

# The Evolution of Environmental Sensitivity 1750-1950

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## 1 Introduction

This chapter proposes to tackle the relationship between history and ecology (ecological history) from the angle of ideology and mentality. What interests me is the composition — the component parts — of sensitivity towards the environment. The current ecological movement, with us now for some decades, is the most recent manifestation. I am not, therefore, going to write a history of the protection of nature. I am going to seek to understand the evolution of ecological sensitivity. Respect for equilibrium in the natural environment is a concern which is the result of a long evolution. This is understandable, providing one restores nature to a place in a social context where it has both a symbolical and economical meaning.

The departure point is the hypothesis that environmental sensitivity changes. One is aware of various attitudes from what has been called “The Ecological Crisis” or even “The Ecological Age”, and from the new environmentalist ideology which developed in the 1950s and 1960s. This recent phase brings together various heterogeneous and sometimes contradictory paths: fear of upsetting the social order (by overpopulation, economic growth, exhaustion of resources, etc.), challenging the consumer society, pessimistically casting doubt on the possibilities of technological development, progressing in the scientific understanding of ecological mechanisms. All that constitutes the new “ecological conscience” of the western world which shows itself by symbolical practices (a taste for natural authenticity, rusticity, nostalgia for folk-dress, etc.) and political movements (the “Greens” have attracted particularly strong support in certain countries).

## 2 The Relationship with the Natural Environment

The present approaches have nothing new in themselves, rather it is their combination which is original, forming a model for the relationship with nature which one describes as ecological. The historian has therefore to operate in two

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ways: (1) he begins with a classical genealogical approach which consists of identifying innovating practices and promotional speeches. (2) A systemic approach follows, using historical studies at different levels in mutation, changing between different periods. Every epoch has its model for environmental relationships. It is built up from a variable complement of approaches: I shall limit my examination to five components whose contents I shall try to characterize before applying them to a case study: (1) emotional; (2) techno-economic; (3) scientific; (4) ideological; and (5) utopian.

### 2.1 The Emotional Approach

The emotional approach is the attitude closest to us. It consists of finding esthetic enjoyment in the spectacle of nature, and is essentially visual. The promotion of the visual perception dates from the Renaissance. It assumes the education of the aesthetic senses, which results in an awareness of class. A taste for nature is in the first instance a sign of being part of an elite. However, the notion of a beautiful landscape or of the beauty of nature has made some progress. The idea of a planned landscape, prized in the classical era (symmetry and regularity), gave way in the 18th century to an attraction to untamed nature and for the picturesque, taking the form of a romantic perception of nature. This esthetic relationship, developed in England at the end of the 17th century and propagated on the continent particularly by Rousseau, still influences the neoromantic attitudes which exist even today. References to a visual culture suggested societies for the protection of the countryside, picturesque places, and historical sites and heritage, particularly at the end of the 19th century.

### 2.2 The Techno-Economic Approach

The techno-economic approach is at first sight equally banal. It consists in putting the exploitation strategies of natural capital to work. The idea that the environment is a rare good is a recent variation. Throughout the centuries, societies have done little else other than to codify their rights to use the natural environment according to their needs. Legislation, some of it very ancient, on hunting, fishing, forestry, and use of the pastures was interpreted in this way. The point which interests us in particular here is that the countryside itself became merchandise. Financial investors and the tourist industry gave themselves the task of transforming it and giving it an exchange value. For the first time, the esthetic and the utilitarian began to compete with each other in a period where technological development (industrialization) pushed the contradiction between the necessity of economic growth and the defence of esthetic values, as well as those morals inherent in civilization, to its paroxysm.

### 2.3 The Scientific Approach

The scientific approach is essential in order to develop a theory of the risks of anthropological action. One has to admit that Darwinism, dominant in the natural sciences during the 19th and 20th centuries, does not readily lend itself for use here. In the 18th century, rationalism had developed an evolutionist concept of human history. Perfected by progress, each people passes through various stages of development. With Charles Darwin (1809-1882), the finality of evolution lost its intentional character and became laicized. From then on, the various species transform themselves by accident. It is the environment which assures the success of the best adapted. The environment becomes the great regulator of evolution. Adapted to man, the simplified and simplistic vision of Darwinism declares that history should accept that the most adaptable "cultures" have become part of their environment, that is, those which have best mastered their environmental constraints. Science, in explaining the processes, has as its objective the subjection of the natural world and does not yet show itself to be very sensitive toward the negative aspects of man's impact on the environment. One retains the paradigm of progress from Darwin's teachings.

It is symptomatic that it was the naturalist Ernst Haeckel who contributed to the spread of the new theory in Germany. It is also he who in 1866 invented the concept of "ecology" in order to study the relationship between living beings and their environment, never exposing the breaches of harmony. Karl Moebius introduced the concept of biocenosis in 1877. In 1865, the German physicist Rudolf Emanuel Clausius defined the notion of entropy in thermodynamics. Essential to the understanding of the global functioning of a system, his impact was extremely limited and the other scientific fields hardly noticed its result. Ecology integrated these contributions only in the 1950s. In addition, those ecological concepts which opened the way to a more global conception of the environment were late in coming. The decisive notion of an ecosystem was introduced by the English naturalist A.G. Tansley, designating "not only the organism-complex, but also the whole complex of physical factors forming what we call the environment". The concept acquired all its potential with Lindeman (1942, cited in Kormondy 1965). He refers in particular to McIntosh (1985). See also Schramm (1988).

