

From Prairie to Planet: Global Processes and Ecological Restoration

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Ecological restoration has come to play an important role in discussions of the environment in the USA over the past decade. Yet there is still no generally accepted definition of the term "ecological restoration." Although the idea of restoration in the strict sense originated in the Midwest of the USA, restoration has recently caught on in countries outside North America, many of which offer very different ecological, economic, and cultural conditions. In this paper it is (1) illustrated that there exist different practices under the label of "ecological restoration" in different areas of the world, and (2) it is suggested how these differences can be understood within the framework of world system theory.

1. INTRODUCTION: TWO KINDS OF RESTORATION

The field I am concerned about is fairly new, though the structural foundation of its outcome as presented here is – as I will suggest – very old. For only a decade or so has ecological restoration been a theme in wider academic circles in the USA and also become a field outside so-called western countries. What is even more recent (less than two or three years old) is any debate on the suitability of ecological restoration with respect to different geographical regions. This article deals with the author's experiences in studying ecological restoration over a period of some three years. In that time I learned that there are several approaches to restoration, but that in between these types there are two that are not only clearly distinct, but that these two groups can also be linked to certain regional and geographical areas: One that takes the term very literally (mainly in the USA) and another which simply uses the term in order to have a 'flashy' new term for traditional methods of landscaping, rehabilitation, or mitigation, most evidently, though not exclusively, in so called third world countries. In other words, there appear to be two different kinds of core definitions of what restoration is and how it is to be understood as an environmental paradigm: (1) strictly going back to a historical ecosystem and (2) rehabilitating some parts of an ecosystem in order to create a more sustainable landscape, where sustainable means that it offers more effective use for a human community.

An increasing number of people in the USA are discovering restoration and the intimate relationship with nature. In the Midwest of the United States that means that they

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are *discovering* prairies. In fact, local interest is one of the primary forces pushing the growth of ecological restoration. Remnants of native prairies along old railroad tracks, country roads, or even neglected army bases often serve as models for re-creating a prairie. Volunteers and citizen scientists collect seeds of prairie plants, grasses, and trees, planting them on public lands, in parks, or in suburban acreages.

Most generally, ecological restoration is the active attempt to return an ecological system to a former condition following a period of alteration or disturbance through the reconstitution of processes, the reintroduction of species and the removal or control of species inappropriate to the model system. It is best seen as a form of environmental rehabilitation distinguished from other forms of rehabilitation by its commitment to the re-creation of all aspects of the model system, regardless of their value to humans. As developed on the tallgrass prairies of the North American Midwest over the past half-century, and more recently in other areas as well, restoration has proved to have value not only as a way of reversing environmental damage, but also as a context for negotiating the relationship between human societies and the rest of nature.¹ This, however, raises a number of questions about the value of restoration for conservation in other parts of the world.

In the following I will (1) empirically show that these two different forms of restoration can be linked to different geographical regions that roughly match up with the world system position and (2) from here on present my reflections on what this might mean for the understanding of ecological restoration, when perceived in the framework of the world system model.

For analytical reasons, I will distinguish between rehabilitation (including conservation, mitigation, revegetation, reclamation etc.) and restoration, to the extent that the former takes productivity and ongoing exploitation of resources for granted whereas the latter, most often, is strictly trying to bring back a historical ecosystem in its entirety. John J. Berger called ecological restoration “the return of an ecosystem to a close approximation of its condition prior to disturbance” (1995: 90). He further clarifies the terms condition, structure, and function as understood in his idea of restoration:

Condition is used in the broadest sense to mean that the ecosystem’s structure and function must closely approximate the earlier state. *Structure* includes the ecosystem’s physical, biological, and chemical characteristics. *Function* encompasses dynamic ecosystem processes, such as nutrient cycling, and their derived ecosystem services, such as wildlife support (Berger: 1995: 98f; original emphasis).

The North American Journal *Ecological Restoration*, founded in 1982, is the first journal devoted exclusively to the restoration of historical ecosystems. The Instructions to Contributors regarding the definition of restoration ecology read as follows:

“We will consider manuscripts concerned with all aspects of the restoration of natural or historic communities or landscapes [...]. We do not accept manuscripts dealing with reclamation, rehabilitation, historic gardens or landscapes unless they relate

¹ For more elaborated introduction to ecological restoration see Jordan (2001) as well as Jordan et al. (1987) and especially Jordan (forthcoming). Other excellent writings on the practice of ecological restoration can be found in House (1999), Mills (1995) and Stevens (1995). For a discussion of ecological restoration from a social scientific perspective, see Gross (2000; forthcoming).

explicitly to the restoration of historic plant and animal communities (Instructions to Contributors, *Ecological Restoration*).”

