# I

# *Thinking about Environmental History*

## 1. BLINDERS AND DEAD ENDS IN ENVIRONMENTAL HISTORY

Although environmental history is an offspring of the environmental movement, the dream of uniting history and nature has enticed historians for a very long time, going back all the way to Herodotus.[1] The idea of history contained a connection between culture and nature at its very inception: writing history means grasping culture in its development, and it is here that natural processes of growth and decay come into play. Reinhart Koselleck has observed that "biological naturalisms were already rampant" in nineteenth-century historiography.[2] A reuniting of history and nature can tap into a deep current that has been running through historical writing since ancient times.

The relationship of historiography to nature, however, is burdened by the past. The natural, organic element that was projected into peoples and cultures was usually a product of the ideologies of the day, and scholarship took these intellectual constructs as its starting point. Kant proclaimed, in his *Idea of a Universal History in a Cosmopolitan Plan* (1784), "A philosophical attempt to compose a universal history in the sense of a cosmopolitical history on a plan tending to unfold the purpose of nature in a perfect civil union of the human species . . . is to be regarded as possible, and as capable even of helping forward this very purpose of nature,"[3] but his was an idealistic and teleological conception of nature, which asserted that humanity's progress toward reason was the intent of wise nature. Even Kant became entangled in contradictions with this conception of nature. Intellectual history as a whole shows that it is not easy to think clearly about nature. At times Max Weber made it his sole ambition to purge the social sciences of any and all "naturalism." Current environmental history writing must not suppress historical experiences with dead ends in the way humans have thought about nature. Contemporary environmental history, too, is grounded in the critique of the old naturalism, namely, in the recognition that society is something fundamentally different from a natural organism – indeed, that societies can destroy their own natural foundation.

Beginning in antiquity, a synthesis of history and nature occurred mostly along the lines of geographic and climatic determinism: the essence of a people, it was believed, grew from its landscape, including wind and weather. Arnold Toynbee, in contrast, interpreted the high cultures as a response to the challenges of an environment that was not always kind to its inhabitants. However, nature appears primarily when cultures are born. Their decline is, at its core, an internal cultural

matter. Decline manifests itself as the end of growth and the loss of dominion over nature; the other idea, that growth and the domination of nature could itself prove fatal to a culture, was not yet on the horizon. Gazing on the overgrown ruins in the Yucatan peninsula, Toynbee thought that the "forest, like some sylvan boa-constrictor, has literally swallowed them up."[4] It did not yet occur to him that this civilization could have been destroyed by a self-inflicted deforestation. Or is this, too, merely a fashionable theory?

Fernand Braudel began his great work on the Mediterranean world in the age of Philip II with the primacy of nature, with mountains and plains. Confessing unabashedly that his love of the Mediterranean was one impulse behind his writing, he expressed the hope "that a little of this joy and great deal of Mediterranean sunlight will shine from the pages of this book." But this joy distracted him from the question about the ecological decline of the Mediterranean region; instead, he criticized Mediterranean peasants for not ploughing their soil more deeply – absurd criticism from an ecological perspective. And that was not all: steeped in the tradition of the belief in progress, he paid scant attention to the dangers of overpopulation; instead, like an eighteenth-century politician bent on increasing the population, he raged against the practices of birth control that began to spread in Enlightenment France.[5]

The ecological movement allows us to advance our thinking on a number of issues to which older historians were blind. But even contemporary environmental history has its blinders, and often it even seems unaware of them. Initially – and in the beginning this was a sensible strategy – environmental history sought out ecological niches within the scholarly world that were not yet colonized by any established discipline. This, along with the current ecological impetus, explains the focus on industrial water and air pollution, which was a marginal area in the history of industry and technology, little studied until the 1970s. But it also explains the fondness for the history of ideas about nature, an area largely disregarded by the history of philosophy until very recently. Unfortunately there is virtually no connection between these different ecological niches of environmental history. Above all, environmental historians – in Europe even more so than in the United States – have tended to avoid core areas of the historical relationship between humans and their environment – such as the history of fields and woods, of urbanization and traffic, of population movements and epidemics. These were already claimed by others and therefore not easily accessible to newcomers; moreover, the scholarly traditions established in these fields are somewhat suspect to the ecological movement. But if environmental history wants to become world history, it must push into these very areas. And perhaps even more importantly: it has to become a history of human nature.