The sciences most concerned with the analysis of the relationship between man and his environment have been, since the 19th century, anthropological geography and human geography. They were also inspired by Darwinist presuppositions in the natural sciences. Both F. Ratzel in Germany and Vidal de la Blache in France insisted on the positive capabilities of adaptation of life-forms to their surrounding conditions (Raumolin 1984). By contrast, those who analyzed the negative role of man in the transformation of nature were little heard. I have in mind the *Raubwirtschaft* economists such as the German Ernst Friedrich, who around 1900 stressed the increasing aggressiveness of human intervention. The *Kulturvoelker* (civilised peoples) appeared to be much more destructive than the *Naturvoelker* (primitive peoples). That which Friedrich calls a "predator-characterized economy" is essentially linked to the contemporary civilization and its

world-wide extension through colonial imperialism (Friedrich 1904). The pioneer work of the American geographer George Perkins Marsh, who in 1864 also stressed the results of man's acts on the environment, did not much influence thought outside the Anglo-Saxon world. It was, however, in the United States that systematic observation of the effects of catastrophes which affected cultivated lands (spectacular phenomena of erosion) would contribute toward an active policy of land conservation. For this reason, ecological sensitivity is particularly strong in the United States. In other words, the concepts which are essential today for an ecology-minded conscience only became operational relatively late.

Nevertheless, scientific circles played an important role in promoting the nature conservation movement. Let's remember a few milestones. It was in the United States that Yellowstone, the immense nature reserve and first national park, was created in 1872. This served as the model for later institutions of that kind. Equally, in Great Britain, scientific interest was foreseen in the activities of the first preservation societies such as the Society for the Preservation of Birds (1889). The debate on the necessity for nature reserves also goes back to the 1880s. On the continent, Germany followed the Anglo-Saxon model beginning in the end of the last century. In 1906, Hugo Conwentz convinced the Prussian government to create a *Staatliche Stelle fuer Naturdenkmalpflege* (Central Office for the Protection of Natural Monuments), which had a consultative role. Similar ideas were observed elsewhere in Europe. The pioneering activities of scientific circles (notably Paul Sarasin of Switzerland) were the origins of the First International Conference on the Protection of Nature (Berne 1913), and the First International Congress for the Protection of Nature (Paris 1923).

#### 2.4 The Ideological Approach

The fourth approach is the ideological one, implying an imaginary relationship between individuals and their real conditions of existence. I should like to mention that vast compensatory movement which values nature as a counter-balance to urban life in general and to the industrial civilization in particular, a problem well-studied in Germany through the works of Bergmann (1970) and Steferle (1984). One of the manifestations of this current is what D. Worster calls "Arcadianism" (Worster 1985). The ideal of harmony between man and nature became a real ethic with the holders of the new attitudes of humility toward and coexistence with the natural world. This ideology was illustrated at first in France by the *Societe pour la Protection des Paysages*, founded in 1901. The same inspiration was behind the founding of the *Bund Deutscher Heimatschutz* in Germany (1904) and the *National Trust for Places of Historic Interest or Natural Beauty* in Great Britain (1904). The foundation of the national societies was evidently the result of numerous local and regional initiatives. It would be too time-consuming to describe their development in detail here. The various organisations met each other at the international congresses in Paris (1909) and Stuttgart (1912), and at the *Institut international d'art public* (founded in Bruxelles in 1898) which had similar objectives, but was more directly

orientated toward the problems of architectural esthetics, according to the culturalist view inspired by John Ruskin. At the international meetings, the protection of sites was thoroughly discussed. The first international congress for the protection of the countryside took place in Paris in 1909. The first legislation in various countries which attacked advertising by regulating the sites of advertisements, the latter being a sort of symbol for the consumer society, happened within a short time (in Prussia, the 1907 law; in Great Britain, also a law of 1907; in France, 1909; in Belgium, 1909).

In a certain manner, these institutions prolonged the most ancient discovery in historical heritage. Sensitivity towards historical monuments is contemporary with the French Revolution, whereas the notion of natural heritage was invented at the end of the 19th century. France was therefore already innovatory in the 1830s, with her Inspectorate of Historical Monuments. In Great Britain, the first legal text dates from 1882 – the Ancient Monuments Protection Act (see Fawcett 1976). The end of the 19th century saw the notion of heritage joined to that of the rediscovery of nature by integrating the traditional architecture into the landscape.

