Environmental history and sustainable cultural dynamics¹

JWN Tempelhoff² Department of History North-West University

Abstract

A notable sophistication has taken place in the field of environmental history, as a result of the endeavours of historians in the United States of America, Britain and Europe in recent years. In the article a number of trends are considered. Attention is given to the conceptualization of environmental history, nature, culture, dynamics and sustainability. Reference is made to global environmental history, as a result of its growing significance. Then more detailed attention is given to cultural environmental history. Historiographically the focus is on the United States of America and Britain where some of the definitive work in the field of environmental history has taken place. In the final section of the study cursory attention is also given to the development of the discipline in Africa and Southern Africa.

"Wenn Menschen einer bestimmten Zeit ihre eigene Natur und die Natur um sie herum in bestimmter Weise wahrnehmen, so heist das nicht dass diese Art der Wahrnehmung willkürlich ware. Natur-Konstrukte sind nur dann von Dauer, wenn sie nützliche Erfahrungen enthalten. Wo der pure Konstruktivismus die Naturdiskussion in einem ahistorischen Milieu immer wieder an einen toten Punkt manövriert, beginnt für den Historiker das Nachdenken über die historisierte Natur."

J Radkau³

¹ Based on a paper with the same title presented at "Historical studies, disciplines and discourses," an international conference on the History and Theory of Historical Studies, presented by Pasts Inc., at the Central European University (CEU), Budapest, 21-24 October 2004.

² School of Basic Sciences, North-West University, South Africa.

J Radkau, "Nachdenken über Umweltgeschichte" in W Sieman (ed.), Umweltgeschichte: Themen und Perspektiven (Verlag CH Beck, München, 2003), pp. 178-179.

Introduction: The hybridisation of culture and landscape

In a recent article Richard White refers to a new trend that is emerging in environmental historiography. It has a bearing on what he describes as 'the hybridization of the landscape' and forms part of the realization that pristine natural landscapes rarely are historically undisturbed environments. There are also indications of an internalization of space. He states:

(H)ybrid landscapes are where we spend our lives, and, as much to the point, where most wild creatures spend theirs.⁴

The realization that the environment is part and parcel of a constant process of change over time – capable of transforming humans in their natural state – forms an inherent part of our contemporary understanding of cultural dynamics. For the study of history, this has very specific interpretational consequences. Allow me to use two examples.

On the 24th of August 1872 //Kabbo, a member of Southern Africa's near-extinct San (Bushmen) told the German philologist Wilhelm Bleek and his assistant, Lucy Lloyd, about a dream he had had. He said:

I dreamed of a lion that talked. They talked to their fellows. I was listening. I saw them. They were black. Their feet resembled the feet of a lion. I was afraid of them. Their legs were many. They had hair. Their tails were long. I was afraid, startled awake. I looked because I was startled awake. I lay watching carefully. Their tails had black hairs on the top. They were shod with hairs. ⁵

There are numerous ways in which this text can be interpreted, but let us take note of some circumstantial evidence. Previously confined to a colonial prison in Cape Town, and now the subject of research on the remnants of the subcontinent's Stone Age people, //Kaba experienced an intense longing for the environment from which he had been removed. He had been placed in goal as a result of actions that the colonial authorities, in terms of their legal reference framework had termed a misdemeanor. //Kaba found himself in a world that was rapidly changing.⁶ His metaphorical use of lions, multitudes, color, hair and speech, convey a sense of surprise and awe at the changing world around him. It was a landscape from which he and those like he, were destined to disappear in the face of colonial expansion and the transformation of indigenous cultural lifestyles.

⁴ R White, "Hybrid landscapes: the cultural turn in environmental history" Historian, 66(3), Fall 2004, p. 564.

⁵ He is quoted in JD Lewis-Williams, *Dreams that float from afar ancestral folklore of the San of Southern Africa*, (David Philip, Cape Town, 2002), p. 131.

⁶ A Krog, The stars say 'tsau': /Xam, poetry of Diä!kwain, Kweiten-ta-//ken, /A!kúnta, /Han≠kass'o and //Kabbo, (Kwela Books, Cape Town, 2004), p. 38.

Some 70 years later, Engela van Rooyen, a white woman of Dutch extraction, born on an irrigation farm on the banks of the Orange River, the largest river in South Africa's Kalahari desert, recalled with a sense of nostalgia how she had experienced a Bushman, Hendrik, and his sister, Antjie, who had lived with them on the farm, only to wake up one day, finding that they had vanished. Years later she was in a position to realize that they had left for landscapes where with which they were more familiar. Hendrik and Antjie had earlier specifically transformed themselves to become part of a hybrid landscape in which the cultural dynamics, representative of European tradition, was presenting a new statement of *habitus*. Once they had taken note of the changes in their natural landscape, the indigenous people withdrew and escaped to an environment that they thought would protect them. Ironically though, also that environment was rapidly facing degradation.

Categorized and reduced to ephemeral actors on the landscape, it was people like these who were destined to literally vanish from the face of the earth until the late twentieth century before they could be once again called 'native' in the environments where they had been endemic in times gone by.⁸ The heterological reappearance of indigenous culture was notable for the fact that, apart from the hybridized landscape which now had become naturalized, there was an acceptance that also the people had been transformed. Fact of the matter is that these people had not vanished. Instead, they had been located in the vestiges of memory, perceived in rigid contexts, and were now being perceived as a result of transformed perspectives of early humankind. It is dynamics of this kind that we will return to below.

Outline

In the discussion to follow attention will be given to defining some of the key concepts used in the discussion. In particular attention is given to outlining environmental history, nature, culture, dynamics and sustainability. Furthermore, some of the trends in the discipline are outlined. There is a vast array of stylistic trends evident in the works of contemporary environmental history practitioners. For the purposes of this discussion passing reference is

⁷ E van Rooyen, Met 'n eie siekspens: jeugherinneringe (Tafelberg, Cape Town, 1994), pp. 15-16.

