Index

Page numbers for photographs and figures are in italics. Page numbers for tables are in bold type.

Xavánte, 29-32, 30 age sets: in Central Brazil, 27; hö (bachelors' hut), 29, 31-32, 277n. 5; in log racing, 35; Xavánte system of, 29-32, 30, 123-24, 277nn. 4-5 agriculture: in Central Brazil, 24, 27, 169-71; prehistoric, 17. See also corn; crops; farming; plant domestication in Central Brazil; rice; Xavánte Rice Project Água Boa, town, 25, 196 Akroá, 26, 55-57, 59-60, 62; Akroá-Assu, 26; Akroá-Mirim, 26, 28, 66. See also Central Jê Akwe, 26. See also Central Jê aldeias (mission villages for Indians), 51-52, 55-57, 56, 59-66, 61, 68-69, 93; for Xavánte, 62-66, 278-79nn. 8-10. See also Carretão; Duro missions; São José de Mossâmedes; secular missions Alvard, M., 165 Amazon River Basin, 17, 27, 276n. 1 anemia, 233-35, 234, 287-88nn. 18 - 20anthropology: historical perspective in, 11-12, 276nn. 6-7; and study of Amazonian peoples, 8-12; and study of change, 8 275n. 5 anthropometry, 96-99, 235-38, baskets, 44; as cradles, 156, 259, 288nn. 21-22; body mass index 286n. 10; materials for, 156

age grades: in Central Brazil, 27;

(BMI), 251-55, 251, 253, 255, 289nn. 4-5; stunting, 236-38, 236, 237; wasting, 236–38, 236, 237. See also morphology; nutritional status; obesity Apinayé, 26 Apöwe, Xavante chief, 42, 75, 79-81, 84, 128, 143-44, 149. See also lead-Araguaia River, 13, 17, 19, 28-29, 63, 68-70, 279n. 13. See also inland waterway, Tocantins-Araguaia arbovirus infections, 230-31, 287n. 17 Associação dos Xavantes de Pimentel Barbosa, 25, 87, 89, 91 attacks on Xavánte villages, 58-59, 73. See also raiding; warfare Aweikoma. See Xokléng Bananal Island, 57, 60 bandeira (frontier military or exploratory expedition), 277-78n. 6; to attack Xavánte, 57-59; March to the West as, 73-74; to pacify Xavánte, 61-63 Barbosa, Genésio Pimentel, 74 Barra do Garças, town, 25, 175, 196, 198, 200 Barreto, Maurício L., 248–50 Baruzzi, Roberto G., 3, 7, 264-65,

birds, 161; used for feathers, 161; used for food, 161. See also hunting birth: ascertaining date of, 123–24; women's age at first, 124. See also Etéñitépa Xavánte demography

Black, Francis L., 3 blood groups, 100–108, **101, 103–6**. See also DNA; genetic diversity; genetics of Etéñitépa Xavánte; protein genetic systems

blood pressure, 205, **251**, 261–63, **263**, 271, 290nn. 9–10; at São Domingos, 205, 262. *See also* chronic noncontagious diseases; diet; epidemiological transition

body mass index (BMI). See under anthropometry

Boróro, 71, 79, 250

Botocudo, 26

Brasília, 11, 25, 85–87, 200, 282n. 1 Brazil: constitution of 1988, 11, 87; 500th anniversary of discovery, 12, 92; indigenous population of, 2; interethnic relations in, 12, 92; "invisibility" of Indians in, 2–3, 273–74; military government of, 9, 82, 85– 87, 175; number of indigenous societies in, 2

brothers: and household organization, 41–42; and sororal polygyny, 45–47

Callegari-Jacques, Sídia, 121–22 Campinápolis, town, 196, 198 Canarana, town, 25, 196 Canela, 26

Capiekran, 67; and smallpox epidemic, 67–68. See also Canela; Ramkókamekra

Carmo, Eduardo H., 248-50

Carretão, 62–66, 69, 279n. 10; abandonment of, 66; Pohl's visit to, 66. See also *aldeias*; secular missions