Because it does not understand its real prehistory, the environmental movement often lacks historical awareness, caused by the fact that the environmental problems and the strategies to counter them have fundamentally changed in the twentieth century. Today, the overfertilization of fields is a major source of stress on the environment; for thousands of years, however, the *shortage* of fertilizers was humanity's most pressing environmental concern. In this case the landscape of our modern problems has blocked our view of the historical issues. Even Goethe, as State Minister of Weimar, at times did not have enough fertilizer for his gardens;

getting them properly fertilized was one of his last worries before his death.[6] On his travels to Italy, he did not consider it beneath him to observe how the cities were dealing with their waste. He gave the Venetians and the inhabitants of Palermo bad marks in this regard, but praised the Neapolitans, who fertilized their gardens intensively (diary entry of April 7, 1787).

Today, we are confronted in many parts of the world with the destructive consequences of rampant free market selfishness. Yet this situation should not blind us to the fact that, many times throughout history, a secure law of ownership and inheritance probably promoted the protection of the soil and the fruit trees growing in it. Two conservationists, after analyzing conditions in Southeast Asia, concluded that the problem of the environment was basically quite simple: wherever the local population does not have control over its resources and is unable to keep outsiders away, the environment degrades.

There are other blinders that spring from the current state of affairs. Under earlier conditions, a regulation of sexuality, which is today seen as a compulsive-neurotic repression of human nature given modern contraceptives, could function as a brake on population growth and promote a harmonious balance between humans and their environment. Xenophobia, today for many the very embodiment of political pathology, may well have served a purpose under premodern conditions, since the balance of the relationship between humans and their environment in agrarian-pastoral microcosms was indeed upset by migratory movements, and local knowledge and experience was lost when populations moved. John R. McNeill has rightly pointed out that the great "transmigration" project in Dutch Indonesia, which was supported in the postcolonial era not only by the World Bank but also by the Communist Party, was the source of large-scale environmental destruction.[7] Environmental historians who still regard mobility as progress and love for one's native land as reactionary are blind to such factors.

Another observation is perhaps more important still: the universal law of inertia, which today often promotes the thoughtless treatment of the environment, was frequently the best protector of the environment in times when cutting and transporting trees was a very laborious task. If historians are fixated on an idealistic notion of modern environmental awareness, they fail to see the everyday, environment-preserving behavioral patterns of the past, which often emerge only between the lines of written sources and which today's environmental movement tends to look at less than favorably. To be sure, the world of "zero growth," of thriftiness and endless recycling, was all too often not the pleasant world conjured up by the phrase "living at peace with nature." Rather, it was a world in which many accepted a high infant mortality with a certain equanimity, since they knew that the survivors would have more to eat if fewer hungry mouths crowded around a food supply that was exceedingly difficult to increase.

A serious obstacle for environmental history is also the demand by environmental fundamentalists for a kind of history in which nature is the focus, not humanity, and in which nature is not perceived from the perspective of human interests. In such a history, the struggle of humans for thousands of years to come to some kind of arrangement with their natural resources appears only as an interference factor – as the eternal attempt on the part of humanity to make nature serve humanity's ends. Thoughtful environmental historians are constantly assaulted by scruples: are

they doing real environmental history if they study forest and water conflicts in the past? Is not all of this about human interests and not at all about nature? Between the lines one can often read the assumption that "real" environmental protection exists only where (1) it is selfless, (2) it is done out of an ecological understanding, and (3) it is done with a holistic view of nature.

A historian, however, cannot work with such uncompromising criteria. Like all powerful movements in history, environmental history is driven not only by noble but also by selfish motives; not only by wise understanding, but also by vague feelings and sometimes by baseless fears; not only by a holistic view of nature, but very often also by a fractured one. An environmental historian should not write comic book history, where heroes fight villains, but realistic history. It is not difficult to recognize that the clash between "biocentric" and "anthropocentric" environmental history is a sham. Written sources restrict the historian – provided he or she has an understanding of source criticism – always to the interests of those who produced them and handed them down. Is all of environmental history a history of crimes, the story of how human beings have raped virgin nature? We have long known from ecology that the ideal of "untouched nature" is a phantom, a product of the cult of virginity. An impartial environmental history does not recount how humanity has violated pure nature; rather, it recounts the processes of organization, self-organization, and decay in hybrid human-nature combinations.

