable biodiversity. Most people do not understand how "things" work in this habitat, but that might be one of the best features of the wilderness; we like to be in an environment that we still do not understand completely but can admire. Some might say: "God created this environment," or God "designed" the wilderness. It is not for us to understand; we can not design nature." As soon as we let roads penetrate into a wilderness, or build a log cabin there, we put our footprints into virgin areas, and some of the wilderness is gone. In our life we spend a great deal of time designing and giving form, i. e., giving *meaning* to things and features around us by interpreting and handling symbolic, i.e., semiotic, resources. Wilderness is one such resource, and it is important to remember that this resource is in principle non-renewable. Can we also design, or designate (same root), a natural landscape? Let us take as an example trying to designate a silent wilderness in northern Sweden.

One possibility for solving at least partly the problem of conflict between "snowmobile lovers" and their adversaries would be to create sound-disturbance-free areas in the mountains. The Swedes have so called "K-designated" — "K" as

in “kultur” (culture) — buildings and parts of the built environment. In developing a “soundscape,” i.e., planning to zone towards that goal, some areas could be “*S-designated*.” “S” would stand for Silence and indicate that silence must be preserved, not only for the benefit of humans, but also for the wildlife. A Swedish government committee proposal for adding another 3,000 sq. km. of “protected” areas will try to locate them in remote places, far from roads, and in areas currently not much frequented even by non-motorized recreationists. A few “*S-designated areas*” could be established within these protected regions along the mountains. This would establish *silent wilderness areas*, where recreationists, on foot or skis, would be allowed to roam around, and where wildlife would be better protected, but where the economic activity of reindeer herding would be possible as before (including herding by snowmobiles). Since they would not be located in the most highly frequented areas close to good fishing, establishing these designated areas would not infringe much upon the freedom of local inhabitants in the mountain communities. But they would have to be large enough to ensure the wilderness experience that more and more people are looking for in the crowded, growing urban areas of Europe. Designating some areas as silent wilderness can be seen as restoring a resource to the landscape: a landscape that was lost. We add silence to the elements that had remained, but at the same time the areas are lost for roving groups of snowmobilers. Will they receive compensation in some form?

We must, however, be careful with words that have their root in “sign.” As mentioned earlier, “signification” is the process of giving meaning to phenomena taken as signs. Should it then also be possible to “de-signify” a landscape, i.e. mentally to remove some parts of the landscape and thereby make it poorer?

### In Dialog with a Landscape

If a shift takes place in our post- or late-modern society, a movement back towards a more local identity, what will that mean for “our” landscapes in the future? If we are in a sense moving back to our old “home” landscape, a landscape that has changed in several respects, what is left of that old, “inner” landscape? If we become increasingly attached to a new landscape, can we “take over” symbols of that old landscape? Movement out from the cities to the countryside, and rural “gentrification,” will bring urban values into a rural environment. Although this movement to a rural setting is perhaps most widespread in England, the process will expand in many countries. Thanks to the rationalization of agriculture, large parts of the pre-industrial agricultural landscape have, returned to a semi-wild state. This “nature” has in

northern Sweden become the Countryside” in a new sense. The strange division between work and leisure has also, for a large portion of the Swedish population, led to double residence: one near work in the urban environment, and one recreational, cottage-like residence. During the weekends, Easter and summer holidays, hundreds of thousands of Swedes live in a countryside setting that used to be a production-landscape, a landscape dominated by agriculture, forestry and fishing. Very little of the workforce in Sweden today, less than 5%, is engaged in agriculture.

“The Fairy landscape,” with its friendly or fearsome trolls, the “Magic Landscape” of the old days, is replaced by a recreational or “Leisure Landscape.” Ties to productive nature, demanding hard work but also offering potatoes and bread, are weakened and replaced by ties to a landscape that is non-productive in that it does not produce anything directly related to sustenance. Can we understand this new-old landscape: a landscape with a multitude of symbols, legible to people who have lived all their lives in it? Can we establish a dialogue with the old landscape? “Dialogue” comes from the Greek “*dia logos*,” meaning through the word, through conversation. But the true meaning of “*dia logos*” is to establish a deep contact and understanding of what something is all about (Ramirez 1993, 28). Can we then, in the true meaning, have a dialogue with a landscape? Just looking at a forested landscape, with patches of cultivated fields, in late fall, is not a dialogue. Surveying an urban landscape, seeing the physical structures, gives only a visual impression. We cannot understand how a city functions if we have not lived in one, and had a *dia logos*-contact. In classical languages, there is a similar difference between structure and function. The Latin word “*civitas*” referred to activities within an urban area, while “*urbs*” referred to the buildings and streets, i.e., the physical landscape.

