

THE FOREST FRONTIER—SETTLEMENT AND CHANGE IN BRAZILIAN RORAIMA edited by Peter A. Furley, London and New York: Routledge, 1994.

This book examines the issues of environment and development in Roraima, the northernmost Brazilian Amazon state. A commission of the Sociedade de Geografia do Rio de Janeiro suggested as early as 1933 to establish 10 federal territories in frontier regions of Brazil. A decade later this idea was implemented by the government, who considered frontier-land colonization by landless poor as a safety valve for social unrest. Thus the federal territory of Rio Branco was created out of the state of Amazona in 1943. The name of the former was officially changed to Roraima in 1962. Access to Roraima was only possible by river or air until 1978, when the first road link was opened. The total population of Indians and settlers in 1991 numbered almost 216,000, more than half of them, 118,000, living in the capital Boa Vista.

Roraima is relatively untouched, but also here the forest frontier is moving, as about 4 percent of woodland has been lost to clearance. The state covers an area of 230,000 km², stretching from just south of the Equator to over 5° North. Fieldwork was carried out by a research team in the period 1986 to 1992. The resulting book represents a regional geography of Roraima aimed: (1) to outline the environmental and socio-economic resource potential; (2) to advise in the planning process through land development assessments; (3) to highlight selected parts of this process in northern Roraima, as part of the Maraca Rain Forest Project.

The first chapter by Furley and Mougeot—*Perspectives*—introduces the reader into the geography, natural resources, settlement and resource development of the state, which has international boundaries with Venezuela and Guyana. Roraima is characterized by forest, poor soils, usually good water supplies and rich but scattered mineral resources, including gold, diamonds and tin. Average annual rainfall ranges from over 2,000 mm in the west to 1,500 mm. in the east. The Rio Branco river drains most of the state, flowing at its southern border into the Rio Negro, which further downstream joins the Amazon. Roraima has only one major road, from Venezuela in the north, via the capital Boa Vista, towards the Rio Negro in the south. The dominating evergreen forest becomes partly deciduous and broken towards the north, where savannas exist. The mineral resources are generally located on indigenous tribal lands. Traditional colonial settlement was based on extensive grazing on natural grasslands as the most reliable way of raising and protecting capital.

The second chapter, 'Indians, Cattle and Settlers' by Hemming, begins its scope from about 1720, as the first Europeans enter the region of Roraima. The first cattle were transported during the 1780s via the Rio Branco to the natural grasslands upstream. By the late 1980s the official estimate listed 362,000 head of cattle. The Indian tribes could to some extent decide whether to retreat from the colonizers or to integrate and co-exist with them. Some settlers violently attacked the Indians, but most ranchers simply exploited them. Imported diseases, such as measles, were a more serious threat to the indigenous population. The Brazilian government es-

tablished in 1910 the Indian Protection Service to assist and help the tribal peoples. Hemming states (p. 46): "Indian culture and survival is closely linked to land. The plains Indians saw their territories ruthlessly invaded and usurped by cattlemen and farmers. They themselves had little understanding of legal ownership of land, which they regard as common to all mankind, and were powerless to resist. During the past decade, their constitutional right to their land has finally been recognized."

Nevertheless, the largest surviving tribe of forest Indians in South America, the Yanomami, became threatened by mineral prospectors, *garimpeiros*. A massive gold-rush from 1987–90 brought tens of thousands of prospectors by air into the prohibited Yanomami territory, landing on simple airstrips. The forest Indians suffered from malnutrition, because the air traffic of the *garimpeiros* hampered hunting of game. The rivers became poisoned by mercury used in the gold-panning process. The Brazilian government attempted to evict the prospectors, but this proved difficult.

The third chapter by Dargie and Furley, 'Monitoring Change in Land Use and the Environment', demonstrates the usefulness of remote sensing and Geographical Information Systems (GIS) to monitor environmental change in such an inaccessible region.

Chapter Four by Eden and McGregor, 'Deforestation and the Environment', is concerned with the environmental impact of contemporary deforestation in northern Roraima. Overgrazing remains an attractive economic option, as cleared land, degraded or not, can be readily sold at a profit, while the proceeds may thus be reinvested in further clearance of forest land. Initial pasture quality of cleared land is favorable. However, the pasture quality quickly declines, as low levels of available phosphorous affect the productivity negatively.

Chapter Five by Mougeot and Lena, 'Forest Clearance and Agricultural Strategies in Northern Roraima', is based on a detailed survey in three localities to the northwest of Boa Vista. About 50 farmers were interviewed twice, during the dry mid-season and during the following rainy season. The study compared production systems and household level decision-making in physically and economically distinct localities. The results reveal that forest clearance is a crucial element in economic survival strategies, which are supplemented by hunting, fishing, gathering and gold-panning, besides agro-pastoralism. Legally it is only permitted to clear 50 percent of the forest cover on an estate. Agricultural crops in these localities usually cannot compete with ranching. Crop production, including coffee, is often carried out as a means of going into ranching. The farmers realize that resource deterioration accompanies forest clearance. A number of perennial small-stream flows, normally sustained by forests, have become intermittent in the lifetime of some informants, due to forest clearance.