⁸ A Kuper, "The return of the native" in *Curent Anthropology*, 44(3), June 2003, pp. 392-395; Also see J Bruchac (text) and M Steber (photographs), "Indian scenes from a renaissance" in *National Geographic*, 206(3), September 2004, pp. 76-91.

made to global environmental history, as a result of its growing significance. Then more detailed attention is given to cultural environmental history. Historiographically the focus is on the United States of America and Britain where some of the definitive work in the field of environmental history has taken place. In the final section of the study cursory attention is also given to the development of the discipline in Africa and Southern Africa. The objective is to mirror the mainstream effect of developments at the core of the trend to the developing continent of Africa. In this manner it would be possible to form an impression of how environmental history as an intellectual stylistic pursuit has been transmitted to another part of the globe.

Definitions

For the purposes of this discussion *environmental history* is described as a branch of the discipline of history in which nature is provided with a central role in the discourse on the human past. Apart from being a subject, it is also an object in the form of the perceived landscape, in which reflexive observations by humans on change are perceived and become part of a larger discourse dealing with change over time. History becomes of relevance to the environment if and when there are indications of a potential comparison between then and now. Nature is then perceived as any process, event or manifestation of reality that is not the result of human activity. Culture, on the other hand, can be perceived as transformed nature. It is the result of human intervention in which the state of nature is altered by actions and events pertaining to human agency. The term contains a suggestion of tradition and past practice. From an enlightenment perspective, it may be possible to constitute that culture can be considered to be the rationalization of nature to the extent that it serves the purpose of humans.

⁹ JR McNeill, "Observations on the nature and culture of environmental history" in *History and Theory*, Theme issue, 42(4), December 2003, p. 6.

¹⁰ F-J Brüggemeier, "Internationale Umweltgeschichte" in W Loth and J Osterhammel (eds), *Internationale Geshichte: Themen – Ergebniss – Aussichten* (R Oldenbourg Verlag, München, 2000), pp. 371, 375.

¹¹ TR Schatzki, "Nature and technology in history" in *History and Theory*, 42(4), Theme issue, December 2003, p. 85

¹² J Rüsen, "Sinnverlust und Transzendenz – Kultur und Kulturwissenschaften am Anfang des 21. Jahhunderts" in in F. Jaeger and J Rüsen (eds.), Handbuch der Kulturwissenschaften, III Themen und Tendenzen (Verlag JB Metzler, Stuttgart and Weimar, 2004), p. 534.

¹³ A Heller, A philosophy of history in fragments (Blackwell, Oxford, 1993), p. 138.

A subsidiary of the cultural phenomenon is *dynamics*. The term is derived from Aristotelian philosophy and used, since the fourteenth century, to define the laws of motion as outlined by Kepler, Galileo, Leibniz and Newton in Physics. Both *kinematics* (which focuses in on motion, without regard to its causes, in terms of position, velocity, and acceleration), as well as, *kinetics* (which concerns itself with the effect of forces and torques on the motion of bodies having mass), can be of use for a more comprehensive understanding of dynamics in the cultural sphere.¹⁴ The metaphorical use of dynamics in cultural contexts is founded on the assumption that culture is, even if only in part, responsible for transformed nature, in its multifarious manifestations, perceived by humans in the realm of material and spiritual consciousness.

Finally, *sustainability*, an important term in environmental studies, is understood to have a bearing on the sustained material-energy processes of exchange between human society and the natural environment.¹⁵

Environmental history: origins and trends

Environmental history, it is generally conceded, had its origins in the 1970s as a result of the environmental movement in the United States of America in which a new generation took note of the consequences of rapid industrial and economic growth that had taken place since the end of World War II in 1945. At the time of the energy crisis, in 1973, ¹⁶ the sense of disillusionment with unbridled scientific positivism and growing despair with contemporary consumerist tendencies provided the impetus towards a coherent green movement that had substantial support in many parts of Europe and Australasia. ¹⁷ In historiographical terms, environmental historians formed part of the intellectual thrust of the environmental movement. There were early indications of activism pervading some of the thinking on the discipline. ¹⁸ Increasingly, as the discipline became more settled, practitioners oriented

¹⁴ HM Nobis, "Dynamik" in J Ritter (ed.), Historisches Wörterbuch de Philosophie, Band II, (Wissenschaftliches Buchgesellschaft Darmstadt, 1972), pp. 302-303; Anon., "Dynamics" in Encyclopaedia Brittanica: the ultimate DVD reference suite, (London, Encyclopaedia Brittanica, 2002).

¹⁵ RP Sieferle, "Nacchaltigkheit in universalhistorische Perspektive", W Siemann and N Freytag (eds.), Umweltgeschichte: Themen und Perspektiven, p. 39.

¹⁶ B Luckin, "At the margin: continuing crisis in environmental history", *Endeavour*, 28(3), September 2004, p. 97.

¹⁷ J Young, Post-environmentalism (Belhaven Press, London, 1990), p. 9; A Heywood, Political ideologies: an introduction (Houndmills Bassingstoke, Macmillan, 1992), p. 244.

¹⁸ MW Klingle, "Spaces of consumption in environmental history", *History and Theory, (Theme issue)*, 42(4), December 2003, pp. 94-110.

themselves to dedicated research and an acceptance of the fact that their findings would become crucial in discussions aimed at finding diplomatic solutions for prevailing environmental problems.