In the “Gant World” of clothing, the “background landscapes” for presenting a fall collection of sweaters and shirts are certain landscapes in the USA: New England, Montana, the Californian coast. In the 1997 catalog, the landscape is Norman Rockwell’s Vermont, in soft shadows. What semi-otic resources are gained for, or reintroduced, into the New England landscape? Norman Rockwell was the painter of the “American Dream.” The Glencheck Blazer, the Riding Coat, New Haven Oxford shirts — symbols are plentiful — belong to a landscape of class, of urban gentry and leisure activities: fishing, golfing, sailing and riding. Most Americans might understand the symbolic value of Rockwell’s New England, but on Europeans, who by now constitute an important market for the company, these life-style landscape resources are wasted. Europeans have not had, and will not in the foreseeable future have, a “dialog” with the fall colors, white churches, and covered bridges of Vermont.

## On Landscape Changes and Persistence

In landscape ecology, which basically defines a landscape as a heterogeneous land area, composed of a cluster of interacting ecosystems, i.e. the visual landscape, an important consideration is that of stability and change. A landscape is said to be stable if a) the long-term variability of its parameters can be represented by a horizontal line, and b) the amplitude and degree of periodicity of oscillations around the line are characterizable (Forman and Godron 1986, 431). This denotes variation curves in a graphical illustration of ecosystems with tendencies, amplitudes and rhythms. Instability means in this context that small environmental change is sufficient to throw the system out of kilter. *Persistence*, a measure of stability, refers to the *time period* during which a certain characteristic of a landscape continues to be present, while *resistance* is the ability of a system to withstand or resist variation. *Resilience*, on the other hand, is the ability to bounce back, or return, after having to change. Let us try to use the terms change and persistence dealing with “inner” landscapes and semiotic resources.

Landscapes have multiple meanings, and these again are symbolic reflections of how cultural groups define themselves (Greider and Garkovitch, 1994). Change in the landscape can challenge cultural expression, and thus have socio-cultural impacts.

“Ranchers, farmers, entrepreneurs, and natives (in the American North-West) have constructed different symbolic meanings for the land, thereby creating different landscapes. This leads to different attitudes towards potential changes in their landscape and to different human consequences of environmental change” (Greider and Garkovitch, 1994, 12).

We can assume that the natives, Indians and Inuits, try to have persistence in their landscape, while farmers and other “new-comers” are changing their landscape, i.e., introducing their own symbols. Naturally, symbols and their meaning, i.e., the semiotic resources — change over time, but some have a degree of persistence that gives them long-time continuity. Greider and Garkovitch (1994) maintain that durable traditional symbols provide people with an interpretative framework — a familiar context — within which they can construct the meanings of new technologies and other changes. Brody, in studying the Beaver Indians in northern British Columbia, provides evidence that this is true:

“They adopted many items of new technology, including guns, steel traps and horse tack, and they developed a flexible, mixed economic system. They now regard many of these innovations as elements of traditional life — proof that the Indians

have not been passive in the face of change” (Brody, 1988, 247).

So, faced with extensive intrusion by white hunters, farmers, and gas- and-oil exploration crews, their landscape has not changed totally. There is persistence over a long time in the “Beaver Landscape.” The Indians have not had sufficient resistance to withstand the changes, but the important semiotic resources are still there: the hunting, trapping and berry-picking landscape of theirs.

“Rather, the meanings were negotiated within the context of the structure of beliefs used by these people to define themselves as subsistence hunters within their landscape” (Greider and Garkovitch, 1994, 7).

Although the physical landscape has changed through the introduction of seismic lines and forestry clear-cuts, the symbolic resources for one group living there are almost unchanged. That is a stable, persistent “inner landscape.”