In taking these original definitions of practitioners active in North America as a heuristic to follow the thesis that the notion of restoration is dependant on a world system position, I did a little investigation in the leading *academic* journal of the field, *Restoration Ecology* – starting with the first issue in 1993 – arguing that these two different kinds of restoration can be linked to regional differences and that these differences have some kind of correlation to the world systemic position of the regions where restoration is practiced. I hypothesize that these different forms and understandings of ecological restoration are, in the final analysis, expressions of the same global processes in the world arena. To initiate this, I will look at the recent debate in which restoration practitioners argued over the proper notion of ecological restoration. Since this is my very first step in this direction of research, the findings presented in the following need to be understood as a suggestion which needs further proof.

Now, before proceeding any further, I will very briefly introduce this approach to global processes as understood in a world system perspective and explain how it differs from more popular notions of globalization.

2. GLOBAL PROCESS AND LOCAL ENVIRONMENTAL PRACTICES

In many diverse fields and disciplines, theorists consider how global, systemic, and macro-structures and forces interact with local, particular, and micro-conditions. Such dialectical optics attempt to theorize the intersection of the global and the local, examine how they interact with and mediate each other, and pinpoint the new constellations being produced by their current interactions. For some it goes without saying that the ‘global village’ has arrived. This vision of globalization seems to be an idealized vision of a bright, cooperative, and prosperous future brought about not only through trade but also through the unfettered spread of knowledge (most famous: Robertson 1992). In this vision, knowledge is something owned by no one but used for the good of everyone. The increased use of the Internet in the 1990s has seemingly supported this vision. From that perspective environmental consciousness and practices are transported through the media, policy, or social movements; but this view does not recognize, as Jonathan Friedman (1994; 2000) most convincingly does, that the means of transportation themselves might be structured by global relations.

In terms of the other vision – the one that I shall refer to – global economic forces and multinational commercial interests are not always perceived to be benign. This is the perspective of world system theory. World system researchers often use dependency theories to understand the economic disparities between nations within the capitalist world-economy. Dependency theory is the thesis that countries in particular in the Third World, are unable to control major aspects of their economic and cultural life, because of the dominance of industrialized countries in the world economy (see Frank 1978). This stream of thought provides a framework focusing on global processes and their influences on national and local outcomes. In addition to consequences for communication and world trade, economic globalization has profound implications for cultural and environmental integrity, for changing communication patterns, and for the

further development and dissemination of science and technology. Wallerstein (1974), for instance, identifies a world economy that for centuries has promulgated power and dependency linkages among nations of the world. He argues that global power-dependency relationships are reflected in an international division of labor that encompasses core, semiperipheral,² and peripheral countries. The core regions are developed as industrial systems of production, whereas the periphery provide raw materials, being thereby dependant on prices set in the core regions (Frank 1978). Core nations, including the major powers of Western Europe, the United States, Canada, and Japan dominate global production by virtue of their domestic and international trade.

A world-system, in Wallerstein's understanding, is a system that is distinguished by an extensive division of labor. "This division," as Wallerstein suggests, "is not merely functional – that is, occupational – but geographical. That is to say, the range of economic tasks is not evenly distributed throughout the world system" (Wallerstein 1974: 229). In the short run at least, core countries thereby secure their wealth, economic expansion, and technological advancement. When coupled with relatively low population growth, these serve to maintain a high standard of living for core nations, reflected in their role as the primary consumers of the world's resources. According to conventional world-system arguments, the countries on the periphery of the world-system – the least-developed nations in Africa and Asia – are weaker in relation to the core. As a result, they remain underdeveloped, and experience the domestic conditions that accompany a relatively low standard of living. As an illustration of their weakness, consider that the commodity exports of peripheral countries are often highly concentrated. These dynamics, when coupled with their initial disadvantage due at least in part to international geography, as well as to political-military, cultural, and technical dependency, have severely limited the national wealth and economic growth potential of the periphery. These disadvantages limit technical and environmental improvement. For Wallerstein, thus, the term globalization means the development of a global world system dominated by socio-economic relationships of capitalism. In some of the later studies world system authors (e.g., Bergesen 1996; Friedman 1994; Wallerstein 1991) have extended their analysis into the cultural dimension of the world system, seeing it as a tension between *universalism* and *particularism*.

