

Production of Nature Re-Visited

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Abstract

This essay reconvenes arguments that the author remembers around the writing, with Neil Smith, of “Geography, Marx, and the Concept of Nature” (which was published in *Antipode* in 1980). The author argues that any subsequent commentaries on the paper miss the essential point of the original debate. Firstly, there was a need to explore why isomorphism reduced spatial models to only capital, leaving out people and environment considerations. Secondly, the arguments also miss that transition in modes of production was critical to an understanding of what the original authors were analysing. These misreadings, taken together, tend to lead to an analysis of the original article that suggests it is part of a cultural geography tradition. At best, if this was an achievement, it was accidental. The original article is part and parcel of a global debate that resources do not exist, they become: the key is to re-establish the original article as economic geography.

Keywords

production of nature, mode of production, nature, “Geography, Marx, and the Concept of Nature”

If life is external to you, you are not alive. If the only culture you have is what you purchase from capitalism as a commodity, you do not have a life. Live and Life. This essay does not wish to abandon the last 40 years' research on the nature of nature but seeks to re-state how the original Production of Nature was driven.

When Neil Smith and myself wrote "Geography, Marx, and the Concept of Nature" (Smith and O'Keefe 1980), referred to in this paper as the Production of Nature, we brought to the table two very different sets of material but also much communality. Neil had produced two term papers on the discussion of nature in the Frankfurt School and a critique of positivism (they would be published as Smith 1979; 1980). Neither, in their original form, rather like his early work on rent theory, could be termed Marxist although the papers were definitely radical. His actual political involvement, at the time, was intensely radical.

Since that time, there have been many commentaries on Smith's work, more on his production of uneven development than on the Production of Nature. Many of the commentaries have been, for me, away in the post-whatever literatures (modernism, structuralism, Marxism...) that seemed to have little to do with the original purpose of the Smith and O'Keefe Production of Nature article. They also seem set in an aggressively Anglo-American battle for theoretical interpretations that were at odds with what we both politically intended to do in the first place. In this piece, I simply want to lay out what I thought we were doing.

I have mentioned Neil's political involvement at the time. My own was a little more prosaic, involving doctoral work on soil erosion in Kenya (O'Keefe 1983) and natural disasters (O'Keefe et al. 1976). The former showed soil erosion caused by the outmigration of male workers so that there was insufficient labour to meet the demand for soil terracing but, at village level, a continuous requirement for cash that meant female labour had to undertake operations on plantation farms precisely when they were needed in their own fields. (There was also a little proof on the making of space

that I would write up some 40 years later [O’Keefe and O’Brien 2013].) The latter simply argued that natural disasters were not natural, they happened to poor people in poor places, an argument with global implications. Both pieces said something about a produced nature.

Beyond my own academic output, there were boisterous political arguments that tackled the people–nature relationship that I had encountered on my travels. In Dar-es-Salaam, Tanzania, under the emerging African socialism of Nyerere, I met medics who argued that “There is no such thing as a tropical disease: they are all diseases of poverty” (O’Keefe 2020) The same group of medics would overturn national medical planning that wished to put resources into urban, curative planning, and instead, under a banner of “Health For All”, would insist on a rural, curative programme to address the majority of the population. In the United Kingdom, Hart (1971) would produce a similar impact with his “Inverse Care Law” (“The availability of good medical care tends to vary inversely with the need for it in the population served”). And in Dar-es-Salaam, there were other academics who would produce new ecological histories of the impact of colonialism.

One was Helge Kjekshus, a historian, who produced mind-blowing work that documented the colonial impact on Tanzania’s social ecology arguing that imperialism produced a new ecology. Together with the on-going specification that there was no such thing as a tropical disease, this changed my view on ecology. It was further strengthened by Meredith Turshen, and others, who were involved in trying to establish a national formulary so that the Tanzanian health service could avoid price gouging for drugs by multilaterals and engage in the exploration of local medical drug opportunity. Critique of nature in history coupled with a new production of nature for a socialist Tanzania.

From Clark University, around *Antipode*, there were strong relationships with “Science for People” and the British Society for Social Responsibility in Science. There was a focus on the ecological impact of the Vietnam War, and on nuclear

power, both for weapons and for electricity generation. There were popular movements around seizing science for people: *Where There Is No Doctor* (Werner with Thuman and Maxwell 1977) and *Our Bodies, Ourselves* (Boston Women's Health Book Collective 1971) proved to be best sellers.