One of the early practitioners of environmental history was Donald Worster, ¹⁹ who outlined the concentration of the disciplinary field in the 1970s. For him three dimensions were apparent: the historical study of nature; the study of humans' socio-economic interaction with the environment; and the environment as understood through the changing ideas of nature.²⁰ In the next 20 years there were numerous new accentual 'turns' in the discipline. It ranged from the postmodernist approach to gender political discourses on natural space. However, in essence, the focus remained the same. Recently JR McNeill embroidered further on the three varieties of the discipline. For him the classification was: material environmental history (which preoccupies itself with changes in biological and physical environments); cultural/ intellectual environmental history (which places emphasis on images of nature in literature and art); and political environmental history (in which laws and policies of state are studied against the backdrop of the effect they have on nature).21 Simplified, this classification suggests there is primarily a natural science accent and human sciences accent in the discipline. A third branch, which forms the paradigm of the discipline is integrated in an area of science where the governance of society is of primary significance. ²² It must be accepted that environmental history remains a discipline in which the works produced are the result of personal preferences and fashions.²³ There should be also more accents on for example the artistic contextualization of nature which sub-classifications of art in the natural and human sciences could take on a dimension of consciousness of the human condition in its interaction with nature.

Over the years numerous historiographical forces have favorably motivated historians to work in the field of environmental history. In the early 1980s its appeal lay in the fact that it was representative of a radical discourse,

¹⁹ D Worster, Nature's economy: a history of ecological ideas (1977), Cambridge University Press, Cambridge, 1991).

²⁰ D Arnold, "Environmental history" K Boy (ed.), *Encyclopedia of historians and historical writing*. Vol. 1, (London, Fitzroy Dearborn Publishers, 1999), pp. 360-361.

²¹ JR McNeill, "Observations on the nature and culture of environmental history" in *History and Theory*, Theme issue, 42(4), December 2003, p. 6.

²² This outline could well be brought in line with the agenda for the discipline that had been set out by Aldo Leopold in 1949. See K Asdal, "The problematic nature of nature: the post-constructivist challenge to environmental history" in *History and Theory*, Theme issue, 42(4), December 2003, p. 62.

²³ J Radkau, "Nachdenken über Umweltgeschichte" in W Sieman (ed.), Umweltgeschichte: Themen und Perspektiven, p. 172.

environmentalism, in an era of transition in Western society. In North America, where environmental history first manifested most prominently in the seventies, the tradition was rooted in the work of FJ Turner, Walter Prescott Webb, and James Malin.²⁴ A notable dimension was the focus on the westward movement of American society. In Europe, historians who had worked in the style of the influential French Annales School, first responded to the new trend.²⁵ In particular the accent on periods of long duration and their impact on the dynamics of human society in periods of rapid transition, served the new environmental historians well. In the former Western Germany, in particular, social historians who had started specializing in the history of industrial development and technology, easily took to the field.²⁶

On the whole the new environmental historians were familiar with quantitative strategies and interdisciplinary research in collaboration with natural scientists and specialists in the economic sciences. The new postmodernist discourses, in the mainstream of historical research at the time, were foreign landscapes of intellectual endeavor to them. Discursive analysis and debates about the new historicism were themes of investigation that had played off in the arena of literary studies and cultural history. Instead, environmental historians chose to confine their efforts at promoting greater environmental responsibility in civil society. Methodologically they were familiar with the integration of practices in regional studies, geography, ecology, environmental studies and development studies.

As the 1980s drew to a close the appeal of environmental history was extended to historians who had previously actively pursued neo-marxist theories in the practice of social history. The collapse of the East-West divide required of historians to seek alternative fields of concentration. This was conducive to environmental history in the sense that historians were enabled to get more

²⁴ JR McNeill, 'Observations on the nature and culture of environmental history' in *History and Theory*, Theme issue 43, December 2003, p. 14; T Steinberg, 'Environment', PN Stearns (ed.) *Encyclopedia of social history* (London, Garland Publishing, Inc., 1994), p. 236; W Beinart, "African history and environmental history", *African Affairs*, 99(395), April 2000, p. 269.

²⁵ J Radkau, 'Nachdenken über Umweltgeschichte' in W Sieman (ed.), Umweltgeschichte: Themen und Perspektiven, 165-6. Also see W Beinart, "African history and environmental history" in African Affairs, 99(395), April 2000, p. 269; D Arnold, 'Environmental history' in K Boy (ed.), Encyclopedia of historians and historical writing. Vol. 1 (London, Fitzroy Dearborn Publishers, 1999), 361; JR McNeill, 'Observations on the nature and culture of environmental history', History and Theory, Theme issue 43 (4), December 2003, p. 14, does have different perspectives in the matter.

²⁶ J Radkau, "Nachdenken über Umweltgeschichte", W Sieman (ed.), Umweltgeschichte: Themen und Perspektiven, pp. 165-166.

focused perspectives on the new global society that was being debated in many fields of the humanities and economic sciences at the time.

Environmental history was effectively institutionalized over the years. In the United States of America the American Society for Environmental History was founded in 1976.²⁷ At first it was merely a platform where practitioners of the discipline identified themselves as a grouping apart from other branches of historical studies. By 1998, when European environmental historians established their own association, it was evident that environmental history had become an active pursuit of professional historians. Moreover, they formed part of the integrated field of environmental studies, which covered a broad spectrum of disciplines.²⁸ The new accent in the field of historical studies enabled environmental historian to compile a comprehensive bibliographical corpus of works that had accumulated in the field over a period of more than three decades.²⁹ It was evident that, although environmental history had not been coordinated within the ranks of professional practitioners of history, there were nevertheless substantial work that had been done in the field.

A diversified discipline

The diversity of environmental historical themes, as a result of its vast interdisciplinary linkages, is a notable feature of the current historiography.³⁰ It is a broad field that can be categorised in numerous ways, depending on the particular field of interest of the individual researcher. For the purposes of this discussion attention will only be given, very briefly, to global environmental history, and then in somewhat greater detail to cultural environmental history.