Contemporary environmental history that is written in the Third World, which does not suffer from surfeit, deals with human conditions of life almost as a matter of course. Vandana Shiva, next to Wangari Maathai perhaps the most famous Third World "eco-woman" of our day, is vehemently opposed to separating environmental protection and the preservation of the human food supply. The cult of the wilderness has its origins above all in the United States. There it has a practical reason: the protection of the national parks, of the giant trees of the West, and of the remaining buffalo herds. But it has long since been shown that the "wild" nature glorified in the West was created under the influence of the slash-and-burn agriculture practiced by Native Americans: "The most damaging misconception that Europeans brought with them to California – as well as the rest of the continent – was the belief that they were entering a 'natural wilderness.'"[8] Thus they believed they had to expel the Native Americans from the national parks to preserve the beauty of what they thought was untouched nature. As William Beinart and Peter Coates have said, the presumed "virgin land" was in reality a "widowed land": a land whose Native American population had been decimated by epidemics.[9] In environmental history, the guiding notion of "wilderness" has the fatal effect of diverting interest away from improving the environment shaped by human beings. What is more, even if one believes that the eco-fundamentalists are not capable of harming a fly, there is good reason to be uncomfortable with a philosophy that regards humanity as the "cancer of the earth," a philosophy that should make one wish for nine-tenths of humanity to disappear from the planet.

It is rather strange how tenaciously such a contested concept as "wilderness" has persisted. Or is there a deeper reason behind it? The word "wilderness" often seems like the awkward expression of a deep-seated feeling that exists for a good reason: the feeling, namely, that human culture, if it wishes to retain the capacity to develop and prosper, needs quiet reserves, room to play, unencumbered spaces.

The "thought of seeing every scrap of earth dug up by human hands," Wilhelm Heinrich Riehl wrote long ago, "has something horribly eerie for the imagination of every naturally feeling person,"[10] and he may very well be right in a perfectly rational sense.

Not least for that reason, an environmental history worthy of the name deals not only with human beings and their works, but also with sheep and camels, with swamps and fallow land. One must notice that nature has a life of its own and is by no means only a component of human action, or the topic of human discourse. It is precisely the unintentional chain of effects that flow from human action, and in which natural contexts make themselves felt, that is worthy of special attention.

Universal history connects the historian with those disciplines that have practiced environmental history for a long time, sometimes with considerable public resonance: ethnology, anthropology, and prehistory (including paleobotany). So far, these disciplines and the research of environmental historians are all but unaware of each other. Much depends on bridging this gap, and uniting the still widely scattered knowledge about environmental history could set off powerful chain reactions. Until now, ecological forays into universal history have been undertaken more often by biologists and ethnologists than historians.[11] However, the ecological dimension in ethnology is usually the basic pattern of "adaptation of culture to the environment." In this way, culture's destructive impact on the environment is easily marginalized. Ethnologists are partial to isolated cultures little touched by modern civilization and to remote mountain villages: as a result they miss the ecological dimensions of modernization and the interconnectedness of the world. The common formula of "adaptation to nature" still conceives of nature too much as something given a priori, eternally the same. A history of human environmental awareness cannot be written as the history of a sense of nature's right to exist on its own terms, but only as the history of a coevolution of culture and nature: the feeling – shaped by the experience of crises – for the long-term natural foundations of one's own life and culture. This history does, in fact, exist, and many conflicts over resources lead into it.

An environmental history that is committed to the "environment as such" will invariably put on blinders about the other contexts of historical sources; as a result, it is reluctant to engage in source criticism and tends toward self-delusion. If one does reconstruct the contexts, one discovers that the real issue in many early modern complaints about the destructive exploitation of the forests was not the woods, but the assertion of forest rights, and that the lament about the neglected state of the commons was driven not by concern for the ecology of the pasture, but by an interest in the division of the commons and agrarian reform. In more recent times, the *Chipko* ("hug the trees") movement in northern India has become "the most celebrated environmental movement in the Third World" – yet a closer look reveals that it is primarily a peasant movement aimed at defending traditional forest rights.[12] But why deny or marginalize these contexts? If one conceives of environmental history not as a specialty but as an integral component of a *histoire totale*, one gains a deeper appreciation for all the other elements that come into play in environmental conflicts.