### Appropriating a Landscape — or “*Eadem mutata resurgo?*”

In architectural psychology the individual appropriates his/her environment in the sense of taking over, incorporating the “space.” Järnegren, Liedholm and Sandin (1981) argue that individuals, from their position in the cultural and social structure of a society, assimilate or appropriate different parts of the environment, and they also “dedicate” different values and symbols to the environment. To appropriate the environment, the space, means recognizing and learning to know that space in a more than cognitive sense. It also implies getting involved, and at the same time identifying oneself. But to live in a changing society also means that one experiences a continuing modification of subjective reality. This is a dynamic process, involving both a replenishment and a modification of the individual’s value system. The appropriated becomes a part of the individual.

There is also a movement in the opposite direction. Appropriation also means investing something of oneself in the space. A person’s basic resources, knowledge and values, have co-evolved, developed, in close relation with his or her socio-cultural reality, and they determine the possibilities for appropriation of the environment (op cit. 39). People “charge” their space, i.e. the environment in a limited sense, symbolically, and for people within the same culture that space becomes readable, communicative, and comprehensible, because it is charged by people with the same value system. Jones proclaims that the landscape is a mirror of human values. Values are not intrinsic to the landscape; *values lie within people* or groups of people (Jones 1993, 20).

An important aspect of this *appropriation process* — and this applies also in dealing with landscapes — is the question to what extent the individual is tied to a socio-cultural context. It has been proposed that appropriating is possible only within a specific society and within a specific social class. “Socio-geographic space is a codified space, a space that has been institutionalized and organized according to models, norms, and value scales” (de Lauwe, in Sandstrom 1979, 12). Can a person who does not stay very long in any one “space,” who moves through several landscapes, still appropriate these landscapes, or can *only one landscape at a time* be appropriated? The “Place Identity” concept proposed by Proshansky denies the possibility of alternative identity places, while the “Place Ici” concept of Moles accepts it (Sandström 1979, 10). Some of us spend a few weeks of the year at a summer cottage, or we sail through the same archipelago every summer and the cattleherding nomad of East Africa wanders back and forth between two basic locations in space, depending on the season. These alternative environments along the route are “perceived” and “absorbed,” but not appropriated in the true sense (Sandström, 1979, 10).

If we “belong” to one landscape by appropriation, how easily can we change that tie? Proshansky (1979), in a paper called “The Appropriation and Misappropriation of Space,” states that appropriation is a *process over time*, and with a certain continuity. He emphasizes that, over time individuals and groups, change their norms and values, and therefore must repeatedly conquer their environment, their landscape. A landscape could then be *misappropriated* if a) the person has changed his/her values and norms enough not to “fit” the landscape, or b) the landscape has changed so much that his/her the norms and values are not valid any more. Most of us believe that since “beauty is in the eye of the beholder,” we experience a landscape in our own way, it belongs only to us. There is, however, a high degree of consensus about scenic quality in the landscape. From the time of Plato and Aristotle until the beginning of the 18th century, aesthetic quality was believed to be objective. The Romantic Movement led to the modern view that *aesthetic quality is a subjective matter*. At the same time, “Scenic quality assessments” (SQA) made by landscape architects show that, at least in the Western world, “[All] people love views of mountains, rivers, lakes, houses set among trees, dramatic urban skylines —” (Turner 1998, 58). It is accepted that taste in scenery has changed with tastes in the arts. “We now love deep forests, mountains and rocky coasts, which used to be viewed with horror” (Turner 1998, 61). This would mean that during any period in our history most people like the same features in the landscape, but with any change in “common taste,” some features will be replaced by others as the most desirable ingredients in “a good landscape.” It is important here to remember that the

concept of aesthetics has its origin in the Greek *aisthētikos*, i.e., perception by the senses (Keisteri 1990, 47). This means observations by all senses, not only the visual impression of a landscape. The original aesthetics of a landscape would then include the noise from a highway in the background as well as the smell of a newly manured field in the visible foreground. Whether or not we like those impressions is a matter of personal taste. We usually think only of the degree of beauty of a landscape scene, a much more limited aspect. To this should be added the fact, that what you do not accept, you can not appropriate. A landscape might be lost in the sense that we are unable to appropriate it, at least for some time — or even forever.