Global environmental history: As a result of the implications of globalization and the rise of consumerist traditions environmental historians have been active in the field for a considerable period of time. Just as world history as discipline has changed its perspective towards the acceptance of a redefined

²⁷ JR McNeill, "Observations on the nature and culture of environmental history", *History and Theory*, Theme issue, 42(4), December 2003, p. 11.

²⁸ B Luckin, "At the margin: continuing crisis in environmental history", *Endeavour*, 28(3), September 2004, p. 98.

²⁹ For an impression of the work that is being done see the website of the European Society for Environmental History's "Environmental history bibliography", 1976-2004 at http://www.eseh.org/bibliography.html

³⁰ For a comprehensive overview, see JR McNeill, "Observations on the nature and culture of environmental history", History and Theory, Theme issue, 42(4), December 2003, pp. 5-43.

conception 'global history', environmental historians have made the essential shifts.31 This was an important disciplinary accent in view of the fact that non-governmental organizations such as Greenpeace and the World Wildlife Fund had, from early focused in on the transnational nature of environmental issues. It strengthened activities aimed at making the global society aware of environmental dangers. In the early years the postcolonial debate resulted in some interesting definitive works in environmental history. First was Crosby' Ecological imperialism: the biological expansion of Europe, 900-1900, (1986),32 which addressed the issue of imperialism in the nineteenth and twentieth century, as well as the impact it had on the environment. Even more sophisticated studies, such as that of J Westoby,³³ AM Mannion,³⁴ and WB Meyer³⁵ followed in an attempt at addressing specific needs prevailing in the natural sciences where discourses were more orientated towards readers interested in finding out more abut humans and their place in the world. Jarred Diamond, a biologist with some interesting perspectives on the manner in which biological forces have shaped history, published a history of germs and their impact on the environment.³⁶ For historians interested in locating the origins of the current wave of environment degradation, Richards' work on the environment in the early modern world, is a thoughtfully written guide.³⁷ JR McNeill's prize-winning global history of the environment in the twentieth century,³⁸ is perhaps one of the best of its kind. Of particular interest is the work of Joachin Radkau, the Bielefeldt historian of technology, who has made a substantive contribution towards our contemporary understanding of the world of political power and the effect it has had on nature. He sheds some interesting light on universal trends in environmental degradation and the manner in which societies throughout the world have responded to these.³⁹

Cultural environmental history: In the mid-1980s there were the first indications of a trend towards a cultural environmental historiography in

³¹ For a discussion of the trend, see M Geyer and C Bright, "World history in a global age", *The American Historical Review*, 100(4), October 1995, pp. 1034-1060.

³² AW Crosby, *Die Früchte des weisses Mannes: Ökologischer Imperialismus 900-1900* (Translated by N Kadritzke, Campus Verlag. Frankfurt, 1991.)

³³ J Westoby, Introduction to world forestry: people and their trees (New York, Blackwell, 1989).

³⁴ AM Mannion, Global environmental change: a natural and cultural history, (London, Longman, 1991).

³⁵ WB Meyer, Human impact on earth (New York, Cambridge University Press, 1996).

³⁶ J Diamond, Guns, germs and steel: a short history of everybody for the last 13 000 years (London, Vintage, 1998).

³⁷ JF Richards, *The unending frontier: an environmental history of the early modern world*, (Los Angeles, University of California Press, 2003).

³⁸ JR McNeill, Something new under the sun: an environmental history of the twentieth century world, (London, Penguin, 2000).

³⁹ J Radkau, Natur und Macht: eine Weltgeschichte der Umwelt, 2ed., (München, CH Beck, 2002).

America. In the mainstream of historical practice the 'new cultural history' had its first significant breakthrough with Lynn Hunt's contribution on the French revolution era in France, published in 1989. 40 In environmental history, there were even earlier traces of the new trend. Worster had already given attention to the intellectual history of the environment in the 1970s. 41 However, it was William Cronon⁴² who started championing the cause of a post-materialist environmental history in which culture manifested itself on the natural landscape in such a manner that it was perceived as an extension of the environment. 43 At a time when environmental degradation and the collapse of ancient civilizations still attracted debate, 44 Cronon was also shifting in a number of other directions. He experimented with postmodernist ideas, delved into contemporary history and outlined the need for comprehending the relationship between political power and the factors of social and environmental difference.⁴⁵ More important was the fact that, along with Joel Tarr and Martin Melosi, Cronon started concentrating on a scrutiny of the urban environment and interrogated the interactions between physical and social ecologies. They also contemplated the politics of pollution, public water, sewage, garbage disposal and a number of related issues. In many respects this turned out to be a drift in the direction of a cultural history of the environment.

Not all environmental historians responded to the new trend. In Britain, up to the present, there have been irate historians frustrated by the fact that the trendsetting practices of their American counterparts have literally been ignored. On the other hand, in Germany there were numerous indications that culturally oriented environmental history had a positive reception. Steeped in a philosophical tradition of historical theory and practice, German environmental historians were able to synergize their analytical and interpretative methodologies to the extent that it was integrated with

⁴⁰ R Chartier, "New cultural history", J Eibach and G Lottes (eds), Kompass der Geschichtswissenschaft: ein Handbuch (Vandenhoek & Ruprecht, Göttingen, 2002), p. 193.

⁴¹ K Asdal, "The problematic nature of nature: the post-constructivist challenge to environmental history" in *History and Theory*, Theme issue, 42(4), December 2003, p. 62.

⁴² Changes in the land, (New York, Hill and Wang, 1984).

⁴³ W Cronon, "Modes of prophecy and production: placing nature in history" in *The Journal of American History*, 76(4), March 1990, pp. 1122-1131; W Cronon, "A place for stories: nature, history and narrative", *The Journal of American History*, 78(4), March 1992, pp. 1347-1376.