Since heritage is the memory of a country, patriotic connotations are essential. They showed themselves particularly vigorously in the age of *Heimatschutz* (protection of picturesque countryside). Let us remember that the concept of *Heimatschutz*, forged by Ernst Rudorff in the 1880s, and used systematically from the end of the century onwards, was particularly rich in symbolical implications. At the Congrès de Paris in 1909, the German delegate stated that the movement was both a "tribute of admiration for the monuments of one's country", and action to protect "the whole country, from which nature evidently could not be excluded". In France, similar opinions were voiced on the occasion of the discussions relating to the 1906 law for the *Protection des Sites et Monuments naturels*, the first of its kind in Europe. A small extract from the parliamentary debate on this law:

"Patriotism, Gentlemen, is not only a moral entity, an abstract conception, a geographic or historical expression. It is, in a certain way, the material and visible representation of the country itself, its particular physical character and its diverse elements, with its mountains, forests, plains, lakes, rivers and river banks, the varied and multiple aspects of its soil, such as have been transmitted by the slow succession of the centuries. Certainly, patriotism is an innate and instinctive sentiment, but that which contributes most toward fortifying it and engraving it indelibly in the peoples' souls is the attachment to their natural soil, to their preferred horizons, and the memories which this evokes. To alter little by little this filial sentiment by neglecting to conserve all its *raisons d'être* is to extinguish the purest source of the love of one's country of which the love of one's native soil is the granite foundation." (Declaration of Maurice Favre, Journal officiel, March 28th, 1906, Sénat p. 282).

The German 1935 law on the protection of nature was commented on in similar terms by its promoters: "In addition, the German soul and the ethnic identity of the German people is formed by the German landscape and the preservation of its natural character." (Weber and Schönichen 1936).

Thus, in different contexts, the countryside was invested with a massive ideological meaning. Such a discussion was revived by conservative elements who were nostalgic for the society of the Ancien Régime. It served as a point of reference for the conservative revolution of which F. Stern says: "The term conservative revolution . . . denotes the ideological attack on modernity, on the complex of ideas and institutions that characterize our liberal, secular and industrial civilization" (Stern 1961). From this point of view, the city seemed to incarnate all the evils of contemporary society. The back-to-nature ideology idealized the eternal peasant, the harmony of a people, strong in their physique and in their morals, with their soil. The idealization of rural life had political implications and served the corporate defense movements such as the great agricultural societies at the end of the century. In France, it was Méline and his *retour à la terre*, followed by the myth of the peasant farmer during the Vichy régime. In Germany the slogan *Blut und Boden*, forged in the 1920s, had a patriotic basis which had racist tendencies, duly diverted for its own purposes by National Socialism.

Another point I should like to mention, again with the purpose of showing the ideological importance of the return to nature, is the frequently mentioned relationship between Protestantism and an awareness of nature (Viard 1985). The sensitivity towards the negative consequences of human acts is much stronger in Great Britain, the United States, in the Scandinavian countries, in Germany and in Switzerland. From the wide range of available literature one should mention particularly Hays (1968), Olwig (1984) and Brüggemeier and Rommelspacher (1987). According to Andre Gide, there is a "Helvetico-Protestant" image of nature. The conception of a mankind more responsible and more committed with regard to the possession of land could be the result of being accustomed to conquer vast territories. If this can be shown to be true in North America, precociously ecological, the relationship is less pertinent in Europe, and one can ask if it is not simply a north-south division. A nature which is, *prodigious* and *luxuriant*, or at least understood to be so? That leads to a wide appreciation of the renewable productive capacities of the soil. In the process of the industrial revolution, the centre of gravity of the industrial and urban Europe was placed in the northern and western regions, and the less industrialized regions remained to the south and east of this kern. What, therefore, would be astonishing about the northern and western regions being more sensitive toward environmental degradation?

### 2.5 The Utopian Approach

The final approach is that of utopian thinking. The French term *uchronie* refers to an utopia situated in an imaginary time, but not necessarily situated in a fictitious place. Since the 18th century, the utopian discourse has changed its location to exotic places in an imaginary time, under the effect of the general belief in progress. The myth of progress had been one of the obligatory components of

the movement for sensitivity toward the environment, until the 1960s when it was severely breached. For some, degradation of one's environment is a normal accident and a problem which technology will solve in the future. For others, utopia is to be reversed and situated in a hypothetical return to the values of the past in the realization of their social ideal. Such a progressive/regressive dialectic was incarnated in the vast reformist current to which the Germans gave the name *Lebensreformbewegung* Movement for the reform of man's daily life (Krabbe 1974; Frecot 1976). The movement began during the first quarter of the 19th century in Great Britain and Germany, reaching its peak at the beginning of the 20th century, whereas in the Latin countries experiments were only being very timidly made with certain "alternative" ideas. In effect, rupturing with certain accepted ways of life and technology of urban civilization, the various reformist currents encouraged a return to a more natural way of life: natural medicine, natural food (health foods), biological agriculture, freedom from the bodily restrictions of clothes, modern dance, nudism (naturism), sexual liberation, social reform through cooperative and community idealism, and housing reforms (the garden city as opposed to the city of blocks of flats and dense housing areas).