Casas do Índio. *See under* health services

Castelnau, Francis de, 66, 68

Castro, Eduardo Viveiros de, 11 cattle, 28, 50–51, 55; in Etéñitépa community, 88, 173; raising, 50–51, 74; ranches, 55, 65. *See also under* raiding

census: by anthropologists, 121–22; Brazilian, 121; categories, 121. See also under Etéñitépa Xavánte demography. See also demographic information

Central Brazil, 13; Central Brazilian Plateau, 17, 27, 47; economic development of, 74, 175; European penetration of, 50; indigenous groups of, 17, 26–28, 49–51, 50; large villages in, 27; prehistory of, 17. See also *cerrado*

Central Jê, 26–29; linguistic relationships, 26–27; villages of, 27, 55–56. See also Akroá; Akwě; Xakriabá; Xavánte: Xerénte

ceremonies, 35–38, 257; curing ceremony, 142–43; ear-piercing ceremony, 31, 224; initiation of boys, 31; *wai'a* ceremony, 36, *37. See also* log racing; *warã*

cerrado, 17, 21–24, 28, 39–40, 282n. 1, 284n. 12; campo cerrado, 21; campo limpo, 21; cattle raising in, 187–88; cerradão, 21; cerrado (sensu stricto), 21; conservation of, 188; degradation of, 187–89; farming in, 24, 40, 187; fauna of, 24, 158–68, 282–83nn. 2–3; fires in, 23–24; gathering in, 152–58, 154–55; Indian reservations in, 188; as "inhospitable environment," 151; location of Etéñitépa village in, 39–41; soils, 23–24; vegetation of, 22, 23; Xavánte subsistence in, 21, 24, 152. See also climate

Chagas disease, 219

children: as age grade, 29; anemia in, 15, 233–35, **234**; baptized at Carretão, 63; birth dates of, 123; carried in baskets, 259, 286n. 10;

deaths of, 15, 209-10, 210; enslavement of Indian, 67; high morbidity of, 15, 209-10; in household sleeping arrangement, 43: intestinal parasites in, 214-15, 214; proteinenergy malnutrition, 235-38; rice in diet, 258, 260-61. See also diarrheal diseases; mortality of Etéñitépa Xavánte; oral health

chronic noncontagious diseases, 2, 16, 243-67. See also blood pressure; diabetes; diet; epidemiological transition; obesity

clan system, 32–33, **32**, 277nn. 6–7; and demographic change, 145-50, 146, 148, 149: and demographic hegemony, 150; and exogamy, 33; and male fertility, 147-50, 149

climate: rainfall, 20-21; temperature, 19 - 20

Coimbra, Carlos E. A., Jr., 13, 251 colonists: in colonial Goiás, 28, 49-52, 54-55, 57-65; increase in Goiás, 68; in Maranhão, 66-67; in Mato Grosso, 73-74, 83-85, 175

colonization: of the Amazon, 9; of Central Brazil, 1, 13, 73–75, 175. See also frontier expansion

Conklin, Beth, 189

contact: and demographic change, 120, 136-37, 144-50; epidemiological aspects of, 4, 6–8, 136–37, 207; and genetic change, 4; resistance to, 1, 65, 69-70, 74-75, 76, 93. See also pacification

corn, 169-70; domestication of, 169; Xavánte varieties of, 169. See also agriculture; farming

Coudreau, Henri, 69

Couto de Magalhães river, 79

crops: annatto, 170; bananas, 170–71; beans, 170; cotton, 170; introduced, 283n. 6; mangos, 170; manioc, 170-71; papayas, 170; pumpkins, 170; sweet potatoes, 170-71; watermelons, 170; yams,