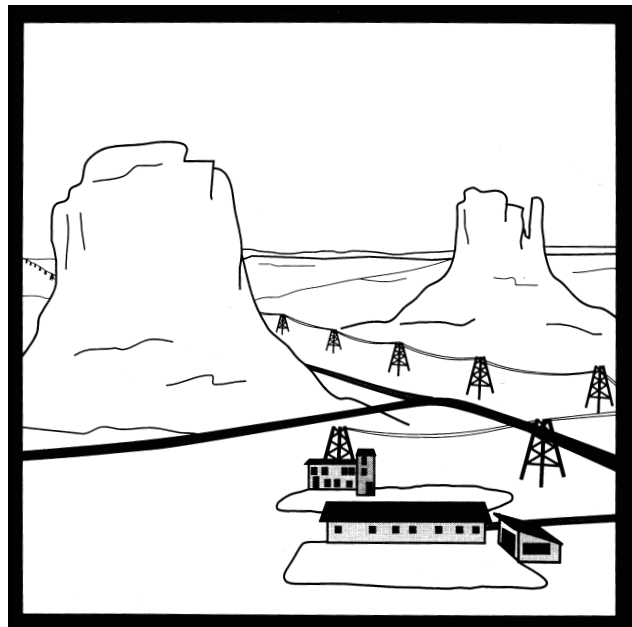


Figure 1. Development in Monument Valley — a misappropriated landscape?

The sententious Latin phrase “*eadem mutata resurgo*” can be translated “though transformed, I will rise again unchanged.” This motto, inscribed on the tomb of the Swiss mathematician Jacob Bernoulli (1654-1705) in Basel, could also pertain to landscape appropriation. If a landscape changes in certain aspects, and is hence misappropriated by some, the landscape, with its new semiotic resources, can be re-appropriated nonetheless by people with other values.

## On Losing Landscapes

While we all belong to at least one landscape, and thereby give that landscape a set of semiotic resources, Arnesen



(1996) discusses two ways of losing a landscape: through “fading out” (disappearance) or by being “battled down” (destruction). He accepts the destruction of landscapes, “providing they are legitimately lost in the *modus operandi* of a democracy. Landscapes fading out are more of a tragedy, because fading out implies a process where society has not managed to focus on the loss of certain types of landscapes” (Arnesen 1996, 3). He believes that “fading out” undermines the identity and culture of whole groups in a society, ultimately affecting the cultural assets of a whole nation. He also considers the loss of semiotic resources a cause of alienation in a society. Arnesen considers it conceivable that a nation

“may fade out vital parts of its landscape through a morbid focus on certain esoteric landscapes with an alleged value, and leave the rest to ‘the wolf’ . . . We could even speak of a *coup d’etat* when it comes to landscapes” (Arnesen 1996, 3).

He takes the example of Norway, where, according to him, protection of remote mountain areas has almost archetypal status. Other regions are pushed aside, or into the background. “Winners take it all!” The landscape that, according to Arnesen, is “fading out,” is the coastal cultural landscape, the fishing villages along the deep fjords with high mountains as a background: the type of landscape that until recently was, in most respects, “The Norwegian Landscape.” The coastal landscape is disappearing mainly because of changes in mode of transport. Transportation has switched from sea-based to land-based. Construction of roads, bridges, and tunnels, has severely affected coastal communications. The “leisure landscape” is taking over the old fishing landscape; environmental protection policy in Norway is turning its back on the coast and is retreating to the remote mountain wilderness.

The British-Norwegian landscape geographer Michael Jones, who has done extensive research on the management and preservation of cultural landscapes, maintains that landscapes incorporate, or symbolize, ideas of beauty, historical association, and local or national identity (Jones 1993, 19). A good example is found in another “losing” landscape, that of summer farms in Hedmark county in southeastern Norway, presented by Daugstad (1992). Summer farms, normally in mountainous areas, have been a vital part of traditional agriculture in Norway (and also in some central parts of Sweden). This has involved an extensive use of “utmark” areas, i.e., outlying areas, used for summer grazing, hay production, forestry, and hunting, and has created a characteristic type of landscape, considered another significant part of Norwegian culture and national identity. The traditional use of these areas has dramatically declined and changed during recent decades. At the same time, the significance of these areas is

increasing. The landscape of these mountain summer farms has been created, and can only be maintained, by traditional farming activities. How can this landscape be preserved? Should it be preserved, and if so, why? If it is not kept “open” by cattle and man, it will revert to forest and bush, and thus be lost. Many in the country do not like to lose the landscape. They want to preserve at least parts of it in some conservation areas, or as national parks and monuments. But every landscape, natural as well as cultural, changes over time, so why should this landscape be preserved as it was around the turn of the century?

