

# **Underdeveloping the Amazon**

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Extraction, Unequal Exchange,  
and the Failure of the Modern State

**Stephen G. Bunker**

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*To the Great Cayman*

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almost managed to convince me that the machines were not really malevolent.

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Chacon, New Mexico  
*November 1983*

## *Glossary of Acronyms and Abbreviations*

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- BASA** Banco da Amazônia, S.A. (Bank of the Amazon).
- BNCC** Banco Nacional de Crédito Cooperativo (National Bank for Cooperative Credit) makes loans to cooperative societies both for their own use and for secondary loans to members.
- CFP** Comissão de Financiamento de Produção (Commission for Financing Production), an "autarquia" under the Ministry of Agriculture, determines the minimum prices to be paid for particular crops and controls the funding for this program.
- CIBRAZEM** Companhia Brasileira de Armazenagem (Brazilian Warehouse Company), a public company subordinate to the Ministry of Agriculture, maintains a network of warehouses in areas where those provided by large enterprise are insufficient.
- CIRA** Cooperativa Integrada de Reforma Agrária (Integrated Cooperative for Agrarian Reform).
- DNER** Departamento Nacional de Estradas e Rodovias (The National Department of Roads and Highways).
- EMATER** Empresa de Assistência Técnica e Extensão Rural (Technical Assistance and Rural Extension Enterprise) is the state agency of a national public company, EMBRATER; its projects include technical assistance for agriculture, agricultural cooperatives, and the preparation of projects for crop loans.
- FUNAI** Fundação Nacional do Índio (The National Indian Foundation) has tutelary powers over all Indian groups and controls their reservations.
- IBDF** Instituto Brasileiro de Desenvolvimento Florestal (The Brazilian Institute of Forest Development) administers forest reserves and is supposed to supervise all forest clearance in areas of federal jurisdiction.
- INCRA** Instituto Nacional de Colonização e Reforma Agrária (National Institute for Colonization and Agrarian Reform) is the normative agency for surveying and titling land and for the registration and supervision of all agricultural cooperatives and for federal projects of colonization.

- PDA Plano de Desenvolvimento da Amazônia (Plan for the Development of Amazônia) I (1972) and II (1975).
- PF Projeto Fundiário (Land Project), the offices responsible for surveying and selling lands under INCRA jurisdiction.
- PIC Projeto Integrado de Colonização (Integrated Colonization Project).
- PIN Programa de Integração Nacional (National Program for Integration) included the highway building programs in the Amazon 1970-74.
- POLAMAZONIA A program aimed at developing sixteen "growth poles" in the Amazon. It replaced PIN.
- RADAM Radar na Amazônia (Radar in Amazônia).
- SAGRI The State's Secretaria de Agricultura (Secretariat of Agriculture) is involved in extension work and in colonization of state lands.
- SUDAM Superintendência do Desenvolvimento da Amazônia (Superintendency for the Development of Amazonia), the major planning, coordinating, and executing agency for the Amazon, provides limited resources for various of these programs. It is funded in turn by a variety of other federal projects. Its major concerns are with fiscal incentives for large industrial, mining, and agricultural enterprises.

## *Glossary of Words and Phrases in Portuguese Used in the Text*

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- Aviador.** Literally, supplier. In the Amazon, an intermediary who supplies rural clients with basic production and subsistence goods at the beginning of a season and against eventual payment in kind.
- Aviamento.** The system of exchange in which the aviador participates, typically involving multiple intermediaries and long chains of debt.
- Caboclo.** General term for members of the rural lower class in the Amazon. They typically combine horticulture, extraction, hunting, and fishing in varying proportions.
- Cartório de registro.** Land registry office that operates at the level of the município. Offices are owned by individuals who are licensed by the local states and who charge for each title registry.
- Convênio.** A contractual arrangement between two or more public agencies, usually involving the transfer of funds to carry out particular programs.
- Discriminatória.** A procedure that INCRA was required to follow to determine existing claims to and uses of land prior to surveying or deeding any area under its control.
- Indústria da posse.** The practice of occupying land known to belong to a large enterprise or to a public agency to claim indemnification for improvements on the land.
- Licença de ocupação.** An INCRA document that authorized and protected occupancy of land while a definitive title was pending.
- Latifúndio.** A large tract of privately owned land, often including large unused areas.
- Minifúndio.** A small tract of land used for agriculture but too small to sustain the family that owns it.
- Minifundização.** Progressive fragmentation of small land holdings through inheritance and sale.
- Município.** Subunits of the local states. In the Amazon most município seats were cities along the river banks, but the areas of each município extended back through miles of sparsely settled terra firme.