⁴⁴ BL Turner II, "Overview: environmental history", Environment, 33(4) May 1990, p. 2.

⁴⁵ W Cronon, "Modes of prophecy and production: placing nature in history", *The Journal of American History*, 76(4), March 1990, p. 1131.

⁴⁶ B Luckin, "At the margin: continuing crisis in environmental history", *Endeavour*, 28(3), September 2004, p.p. 97-98.

traditions dating back to the early nineteenth century when many of the groundbreaking works of German naturalists and philosophers were taking account of the impact of industrialization.⁴⁷

However, German practitioners of the discipline, in the 1980s, operated within an environment in which green politics led to the first *Grünen* representatives being elected to the legislative assemblies of the Länder and the Bundestag. The primary issue of the day was *Waldsterben*, firmly situated in die fields of natural science, politics and the cultural affinity that Germans had for the forest. Some of the leading participants in the academic debate were Joachin Radkau, Rolf Pieterle Sieferle and Rolf-Jürgen Gleitsmann. As historians of the environment and technology they increasingly found themselves squarely in the prevailing climate of environmental- and forest politics. The practice of cultural environmental history appeared to blend in well with the public debate conducted at the time.

It was a time when cultural studies, emerged in humanities departments in many parts of Western Europe and the United States. By the late 1980s it had gained substantially in popularity as practitioners started veering away from canonical literature as well as aspects of traditional hermeneutic practices. The dissolution of the centre had the effect that the disciplinary practices were then defined.⁵³ In the broad discipline of history there were indications of a shift away from social history to cultural history. Increasingly it was possible to draw a distinction between 'social sciences' and 'cultural sciences'.⁵⁴

⁴⁷ JWN Tempelhoff, Preliminary observations on environmental history as discipline and its practice in Germany, (Unpublished report, KWI, Essen, March-April 2004), p. 6.

⁴⁸ I Blühdorn, "Environmentalism" J Sandford (ed.), Encyclopedia of contemporary German culture, (New York, Routledge, 1999), p. 188.

⁴⁹ W-R Baumann, W Eschenhagen, M Judt, and R Paesler, *Die Fischer Chronik Deutschland 1949-1999: Ereignisse, Personen, Daten,* (Frankfurt, Fischer Tadchenbusch Verlag, 1999), Column. 758.

⁵⁰ J Radkau, "Zur angebliche Enegiekrise des 18. Jahrhunderts: revisionistische Betrachtungen über die 'Holznot'" Viertelsjahrschrift für Sozial- und Wirtschaftsgeschichte, 73, 1986, pp. 1-37; Also see M Cioc, B-O Linnér and M Osborn, "Environmental history writing in Northern Europe", Environmental History 5(3), July 2000, pp. 397-398.

⁵¹ For a thoughtful essay on the process of environmental transformation and its perceptions see RP Sieferle, Fortschrittsfeinde? Opposition gegen Technik und Industrie von der Romantik bis zur Gegenwart (München, CH Beck, 1984).

⁵² W Sieman and N Freitag, "Umwelt – eine geschichtswissenschaftlich Grundkategorie" in W Sieman and N Freitag (eds), *Umweltgeschichte: Themen und Perspektiven*, p. 8.

⁵³ HP Söder, "The return of cultural history? 'Literary' historiography from Nietzsche to Hayden White" *History of European Ideas*, 29, 2003, p. 82.

⁵⁴ J Rüsen, "Sinnverlust und Transzendenz – Kultur und Kulturwissenschaften am Anfang des 21. Jahhunderts", F Jaeger and J Rüsen (eds.), Handbuch der Kulturwissenschaften, III Themen und Tendenzen (Verlag JB Metzler, Stuttgart and Weimar, 2004), p. 534.

Methodologically modern cultural history is noted for the plurality of its approaches and the vagueness of consensus over its theoretical tenets.⁵⁵ It has been responsible for creative investigations into interdisciplinary studies. For the discipline of environmental history, the encounter with culture has been constructive. Contextualizing nature and environment in a cultural paradigm, Brüggemeier explains that the cultural approach makes it possible to conceive nature and environment respectively as reality and representation. ⁵⁶ Moreover, depending on the disciplinary bias of the individual practitioner, environmental history can be contextualized from the perspective of either the natural or the human sciences. Theorists of cultural studies reason that the scientific interaction with the world forms part of a cultural reality. In a world under construction humankind has some fantasies, but no knowledge. It was only with the emergence of the systematic study of nature in a scientific manner that some assumptions were formulated and simultaneously made provision for the study of nature in an *an sich* manner. It then became familiar as nature was explored, much the same as would be the case after the discovery of a new continent. In this process numerous symbolic schemes were introduced for comprehending nature. One of these was classified under the rubric of ecology at the start of the twentieth century.⁵⁷

Ecologically orientated cultural history in its foundational form comprises the project humankind. It implies that apart from the protection and preservation of nature, there has to be provision for the productive use of nature. It is argued that humankind is as unstable as nature. However, the playing field of the human project is merely enlarging. One example is the incorporation of the new dynamics introduced by the rapid development of genetic technology in recent years. For all practical purposes the zoological empire has expanded.⁵⁸ Furthermore the interdisciplinary applications of historical geography and historical knowledge have stimulated investigations

⁵⁵ M Dinges, "Neue Kulturgeschichte" in J Eibach and G Lottes (eds), Kompass der Geschichtswissenschaft: ein Handbuch (Göttingen, Vandenhoek & Ruprecht, 2002), p. 192; R Chartier, "New cultural history" J Eibach and G Lottes (eds), Kompass..., p. 198.