Here the term “*amenity value*” should be used. Amenity has to do with pleasure and agreeableness, and every landscape has value for non-economic, or amenity activities (Jones 1993, 23). People may seek in the landscape an experience of nature, of history, or “only” an aesthetic experience. These experiences cannot be bought or sold on the market and, in the terminology of welfare economics, the landscape is in this respect a free good. As such it requires protection by the authorities, or philanthropic landowners, if it is to be available to the general public (op. cit). The former summer farm areas apparently have a high amenity value.

Arnesen asks whether there is a metaphor for the “typical” Norwegian landscape today? He makes the interesting observation that the national-romantic era of landscape painting during last century was fundamental in creating a “National Landscape” in Norway (as also in Finland). He “blames” the current concentration on preserving “wild,” uninhabitable mountain areas on the painters who made it their mission to discover the unknown and original, the “basic” Norway. They showed the land in great panoramas, depicting it as mostly high mountains and narrow fjords. These romantic painters were highly successful in introducing symbolic values, new semiotic resources, into the Norwegian nation.

If indeed one landscape must lose when another is winning, is there an *optimal landscape* in the semiotic sense? The Swedish mountains for instance: when does that landscape contain the maximum semiotic resource? At least two questions could be considered here. Is there a *Pareto-optimal landscape*, and can the amount of resources contained be calculated, e.g., from the number of satisfied users? The Pareto-optimal landscape would, according to economic theory, be the “most effective landscape”: in this case as far as resource use is concerned. That would mean that any improvement anywhere, anyhow, would have a cost, would entail a loss, in the form of a reduction or impairment somewhere else.

In the previous example from Sweden, the people using snowmobiles are increasing in number; their “landscape” is winning out over that of the non-motorized skiers. More snowmobiles, and faster machines, are taking over larger ter-

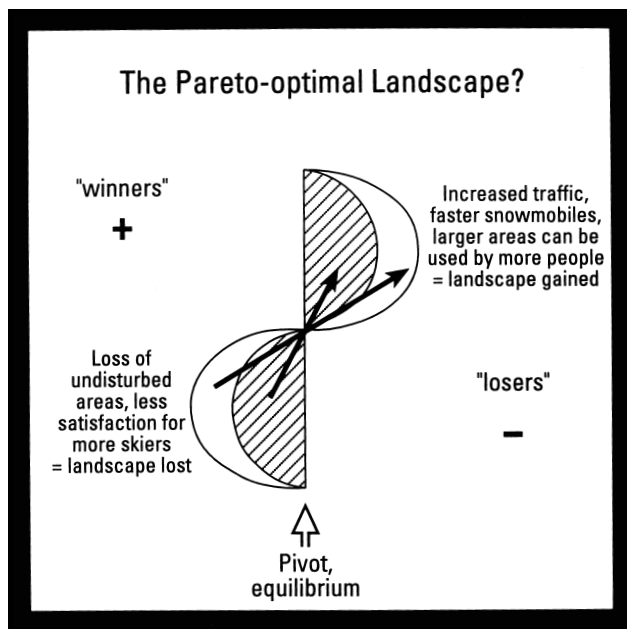


Figure 2. Can there be a Pareto-optimal landscape?

ritories, at the cost of less satisfaction and loss of undisturbed areas for skiers. One could argue that the maximum number of satisfied landscape-users would indicate the Pareto-optimal semiotic mountain landscape. But is the semiotic landscape value greater for an underground iron-ore miner in Kiruna in northernmost Sweden, who spends most of his spare time fishing on lakes he can only reach by snowmobile, than for a government bureaucrat from Stockholm, who usually spends one week at Easter skiing all by himself in the same landscape, enjoying the absolute absence of other people and noise?

Here we apparently also have a case of "interference" with the general economic theory of public goods. Environmental economists use the principle that natural systems are multifunctional assets in the sense that the environment provides humans with a wide range of economically valuable functions and services. One type of service is a set of natural goods, including amenity resources, such as "natural" landscapes. A landscape can also be considered a public good. Public goods generally have the characteristics of *joint consumption* and *non-exclusion*. This means that when the good is consumed by one person, the amount available for consumption by another person does not diminish. Accordingly, one person's "use" of the landscape for recreation should not inflict upon the other person's "consumption" of the same landscape for recreation. This does not hold true in the case of the skier and the snowmobiles, but the principle of non-exclusion means that one person can not pre-

vent another from consuming the common resource, the landscape being a public good. So the conflict is apparent. The snowmobile introduced new groups of people to the Swedish mountain environment, people that earlier had not "used" the mountains, either because they had no desire to do so, nor any tradition of getting out into the wilderness, or because they lacked the physical ability to do so. Some would argue that, with good planning, new semiotic resources can be introduced, and we can thereby prevent the loss of landscapes.