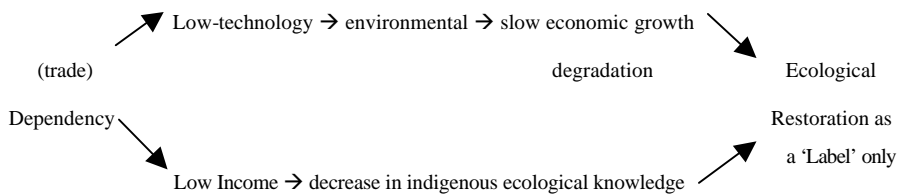
Departing from this, I believe that because of their respective positions in the world system, the core countries permit ever greater expansion of their economic institutions, culture, technology, and indeed, *environmental worldviews*. Peripheral countries

² In this context I will not discuss the importance of the 'semiperiphery' in world system theory since for illustrative reasons my inquiry into ecological restoration in the world system seeks to contrast the two poles of core and periphery. To be sure, semiperipheral countries play a pivotal role in the development of the world system. They have characteristics of both the core and the periphery. Further, they mediate between the core and the periphery in the world-system. For example, the economically and politically stronger nation-states of Africa, Latin America, and Asia exercise a not insignificant degree of control over exchanges with the periphery, despite their own economic, political-military, cultural, and technological dependence upon the core. Thus, although this simplification would not be fully acceptable for orthodox world-system scholars (e.g., Wallerstein 1979: 95-118; or So 1990: 180-87), for purposes of illustration in this paper I distinguish merely between strong core states and weak periphery states.

continue to experience low wealth levels and relative economic constriction. Because of its technological and infrastructural advantages, the core also has a far greater ability *to restore historical ecosystems for their own sake* than the periphery – i.e. to restore nature for nature’s sake.

Global studies have focused on local environmental practices and struggles in relation to religion (e.g., Kim 1999), the political economy (e.g., Yearley 1996), world system history (e.g., Chew 2001), how environmental risks are perceived in local contexts (Beck 1999) or have focused on how the ‘treadmill of production’ (e.g., Gould et al. 1996) is controlled more and more by national and transnational economic actors. As I will argue in the following, in the case of ecological restoration it does not seem to be so much the direct control of economic actors or perceptions filtered by culture, but the indirect nexus to the economic position in the world system that changes the notion of ecological restoration accordingly.

Figure 1: Ecological Restoration and Global Processes: A Heuristic



We know that there is environmental consciousness and ‘restoration’ work going on in countries on the periphery, although these ideas are fairly new even in the core countries themselves. One could say that ‘globalization’ has made this possible. But the actual understanding and the finely tuned praxis of ecological restoration has to serve local needs and when it comes to ecology it is most obvious that we cannot believe in a post-material world. This may sound trivial to some. However, the numerous studies on environmental movements and environmental discourse in the Third World³ that look at the semantics and dematerialized discourses (and not the actual practices) found in different areas of the world come to the conclusion that environmental consciousness is a global phenomenon independent of global economic processes. This implicitly suggests a kind of genetically based ecological consciousness that only needs to be awakened by the core countries.⁴ It makes a study like this one – exploratory though it may still be at this stage – more than overdue.

³ To be sure, the term “third world” used in this context is somewhat misleading. Again – as with the term periphery – for purposes of illustration I use the term “third world” and “developing country” overlapping with the category of periphery in world system theory.

⁴ See e.g., Hannerz (1990), Robertson (1992), Shaw (1994) and other authors in the Parsonian/Luhmannian tradition of systems theory and its notion of a world or global society.

3. RESTORATION ECOLOGY OF CORE AND PRIPHERY

Now, why do I believe that the development of the world system has got something to do with different understandings of environmental restoration? In the investigation I did on the Journal *Restoration Ecology* from its founding year 1993 to the Fall issue of the year 2000, I was able to show that the term 'restoration' as defined by the "Society for Ecological Restoration" as well as by authorities in the field like Bill Jordan and the already-quoted John Berger, does indeed differ in meaning from 'restoration' as used by people operating in the context of the periphery. And this applies not only to the native practitioners in such countries (obviously, I am not in a position to say very much about that), but also and in particular to technical advisors and practitioners from the core in the United States (and Europe) involved in projects in peripheral or developing countries or reporting from these areas of the world system.