Chapter Six by Barrow and Paterson, 'Agricultural Diversification' focuses on the contribution of rice and horticultural producers in the area around the capital Boa Vista. About 80 percent of the farming enterprises range in size from 1–20 ha. Horticultural production in the Boa Vista area is continuously expanding, often using irrigation and fertilizers. Post-harvest handling is generally underdeveloped,

due to inadequate packing, unreliable and rough transport on a poor road network, as well as bad storing facilities. Government extension services began since 1972, while at least five experimental field stations have been established. Further development such as improvement of the poor soils with agro-chemical inputs and reliable transport depend on a better road system and flexible credit opportunities.

Irrigated rice production by mechanized large-scale growers on so-called *va'rzea* lands has grown considerably, supplying 30 percent of the local demand by 1986. The *va'rzea* soils, along the Rio Branco and its tributaries, are flooded between April and late September. Labor requirements vary between 15 and 30 man-days per hectare per year. Other forms of rice production also exist, such as irrigated rice on native grasslands, rain-fed *sequeiro* rice by mechanized large-scale growers and the latter combination with pasture improvement.

The final chapter by MacMillan and Furley deals with Land-Use Pressures and Resource Exploitation in the 1990s. Roraima received in 1990 the status of a federal state within Brazil, which brought about an immediate change in the power base, away from the large-scale land holders and the local elite. Government policy is the driving force in frontier development of Roraima in the interests of national security. However, it is unlikely that Roraima will experience the same levels of deforestation as other parts of the Amazon region. Roraima is geographically more isolated from principal Brazilian markets, its timber sources are comparatively poor by Amazonian standards, while the tax incentives for ranching were withdrawn in the early 1980s. The potential of environmental degradation in the future can be largely prevented by Government planning through the demarcation of the remaining Indian reserves and a change in current legislation that recognizes cleared forest as a claim to land holding.

Land development is primarily motivated by a natural but ill-considered desire to achieve maximum economic growth, sustained on the basis of rapid exploitation of natural resources. The capital generated from resource exploitation is very unevenly distributed and a large proportion is removed from the state and invested elsewhere. Development projects are rarely tailored for the majority of the people, who are smallholders. The perceived alternative to natural resource exploitation is subsidized urban growth, but Roraima lacks an industrial or manufacturing sector. Development of this sector could paradoxically enable the preservation of forest, though the authors do not develop this important alternative strategy for development. They close the book with the notion that "For the foreseeable future, exploitation of land resources is likely to remain the predominant economic force".

The book gives a detailed picture of the processes of development in a frontier state in the Brazilian Amazon region. Much environmental attention from the western world is focused on the Amazon, putting pressure on federal and state governments in Brazil to preserve the forests. The fact that large areas of forest disappeared in the development of Europe and the United States is often conveniently overlooked. Paradoxically, the industrial revolution and introduction of chemical fertilizers came too late for the latter regions to save their forests on a larger scale. Providing alter-

native economic growth to the Amazon region based on clean industry and manufacturing may remove the need to cut more and more forest for mere economic survival.

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BENJAMIN'S CROSSING by Jay Parini, Boston: University Press of New England, 1998.

Walter Benjamin argued that the entire life of authors, and the effects of their writings, should stand alongside the history of their composition. In other words, their fate, their reception by their contemporaries and society, must be known, in order to understand the author and their work (Eiland and Smith, 1999). It is not common that an academic journal would review a novel. However, Benjamin's Crossing is a novel with important implications to many areas of scholarly and intellectual inquiry. It portrays the life and tragic death of Walter Benjamin (1892–1940), who is certainly considered among the most important cultural and literary critiques and philosophers of this century. His personal life and writings, encapsulates and was affected directly by some of the most consequential challenges and conflicts that threatened the basis of civilization and decency during this century. He has become a cult figure within the academy during the last several decades, yet most scholars know little about his life and pay scant attention to it. In fact, one could argue that without knowing of Benjamin's experience, it is not possible to truly understand his contribution.

Benjamin's Crossing is a moving novel set against the backdrop of the encroaching Holocaust. Jay Parini is able to recreate much of Benjamin's life, from his youth in Berlin, to his final hours in a Pyrenees village in Spain after fleeing the Nazi invasion of Paris. Parini convincingly conveys these important historical moments, and in doing so, is able to create a riveting story. It is evident that Parini carried out intensive research in order to recount this novel. It depicts Benjamin's numerous attempts to flee Nazi occupied Paris and France, culminating in his frantic escape over the Pyrenees Mountains into Spain. *Benjamin's Crossing* begins with Gershom Scholem at Walter Benjamin's unmarked grave sight in a small Spanish town, ten years after his disappearance. The story then moves to 1940 Paris, where Benjamin is preparing to flee from Nazis, after having spent an entire decade working on his important manuscript. Parini is able to portray Benjamin's life in realistic detail, and also characterizes the general ethos of an era, vanished forever.

Parini concentrates on several episodes in Benjamin's life, including the period just before and during WWI, Benjamin's visit to Russia, his difficult life in Paris during the late 1930s, and his flight to Spain. Parini uses several narrators, including his lifelong friend, the eminent scholar of Jewish mysticism Gershom Scholem, and his lover Asja Lacis, to capture both Benjamin's brilliance and his tormented personality. In the novel Benjamin's character is largely made up of the bohemian