Must there always be losers? Or can new semiotic landscapes be added to old ones, metaphorically one atop the other, or one inside the other, as "new" landscapes appear? Jones argues that a landscape can have several *amenity values* simultaneously, and they need not be mutually exclusive (Jones 1993, 24). He differentiates between four types of amenity value: a) intrinsic ecological value b) scientific and educational value c) aesthetic and recreational value and d) identity value. One example of the first type is maintenance of biodiversity. People enjoy wildlife for its own sake. Protected landscapes (scientific value) can preserve traditional forms of land use (e.g., a summer farm area in Norway). Landscape beauty and local history, embodied in the features of a farming landscape, add aesthetic and recreational values, while historical landscapes are part of our heritage and thus add identity value (Jones 1993, 25).

It can be argued that a landscape can lose some of its amenity value without being totally "lost." I have also maintained that a landscape can lose some of its physical features, e.g. by forest clear-cutting or when old agricultural fields revert back to bush, and thus be lost for large groups in society. In a study of Idaho's "Vanishing Wild Lands," The Wilderness Society finds that the continuing health and diversity of Idaho's economy are tied to the increasing number of economic activities that are "landscape oriented": activities that are supported and enhanced by both the natural landscape and the wildlife and recreation associated with that landscape. According to a government study, Idaho's wild lands may be the most visually intact, unmodified areas in the contiguous United States. The Society affirms the view that unspoiled scenic beauty contributes greatly to the quality of people's recreational experiences and to the quality of life that attract new residents and businesses to the region. The study also states that the economic benefits of roadless areas, as measured by their "existence value," far exceed the value of timber and livestock forage on federal land in the Columbia Basin (in the western US). The existence of unroaded areas currently accounts for 47% of the economic value that federal lands in the basin provide to society, while recreational use, timber, and range land provide 41%, 11%, and less than 1% respectively. The existence or "passive use" value of unroaded areas in central Idaho was estimated to be

nearly \$100 per acre (Anderson 1997).

Another process is the change in value systems among the “users” of the same landscape. An important question in this respect is: how fast can the change in values be, without the landscape being lost? Jones argues that scientific value is best preserved by a very slow change, or none at all, while aesthetic and identity values can tolerate some degree of slow change (Anderson 1997, 27). As a basic rule, the speed of change is critical. Whether this applies to the opposite movement as well, the gaining of new landscapes, is a matter to be investigated. As a final example of a landscape lost, let us consider the change introduced in the rural cattle grazing landscape at Altamont Pass, among the rolling hills east of San Francisco Bay. When the family on the farm in the picture below (this is a true case) moved out from the big city in the mid-1980s as “urban refugees,” they wanted to get away from it all, to have a good life in the valley as cattle ranchers, with no intrusion from the world outside. Some years later, in 1988, they had wind turbines on all the hillcrests around them; a totally new skyline had appeared. The change in the landscape was very fast. They had no time for value changes, and, if we use other terminology, they had not yet appropriated the new semiotic resource. It takes time to love a new wind turbine landscape, even if the method of producing energy from a renewable resource is highly favored by the new settlers. This is a classic “NIMBY” case (NIMBY meaning “Not In My Back Yard”): a good way to produce electricity, but it spoils my landscape!