⁵⁶ F-J Brüggemeier, "Natur und kulturelle Deutungsmuster: die Kulturwissenschaft menschlicher Umwelten" in F. Jaeger and J Rüsen (eds.), Handbuch der Kulturwissenschaften, III Themen und Tendenzen (Weimar, Verlag JB Metzler, 2004), p. 65.

⁵⁷ H Böhme, P Matussek and L Müller, *Orientierung Kulturwissenschaft: was sie kann, was sie will* (Hamburg, Rowohlt Taschenburch Verlag, 2000), p. 120.

⁵⁸ H Böhme, P Matussek and L Müller, *Orientierung Kulturwissenschaft: was sie kann, was sie will* (Hamburg, Rowohlt Taschenburch Verlag, 2000), p. 130.

into the cultural landscape to the effect that it has facilitated more cooperation amongst different disciplines.⁵⁹

In the United States the cultural strain, at times, appears to be less clearly demarcated. McNeill, for example, perceives cultural environmental history as being active in the intellectual field in which religions and their perspectives of the environment are scrutinized in the context of an intellectual history of religious thought. He also singles out certain ideas about specific policies pursued by governments, such as for example, soil conservation policies in the United States of America during the 1930s. ⁶⁰ There is however much more to the trend.

In a sensitive and well-written work Mark Cioc, a German historian, now resident in the United States, has written a history of the Rhine River which explores a multitude of cultural dimensions. As environmental historian he is in a particularly good position to describe the transformation of the Rhine River from a natural, to a cultured water course, over the past two centuries. The accent is on the human interaction with the environment. Ultimately, it is the river that emerges as a major role player in the historical narrative.⁶¹

According to White, the cultural accent in environmental history, represents a major shift. Traditionally the discipline was associated with conservation under conditions of production, whereas in later years it had become a fundamental statement on consumption. The history of consumption in a globalizing world has been under investigation amongst cultural historians since the mid-1990s, whereas environmentalist thinking has focused on it for a considerably longer period of time. Environmental historians are now grappling with Thoreau's aesthetics of relinquishment formulated in the 1840s. The intricacies of an environmental history of goods and consumption within the framework of, amongst others, Bourdieu's theories,

⁵⁹ W Sieman and N Freitag, "Umwelt – eine geschichtswissenschaftlich Grundkategorie", W Sieman (ed.), Umweltgeschichte: Themen und Perspektiven, (Verlag CH Beck, München, 2003), p. 7.

⁶⁰ JR McNeill, "Observations on the nature and culture of environmental history" in *History and Theory*, Theme issue, 42(4), December 2003, pp. 7-8.

⁶¹ M Cioc, The Rhine: an eco-biography, 1815-2000, (Seattle, University of Washington Press, 2002).

⁶² R White, "Hybrid landscapes: the cultural turn in environmental history", Historian, 66(3), Fall 2004, p. 559.

⁶³ J Brewer en R Porter (eds), Consumption and the world of goods, (Routledge, Londen, 1993).

⁶⁴ K. von Beyme, "Biopolitical ideologies and their impact on the new social movements", A Heller and S.P. Riekmann (Eds.) *Biopolitics: The politics of the body, race and nature* (Avebury, Aldershot, 1996), p. 125.

⁶⁵ MW Klingle, "Spaces of consumption in environmental history", History and Theory, (Theme issue), 42(4), December 2003, p. 94.

have already featured in some of the recent works dealing with Africa.⁶⁶ There is also an accent on the manner in which privilege secured for some a better environmental infrastructure, whereas others were deprived of many basic facilities.⁶⁷

The urban environment, inhabited by ordinary human beings, in all parts of the world, is increasingly becoming an important point of focus for environmental historians. The acceptance that the environmental landscape, is no longer merely the 'wilderness' or 'pristine' landscape, has created an opportunity for cultural historians of the environment to scrutinize the urban environment and interrogate the interactions between physical and social ecologies.⁶⁸ It implies that the politics of pollution, public water, sewage, garbage disposal and a number of related issues all become part of a more comprehensive environmental history that addresses crucial issues in contemporary human culture.⁶⁹ It has led to the:

African environmental history

African environmental history is a fairly young field of investigation. Although there have been works with an environmental leaning already in the 1970s,⁷⁰ the bulk of histories have started appearing in the past decade.⁷¹ Particularly environmental historians of the United States of America,⁷² as well as Britain and Australasia⁷³ have made substantial contributions towards the discipline in Africa. One of the ambitious studies of the era has been McCann's

⁶⁶ SE Freidberg, "Culture, conventions and colonial constructs in south-north horticultural trades", *Journal of Rural Studies*, 19, 2003, pp. 97-109; Also see G Hyden, "The social capital crash in the periphery: an analysis of the current predicament in sub-Saharan Africa", *Journal of Socio-Economics*, 30(2), 2001, pp. 161-163.

⁶⁷ B Luckin, "At the margin: continuing crisis in environmental history", *Endeavour*, 28(3), September 2004, p. 97

⁶⁸ R White, "Hybrid landscapes: the cultural turn in environmental history", Historian, 66(3), Fall 2004, p. 558.

⁶⁹ B Luckin, "At the margin: continuing crisis in environmental history", Endeavour, 28(3), September 2004, p. 97

⁷⁰ RG Klein, "The ecology of early man in Southern Africa", *Science* (New series), 197(4299), 1977.07.08, pp. 115-126; RS Desowitz, "How the wise men brought malaria to Africa", *Natural History*, 85(8), October 1976, pp. 36-40; Particularly in the field of irrigation and soil conservation has featured prominently. See JEG Sutton, "Irrigation and soil-conservation in African history", *Journal of African History*, 25(1), 1984, pp. 25-42; S Nicholson, "The methodology of historical climate reconstruction and its application to Africa" *Journal of African History*, 20(1), 1979, pp. 31-49.