There are some very strong links between the five components which we propose to study in order to understand the evolution of sensitivity toward the environment. For example, the Heimatschutz of 1900 allied an esthetic concept to economic concern, that of ensuring the continued economic viability of agriculture and of ensuring the continuing tourist attraction of the countryside, without disdaining scientific arguments (for example in respect of the disappearance of fauna). They combined a patriotic ideology with projects for an ideal city (the garden city). Nevertheless, it is in the degree in which their components combine that the attitudes toward the environment differ from one another in time and space. Every society and every epoch models its relationship with nature according to its own conceptions and strategies. In fact, the environment is a social stake. The complexity of this relationships is well shown in Lübke and Ströker (1986). One distinguishes, therefore, the periods where the contemplative attitudes of admiration, ignorance, fear and ethical respect are dominant, and others, on the contrary, where attitudes implying voluntary action transforming or protecting nature appear to be essential in order to define the social link with the environment.

### 3 Switzerland and Environmental Sensitivity

In the third section of this chapter, I have decided to illustrate the preceding sections by showing how the different components of the relationship with the environment make themselves heard in Swiss society. At first sight, this country is more a part of the group of nations engaged from the start in a compensatory process in the face of wounds which industrial and urban society has inflicted on the environment. To write a history of the environment implies a specification in time of the relationship with nature. We isolate several periods, each of which

ponents described previously. The developments which follow are succinct presentation of a more important work (in preparation), where precise details concerning the sources and literature can be found.

### 3.1 *The Contemplative Model (18th Century)*

The rationalist offensive of the classical age has not saved the Swiss landscape. The anthropocentric and individualistic perspective supports the thesis of the superiority of man over creation (animals, trees, vegetation, and soil); human ingenuity must affirm its mastery of the natural environment. This logic, and not some "ecological" necessity, underlies the codification of fishing, hunting, and forestry. It dispossessed the peasant communities of their rights in the natural habitat to the exclusive profit of aristocratic urban elites, who controlled power in the principal cantons and whose priority was profitability in the use of resources. A heavy hand laid on nature is not without risk, as is proven by the hazardous rerouting of the Kander, a torrential river in the Bernese Oberland. Undertaken in 1711-1714, this "correction" transformed itself into an ecological disaster with, among other things, the forging by the water itself of a 21-m-deep trench and a delta measuring some 5 million m<sup>2</sup> in less than 2 years!

Nevertheless, Switzerland found itself at the beginning of the formation of a new regard for nature. The rediscovery of the mountain as an untamed place, as opposed to the too-well cultivated nature of the plains, transformed the Swiss territory into a laboratory for the state of individual souls. After the initiatory travels of Albrecht von Haller (1728 and 1732), the mass of European travellers, many of them readers of J.J. Rousseau, was going to transform a hitherto subjective viewpoint into an integral part of reality (Walter 1984). The phenomenon is, for example, flagrantly apparent when one associates the image of the landscape with an anthropological conception of a pure pastoral society, in the same way in which, at the same epoch, the North American Indians were presented as the survivors of primitive peoples. The "homo alpinus", sheltered from the corrupting effects of social life, lived in an environment which encouraged the stereotyped images of a rediscovered Arcadia. Apart from anthropological rarities, the Alps revealed mineral and vegetable novelties to curious amateurs of science. A scholar such as Horace Bénédict de Saussure pioneered the concept of a natural monument for erratic blocks. "these precious monuments", he said, "of the great revolution to which the surface of the globe owes its present state". Without exception, men of the 18th century had an esthetic kind of relationship with nature and with the mountain in particular. It was based on a new perceptive code which replaced the beauty of symmetry with disorder: from cultivated landscapes to savage nature, from formalism to the picturesque. Parallel to this, the esthetic sentiment was accompanied by a growing mysticism, even a deification of nature, making the landscape a "spiritual resource" (Thomas 1983). It was therefore a contemplative model of nature which prevailed.

The secularization of ideas, the emancipation of science from moral values and the fashion of individualism opened the door to a new conception of nature, accentuating even more confidence in the unlimited potential of knowledge oriented toward the mastering of one's environment. A summary can be found in Lepenies (1983). In fact, that meant that the dominant concept was still fully functioning; it was a question of protecting oneself against nature, not defending nature itself. If one proposed to save the forest and replant the mountainside with trees, it was in the first instance in order to preserve oneself from the devastating consequences of natural forces (in particular from inundations). Fashionable scientific conceptions relied on the Darwinist paradigm.

As elsewhere in Europe, it was the forestry employees who were among the first to be alarmed at the consequences of man's actions. Their arguments can be classified as preecological. Without a doubt, the Swiss practitioners did not escape the mythology of deforestation, to which all natural calamities were attributed. Legislation introduced in the 1870s gave the Federal authorities considerable rights of supervision in high-altitude regions, where ecological anarchy was considered responsible for devastations which affected the plains, such as floods. The inhabitants of mountain regions were therefore seen as unknowing predators, before being promoted in the 20th century to the rank of "Gardeners of the Alps", and protector of an ecosystem.