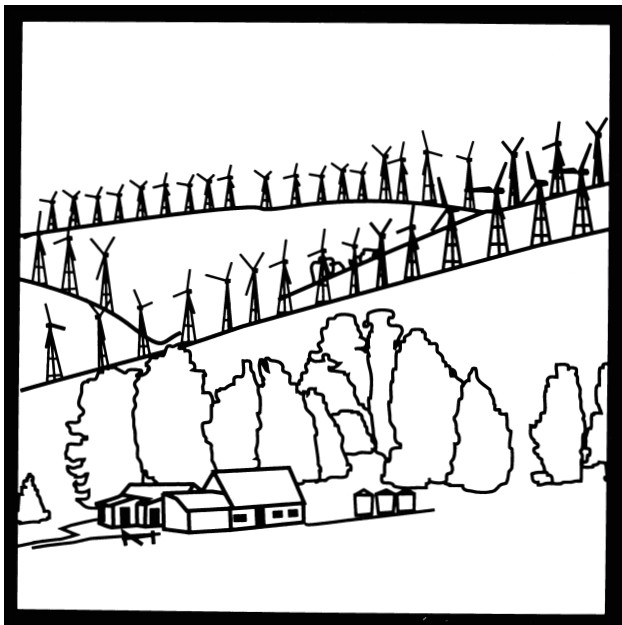


Figure 3. Landscape Lost? — Altamont Pass, California

## References

- Anderson, M. 1997. *Idaho's Vanishing Wild Lands: A Status Report on Roadless Areas in Idaho's National Forest*. Washington D.C.: The Wilderness Society.
- Arnesen, T. 1996. Landscapes lost. Paper presented at International Nordic Conference in Human Ecology, Strömstad, Sweden.
- Bladh, G. 1995. Finnskogens landskap och människor under fyra sekler. Gothenburg, Medd. Göteborgs Universitets Institutioner Serier B, No 87.
- Brody, H. 1988. *Maps and Dreams*. Toronto: Douglas and MacIntyre.
- Bruun, H. 1996. Environment and meaning; Toward a theory of cognitive mapping. Paper presented at International Nordic Conference in Human Ecology, Strömstad, Sweden.
- Daugstad, K. 1992. Seterlandskapet i Hedmark (In Norwegian). *Fornitidsvern*, 3, 36-39, Oslo.
- Department of Transport. 1993. Design Manual for Roads and Bridges, Vol.11: Environmental Assessment. London. HMSO.
- Forman, R. and M. Godron. 1986. *Landscape Ecology*. New York: John Wiley and Sons.
- Greider, T. and L. Garkovich. 1994. Landscapes: The social construction of nature and the environment. *Rural Sociology* 59, (1).
- Hopkins, J. 1998. Signs of the post-rural: Marketing myths of a symbolic countryside. *Geografiska Annaler*, 80 B, 65-81.
- Jones, M. 1993. Landscape as a resource and the problem of landscape values. In *The Politics of Environmental Conservation*, Proceedings from a Workshop in Trondheim, Report # 6/93, 19-33. Norway: University of Trondheim.
- Järnegren, A., M. Liedholm and M. Sandin. 1981. *Den byggda miljöns symbolvärden*. (In Swedish), Rapport R 22. Stockholm: Byggnadsforskningrådet.
- Keisteri, T. 1990. The study of changes in cultural landscapes. *Fennia* 168:1. Helsinki: Geographical Society of Finland.
- Krogh, E. 1995. *Landskapets fenomenologi*. (In Norwegian). Thesis 1995:15, Norges Lantbrukshøgskole, Institutionen for økonomi og Samfunnsvetenskap.
- Ministry of the Environment. 1993. *National Landscapes*, (Lauri Putkonen, ed.). Helsinki: Land Use Department.
- Morris, P. and R. Therivel. 1995. *Methods of Environmental Impact Assessment*. London:UCL Press.
- National Parks and Conservation Association. 1998. *The ParkWatcher Flash*, Washington DC: National Parks and Conservation Association. (also on WWW.npca.org.)
- Peepre-Bordessa, M. 1992. Hugh MacLennan: Literary geographer for a nation. In Simpson-Housley, P and G. Norcliffe (eds.). *A Few Acres of Snow*. Toronto: Dundurn Press.
- Ramirez, J. L. 1993. *Strukturer och livsformer* (In Swedish). Medd. 1993:3. Stockholm. NORDPLAN
- Sandström, S. 1979. Approprieringen av rummet. In Forskningsläget inom arkitekturpsykologin 1977 (In Swedish). Rapport R 56: 1979. Stockholm: Byggnadsforskningen.
- Simpson-Housley, P. and G. Norcliffe (eds.). 1992. *A Few Acres of Snow*. Toronto: Dundurn Press.
- Turner, T. 1998. *Landscape Planning and Environmental Impact Design*. London: UCL Press.
- Vico, G. 1989. *Antologia*. de Rais Busom (ed.) (In Spanish). Barcelona: Peninsula.