Let us take another concluding look at the blinders: environmental history could also get bogged down if, influenced by the ecological debates, it seeks to be overly

refined and fails to develop sufficient appreciation for the mundane. Dunghills and cesspools are great themes in a realistic environmental history, for they were crucial to preserving the fertility of the fields. Eating and procreative behaviors are essential in the relationship between humans and their environment. The potato and coitus interruptus are key innovations of the eighteenth century that are environmentally relevant. For the environmental historian, the French Revolution of 1789 takes on special importance not least because by breaking the power of the church, it made contraception the rule in French families and established France as a pioneer in this area.[13] An excessively top-heavy environmental history ignores the fact that crucial things occur below the waistline. Exaggerated fear of the charge of "biologism" that is popular among social scientists also puts blinders on the way environmental historians think. The primary, elementary connection between man and environment is established by the fact that the human being is a biological organism.

The inner coherence of environmental history, which until now has presented itself often as a colorful potpourri of themes, is guaranteed, in the final analysis, by the reality that there are intimate connections between external nature and the inner nature of human beings, who have always been aware of this. It is strange that "nature in man" was more of an everyday theme a hundred, two hundred years ago than it is today, in the supposedly "ecological age." Environmental history should remember this old theme. It will become history on a grand scale only if it succeeds in grasping the "nature in humanity" in its historical changes, as well as in its biological and suprahistorical elements.

"Environmental awareness" is at its core largely a health consciousness, and as such it has a history that is thousands of years old. Disease is one of those basic experiences in which human beings, in a moment of crisis, repeatedly experience an intimate connection between external and internal nature. Hippocrates was one of the first to accord the environment great importance as a cause of disease. Hippocratic reflections about "air, water, places" established a "geo-medical" tradition stretching over millennia. That tradition lives on in the medical topographies of the early modern period and in the hunger for light and air driving the modern reform of housing and urban renewal; after being temporarily interrupted, it has been resurrected in the environmental movement. The fear of disease is one of the most potent phobias of world history, and its effects extend from the history of religion to the process of civilization. And it was no mere delusion to connect diseases with the constellations of humans and their environment. The history of many diseases begins with humans settling down in denser communities; great epidemics like malaria, the plague, cholera, typhus, and tuberculosis mark certain environmental conditions and phases in environmental history. There is some evidence to suggest that the fear of cancer stands at the very beginning of the modern environmental consciousness. A "nonanthropocentric" concept of environmental history runs the risk of obscuring the real interconnections.

## 2. THE SAMENESS OF VICIOUS CIRCLES AND THE COMPLEX WAYS OF ESCAPING THEM

Were it true, as many historians assert, that historical reality is infinite in its variety, universal overviews would be a scholarly dead end. But that is evidently not the

case, least of all in environmental history. If you scan a great many studies on the regional history of forests, pasture, and irrigation, you experience the eternal return of the similar and get the sense that the problems are on some level rather simple. Jared Diamond maintains that "the pattern of ecological collapses of past civilizations is a familiar, almost banal, one."[14] Since natural laws come into play, this uniformity comes as no surprise.

While we are not dealing with a single story, we are dealing with a limited stock of stories, which in typical cases become intertwined and set a vicious circle in motion. Overpopulation leads to an overuse of pastures and forests: for many observers, this process, abbreviated as PPR (population pressure on resources), is the very essence of the entire global history of the environment from the beginning until today – the Malthusian effect completed by ecology and turned into a vicious circle. Desperate need spawns new troubles, as famines and unbridled competition over limited resources renders a sustained and forward-thinking form of economic life impossible – the present wins out over the future. Shortsighted self-interest prevails over the long-term, collective interest in survival. The forest pasture destroys the forest. The pasture develops into a nomadic or seminomadic economic form and deprives the arable land of fertilizer. Deforestation leads to soil erosion and the accelerated drainage of rainwater; in combination, the two effects produce in one area steppe and desert, in another swamps and malaria. Artificial irrigation causes an increasing salinization of the soil. Added to all of this are the effects of growing mobility and global interconnectedness. The balance between humans and their environment that was created over many generations is upset by external influences, by invasions and the loss of autonomy.

For two modern historians of China, the leitmotif of China's environmental history across the millennia is quite simple: it is population growth, which has led to an initially slow but then rapidly progressing degradation of Chinese soils.[15] For Robert Sallares, reproductive behavior is also the key to ancient Greek history. He applies the models of "r" and "K" strategies developed by ecologists for animal species: "r" strategy is the method for securing collective survival by producing a large number of offspring, even if they are mostly short-lived; "K" strategy is a way of adapting to a relatively inflexible food supply by producing a limited number of offspring that are given careful nurturance. The "K" strategy is most likely to occur where a clearly circumscribed living space is evident. By this reasoning, the progressive elimination of boundaries in the world is threatened by population pressure, struggle, misery, and mass death. Sallares recognizes all the signs of an "r" strategy in the ancient Greek colonial period; in the long run, though, since colonial expansion soon reached its limits, this strategy led to an ecological crisis. Sallares draws parallels with many other cultures of the world. John R. McNeill has noted that the environmental tragedy of the Mediterranean – whose main stages he places at a much later time, to be sure – is now repeating itself in the mountain systems of the tropics: overpopulation, overuse, deforestation, erosion.[16]