170–71. See also agriculture; corn; farming; rice

Culuene River, 79; Xavánte territory on, 84

Cunha, Manuela Carneiro de, 12

death: afterlife, 142; estimating adult age at, 124; estimating child's age at, 124; speaking about dead, 123

death rate. See mortality of Etéñitépa Xavánte

deforestation, 9; of Amazonia, 87 demographic information: estimation of birth dates, 123; lack of, for indigenous peoples in Brazil, 121–22; use of event calendar, 123. See also census

demographic transition. See epidemiological transition

demography. See Etéñitépa Xavánte demography

dental health. See oral health

dermatoglyphics, 96, 99-100, 100. See also genetic diversity; morphology development programs, 9-10, 15, 283nn. 7–9; in eastern Mato Grosso, 80, 84, 175-76; and indigenous peoples, 10; and Xavánte, 175-78. See also colonization

diabetes, 16, 263-67, 266, 290-91nn. 11-13, 15-16. See also chronic noncontagious diseases; diet; epidemiological transition

diarrheal diseases, 15, 54, 204-5. 210-13; and breastfeeding, 212, 286n. 9; and environmental factors, 208, 211; and oral rehydration therapy (ORT), 212–13; zoonotic transmission of, 211. See also sanitation

diet: changes in, 178-84; cultivated foods in, 182, 183-85, 183; hearts of palm in, 153; palm nuts in, 153; purchased foods in, 182, 183–85, **183**; roots and tubers in, 153–54; wild foods in, 153, 182, 183-85, 183 Directorate, 59-60, 64, 278n. 8; and "assimilation of Indians," 59–60; suppression of slavery under, 59. See also secular missions disease pressure, 6, 205, 207 DNA, 95-96, 108-9, **109, 110-15**, 115, **116**, 118. See also genetic diversity; genetics of Etéñitépa Xavánte domestic animals, 171, 173; chickens, 172, 173; dogs, 173; pets, 173. See also cattle dreaming, 38, 142 dry season, 19-21, 27, 35, 48; ceremonies in, 35; temperatures in, 19–20; trekking in, 27 Duro missions, 55-57, 56; abandonment of, 56; São Francisco Xavier do Duro, 55; São José do Duro, 55. See also aldeias

education, 2, 40; access to, 2; opportunities for, 92-93; of young Xavánte leaders, 84, 88-89 Eiten, George, 22-23 epidemics, 6-9, 14, 54, 56, 65, 70, 79, 82, 93, 120, 205–6; among Capiekran, 67-68; at Carretão, 63-64: demographic effects of, 145–50. **146**, **148**, **149**; and depopulation, 8, 14, 51, 93; and genetically based susceptibility, 7; importance of medical care in, 141; among settlers, 54, 65; sociocultural factors in, 7, 141; and sorcery accusations. 141, 144. See also Etéñitépa Xavánte demography; infectious and parasitic diseases; mortality of Etéñitépa Xavánte; population epidemiological polarization, 271–72, 288-89n. 1 epidemiological transition, 3, 12, 15-16, 244-67; in Brazil, 247-50, **249**; theories of, 244-47; Xavánte and, 250-67, 270-73. See also blood pressure; diabetes; epidemiological

polarization; obesity

epidemiology: of indigenous peoples in Brazil, 2-3, 6-8; lack of data on, 202-3, 208; of Xavánte, 15-16, 202-10, 270-73; sociocultural factors in, 6-7. See also infectious and parasitic diseases; epidemics Etéñitépa community, 1–4, 13–16, 18, 20, 26, 29–48, 70, 80–82; age grades in, 29-32; age set cycle in, 29-32, **30**, 123-24; books about. 91-92; cd of Xavánte singing, 91; clan and lineage system of, 32-35, 32, 41-42; economy of, 92-93; factionalism in, 38-39, 84, 143-48; households in, 45-47, 45, 46; houses in, 42-45; leadership in 1990s, 84, 88-91; links with outsiders, 15, 39, 89–93; marriage in, 33– 35, 34; permanence of village, 207; and Sepultura rock group, 92; struggle to regain territory, 83-86; videomaking, 92; village, 20, 39-42, 41, 47–48. See also ceremonies; Etéñitépa Xavánte demography; leadership; Pimentel Barbosa reservation; Xavánte; Xavánte territory Etéñitépa Xavánte demography, 120-40, 280-81nn, 1-2; age composition, 125-26, 126; age-specific fertility rates, 138-39, 138; census in 1977, 128; census in 1990, 128–29, 281n. 4; change in fertility, 126; comparing Xavánte with Brazilian, 129; crude birth rate, 129, 281n, 5; data from reproductive histories, 120, 129; and epidemics, 134, 145-50, **149**; and infant deaths, 139–40, 282nn. 10-12; male fertility and lineage exogamy, 149-50, 149; migration, 128; parity, 130–33, **131, 132,** 133, 281–82nn. 7–8; population change, 124-26, 125, 281n. 3; population decrease, 81–82, 130, 134;