During the same period, this territory open to human exploitation was given new values. It should not be forgotten that Switzerland, as a result of many historical phases which cannot be described here, ceased to be an amalgam of territories of varying status and became a state. Since the end of the 18th century, patriotic images have been very largely mixed with images of the landscape. The territorialization of patriotic sentiment is essential in order to understand the initiatory role of the Alps in Swiss mental perceptions. It is important to distinguish the internal employment of alpine stereotypes from those, more conventional, intended for external use. One knows that the Alps became, in the period 1820-1830, the chosen country of romanticism. The tourists created their own individual territory, their vision of nature, where poetic lyricism was the neighbour of morality and sensibility. The grandeur of nature supported a moral beauty and the values of liberty. The cliché of the Helvetic landscape realized an amazing popularity, thanks to the graphic arts and paintings by less well-known masters.

The Swiss themselves, as well as allowing their collective memory to acquire new national stereotypes, became rapidly aware of the mythical roles of the latter. Already, certain literature describing travels, such as the works of R. Töpfer (1844) ridiculed the mystical tourist. Instead of being aware of man's aggressions in the countryside, still relatively moderate, the corrupting effects of industrial urban civilization on man were stressed. The avaricious mountain dweller who "exploited" the tourist was discovered. It is, however, evident that the era favoured the conqueror. The first ascent of Mount Cervinia in 1865 attracted extraordinary interest. The Promethian image of the mountain, fuelled by the

growing popularity of mountaineering, is also found among the engineers responsible for constructing the means of communication across the Alps. The St. Gotthard was pierced between 1872 and 1880, the apogee of an optimistic century fascinated by progress. The press described the event in the following terms: the “pioneers of progress” and the “workers of science”, wrote a journal in 1882, “have succeeded in lowering the alps and piercing mountains”, “a gigantic undertaking which honours human genius even more than the alpine crossings, well commemorated by history... of Hannibal and Napoleon”.

#### 4 The Esthetic-Patriotic Model (End of the 19th to Beginning of the 20th Century)

The awareness of the dangers which human activities could cause to the natural environment were successful in a period which is described as preecological. That was the moment of progression from a purely contemplative attitude to a will for action, not as yet to manage resources rationally, but at least to protect specifically, while there was still time, those areas which were regarded as being particularly menaced. For this period, see Walter (1989).

The second breath of the Industrial Revolution, which governed the rhythm of social life at the end of the 19th century, resulted in particularly rapid modifications in the countryside. It was alpine nature which paid the heaviest tribute. The hydroelectric equipment in the valleys had hardly begun to operate when the electro-metallurgical industry was installed at Chippis, in the Rhône valley. The peaks which hitherto had been reserved for the slow approach of mountaineers were now covered with rack railways (more than 60 lines built between 1870 and 1910). The hotel industry turned the mythical image of the mountains into profit: about 100 hotels existed in 1880, in 1912 there were 3585!

In addition, Switzerland experienced an unprecedented urban explosion (+ 3.6% per year) during the two decades 1890–1910. The three agglomerations of Zurich, Basel, and Geneva exceeded 100 000 inhabitants (certainly modest by European standards). The question of urban hygiene, a better understanding of organic phenomena, in particular of the contamination process in drinking-water, attracted attention to the problem of water quality. In Basel, in particular, the authorities were alerted to chemical pollution in the 1870s. In 1888/9, the Confederation issued a regulation which indicated the precise quantities of liquid and solid industrial wastes which were allowed in watercourses. However, the dominant representation according to which society should protect itself against nature continued to function normally. Laws regulating the hunting of animals distinguished between animals which were regarded as useful and those which were regarded as pests so successfully that one could triumphantly exterminate the last wolf, lynx, and bear. In 1902, Switzerland ratified an international convention whose objective was to protect such birds as were “useful to agriculture”.

As regards scientific theories which might take into consideration the consequences of action by man, they still commanded but little attention. Even if

numerous Swiss naturalists had been the precursors of ecology, rare were those who were active outside their individual fields. Such was the case of the limnologist, F.A. Forel who, before 1900, already described trophic chains. This was also true in the case of Jean Brunhes, Professor of Geography at the universities of Fribourg and Lausanne (1896–1912), one of the founders of human geography. Under the influence of Friedrich’s theories of the *Raubwirtschaft*, he attempted, in a large work published in 1910, a globalizing approach to the relationships between man and the environment by applying the laws of thermodynamics to the degradation of energy.

Even if perception of the consequences of the industrial and urban society was alive at the end of the 19th century, it was as yet on an esthetic basis. It was the refusal to accept the ugliness created by modern utilitarianism which motivated action. In 1915, Marguerite Burnat-Provins launched an association against vandalism and prostitution of the countryside. It was an immediate success and the movement became the “League for the Conservation of Picturesque Switzerland” (Schweizerische Vereinigung für Heimatschutz). Becoming famous through its national campaign against the Cervinia railway, the Heimatschutz declared war on advertising posters, and found considerable support in the cantons. Several cantons passed laws prohibiting posters where they would prejudice the natural beauty of sites. The same care for esthetic matters on this occasion motivated the Naturschutz.