Back in the United Kingdom, Hart (1971) had shown that the availability of good medical or social care tends to be inversely related with population need. The poor, who need the most, get the least. Hart formulated this as the Inverse Care Law. Hart (2001) would later argue that "No market will ever shift corporate investment from where it is most profitable to where it is most needed". Hart himself would be celebrated in working nature as a people's doctor by John Berger in *A Fortunate Man*, a classic reprinted many times (Berger with Mohr 1967).

All of these influences contributed to both of us questioning the people–nature relationship in geography. We realised that most spatial proofs, relying on isomorphism as a principle borrowed from economics, mapped only capital, through rents, over space. But at what scales did science and capitalism work? I was to be helped with that question by the work of a group of physicists and econometricians at the Energy Systems Research Group (ESRG), now the Tellus Institute, in Boston, who were used to scalar problems (see Raskin and Bernow 1991).

Jumping Scales

Jumping scales was one of Smith's contributions to radical geography (for a discussion of Smith's contribution, see Jones et al. 2017). Different scales required different political solutions. And the jumping of scales was quite dialectic, i.e. what was an important measure at one scale did not necessarily transfer to another.

Scale was a problem in nature, well recognised in ecology. For example, in conservation there is a need to determine whether plant conservation is at the level of germ plasm, species or ecosystem. Germ plasm conservation is dependent on temperature and humidity control in specified conditions; species conservation

requires careful monitoring, and specified breeding programmes; ecosystem conservation requires support to total milieus. Scale was also an issue in physics from molecular science, through gravity based explanation to universal considerations where gravity again was not the dominant explanandum. Scale was also an essential argument to the Production of Nature argument.

Marx broadly wrote at three scales namely:

1. Production in General, a universal materialist analysis applicable to all people at all times;
2. Production under Capitalism, a materialist analysis of the Capitalist Mode of Production; and
3. Socio-Economic Formations, specific histories that included the articulation of different modes of production.

Examples, as we interpreted them, specifically linked to broad struggles, illustrate these three scales. Production in General was illustrated by the continuous struggle for gender equity, not least because biological reproduction is frequently substituted for social reproduction in all societies. There was no guarantee that a move from capitalism would generate gender equity. In contrast, ethnic struggles were not an issue for Production in General, where people of colour were required for both production and consumption: black slavery, and other forms of ethnic repression, were consolidated and legalised during the Capitalist Mode of Production. In 1980, Smith and myself were, for example, convinced that international business was willing to reject apartheid because apartheid limited market opportunity for capitalism within and beyond South Africa. Struggles in specific Socio-Economic Formations were, in many ways, less abstract and more detailed. Struggles over specific risks, such as rain-fed agriculture with its attendant floods and droughts, were the examples

we frequently discussed. Perhaps these discussions were an early hint at geography's later attempts to do political ecology case material.

I have already provided evidence of how we were linked to discussion of science as political action. We were both, however, directly involved in direct action with workers and liberation movements. It proved impossible to get up at union and other meetings and present the Production of Nature as if it overthrew the way builders and mechanics did their everyday jobs, denying their treasured ways of measuring their worlds. Yet, it was in such a direction that much of the early academic commentary seemed to go, assuming that we had written a post-modern, post-structural version of the world. We had not.

In fact, Smith was to somewhat disengage with nature. The title of his classic work, *Uneven Development: Nature, Capital, and the Production of Space* (1984), hinted at this disengagement although his actual dissertation (1982) was to use the Production of Nature in its title. He would willingly talk of the production of space, not so of nature. He was, however, to establish a rather wonderful definition of human geography in all that work, namely, from the production of nature to the production of space to the production of place to uneven development.

Our goal with the Production of Nature article was to argue three things:

1. It was difficult to have a dualistic definition of nature;
2. Capitalism operated as if it were stronger than the laws of nature; and
3. Traditional societies have a different concept of nature than that of capitalism.

Dualism in Nature

Firstly, we wished to show that capitalism operated with two different simultaneous approaches to nature. One approach was that nature was internal, including people: the other approach was external, excluding people. In experienced terms, the internal

definition was largely that of humanities and social sciences; the external definition was that of science and technology. People, central to Marx's analysis, were both in and out of capitalism's version of nature. Nature, for us, was not external. This point was critical to Smith's critique of the Frankfurt School. (When Richard Peet considered what we were trying to write, he quipped, "Frankfurters! You never know what is in them!")