population growth, 125, 127–28;

population pyramids, 126, 127;

sex composition, 125–26, **126**.

See also Etéñitépa community; mortality of Etéñitépa Xavánte; population

exogamy. See under clan system

factionalism. See under Etéñitépa community. See also leadership; Xavánte

farming, 40, 169–71; in the cerrado, 15, 24; in colonial settlements, 54, 60, 63–65; harvesting, 171; and time allocation, 180, 180, 181; women as garden owners, 170. See also agriculture; corn; crops; plant domestication in Central Brazil; rice: Xavánte Rice Project

Fawcett, Col. Percy, 72-73 Ferreira, Manuel Rodrigues, 151 firearms, 57-59, 64, 70; used for hunting, 161

fish, 166-67, 283n. 5. See also fishing fishing, 31, 166-68, 168; by boys, 167; with fish poison, 167; increase in, 179; on Rio das Mortes, 166-68, 168; smoking fish, 167; and time allocation, 180, 180, 181. See also fish fission-fusion model, 4-5

fissioning: of groups, 27-28; lineal, 5; of villages, 5, 125

Fleming, Peter, 72

Flowers, Nancy M., 13, 23, 33, 39-40, 42, 83, 122-25, 145, 162, 178 - 79

food consumption. See diet food sharing, 162; fish and game, 162, 164; garden food, 164 Freire, José Rodrigues de, 61 Freitas-Filho, Amary Sadock de, 203-6, 285nn. 1-3

Frenk, Julio, 246-47, 271

frontier expansion, 5, 52, 93, 176, 268. See also colonization

FUNAI (Fundação Nacional do Índio-National Indian Foundation), 83-87, 89-90, 92; and collection of demographic information,

121; and epidemiological information, 208; and health services, 193-98; Indian posts, 18, 31, 39; methods of pacification, 64; replaces SPI, 82; and Xavánte leaders, 25, 38-39, 85-89, 178; and Xavánte Rice Project, 15, 176-78 Fundação Brasil Central (FBC-Central Brazil Foundation), 73,

gallery forest, 22-23, 156, 161, 169-70. See also cerrado

game, 158-66, 160; meat from, 166; overexploitation of, 165-66, 189, 283n. 4; peccary, 163, 164; tapir, 159. See also game management plan; hunting

game management plan, 89-90, 166, 189; and warã, 189

Gardener, George, 66 gardens. See farming

Garfield, Seth, 83

gathered plant foods, 153-56, 154-55, 171. See also gathering; palms gathering, 14, 152–58; honey, 156; importance in Xavánte diet, 152-53; increase in, 179, 185; by men, 157; and time allocation, 180, 180, 181; turtle eggs, 161; by women, 157. See also gathered plant foods; insects as food; palms; trekking

Gavião, 115-17, 116, 118 Gavião-Parakateié. 26: and chronic diseases, 250-51, 273

Gê. See Jê linguistic group genetic diversity, 4-5, 14, 115-19; comparing Xavánte with other South American groups, 115–17, 116, 118: variation over time at Etéñitépa, 117, 119. See also blood groups; dermatoglyphics; DNA; genetics of Etéñitépa Xavánte; morphology; protein genetic systems

genetics: and disease, 7; and pemphigus, 222

genetics of Etéñitépa Xavánte, 14, 95–96, 100–108; and comparison with other groups, 107–19. *See also* blood groups; DNA; genetic diversity; morphology; protein genetic systems