From 1906 onwards, the Schweizerische Naturschutz commission of the Swiss Society for Natural Sciences brought together experts in the natural sciences, engineers, and foresters. Beginning in 1909, the Commission worked together with the Swiss League for the Protection of Nature (Schweizerischer Bund für Naturschutz). Their principal work was certainly the Swiss National Park in Lower Engadine, created with Federal support in 1914. The clearly affirmed objective was the detachment of a part of the national territory from “the fury of destruction which the modern world has unleashed”. Although it was spectacular, the creation of the National Park should not make us forgetful of the revealing arsenal of legislation which resulted from this new preecological conscience. It would be too time-consuming to enumerate here all the measures taken by the cantons and communes to protect historic monuments, natural curiosities, the aspects of the various sites (*Landschafts- und Ortsbild*), and plants and beautiful trees.

If the esthetic component is closely linked to Heimatschutz and Naturschutz, the model for action in respect to nature during the Belle Epoch functioned, in addition, through a fundamentally patriotic concept. More particularly, since Swiss patriotic feeling had as much need for landscapes as for heroes, Geography and map-reading were more important than history as educational methods, in order to ensure that schoolchildren and future soldiers developed a love of their country. In addition, natural objects which were protected by law corresponded to an equation between the homeland (*patrie/Vaterland*) and the natural landscape. This is the case when fine trees are considered to be witnesses of the past; it is the case with bizarre blocks of stone, themselves witnesses of many ages; it is also the case of a flower such as the edelweiss. The edelweiss, by nature of its



smallness and its resilience in a hostile environment, is the incarnation of a Switzerland which created the identity of a small state confronted by the imperialism of great powers. The great national exhibition of 1896 in Geneva constituted in this respect a summit in the theatrical presentation of the alpine scene. In offering a reconstruction of a Swiss village and a mountain of plaster, populated with authentic inhabitants, the promoters intended to produce the "real symbol of our Swiss homeland". The Swiss village was surrounded by an artistic atmosphere which had for its motto "Art, Mountain and Homeland".

In default of scientific arguments, the preecological current defended in esthetic terms the nonproductive, nonutilitarian and nonpredatory use of natural spaces, sheltered from human action. For the Swiss Society of Natural Sciences, it was a question of (according to a report in 1911) "saving that Switzerland menaced by industry and invasion by foreigners from its imminent destruction and restoring it to its former state". The alps were a museum of landscape-relics, a conservatory of traditions and Swiss values. These ideological connotations appear extremely strong. It was, in effect, a period which attempted to invent alternatives to which one could escape, when faced with a disquieting economic and social revolution. Valuing nature and rurality went therefore hand in hand, for example, in end of the century literature, which illustrated a Helvetic authenticity, "Swiss-ness", the *Schweizerisch* (Linsmayer 1987). Opposed to this was the modern city which endangered collective values and menaced the national identity. In Switzerland, anti-urban sentiment concentrated on the foreigner, symbol par excellence of urban life, one-third of known foreigners lived in the three great cities. The massive presence of foreigners (14.7% of the resident population in 1910) was such that around 1910, one spoke of "Überrandung", became a symbol of materialism and decadent moral values. In other words, it was the authenticity of the indigenous race which appeared to be compromised, and some people regretted that one could not "construct territorial reserves where things such as the splendid alpine flowers and the ancient qualities of our race could be cultivated and safeguarded" (de Montenach 1910).

Politically, sensitivity toward degradation of the environment and the myth of the return to nature have been mostly retained by various conservative and nationalist currents of opinion, strongly tainted by outdated nostalgia. The Union Suisse des Paysans, founded in 1897 on the model of the Bund deutscher Landwirte, propagated an anti-urban ideology much influenced by the analogous debate in Germany. On the contrary, it was not astonishing that the Social-Democrat party was the only one not to be a supporter of the National Park Project in 1914, arguing that there were more urgent social tasks in need of support.

But Switzerland participated equally in that great Western current called *Lebensreform*. Here, criticism of the materialist civilization and of liberal capitalism nourished the currents combining the regressive aspects of conservatism and an Utopian outlook. It would be impossible to review here all those organizations and publications where such orientations were debated as had as a common purpose the propagation of life-styles considered closer to nature.

Natural medicine, corporal hygiene, healthier food, and reformed clothing all had their periodicals such as *Die Gesundheit*. *Zeitschrift für gesundes Körper- und Geistesleben*, founded in 1900 by Pastor W. Stern. The *Wandervogel* movement, which originated in Germany, had a Swiss counterpart from 1907 onwards. This movement of young people sought to rediscover a taste for nature by journeying on foot and offered a culture which was a mixture of neoromantic traits in Heimatschutz style and the most modern reformist tendencies. Ticino and the Ascona region were, around 1900, a laboratory for such ideas. There was a community of "pre-hippies", long-haired vegetarians, living in huts open to the sun, adherents of nudism, close to theosophic thought and mystic cosmology (Green 1986). These few examples show how closely Switzerland had become linked to the common evolution of European countries. There were slight differences, of course. Environmental problems were quantitatively less spectacular than was the case in the great industrial regions. On the other hand, the symbolic investment of nature and landscape was more decisive than elsewhere, because of a massive territorialization of the national sentiment from the end of the 18th century onwards.