**Seringal.** Rubber-producing area owned, leased, or appropriated by a single individual; refers to both wild and cultivated stands of rubber trees.

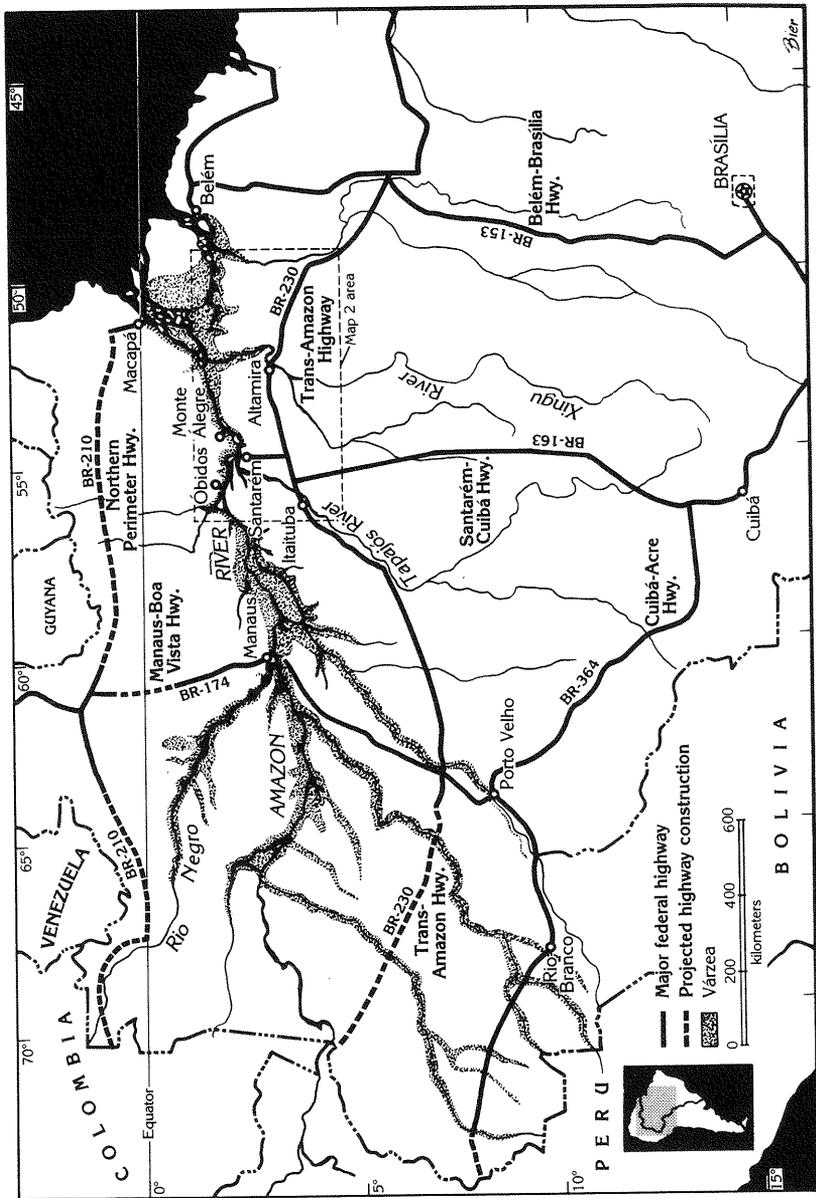
**Seringalista.** Owner, lessee, or appropriator of a seringal.

**Terra firme.** Lowland forest not subject to annual flooding, characterized by rapid nutrient cycles which draw primarily on plant litter rather than on the generally poor soils.

**Várzea.** Flood plain characterized by highly fertile and friable soils renewed by annual flooding and sediment deposits.

## *Underdeveloping the Amazon*

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**Map 1. AMAZÔNIA.**

# Introduction

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Three months after arriving in Belém, Pará, the Amazon's largest and easternmost city, I took a trip around the entire Brazilian portion of that enormous river basin. What I saw on that trip struck me then as strange and wonderful. Seven years later, after writing most of this book about the ways that 350 years of different extractive economies had briefly enriched various dominant classes but progressively impoverished the entire region and about the incapacities of the modern national state to halt the disruption of human community and the natural environment there, I realized how much of what I saw in those eight days had foreshadowed what I was to learn about the region.

I had been sent with a Brazilian colleague, Paulo Cal, to interview candidates for the graduate program in regional planning in the university which had hired me. We flew north to Macapá directly across the Amazon's delta from Belém. Several great rivers converge here around the island of Marajó, but knowing this did not diminish the impact of having to fly for fifty minutes to get from one side of the delta to the other.