Godoy, João de, 58 Goiânia, 25, 89, 196, 199

Goiás, 13, 51–66, 68–69; gold rush to, 51–52, 54; Indians settled in, 55–57, 60–65; Xavánte in, 57–59, 61–64, 66. See also *aldeias*; gold miners; gold mines; secular missions

gold miners, 13, 49, 63; African slaves as, 54, 58; and ill health, 54; privations of, 54; Xavánte fighting with, 52, 63. *See also* gold mines

gold mines, 49, 52, 54; decline of, in Goiás, 58, 60, 65; discovery of, in Goiás, 51–52, 54, 277n. 4; and Kayapó, 88; prospecting for, 58, 63. *See also* Goiás; gold miners

Gomes, Mércio, 10 Goodman, Alan H., 269 Goyaz Indians, 52 Graham, Laura, 13, 31, 36, 38, 80, 89–90, 142, 165, 171, 188 Greenberg, Joseph H., 26 Guaraní Kaiwá, 97, 97 Gueguê, 26 Gugelmin, Silvia, 179, 235–36, 252,

255

Hames, Raymond B., 9
Harris, David R., 23
health services, 3, 192–201; access to,
2; Casas do Índio, 193–94, 198,
208, 286nn. 7–8; deficiency of, 15;
and discrimination against Indians,
197–98; equipes volantes de saúde
(EVSs, mobile health teams), 193;
under FUNAI, 193–99; Fundação
Nacional de Saúde (FUNASA, National Health Foundation), 199–
200, 208, 285n. 6; hospitals and clin-

ics, 196–97, 208; Médecins sans Frontiàres (MF, Doctors without Borders), 195–96, 209; monitores indígenas de saúde (Indian health assistants), 195; provided by Salesian missionaries, 195; Serviço de Unidades Sanitárias Aéreas (SUSA, Service of Airborne Health Units), 192, 193; Sistema Único de Saúde (SUS, Unified Health System), 196–97, 199; Subsistema de Atenção à Saúde Indígena (Indigenous Health Care Subsystem), 198, 199–201, 285nn.

health transition. *See* epidemiological transition

hepatitis B, 223–27, 286–87nn. 12–14; and ear-piercing ceremony, 224; and infant feeding, 226; and scarification, 225, 225, 287n. 15

history: of Amazonian peoples, 11; in anthropological studies, 5, 11–12

history of Xavánte, **53–54**, 268; in eighteenth century, 51–52, 57–65; in nineteenth century, 66–71, 279n. 11; in twentieth century, 72–94. See also *aldeias*; *bandeira*; Carretão; Central Jê; contact; Etéñitépa community; Goiás; migration; pacification; Xavánte; Xavánte territory *hö* (bachelors' hut). *See under* age

sets horticulture. *See* farming

house, Xavánte, 41–44; construction of, 156; description of, 41–43; and disease transmission, 208; kitchen lean-to of, 43, 43, 208; and mosquito biting, 217–19, 218; ri uptabi (traditional house), 42–44, 43, 44, 91, 204, 218; sleeping arrangements in, 42–43; sleeping mats in, 43, 154, 157

household, 33, 45–47; kin relationships in, 45–47, 46, 140; number of occupants in, 45, 45

human biological variation, 3–5, 95–96 hunter-gatherers, prehistoric, 4, 17 hunting, 158–64, 159, 163, 164; collective, 161–62; dabatsa (wedding hunt), 164–65; du (dry season hunt), 47–48, 162; and environmental conservation, 165; with fire, 24, 31, 35, 162; importance of, 158; increase in, 179, 185; productivity, 161–62, 166, 283n. 4; and time allocation, 180, 180, 181; use of community truck in, 165, 257, 258. See also game; game management plan hypertension. See blood pressure