For purposes of illustration I count the origin of ecological restoration as the core of the world system, excluding Australia, Europe, Japan and other areas of Asia. Following Chase-Dunn (1989: 207-255), I will treat core production as a certain kind of production, like the production of relatively capital intensive commodities which employ relatively skilled and highly paid labor. Peripheral countries are those that do use technology which is relatively low in capital intensity and labor which is paid low wages and is usually politically coerced compared to labor in core areas. Although there are certain weaknesses using the Gross National Product (GNP) per capita as a measure of the core/periphery status (see Chase-Dunn 1989), it also is a relatively feasible measure for studies of world-system position because GNP is available for a large number of countries.⁵ The list of core and peripheral countries, I obtained from tables in Chase-Dunn (1989) and Hopkins and Wallerstein (1996).

Since the Journal *Restoration Ecology* includes a whole variety of articles in which it is hard to differentiate between restoration and other forms of ecological work like revegetation, reclamation, rehabilitation, and technical treatises on hydrologies and nutrients, I only looked at those papers where – from my perspective – a relatively clear distinction could be made with the help of the definition in the 'Instructions to Contributors' in the journal *Ecological Restoration*. To be sure, many technical articles did not use the term 'restoration' in their abstracts or even refer to restoration in the strict sense as defined by Berger (1995), Jordan (2000), and others. A lot of the articles dealt for instance with plant or animal community composition or more 'general' ecological topics and could not be strictly defined at all. Hence I did not count them. From the whole pool of articles (253, including notes and forewords) I categorized 150 articles.⁶ Of these 150 articles only 20 dealt with ecological projects or technical problems in peripheral countries. And of these 20 articles there were only 5 that explicitly had

⁵ For a comprehensive discussion on analytical meanings and the conceptual categories of core and periphery see Chase-Dunn (1989, chap. 9 to 13).

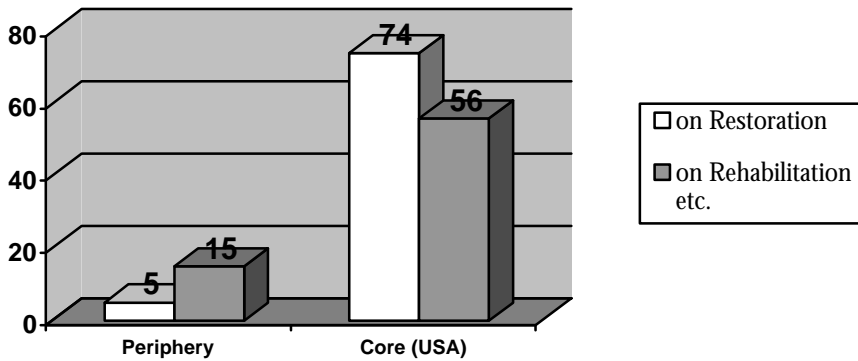
⁶ The data are from JADE (October 30, 2000 – Journal Articles DatabasE – Data of the British Library, Periodical Contents Index, IBZ, Elsevier, Springer Link) for the titles of the most recent articles in *Restoration Ecology*, (European Database) and from OVID – Biological Abstracts for the years 1993 to June 2000 in *Restoration Ecology*, (International Database).

restoration as defined by the founding fathers and mothers from North America as their goal, or dealt with it in another respect. Admittedly, some authors in articles on “restoration” in countries of the periphery did use the term ‘restoration’ for what they were reporting on, but for instance a description of an Indonesian tin strip mine that was “minimally restored,” seemed to be a contradiction in terms from the perspective of ecological restoration in the sense as defined by Berger in the ‘Instructions to Contributors’ in *Ecological Restoration*.

Altogether the result does not seem to be too astonishing.⁷ All articles in *Restoration Ecology* from 1993-2000 that could be categorized in one of the two categories: (1) strict restoration or (2) rehabilitation can be illustrated in the following graphic.