As we can see, the universal leitmotifs of environmental history for the most part boil down to crisis. But that is not the only story. These vicious circles are, first of all, ideal-typical processes in the Weberian sense. To write environmental history we need these kinds of ideal-typical models about the mutual interaction between humanity and the environment – yet no one should believe that perfect examples of these processes can be found in the sources. We must never forget that these are ideal

types that must not be confused with reality. One must always take a very close look to determine whether a certain type of environmental destruction actually applies in a concrete case. Irrigation systems do not promote salinization and malaria under all circumstances: much depends on whether the irrigation systems are covered and protected from evaporation, whether drainage is functioning properly, and whether ponds and flooded rice paddies are home to fish and frogs who eat the larvae of the mosquito, the host of the malaria parasite. Population growth does not automatically lead to environmental degradation; rather, agricultural terraces, which protect against soil erosion, require a high population density for their maintenance: under such conditions, a decline in population leads to soil erosion.

There are other questions that need to be asked: How heavy was the "heavy plow"? How solid were the agricultural terraces, how tight were the fences, and how cheap were the pipes?[17] It is not unusual that small differences crucial to environmental history are found on a mundane technical level. A minor innovation like the motorized pump leads to an overuse of groundwater. The tractor allows farmers to plough more deeply than ever before in history: here the old identification of agriculture with the plow is given a new and fateful meaning.

In many cases it is not entirely clear whether a human population is autonomous or controlled by external forces, whether it follows an "r" or a "K" strategy in its reproductive behavior. Do human beings ever follow a single reproductive strategy in pure form, like whales follow the "K" type and lemmings the "r" type? Evidently they have always had some leeway to guide their population number; Hubert Markl has gone so far as to argue that humans are "biologically speaking the most strongly K-selected primates."[18] Sallares has noted that both strategies also existed in ancient Greek culture. Especially a meager environment sometimes promoted birth control, which produced more stable conditions than did population growth in response to more abundant environmental conditions.

The types of environmental degradation I have mentioned did not lead always and everywhere to a vicious circle. Precisely dense settlement and intensive agriculture can give rise to a careful cultivation of the soil, a kind of cultivation more expansive economic forms are not capable of: the Danish agronomist Esther Boserup (1910–99) founded a school of thought that studied the common sense and sustainability of intensive small-scale farming.[19] If human excreta are completely incorporated into the soil, population growth does not necessarily lead to soil exhaustion. If the garden is the prototype of a successful harmony between humanity and environment, a certain density of settlement is advantageous. An intensive use of the forests can lead to their destruction but also to a well-considered and sustainable silviculture; but even in Germany, with its abundance of files and documents relating to forestry, it is not always easy to determine when and where in the history of the forest the one or the other was the case.

The crisis-like causalities of environmental history do not unfold with the inexorableness of natural laws, for human beings are often able to pursue counter-strategies. However, it is possible to construct patterns of events that make it very difficult for human beings to take remedial measures. That is the case when the decline of the environment takes place slowly and nearly imperceptibly over centuries. But it can also occur when the decline is precipitous and a variety of factors combine to create a self-sustaining vicious circle. Both scenarios seem to have

existed in typical cases, at times they are even found in the very same process. Erosion researchers have long observed "that erosion begins slowly and with the smallest, barely noticeable transformation of the soil, but it can very rapidly reach a large, indeed catastrophic, scale."[20]

In general, however, one can assume that human beings are aware – up to a certain degree – that they are destroying the basis of their own existence, and that they are in principle capable of taking steps against it. Precisely because many traditional environmental problems are thousands of years old and in essence rather simple, there has also existed since time immemorial a good deal of knowledge about how to deal with them. If one wanted to, it was not difficult to keep sheep and goats from destroying the forest; and much that is known about the usefulness of forests is not a new insight. But human beings were by no means always able – or encouraged by their living conditions – to act with an eye toward the long term; likewise, institutions and legal traditions capable of providing effective protection for the life-sustaining environment were not always present.