## 5 Nature as a Social and Economic Stake (World War I-1950)

The esthetic-patriotic model for intervention in nature could not remain intact after the shock of the Great War. And yet, in several aspects, the period between the two World Wars prolonged the preecological wave dating from the end of the previous century. The continuity is remarkable, but the conditions under which the model now functioned brought the objectives face-to-face with the hard realities of the economic, social, and cultural crises of Europe resulting from the war. The land and the landscape, as always symbolically invested, had now to reply to the different needs of social and economic viability. The vaguely sentimental prewar patriotism had now to anchor itself more deeply. Heimatschutz and Naturschutz sought to acquire a new autonomy with reference to a Germanic model, now compromised. Helvetianism had to be reinvented.

The anti-urban and xenophobic attitudes (as was the case with agrarian nostalgia) were going to serve as a new springboard. Hostility towards the city was at its peak between 1918 and 1923, a period when diverse measures were introduced limiting freedom of establishment and residence in the cities. The inconvenience of a large presence of foreigners seemed exerbated by the war, and in the 1920s, long debates culminated in a more restrictive attitude in the granting of naturalizations, and the first measures taken against the excessive foreign population. Nationalist attitudes took on the most unexpected accents. Thus the forestry employees strongly criticized the fashion for "exotic" perfumes and offered the viewpoint that for esthetic and climatic reasons, the indigenous perfumes were best adapted to the Swiss countryside.

The shortage of housing in the 1920s is a prime example of how nature served as an argument for economic and social reasoning. The ideal of a small house as opposed to barrack-like flats, access to property, contact with the soil (thanks to

a small garden) appeared to be alternatives to roundly condemned Muscovite and Viennese solutions. This stimulated preference for the more-or-less watered-down and fragmentary forms of the garden-city. In 1916, one of the partisans of "disurbanization" wrote: "Green is the favourite colour of the people . . . who adopt and prefer simple poetry - the green of nature". The examples of projects which take the Howardian model of *Lebensreform* dynamics to the limit are rare. Only at Hannes Meyer's Freidorf (MuttENZ, Basel 1919-1921) was it possible to demonstrate the rejection of private property and capitalist viability as well as the promotion of the cooperative community ideal so dear to the social reformers. Investment in the countryside by the flux of urban desires remained one of the ways in which the ecological relationship to nature could progress.

Other alternative forms of a return to nature developed during the 1920s and 1930s. Their vitalist inspiration was close to that of *Lebensreform*. Some of them had already an institutional anchor, such as the youth movements and new "active" teaching methods where corporal expression and "lessons with things" (direct physical contact with nature) played an important role. The dietic principles of Dr. M.O. Bircher-Benner, a partisan of vegetarianism, begun to be known outside the circle of his Zurich clinic. Certain forms of returning to nature continued to be objectionable to the "common sense" of the day and found favour with marginal elements of society. A typical example was the moral revolution proposed by the psychiatrist August Forel, author of a constantly reedited work *Die sexuelle Frage* (1905). The development of the first Swiss nudist (naturist) organizations caused occasional scandals, in particular Der Schweizerische Lichtbund and its magazine, "*Die neue Zeit*". The work by Werner Zimmermann, *Lichtwärts*, appeared in 1922 and was reedited several times. It insisted on cosmic relationships between man and earth. [The symbolic importance of light (*licht*) and of the benefits of the sun in the names of these movements should be noted.]

In a general way, Swiss political culture centered on rural norms. The peasantry incarnated the values of *rein schweizerisch* (pure Swiss values). The maintenance of a strong rural class became the guarantee not only of Swissness but of the economic and social system. The world of the countryside was the incarnation of the social order. The language of discourse surpassed the usual arguments of group interests. More than a simple ideological support, it was the expression of a veritable doctrine. As late as 1940, the powerful secretary of the Union of Peasants Ernst Laur could write in his journal *Le Paysan suisse*: "The development of cities and industrialization leads irrevocably to the numeric weakening of the Swiss people, and also, unfortunately, to a qualitative degeneration (. . .) Urbanization equates with sterility and in consequence constitutes a danger for the existence of our people". It should be noted that such *Blut und Boden* accents never had the racist connotations found on the other side of the Rhine.

Nevertheless, the earthbound interpretations of Helvetic reality impregnated all representations which Switzerland produced about itself. An author such as C.F. Ramuz recalled in *Besoin de grandeur* (1937) that in Switzerland, in the *grande opposition entre l'homme et la nature*, that it was nature which won, in other words the victory of the peasant over the city-dweller. This debate clung

narrowly to an economic reality. Agricultural development and resistance to the depopulation of the mountain regions was the order of the day during that period. Numerous initiatives contributed to the definition not only of a sectorial agricultural policy but also of a veritable regional policy in favour of the mountain regions. This context favourable to the peasant question was directly linked to those arguments which had hitherto served to join the esthetic-patriotic action directly to economic and social questions. This approach banalized to a certain extent the protection of heritage and nature.