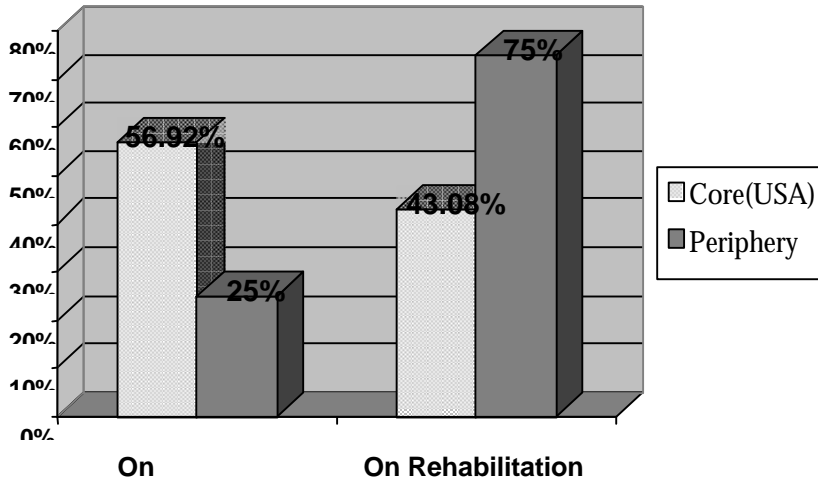
Figure 2.

Articles in *Restoration Ecology*, 1993-2000
Total = 150 (without Europe and solely technical articles)



What concerns us here is the argument that restoration as a new environmental paradigm might only catch on in its original version in countries of the core of the world system. As we can see, article distribution regarding (1) core and (2) periphery is as follows:

⁷ What is more surprising is that of the 130 articles on restoration in North America (and to a much lesser extent in Australia and Europe) only 74 (49.3%) dealt explicitly with restoration, while 56 were not eligible in terms of the strict definition. These 74 articles make up a little less than 57% of all the articles on North America. This tendency has increased in more recent issues, especially after 1994. More than three quarters of the articles on restoration ‘proper’ were published in the first four years of the journal’s existence.

Figure 3: Relative Distribution of Articles in *Restoration Ecology*, 1993-2000

Only 25% of the articles from Third World Countries located in the periphery of the World System deal with restoration in the strict sense as compared to articles from North America, where more than half (ca. 57%) deal with restoration in the strict sense. That means that of the articles categorized there are more than 43% that do not explicitly relate to the restoration of historic plant and animal communities and hence could not have appeared in the sister journal *Ecological Restoration*, which is the older of the two. One is tempted to speculate that the new version of restoration made public via the journal *Restoration Ecology* does have a much more open definition of what can be categorized under the heading of restoration. Undeniably, this makes it problematic to distinguish what ecological restoration is and what it is not, since a lot of the claims of restoration practitioners about the novelty of their field is that it is *not* rehabilitation, conservation, preservation, mitigation, or any other traditional stream of environmentalism.

I would like to summarize the different global variations of ecological restoration in the following table. For illustrative purposes, I have sketched the differences between the two core versions of ecological restoration and their geographical distribution:

Table 1. Variations of Restoration Practices and Their Local Justifications

Global Variations of Ecological Restoration	Restoration Ecology – North America	Restoration Ecology – Third World
Ethical Orientations	<ul style="list-style-type: none"> • more ecocentric • ‘spiritual’ connection to the land (“restoration is good for your soul”) • paying tribute to nature 	<ul style="list-style-type: none"> • more anthropocentric • utilitarian connection to the land • celebrating yet another form of environmentalism
Question of General Goal	<ul style="list-style-type: none"> • Restoring nature for Nature’s Sake – sustainability might be a nice side effect • Highest biodiversity possible – doing it nature’s way • Including local knowledge and skill as a tribute to nature 	<ul style="list-style-type: none"> • Restoring nature for a sustainable future – for human survival • Highest biodiversity for efficient usage • Using local knowledge and skill as ‘cheap labor’

However, what concerns us here is the question whether the shift in the notion of restoration can be understood from a world system perspective. Local knowledge from around the world has become the object of intensive global scrutiny for possible commercial use. Studies on the globalization of culture in world system research, however, have shown that cultural expression cannot be treated as autonomous from the economic process of capitalism (Bergesen 1996; Friedman 1994, 2000; Wallerstein 1991).