We wrote:

... it is not just this "second nature" that is increasingly produced as part of the capitalist mode of production. The "first nature" is also produced. Indeed the "second nature" is no longer produced *out of* the first nature, but rather the first is produced *by* and within the confines of the second ... In a quite concrete sense, this process of production transcends the ideal distinction between a first and a second nature. The form of all nature has been altered by human activity, and today this production is accomplished not for the fulfillment of needs in general but for the fulfillment of one particular "need": profit. (Smith and O'Keefe 1980: 35)

It was obvious to us that traditional approaches to nature husbanded resources, generating production that was with and in nature. At a higher level of abstraction, it was obvious that scientific laws operated at a production in general level although we would willingly accept that these laws were under permanent reconsideration or, in the language of the time, paradigm shifts. Capitalism was, however, unique, requiring two different interpretations of people–nature interaction. That was simply impossible. It did so by folding second nature into first but it was essentially a conjuring trick. It operated with a duality that was to disregard nature.

Without Regard to Nature

Secondly, we wanted to show that capitalism operated without regard to the laws, and therefore limits, of nature. We were used to the commonplace geographic assumptions that, post-World War II, capitalist building enterprises excavated more earth than was shifted in natural mass movement of materials. I summarised the problem, and used that summary as a repeated final examination question, as “The Laws of Capital Accumulation are stronger than the Laws of Thermodynamics”. Quite simply, capitalism beat nature.

The way we saw it was that the laws of nature operated at a Production in General scale, a scale that was universal and trans-historical. Clearly, the laws of capital accumulation operated at a scale specific to a Capitalist Mode of Production. Capitalism jumped scales to define a second nature to beat the laws of nature. This never worked especially when pre-capitalist relationships with nature were, metaphorically and literally, bulldozed by capitalism. Nature was denied.

Transitions in People-Nature Relationships

There was a third reason for our interest in the production of nature. We were interested in transitions between modes of production, particularly between pre-capitalist (traditional) modes of production and capitalism (modern). It was a concern beyond my own fieldwork. In the 1970s, there was an obvious conflict between the Soviet and the Chinese models of development: for the Soviet version, there was a need for a vanguard working class, while for the Chinese, the road could go straight from peasantry to socialism obviating the need for a working class and thus capitalism itself. Was it possible to have revolution without a vanguard working class?

As both of us had strong Trotskyist leanings, it was not surprising that we were interested in this question. Mandel’s (1975) *Late Capitalism* was a core text for our readings long before the literature on globalisation. It strongly suggested that a

new economic geography would reflect the post-World War II features of capitalism, namely multinational corporations, globalised markets including labour, mass consumption and capital flows.

We understood pre-capitalist systems as ones where, under conditions of customary, communal land law, there would be systems that “husbanded” natural resources. Husbandry implied people working within nature’s limits. Much a part of nature. This contrasted strongly with a capitalist mode of production where, under individual, statutory law, people sought to master nature. Capitalism could never do that and there was a widespread radical literature that criticised such assumptions. We saw changes in land ownership throughout the world where capitalism captured the high potential lands, usually at the valley bottom with access to permanent water, and poorer farmers were forced up the hills, deforesting land for more marginal agriculture. Such a situation had exacerbated floods, for example, during Hurricane Fifi in Honduras. Nature was undone.

The Nature of Nature Debates

The Marx that Neil and myself knew was of a gentle persuasion, largely courtesy of Penguin (Pelican) books. Many radicals of our generation grew up with that library that invited a radical perspective on the world. I would later find out that my comrade and co-writer, Neil Middleton, was a commissioning editor at Penguin responsible for, inter alia, the radical psychology library (R.D. Laing), the Latin American library (Andre Gunder Frank), the African library (Ann Seidman) and, although there was no designated Marx library, the first commissioned translation of the *Grundrisse*.¹

There was the non-Marxist, but materialist, *The Making of the English Landscape* (Hoskins 1955) which morphed into *The Making of the English Working Class* (Thompson 1963).² Why? I leave for better explanations why land, in *Traces on the Rhodian Shore* (Glacken 1967), does not give way to class as an explanation of historical progress. Everybody knew the Communist Manifesto and the Little Red

Book but essentially the late 1960s and early 1970s were not time for theory. There was Berger (1972a) for a different Marxist take on art (*Ways of Seeing*), there was different art production where again I would choose Berger's (1972b) novel *G*.³ More than that was the spill over to music, the black consciousness movement, the opposition to technology, particularly nuclear power, and a general radical feeling, but not a shared Marxian theory. The one large failure of radical education was to not address the issues of gender and race: not surprisingly, in working class culture these topics were the brunt of jokes we no longer, fortunately, hear. It was broadly in this milieu that we attempted the Production of Nature.