In consequence, dynamics were displaced from the echelon of private initiatives to that of the political authorities. Without following the elaboration of the legal base in the cantons, the national debate is sufficiently revealing. In effect, apart from an article in the 1907 civil code, the sole base for intervention can be found in those articles called *Heimatschutz*, referring to laws pertaining to the use of hydraulic forces. That of 1916 in particular stipulated "The beauty of the sites should be retained. It should therefore be conserved intact if a major public interest demands it. The factories (works buildings) should not infringe on or infringe as little as possible on the landscape." In other words, it is precisely through the impetus of hydroelectricity that the contradiction between industrial development and protection of the landscape erupted into the process of sensitivity toward nature.

The phenomenon of the electricity-generating industry entering the camp of the nature-protectors came relatively late in Switzerland. The conflict of interests proceeded at the same pace as technical progress. High-tension power lines, "scars on the beloved face of the homeland" and, above all, the construction of high-level water reservoirs in the 1940s resulted in sympathetic opposition. The filling of valleys with artificial lakes was regarded with disfavour not only from an esthetic viewpoint, but also because it implied a displacement of the population. In its 1940 bulletin, the *Heimatschutz* spoke of the "deportation of a small people", the mountain dwellers. It is interesting that those who opposed the construction of a generating station on the Rhine (the Rhineau initiative of 1953/4) saw nuclear power as an acceptable alternative! "There are great Swiss scholars who are working to harness nuclear power for peaceful purposes. . . and in doing so will save our Swiss landscapes." Such a statement was what one could read in a brochure of the period. Concerning the legal basis of intervention by public authorities, one had as yet made little progress. The legal systemization of protective attitudes had to wait for the 1960s (a constitutional article in 1962 and a law on the protection of nature and the landscape in 1966). This type of institutional delay is currently common in Switzerland and is explainable by the complexity of appropriating responsibilities in the federal system. Because of this a federal law had been discussed on several occasions in the 1930s without tangible results. In addition, a Federal Commission for the Protection of Nature and the Picturisque, formed in 1936, would henceforth examine all requests for construction permits which implied damage to the countryside and landscape.

I shall finish by mentioning the integration of nature in cultural politics developed on the eve of the Second World War under the name of "Spiritual Defence". It appears to me to be the logical development of the massive



ideological investment in the coupling of the ideals countryside/homeland. The message of the Federal Cultural Council in 1938 defined Swiss-ness using a small German phrase, very rich in German thought but very difficult to translate into English: *Das Schweizerisches Wesen ist schollenverbunden und bodenverwurzelt* (The Swiss soul is rooted in the soil). During the war, the necessities of military defence led to inevitable compromises. Protective idealism was discreetly realist vis-a-vis military installations (anti-tank barriers, fortifications, etc.). The constraints of obtaining essential supplies exacted a heavy tribute from the over-exploited forests, while the extension of cultivation brought with it the destruction of numerous biotopes, the elimination of hedges which were the home of insect-eating birds, thus creating much business (affirmed by the most critical) for the manufacturers of insecticides. It was of course out of the question for the Naturschutz/Heimatschutz groups to attack the military and the war economy. Nevertheless, the reflections on the consequences of such degradations permitted the abandonment of a narrow ideological vision to which resistance was dangerous, to the profit of a new kind of argument of the ecological type. The more clairvoyant had already understood in the mid-1930's, the importance of a more global perspective. Instead of fighting for a particular detail of the landscape, instead of trying to turn portions of nature into a museum, would it not be better to envisage the dislocation of the countryside viewed as a whole? The link began with a reflection on town and country planning, which had just come into being, and permitted, after 1950, a digression from the narrow impasse of esthetic-patriotic protective discourse (Walter 1985). Equally, this way made possible the integration of ecological scientific discoveries and the systematic functioning of the environment.

The formula which has progressively integrated the environment into a wish for global and concerted town and country planning has taken a long time to mature. The socio-economic model for action on nature which characterized this period was an important step. This model had the particular characteristic of closely articulating the social function of nature and economic necessities. A constituent of the Helvetian identity, nature guaranteed the social order. Parallel to this, nature is made economically viable by a policy of promoting tourism, productivity improvements in forestry and agriculture, and by the management of hydraulic resources. In essence, it is a sort of precarious reconciliation between nature and the economic necessities which prevailed at the time. The national exhibition in 1939, the so-called *Ländli*, was the successful expression of this. According to the concept of the exhibition, the countryside was a part of the primary materials. Section I evoked the Helvetian *Lebensraum* in the form of an expression of "natural conditions" and "spiritual heritage of the nation". The *Dörfli* was not factitious as was the Swiss Village of 1896. It had become a place where traditions and a perfected agriculture cohabited. In other words, the society of the 1930s succeeded in presenting itself as a completely harmonious unit. This is an important fact. Far from attributing a hypothetical ecological equilibrium only to preindustrial societies, it was necessary to envisage several homeostatic levels. After the exacerbations of the contradictions between industrialization and esthetic and moral values (19th century), the period between the two World Wars succeeded in providing a very provisional conciliatory formula.

In its own turn, our time is trying to find a new ecological equilibrium. We find ourselves, in effect, since the 1950s, in the centre of a fifth period which one calls the age of ecology. During this period, the relationship to the environment functions according to a new ecological type of social model. We experiment daily with its dominant traits. It is history which will no doubt say one day how precarious our solutions and illusions have been.

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