After completing our work in Macapá, we were driven twenty minutes to the Port of Santana, past the residential compounds of ICOMI, a company which had been mining and exporting manganese in Amapá Territory for almost twenty years. The gleaming suburban homogeneity of the solidly maintained and obviously comfortable company town contrasted sharply with the hodgepodge of weather-beaten structures and dusty roads of Macapá. That Macapá is the territorial capital made the contrast even more striking. The single-purpose rail line which carried the ore from the inland mine to the port, the enormous machinery which loaded it, the great black slag heap which had built up over the years, and the fields and barns which the company had made for its cattle ranch all formed a strange and incongruous break in the tropical landscape. ICOMI's activities, however, were the sole basis for Amapá's rapid population growth and relative

prosperity. I heard several people say that the manganese would be finished soon, and the territory left with nothing except the hole.

From Macapá, we flew to Manaus in the state of Amazonas, much of the way along the main river and over the huge flood plains it forms. From the air I could see the multiple channels and levees which the river had formed in its meanders, discernible now in long lines of vegetation in the seasonal lakes. I watched the long stretches where clear water rivers, which drain the nutrient-poor soils to the south, and the black water rivers, which drain the even poorer soils to the north, flow into the brown waters with the heavier loads of Andean soils. Different colors of water run side by side for miles before finally mingling.

Though the city of Belém is both larger and politically more prominent, Manaus's ultramodern airport was far larger and much more efficient at handling passengers and baggage. Manaus had been declared a duty free zone eighteen years before in an attempt to stimulate industry and foreign investment there; Brazilian tourists flocked there to buy imported goods. The recently completed airport was but one of the ways the city was accommodating, and profiting from, the influx of travelers. The sophisticated design and expensive construction had not been sufficient, however, to prevent a large bull from wandering onto the runway and doing extensive damage to a jet which was taxiing in after a flight from Rio de Janeiro just before we arrived.

As in Macapá most of the people we saw, and most of the people we interviewed, worked in various government agencies for social or economic development. We conducted some of the interviews in the huge concrete headquarters of SUFRAMA, the Superintendency for the Free Zone of Manaus. I was told that the costs of this structure, as of the many others which the free trade boom had created, had been greatly increased by the need to import all cement from Belém, a thousand miles downriver. Various entrepreneurs were awaiting approval of their proposals to build a cement factory with government subsidies and tax credits.

Leaving Manaus was more difficult than arriving there. We had to go through a reverse customs search, designed to enforce the limits on the value of duty free goods which could be taken into the rest of Brazil. We finally set off for Pôrto Velho, this time in a prop-jet imported from Japan. I was told that the airline of the state of São Paulo had bought a number of these planes for their run between the two major Brazilian cities, but that they were not capable of the steep banking necessary to avoid the mountains behind Rio de Janeiro. After two had sideslipped into the Bay of Guanabara, the rest of the fleet was consigned to the much flatter Amazon.

Only one of the two propellers was still turning as we arrived in Pôrto Velho's small airport. We waited there for three hours while a mechanic was flown in from Manaus and then continued on to Guajará Mirim, a small town on the Bolivian border. Here we landed on the town's main road, kicking up a wall of mud high enough to obscure the houses from view. We waited again while the mechanic dismantled the propeller housings to clean out the mud and grass which the jets had sucked in. I asked why the airline didn't use a simple propeller plane for landing in these conditions. I was told that such primitive craft were not appropriate for regular runs by a major airline between the capital cities of Brazilian states and territories.

We finally flew on to Rio Branco, the capital of the new state of Acre. Acre was seized from the Bolivians by Brazilian immigrants at the height of the rubber boom in the last century and was connected to the rest of Brazil by road only in the 1970s. It was now suffering a second invasion, this time by wealthy entrepreneurs from the south of Brazil who were buying up or simply laying claim to the old rubber estates and turning them into cattle pastures. The small holders who tapped rubber for a cash supplement to their subsistence activities were resisting expulsion more tenaciously than were peasants in other areas of the Amazon, and the rural violence which I had already heard about around Belém was much more palpable in Acre.

We had flown thousands of miles over water and forest, with only the sparsest signs of human habitation between the major towns. At the farthest point in our journey, Rio Branco, we were 3,000 miles from Belém and the Amazon's delta, and only a few hundred from the Andes; but we were still in lowland jungle, only 600 feet above sea level. Acre's old river connections to Belém still weighed more heavily than the newer and shorter roads to the south. Discussions of politics centered on the nationally controlled regional development agencies headquartered in Belém and on the struggles between Pará's major political figures. Rio Branco sports fans were divided by their allegiances to different Belém soccer clubs. Many of the bureaucrats we met had been educated in Belém.