Although we were to use a Isaiah Bowman quote about establishing bond markets in the Production of Nature, I remember the starting point was Erich Zimmermann's "Resources are not; they become". We were dealing, like all political economists on the right and left, with that triangle of resources – Land, Labour, and Capital. Economic models in geography did not, however, deal with the triangle of resources.

The models started from an assumption of economic activity in geography that was a rejection a rejection of Land and Labour, assuming a *tabula rasa* over which capital could roam. Isomorphism ruled for capital. The rejection of Land and Labour was actually a rejection of people and environment, and the relationship between them. It was also a rejection of a human geography that placed those relationships to the fore. What we wanted to construct was a political economy of the environment (Taylor and O'Keefe 2020).

I would later comment:

Imagine a meeting of the geographers' club, Masters of Capitalist Cartography (MCC). MCC members would have a special tie depicting a flat earth: women would only be allowed membership if they had demonstrated ability to make cucumber sandwiches: meetings would be held in the short room. Each

meeting would focus on placing features of capitalism on an unmarked, unfettered, uncluttered flat map. The primary features of capitalism were not physical, not variations in geology or climatology, because capitalism produced a uniform nature. The primary features were the mountains of capital accumulation and the rivers of capital circulation. Empty spaces charted where future geographies of accumulation and dispossession might be built. MCC offered an annual prize for the best map of uneven development. Isomorphism was necessary for Capital's Imagination. To produce isomorphism both people and nature had to be removed from the landscape leaving an empty space to isomorphism. Not surprisingly, isomorphism died, and the MCC disappeared. (O'Keefe 2020)

Life, of course, is not as simple as theory even if that theory emphasised that nature was capital's accumulation strategy. I would later find myself under intense criticism from Smith, particularly around the time of the United Nations Framework Convention on Climate Change Conference of Parties in Copenhagen, in 2009 (UNFCCC COP 15). He had recently published his opposition to all commodification of environmental free goods, including the atmosphere (Smith 2006). I was drafting, in a professional capacity for the African group, and by implication G7, a position paper that indicated that, in exchange for greater concessions and a bigger pool of money available to developing countries, they would sign for increased targets on carbon emission control. Smith regarded the atmosphere as humanity's last birth right: it could not be commodified or sold. I argued it already was, not least in air pollution control in the United States. I also argued that it was the best deal available, on the table, for the global poor. We agreed to disagree. COP 15, Copenhagen, failed. We were both to be right and wrong. It was not to be a revolutionary moment.

What would we argue for readers new to the Production of Nature? Just before his death, I sat through a presentation by Smith. In the lecture hall, at Clark

University, I scribbled in a manuscript where I thought we should go. I believe it exists in the Smith archive that was collated by Don Mitchell. I think, I argued we would say much the same. That same would be:

1. Abandon Dualism in Nature.
2. Criticise all capitalist acts of accumulation that disregard Nature.
3. Analyse People-Nature changes in all livelihood transitions.

I have too quickly dismissed other major contributions to the Production of Nature debate. Of primary importance are the numerous contributions of Noel Castree who, of late, has developed a kind of Platonic dialogue with Smith over the nature of nature, particularly with reference to geophysical sciences (see, for example, Castree 2017). Both Castree and Smith respect the integrity of science while questioning its purpose: both respect scientists without being afraid to question the application of the results. Another major contributor is Mitchell who, in his Neil Smith Lecture⁴ entitled “The Tight Dialectic: The Anthropocene and the Capitalist Production of Nature” stated, “We have no choice but to produce nature”. And then he added the revolutionary challenge – the only question is *how* we shall do it. Readers will notice I have not made specific references to text and that is because the Production of Nature debate is quintessentially *Antipode’s* debate. *Antipode* is hearth and home to cherished debates about people’s roles dialectically woven with nature. *Antipode* gives a clothing to the world.

What this simply means is live a life where nature is not external, a life that opposes nature as a major site of accumulation and dispossession, a life where nature is liberation. Live a life.