4. RESTORATION PRACTICE AND THE POSITION IN THE WORLD SYSTEM

Since it originates in a wealthy country some restorationists regard ecological restoration as a problem-solving tool for environmental problems in less wealthy countries. The respective cultural conditions, though they might be of some importance, are not considered in the articles in *Restoration Ecology*. Rather, purely economic reasons are given as a justification for widening the definition and scope of restoration in order, as a group of its Western proponents working as advisers in developing countries like in the Caribbean and China put it, to “not sell the field short” (Aronson et al. 2000: 147). By this they do not mean propagating restoration as a new conservation technique *per se* in other places of the world, but saving the field by making something different out of it than North American leaders in the field originally suggested. As Aronson and Le Floch put it:

What’s more, if they [people from Third World countries, M.G.] read in North American journals that restoration is not about pragmatic goals, at all, there is a real risk some of them may turn away from the field as plaything, a fad, a recreational pastime for rich Americans, and nothing more (2000: 214).

These restorationists seem to be almost desperate to widen the field and the definition of restoration to come to terms with the economic conditions of the periphery, embedded in global processes. One of these reasons is undoubtedly that, to quote this group of Third World restorationists again, “academic ecology is increasingly at risk of becoming irrelevant to the world’s economic and socio-political trends and realities” (Aronson et al. 2000: 147). This might be due to the traditionally more ‘volunteer-approach’ to restoration in North America. To put it more bluntly, the more recreationist and aesthetic the focus of restoration in North America, the less it can be sold to other places without significant changes, most apparently to the more pressing questions of the periphery, like topsoil losses and severe ecological degradation and even the pure survival of the people. As Aronson and his co-authors put their outlook on the future of ecological restoration:

[Third world countries] are looking for strategies to increase or, rather, replenish their natural capital in a world of exponential population growth and declining aid and cooperation for the poor South to be expected from the rich and super-rich countries to the North. Restoration and rehabilitation ecology will have a big role to play in all of this – that is our prediction for the coming century” (Aronson et al. 2000: 147).

In other words, western environmentalists – if we dare to count ecological restoration as yet another environmentalism – are trying to sell a new paradigm – supposedly without economic interests beyond their own academic goals to publish – but this paradigm has to meet local cultural meanings and economic necessities, which, given the extreme and obvious materialist stance of restoring ecosystems, in turn can be explained from a materialist world system perspective.⁸ Thus restoration is sold like a ‘developing aid’ which in its North American form, is of not much use in its local non-American context. I would like to suggest several points about the global and the local in the field of ecological restoration: (1) The North American language of communication about restoration is not understood in the way it is understood in the local context of certain African or Asian countries. (2) Restoration is understood in terms of economic and cultural necessities, that is, identifiable types of nature perception. (3) Thus the “local resonances” (Friedman 1994: 204) have little or nothing to do with the original North American meaning attributed to restoration.

⁸ An interesting and perhaps even more challenging observation in this case could be made, though I will not consider this in detail: If we follow the hypothesis that the hegemony of the West, the center of the world system, is currently declining after a short economic upswing in the 1990s (see e.g. Friedman 1994; Frank 1998), we might suggest that the debate in ecological restoration has got something to do with the world systemic process, especially since the original idea of restoration ecology is itself increasingly being shifted to rehabilitation in the leading academic journal *Restoration Ecology* for North American restoration projects.

5. ECOLOGICAL RESTORATION: A PURELY WESTERN PHENOMENON?

In a recent letter to the editor in the journal *Ecological Restoration* the above-mentioned group of restorationists working in Third World countries (Aronson et al. 2000) asked the challenging question whether the journal is “for North American readers only.” Furthermore, in a recent editorial in the journal *Restoration Ecology* in fall 2000, Aronson and Le Floch gave the editor to understand that in their view the focus of the journal is “a bit too North America-North American for our taste” (Aronson and Le Floch 2000: 214). What is apparently happening here, however, is that these committed restorationists are attempting to adapt the concept of ‘ecological restoration’ and the increasingly ‘flashy’ term ‘restoration ecology’ for use in Third World contexts by trying to squeeze it somehow into local ideas of what restoration could be. They point out that “more and more restoration and rehabilitation experiments are being and will be set up in Latin America and the Caribbean, in Africa, China, and the rest of the poor, over-crowded, all-too-often ecologically debilitated countries” (Aronson et al. 2000: 146). They repeatedly talk about restoration as being the same as or complementary to rehabilitation, and dislike the idea that restoration in the new millennium will also come to have great recreational value. All the countries they mention and that are referred to⁹ belong to the parts of the globe that world system theorists call peripheral countries of the world.