The crucial point is evidently that adequate strategies for remedying environmental problems do not follow a few simple basic patterns the same way that environmental problems do. This is where culture and society come into play. In many cases, effective solutions were not a recognizable response to a given problem, but a component of the culture that was presumably reinforced by environmental pressures, though not created by them. A cultural preference for homosexuality is consistent with the overpopulation of Attica in the classical period, whereas in Tibet much later, polyandry and the large number of unmarried monks correlate with the tightly circumscribed food supply. The solutions to environmental problems are often hidden within social and cultural history, and it is there that we must first decipher them. It would appear, however, that solution strategies in general were also not infinitely variable; rather, the more natural laws came into play, the more they were confined to a limited number of typical strategies. A comparative study of how drinking water was supplied and wastewater disposed of in Berlin and Istanbul concluded, by and large, that the most important determinants were found not in the differing cultures, but in the different natural conditions. From that perspective, Istanbul's greatest problem was always supplying water, while Berlin's greatest challenge was increasingly the disposal of wastewater.[21]

Typical patterns in solution strategies also arise from the fact that as the management of environmental problems moves to higher levels of the state, it becomes increasingly subject to the laws of power and the preservation of authority. In and of itself, the regulation of resource problems has had its attractive side for systems of political control since antiquity: one need only recall the building of canals and dikes and the supervision of the use of water, forest, and pasture. Environmental history is always also the history of political power – and the more it moves away from practical problems on the ground and into the sphere of high-level politics, the more that is the case.

It is here, especially, that we encounter what is probably the most important, elementary process in world history when it comes to how environmental problems have been dealt with. When we look at the problems themselves, there is a limited stock of leitmotifs that recur over and over; but there is historical development with respect to the geographic reach of environmental problems and how

humans have dealt with them. Environmental history is invariably shaped also by the formation of ever larger political and even more expansive economic entities, and by the growing interconnectedness of the world. The geographic dimension of certain problems increases, and the competency to deal with them is claimed by higher political levels: territories, nation-states, and supranational institutions. Environmental knowledge, too, becomes more exclusive, turning into a matter for science and bureaucratic experts. This process has causes that are inherent in the phenomenon itself, but it is also driven by the power interests of the state and the professional politics of the experts.

The steady stream of forestry regulations that began to flow especially from the sixteenth century on served the growth and expansion of the early modern territorial state, and in its wake also of forest administration and the science of forest management. That is not to say that the impending shortage of wood, which was used to justify the forest regulations, did not exist at all; however, one must not assume that these decrees were always a direct and appropriate reaction to actual changes for the worse in the forests. The situation is much the same with many of the agricultural reforms that were pushed from the top and justified with reference to the dismal state of agriculture: in reality they were motivated by a quest to secure a greater income for the state or manorial lords, and in the end they actually increased the danger that some resources would be overexploited. There is reason to believe that this holds true also for the irrigation culture of the ancient Near East, for the agrarian reforms of the eighteenth and nineteenth centuries, and more recently for the "Green Revolution."

Historians, who are fascinated by long-distance trade, have often overlooked that, until very recently, humanity's food supply was largely dependent on local and regional subsistence, and that an effective response to environmental problems was most likely to occur at those levels – if at all. Fertilizing fields, maintaining terraces, desilting the many small irrigation canals, and caring for fruit trees – these tasks could not be organized centrally, but were a matter for villages and households. That is why the shift of important aspects of environmental preservation to higher levels raises some concerns. It is possible that the supposed management of the problems misses the real problems and ends up creating new ones.

In this context, importance attaches to another, special phenomenon. We often find in certain environmental sectors of a region *one* dominant problem that overshadows all others. If one were to analyze the psychology of environmental history, one might arrive at a theory of the *primary trauma*. Since drought is *the* terror of humanity in many regions of the world, there is a tendency to engage in irrigation wherever possible and with no regard for unwanted long-term consequences. On the other hand, the myth of the Great Flood, which is found in several ancient cultures, indicates the extent to which flooding was the primeval danger associated with water in many other regions. Where the danger of flood dominates thinking, people pay no heed to the dangerous repercussions from a drastic drop in the water level as rivers are regulated. The fixation on drainage as the chief means of increasing agricultural yields had similar consequences. Many regions were once wetter than they are today. Whether in the Netherlands, France, or England: at the beginning of agrarian history we often find drainage. As late as the 1930s, the environmentalist Alwin Seifert complained about the extent to which