Ianelli, Rubens, 197, 216 IBP (International Biological Program), 275n. 4 Indian leaders, 11, 64. See also under Etéñitépa community Indian organizations, 11. See also Associação dos Xavantes de Pimentel Barbosa Indian rights, 10-11, 85; and Brazilian Constitution of 1988, 87 infant mortality. See under mortality of Etéñitépa Xavánte infectious and parasitic diseases, 2, 6, 7, 15–16, 54, 193, 202–42, 286nn. 7-8; as cause of death, 209-10, 210; frequency of diagnosis, 209, 209; and lifestyle changes, 208, 241-42; transmission of, 208, 240; treponemal infection, 54, 204, 230, 287n. 16. See also arbovirus infections; Chagas disease; diarrheal diseases; hepatitis B; influenza; intestinal parasites; leishmaniasis; leprosy; malaria; measles; pemphigus foliaceus; pertussis; poliomyelitis; respiratory diseases; smallpox;

influenza, 144, 204 inland waterway, Tocantins-Araguaia, 15; Xavánte campaign against, 92, 187, 189–91, 284–85nn. 13–14

tuberculosis

insects as food, 156–57. *See also* gathering interethnic relations, 12, 94 intestinal parasites, 208, 213–15, **214**; and children, 214–15; and oralfecal infection, 214; at Simões Lopes, 215. *See also* sanitation

Jabiru Project, 89-91; failure of, 90.

See also nongovernmental organiza-

tions (NGOs)
Jaikó, 26
Jê linguistic group, 13, 26–29; in cerrado habitat, 151; history of, 27; Macro-Jê, 26–27; Northern Jê, 26–27; social organization, 27–28; Southern Jê, 26–27. See also Central Jê; names of specific groups
Juruna, Mario, 84–85

Kaingáng, 26, 97–98
Karajá, 60, 71, 89; settled at
Mossâmedes, 60, 69; and Xavánte
fear of disease, 71; Xavánte raids
on, 60
Karipúna, 264
Kayapó, 4, 26, 61, 87–88, 95, 169;
and commercialization of natural resources, 185; morphology, 97–98
kin networks, 25
Krahô, 26
Kreen-akarôre, 26
Kreen-akarôre, 26
Krenak, Ailton, 87, 89
Kunitz, Stephen, 269–70, 272–73

language. See under Central Jê leadership, 10–11, 38–39, 83–89; and factionalism, 38–39; and social differentiation, 92–93; and young leaders, 88–93. See also under Etéñitépa community. See also Apöwe; Suptó; Warodi; Xavánte Rice Project Leatherman, Thomas L., 269 Leeuwenberg, Frans, 189 legends: of brave women who raided white village, 71–72; of the river porpoises, 49, 70 leishmaniasis, 204, 221 Leitão, Ismael, 81–82, 84 Leite, Maurício, 237 leprosy, 204, 221 life cycle, 29–35 lineages, 27, 32–33, 32, 41–42; and

lineages, 27, 32–33, **32**, 41–42; and factionalism, 32, 143–45; and households, 41–42; Wamãri lineage, 143–50, **146**, **148**, **149**. *See also* clan system

local systems, and interaction with larger processes, 1, 6, 8, 49–50, 93, 269–73

log racing, 27, 35, 40, 257, 260; and women, 35. See also ceremonies

maize. *See* corn Makiritáre, 4, 95

malaria, 7, 15, 65, 203–4, 215–19; at Areões, 215; at Etéñitépa, 216; at São Domingos, 216; transmission of, 217–19; and Xavánte houses, 217–19, 218

Maranhão, 66-67

March to the West, 1, 73, 80. *See also* frontier expansion

marriage, 31–35, 41, 43, 140, 277n. 8; dabatsa (wedding hunt), 164–65; effects of demographic crisis on, 147, 149–50, **149**; and group endogamy, 106. See also clan system; polygyny Martius, Carl Friedrich von, 26, 28, 65–66

Mason, J. Alden, 26

Mato Grosso, 17, 72–73; and colonization, 82–84, 175; commercial farming in, 175; economic development of, 80, 175; and land concentration, 175. *See also* Central Brazil; colonization; March to the West

matrilocal residence, 33, 41. *See also* marriage

Mattos, Brig. Raymundo Cunha, 54,

Maybury-Lewis, David, 13, 29, 31–32, 35–36, 38, 42, 81, 85, 122–23, 136–37, 143–45, 158, 169, 173, 177, 277n. 3

measles, 6, 54, 82, 136, 141, 204–5. *See also* epidemics

media: and Brazilian Indians, 10; Xavánte and, 84–85, 86 Meireles, Francisco, 74–75, 79 Mello, João Manuel de, governor of Goiás, 57–60

men, 29–31, 33–35; influence of clan system on fertility, 148–50, **149**; life cycle of, 29–31; and polygyny, 33–35