Phrased differently, the idea of restoration is being adopted by Third World countries, but in its particular context it has increasingly changed its meaning so that almost the opposite of the original concept is attributed to it. ‘Restorationists’ who try to make restoration a global enterprise with the same meaning everywhere, believe implicitly in the idea and the concept of a larger world and the way in which people increasingly identify with a larger global unity of culture in general and of ecological restoration in particular, as well as believing that the local has to express the global. This can be explained in terms of what Friedman (2000) has called indigenization from below versus the elitist – here: natural scientific – hybridization of culture. These ecological scientists belong to the group of believers in a linear globalization and modernization that I mentioned before. Modernization and the idea of linear development are well meant, but nevertheless naive intentions of the so called West to mold the non-West in its own image. The assumption is that all particularities, local necessities, will eventually give way under the relentless modernizing force of North American environmentalism and modernization.

The world system model, on the other hand, offers an explanation why certain countries cannot adopt the concept of ecological restoration developed in the prairies of the Midwest of the USA. Industrial countries of the core, like the US, often take advantage of cheap labor and natural resources, but transferring mainly low-technology industrial processes which also preserve environmental degradation. Unlike in the linear

⁹ Aronson and other authors in this circle worked above all in Chile, Argentina, China, Tunisia, and Morocco. That these countries are sometimes on the border between the so-called periphery and the semiperiphery does not distract from my general thesis, although it is an analytical short-coming.

idea of modernization, where ecological restoration is simply dispersed across the globe, in the dependency model of world-system-theory ecological restoration is being transformed via global economic processes. Countries of the periphery are therefore obliged to give undue weight to the production of raw materials that leads to especially high ecological pillaging. Ecological restoration as an ecocentric practice to pay tribute to nature for nature's sake, where sustainability might be a welcome but not pivotal effect, does not fit in here (see also table 1 above). The local skill and knowledge of restoration practitioners is at best seen as 'cheap labor' and not as a source to develop an intimate relationship with nature.

6. OUTLOOK: GLOBAL ECONOMY- LOCAL NATURE

Finally, in addition to the mainly historical-materialist explanations of world system theory, I will suggest some more concluding points as an outlook: It is mainly Western ecologists working in countries of the periphery, but publishing in North American journals, who make us aware of the shifting notion of ecological restoration, simply because they do not want to see that ecological restoration obviously must be allowed to be something different – and not restoration – in different parts of the world. This is because they themselves believe – at least implicitly – in the possibility of a globalization that is nothing more than an evolutionary change, a steady linear development from smaller to larger systems from the local, in this case North American, ideas about prairie restoration, to the global – ecological restoration in other parts of the planet.

The hypothesis for further investigation then would be that the more completely a region or country fulfills the criteria of belonging to what world system theoreticians have labeled peripheries, the higher the chances that the environmental practice of ecological restoration will have shrunk to the term only, whilst actually being something very different, in this case what was traditionally labeled "rehabilitation" or even simply "sustainable agriculture." In other words, countries of the periphery try to catch up with the trends of the core areas, especially the US, but the actual outcomes and practices, from the perspective of North American practitioners, are utterly different. The understanding of nature, and the idea that nature can be regarded as something that is being restored for nature's sake, is apparently not so easy to establish outside of core-countries.

Thus, not only is local environmental degradation often an outcome of the operations of the transnational corporations that exploit the periphery's natural resources, but at the same time the attempt to conceptually restore degraded ecosystems is determined by the position in a global economy. Perceived that way, restoration as such has no life or meaning of its own, but is an aspect of social existence dependant on global processes. The globalization of ecological restoration can only be understood if we take a broader view of the transformation of the world system today. Although it is more than understandable that activists want to sell the field of ecological restoration to the other places on the planet, they need to see, however, that if ecological restoration is to remain a distinct field of environmental practice, they obviously need to stick with their original notion and definition of restoration, since otherwise restoration will not differ from

landscaping, rehabilitation, mitigation, or sustainable agriculture. Put differently, if restoration in the original sense proves to be impossible – as in most countries of the periphery – and the term is being stretched to fit the conditions there, “then the straightforward way to talk about that is to say it is impossible” (Jordan 2000: 148). Otherwise in the long term it might become void of meaning also in its original context in the US. Thus every region and culture in the world needs to have its own indigenous practice of “restoration” – though not necessarily called restoration – and not restoration as a sold field squeezed into its non-western context. Taking this view, the world system model thus provides a useful framework to understand ecological restoration as a geographically dependant local practice of certain regions of the US, and not as a commodity that can simply be sold like movies, Marlboro cigarettes or Coca-Cola.

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