The predominance of government officials as fellow travelers, acquaintances, and graduate program candidates continued through our stop in Mato Grosso. I was fortunate to have Paulo as a traveling companion. He generously included me in meetings with his many friends and acquaintances. Their conversations gave me my first understanding of how dominant the public agencies were in the region's politics and of how closely acquainted their common origins and their extensive travel made the public agents. I also started to get some feeling for the ties of cooperation and hostility between the agencies

of the increasingly powerful national state and the agencies of the increasingly dependent local states. I knew enough by the time we returned to Belém to recognize the acronyms of the government agencies which occupied so many of the buildings we passed on the way in from the airport, and I understood more of what SUDAM, the Superintendency for the Development of the Amazon, which occupied the largest and newest of the buildings we passed, was supposed to be accomplishing.

The predominance of government activities and expenditures and their extravagance in proportion to their results were first conveyed to me by our own very expensive trip. Several of the prospective candidates had not known we were coming, and several other candidates withdrew because they had not been able to arrange for scholarships to complement the full government salary they hoped to receive while studying. Of all the candidates we interviewed, two were finally admitted to the program. Most of the remaining students came from Belém, trained as undergraduates in its older, better university.

Manaus and the Japanese prop-jet meld into a single symbol as I remember them. Both represent incongruous and impractical modernities pushed into the Amazon by a distant, rapidly industrializing society in the central and southern regions of Brazil. Manaus, a decaying city which had blossomed during the ill-fated rubber boom, was intended by government fiat to become an industrial city. Tariff and tax holidays, however, could not abolish its dependence on air and river travel and its distance from other manufacturing centers. Its prosperity depended completely on the artificial effects of fiscal regulation. Its costs were magnified by the need to import even basic building materials and by the fuel spent in carrying Brazilian consumers so far into the jungle. The airplane, a sophisticated but badly designed instrument, totally inappropriate for flying in the jungle, was passed on to the Amazon by the same dominant industrial society which ran the airlines. Modern and very expensive, neither the airplane nor the Manaus free trade zone functioned very well. Both were reflexes of Brazil's commercial and technological dependence on foreign capital; the airplane, the industries, and the consumer goods were all imported from more industrialized countries, and all of them contributed to Brazil's rapidly growing foreign debt. The ephemeral prosperity which ICOMI brought to Amapá and the violence with which entrepreneurs from the south turned land which supported people in Acre into land which supported cattle were only symptoms of the ways that government support for large-scale and quickly profitable enterprise was making large portions of the Amazon uninhabitable.

## Between Field and City

I took the job in Belém in 1975, after teaching and doing research on rural development programs in East Africa and Central America. In Uganda I had studied the interplay between the modern bureaucratic organizations of the state, a large coffee-marketing cooperative, and the lineage and political organizations of its members. As I analyzed those data, I increasingly felt that I would not really understand rural development politics in Uganda until I could compare them with rural development programs in a country where land tenure and the participation in export economies were far less evenly distributed. In Guatemala I headed a group research project on a variety of small holders' cooperatives promoted by the national government. I went on to Brazil three years later with some notions of how access to resources and degree of participation in national export economies affected the ability of peasants to bargain with the state in two small, poor, primarily agrarian countries. I was eager to look at some of the same processes in a larger, wealthier, and more industrial country.

The Núcleo de Altos Estudos Amazônicos (NAEA) of the Federal University of Pará provided an excellent base for this. NAEA's multidisciplinary faculty combined academic research with development planning and administration in government agencies. Visiting faculty with similar experience came from other parts of Brazil. Courses were geared to the needs of its primary clientele, students on paid leave from administrative and planning jobs in development agencies. Many of the faculty were also engaged in research and consulting commissioned by the various agencies of state and national governments. Teaching schedules were adjusted as much as possible to accommodate the requirements of their research.

NAEA's coordinator, José Marcelino Monteiro da Costa, gave me time and encouragement to develop a proposal to study a program of small farm cooperatives being organized by various agencies. This research was eventually funded by the Federal University, by IPEA/INPES in Rio de Janeiro, and by NAEA itself. In both the elaboration of the proposal and the early stages of the research, I was helped enormously by NAEA students who had worked in the agencies involved, by other employees of the various development agencies, and especially by the two cooperative technicians who had been recruited from the south of Brazil to coordinate the program. Access to their files and permission to accompany them in planning meetings and on field trips gave me information and contacts which were invaluable in later field work.

My original proposal had focused on the relations between modern bureaucratic organizations and the rural communities with which they