⁷¹ For a definitive overview of the continent's environmental historiography at the end of the twentieth century, see W Beinart, "African history and environmental history" *African Affairs*, 99(395), April 2000, pp. 269-302.

⁷² W Beinart and P Coates, Environment and history. the Taming of nature in the USA and South Africa (Routledge, London, 1995).

⁷³ T Griffiths and L Robbin (eds.), Ecology and empire: environmental history and settler societies (Keele University Press and University of Natal Press, Edinburgh and Pietermarititzburg, 1997).

environmental history of the continent in which primarily the colonial and postcolonial periods are under scrutiny with some good foundational observations on the African environment.⁷⁴ Given the fact that it is generally extremely difficult to locate reliable documentary information, dealing with the continent as a whole, this study has brought about awareness of the task future authors of monographies will face when they conduct research of this nature.

The predominant plots of the environmental historiography on Africa currently fall out in two distinct categories. The first deals with the colonial environment and the impact that colonial and imperial politics asserted on the landscape. The second deals with the more recent past in which the degradation of the landscape is perceived as the consequence of modernisation - particularly the exploitation of natural resources. An outstanding feature of this approach is the manner in which modernity, in the form of development outside Africa, had an impact on traditional society. It interfaces well with what Beinart describes as the 'environmentalism of the poor'.75 In the field of methodology, African environmental history has also been a fertile field for innovation under pristine conditions of investigation. Of particular importance, in this respect, is the recent work of Dahlberg in which local indigenous perceptions, and research perceptions are mirrored.⁷⁶ It is research, by a geographer, that provides historians of the environment with valuable food for thought about research enterprise and the positioning of the researcher's gaze upon past environmental landscapes.

Southern Africa appears to be one of the major areas of focus in the field of environmental history. A first conference on environmental history was held at the University of KwaZulu-Natal (previously the University of Natal) in 1996 where a highly respected group of local and international academics started coordinating their activities.⁷⁷ By 2002 the first publication was out.⁷⁸ There was a follow-up on work that had earlier started in close collaboration with environmental historians in Australasia. Beinart and McGreggor's work, *Social history and African environments*, marks a further development in the

⁷⁴ J McCann, Green land, brown land, black land: an environmental history of Africa, 1800-1990 (Heinemann, Portsmouth, 1999).

⁷⁵ W Beinart, "African history and environmental history", African Affairs, 99(395), April 2000, p. 280.

⁷⁶ AC Dahlberg, "Landscape(s) in transition: an environmental history of a village in North-East Botswana" *Journal of Southern African Studies*, 26(4), December 2000, pp. 759-782.

⁷⁷ J Carruthers, "Environmental history in southern Africa: an overview" S Dovers, R Edgecombe and B Guest (eds.), South Africa's environmental history: cases and comparisons (David Philip, Cape Town, 2002), pp. 3-4.

⁷⁸ S Dovers, R Edgecombe and B Guest, South Africa's environmental history: cases and comparisons

field. It is evident that discourses are becoming more detailed in various fields. Historical themes on environmental tourism, photographic images, land claims, indigenous practices, and coping with conditions of drought, are well represented. ⁷⁹

Climate has featured prominently in African environmental history. It is largely as a result of the worldwide attention to the phenomenon of global warming and the fact that African environments often present researchers with pristine conditions for empirical investigation. One of the difficulties encountered, remains a shortage of written information. A promising trend is the emergence of a class of indigenous African environmental historians, who are now working through the available written colonial documentation to locate sources of information that can be collated with the available oral traditions and histories. There are also concerted efforts, as is the case in the work of Mortimore, to consider with greater empathy and sensitivity lingering climatic trends from the available written sources. The sources of the considering trends from the available written sources.

However, it is not in the field of history, but more particularly that of paleontology, archaeology, anthropology and the issues of development on an underdeveloped continent that some of the major breakthroughs are being made. Terence Ranger, for one, in his work on Zimbabwe's Matopos has converted the environmental discourse into a narrative of how indigenous culture traditionally responded to nature, the effects of colonial interference, from the bottom up, and the contingency of agency, from the local perspective. Et is thick description and strategies of a hermeneutics, based on understanding the dynamics of a foreign culture that challenges the historian's awareness of the transformative dynamics inherent in African society.

In Africa the despondence towards interpreting a natural landscape because of the long period of the human impact, as is the case amongst European environmental historians, has not yet become apparent. The past, as is often the case also with the present, remains an exciting field of exploration where

⁷⁹ W Beinart and J McGreggor (eds.), Social history and African environments (Ohio University Press Cape Town, James Currey, 2003).

⁸⁰ Pikirayi, I, "Environmental data and historical process: historical climate reconstruction and the Mutapa state 1450-1862" W Beinart and J McGreggor (eds.), *Social history and African environments*, pp. 60-71.

⁸¹ M Mortimore, "Long-term change in African drulands: can recent history point towards development pathways?" Oxford Development Studies, 31(40) December 2003, pp. pp. 503-518.

⁸² T Ranger, Voices from the rock: nature, culture and history in the Matopos Hills of Zimbabwe (Oxford, James Currey, 1999).

assumptions frequently are correct, provided the perspective of the observers are focused on similar subjects of investigation.