Endnotes

1. His obituary is available at <https://www.theguardian.com/books/2016/jan/13/neil-middleton>

2. And, as a question for the geography quiz: “What rural landscapes did Blaut, Harvey, Soja, and Peet explore for their doctorates? There is one point for each answer but deduct five points if a city landscape is discussed.”

The idea that champions of a spatial geography should all do pre-capitalist agriculture is a little discombobulating.

3. I think a solid Marxist cultural course can be built on Berger’s work. See his *A Fortunate Man* (Berger with Mohr 1967), *A Seventh Man* (Berger with Mohr 1975), and the “Into Their Labors” trilogy (Berger 1991): *Pig Earth* (1979), *Once in Europa* (1987), *Lilac and Flag* (1990).

I wish I could write like that. See, for a sense of his importance to struggle, <https://www.theguardian.com/books/2016/oct/30/john-berger-at-90-interview-storyteller> (see also <https://www.theguardian.com/books/2017/jan/02/john-berger-obituary>).

4. Presented at the University of St Andrews, and subsequently published in *Antipode* (Millar and Mitchell 2017).

References

- Berger J (1972a) *Ways of Seeing*. London: Penguin
- Berger J (1972b) *G*. London: Bloomsbury
- Berger J (1991) *Into Their Labours*. New York: Pantheon Books
- Berger J with Mohr J (1967) *A Fortunate Man*. London: Allen Lane
- Berger J with Mohr J (1975) *A Seventh Man*. London: Pelican
- Boston Women's Health Book Collective (1971) *Our Bodies, Ourselves*. Somerville:
New England Free Press
- Castree N (2017) Unfree radicals: Geoscientists, the Anthropocene, and Left
politics. *Antipode* 49(s1):52-74
- Glacken C J (1967) *Traces on the Rhodian Shore*. Berkeley: University of California
Press
- Hart J T (1971) The Inverse Care Law. *The Lancet* 297(7696):405-412
- Hart J T (2001) Why are doctors so unhappy? Unhappiness will be defeated
when doctors accept full social responsibility *The BMJ* 2 June
- Hoskins W G (1955) *The Making of the English Landscape*. London: Hodder and
Stoughton
- Jones J P, Leitner H, Marston S A and Sheppard E (2017) Neil Smith's scale.
Antipode 49(s1):138-152
- Mandel E (1975) *Late Capitalism*. London: New Left Books
- Millar S W S and Mitchell D (2017) The tight dialectic: The Anthropocene and the
capitalist production of nature. *Antipode* 49(s1):75-93
- O'Keefe P (1983) The causes, consequences, and remedies of soil erosion in Kenya.
Ambio 12(6):302-305
- O'Keefe P (2020) "Dreaming Isomorphism."

- O’Keefe P and O’Brien G (2013) *Managing Adaptation to Climate Risk: Beyond Fragmented Responses*. New York: Routledge
- O’Keefe P, Westgate K and Wisner B (1976) Taking the naturalness out of natural disasters. *Nature* 260(5552):566-567
- Raskin P D and Bernow S S (1991) Ecology and Marxism: Are green and red complementary? *Rethinking Marxism* 4(1):87-103
- Smith N (1979) Geography, science, and post-positivist modes of explanation. *Progress in Human Geography* 3(3):356-383
- Smith N (1980) Symptomatic silence in Althusser: The concept of nature and unity of science. *Science and Society* 44(1):58-81
- Smith N (1982) “Uneven Development: The Production of Nature Under Capitalism.” Unpublished PhD thesis, Johns Hopkins University
- Smith N (1984) *Uneven Development: Nature, Capital, and the Production of Space*. Oxford. Basil Blackwell
- Smith N (2006) Nature as accumulation strategy. In L Panitch and C Leys (eds) *Socialist Register 2007: Coming to Terms with Nature* (pp16-36). London: Merlin
- Smith N and O’Keefe P (1980) Geography, Marx, and the concept of nature. *Antipode* 12(2):30-39
- Taylor P J and O’Keefe P (2020) “In Praise of Geography, Field of Study for Climate Emergency.”
- Thompson E P (1963) *The Making of the English Working Class*. London: Victor Gollancz
- Werner D with Thuman C and Maxwell J (1977) *Where There Is No Doctor: A Village Health Care Handbook*. Berkeley: Hesperian Health Guides