Disclosures, in archaeology, of the transition from the Stone Age to the Iron Age, the transition from hunting and gathering to pastoralism and agriculture, are only beginning to unfold a new past perspective on the African landscape. 83 The transformation of an oral society in which the narrative of the past is ephemeral, to one in which the written past is recorded in the writings of early foreign explorers and travellers,84 has made it possible for archaeologists⁸⁵ and anthropologists⁸⁶ to emerge as influential interpreters and commentators for contextualising past environmental landscapes. Their disclosures on factors underlying population mobility are being debated.⁸⁷ Many of their works, although not specifically aimed at making a contribution towards environmental history, are in fact works that are of substantial value to contemporary environmental historians. 88 It is, as Smyntyna has observed in respect of pre-historical European environments, that the accent has been on interpreting historical processes.⁸⁹ The evidence of the natural past is frozen in the artefacts of culture and the long-term human response to changes in nature. This has, since the 1980s, given rise to an interesting discussion on the Khoikhoi people of southern Africa's Kalahari. The famous 'Kalahari debate' has seen anthropologists and archaeologists discussing issues of the adjustments the Stone Age San people had to make when they first came into contact with iron working pastoralists and agriculturalists.⁹⁰

It is to a large extent an unexplored environment of cultural dynamics. It is the story of interaction between humans, their traditions, the manner

⁸³ F Marshall and E Hildebrand, "Cattle before crops: the beginnings of food production in Africa" *Journal of World Prehistory*, 16(2), June 2002, pp. 99-143.

⁸⁴ A good example, in the case of South Africa, is VS Forbes, *Pioneer travellers of South Africa: a geographical commentary upon routes, records, observations and opinions of travellers at the Cape 1750-1800* (Cape Town, AA Balkema, 1965).

⁸⁵ TN Huffman, "Archaeological evidence of climatic change during the last 2000 years in Southern Africa", *Quarternary International*, 33, 1996, pp. 53-60.

⁸⁶ See in this respect J Vansina, *Paths in the rainforests: toward a history of political tradition in Equatorial Africa* (James Currey, London, 1990).

⁸⁷ W Beinart, "African history and environmental history", African Affairs, 99(395), April 2000, p. 287.

⁸⁸ AB Smith, "Origins and spread of pastoralism in Africa", Annual Review of Anthropology, 21, 1992, pp. 125-141.

⁸⁹ OV Smyntyna, "The environmental approach to prehistoric studies: concepts and theories", *History and Theory*, 42(4), Theme issue, December 2003, p. 44.

⁹⁰ K Sadr, "Kalahari archaeology and the Bushman debate", Current Anthyropology, 38(1), February 1997, pp. 104-112; A Barnard, Hunters and herders of Southern Africa: a comparative ethnography of the Khoisan peoples (Cambridge University Press, Cambridge, 1992); JS Solway and RB Lee, "Foragers, genuine or spurious?: Situating the Kalahari San in history", Current Anthropology, 31(2), April 1990, pp. 109-146; A Kuper, "The return of the native", Curent Anthropology, 44(3), June 2003, pp. 392-395.

in which they lived in times gone by and speculation on what actually transpired. The task of the historian under circumstances of this nature is to be sensitive to the natural environment and the peoples who have dwelt on the landscape. It is the ambiguous discourse of fragments of history, left in petroglyphs and rock paintings. It is also the story of societies that have wandered in search of finding solutions to the imminent problems of nature, its manipulation for subsistence, growth and decline. 91 Often the response of the historian is one of over-reaction to past discourses. It is the story of the supernatural, beliefs and ingrained traditions of human responses to the challenge of nature. The frontier is more than often the self in contest with a perspective of nature in which it is either a foe or a friend. The situatedness of the observer as commentator and the reader as interpreter then plays an important role. Ultimately we are dealing with hybridized cultures that have a direct linkage with the landscape. The one is influenced by the other. The environment of the San people, as outlined, for example in the 1930s by Schapera⁹² and GW Stow's⁹³ nineteenth-century observations on rock art should then be interpreted as the accomplishments of a past society frozen in time. They functioned in environments where the landscape in itself would undergo change. Historians than have access to traces of past representations and present natural reality. This has to be contemplated against the backdrop of transformations of the twentieth century, in itself an era of significant change. Before the hybridization of the environment is to be understood properly it may be necessary to contextualise these and more recent discourses against a post-constructivist backdrop.⁹⁴ Its study should however not be at the cost of establishing proper foundations in enlightened thought, a critical awareness of truth concepts and an intrinsic respect for human dignity and cultural identity. Ultimately the objective should be to make chrono-spatial observations on the process of change that has taken place in an environment where nature had been accorded its rightful place. At the same time there

⁹² I Schapera, *The Khoisan people of South Africa: Bushmen and Hottentots* ([1930], London, Routledge & Kegan Paul, 1960).

⁹³ GW Stow, The native races of South Africa: a history of the intrusion of the Hottentots and Bantu into the hunting grounds of the Bushmen, the aborigines of the country [Edited by G. McCall Theal] (London, Swann Sonnenschein & Co. Ltd, 1910).

⁹⁴ For an interesting discussion on the matter, see K Asdal, "The problematic nature of nature: the post-constructivist challenge to environmental history", *History and Theory*, Theme issue, 42(4), December 2003, pp. 60-74.

has to be awareness that these observations are the product of perceptions framed within a specific cultural dynamic that is constantly in the process of transformation.

Conclusion

Finally, environmental history, as a result of the substantial progress in the field in the United States of America, Britain and Europe, has undergone a number of sophisticated developments, enabling historians to approach the past from different perspectives. This has been conducive on the whole. One of the interesting approaches is cultural environmental history that seems to offer potential for investigations into the dynamics of cultural change on the landscape. Underlying this discourse is evidence that the sustainability of nature and culture manifest in the realisation that landscapes are hybridized forms of nature. These landscapes are not necessarily, in the case of the northern hemisphere, confined to impressions of 'wilderness, but instead the landscape, urban or rural, where humankind eke out an existence. In the context of Africa, this approach to environmental history opens up major benefits for historians who are interested in making disclosures on pre-colonial landscapes. It is a field of investigation which historians, along with paleontologists, anthropologists and archaeologists can investigate productively in an effort to record new perspectives on environments of the past.