Mendes, Chico, 88 Menezes, Claudia, 175, 261 Menezes, Tristão de, governor of Goiás, 61–62

men's council. See *warã* migration: of colonists, 9; intervillage, 5, 13, 27–29, 39, 128; westward, of Xavánte, 68–72, 94

missionaries, 36, 49; American Protestant, 79; Capuchin, 69; influence of, 36, 79–80; Jesuit, 64; killed by precontact Xavánte, 74; Salesian, 79, 195, 254

mission villages. See *aldeias*Moran, Emilio F., vii–viii, 283n. 9
morphology, 96–98, **97**, 99; and
standardized photographs, 96, 98. *See also* anthropometry; genetic
diversity

mortality of Etéñitépa Xavánte: and accusations of sorcery, 143–45, 282nn. 13–14; change in, 126, 138; of children, 130–36, **131, 132, 133**; crude death rate, 129, 281n. 6; deaths between 1977 and 1990, 128, **128**; difficulty of collecting information on adult, 124; distribution of children's death by age, **136**; epi-

demics as cause, 136–37; infant, 14, 137–38; life tables for children, 135, 282n. 9. See also Etéñitépa Xavánte demography Museu do Índio, 92; photographs of Xavánte contact in 1946, 92

Nambikwára, 169; and commercializa-

tion of natural resources, 185 Neel, James V., 3-8, 13, 95-97, 122, 136, 203-6, 215, 222, 238-39, 251 Nimuendaju, Curt, 26, 69 nongovernmental organizations (NGOs), 10–11, 15, 25, 39, 85, 87– 93, 122, 186, 189–91, 285n. 5 Noronha, Marcos de, governor of Goiás, 55 Nova Xavantina, town, 25, 89; health services in, 196-98 Nutels, Noel, 141, 192-93 nutritional status, 231-38, 291n. 14; data for Brazil, 237-38, 237; estimating children's ages, 235; and infections, 232, 237; protein-energy malnutrition, 235–38, **236, 237**, 288nn. 21–22. *See also* anemia; anthropometry; obesity

256, 257-61, 290n. 1; and diet change, 257, 258, 260-61; at Etéñitépa, 251-60, 251, 253, 289nn. 5-6; among indigenous peoples, 250–51; and physical activity, 254, 255, 257, 258, 259, 260; at São Domingos, 251-52, 251, 253, 256, 289nn. 3, 7. See also anthropometry; blood pressure; diabetes; diet; epidemiological transition O Cruzeiro, Brazilian newsmagazine, 75; aerial photographs of precon-

tact Xavánte villages, 76, 77

obesity, 16, 205, 250-61, 256, 289nn.

2, 4; comparing Sangradouro with

Etéñitépa, 252, 254-55, 254, 255,

Omran, Abdel, 244–46 oral health, 205, 238-40, 239, 240; at São Domingos, 238-39, 240. See also diet oratory. See under warã

pacification, 1, 28; and distribution of "gifts," 64, 74–75, 78, 78; of Xavánte in Goiás, 61-64; of Xavánte in Mato Grosso, 74–80. 173-74, 280nn. 17-18. See also contact; FUNAI; SPI Palikúr, 264 palms, 153, **154–55**; buriti palm, 23; used as food, 153; used for artifacts; 156; used for house building,

156 Pan American Health Organization

(PAHO), 202 Panará. See Kreen-akarôre Parabubu, precontact Xavánte village, 79 Parakanã, 185 Parakatejé. See Gavião-Parakatejé patrilineality. See clan system pemphigus foliaceus (fogo selvagem), 221-23; at Etéñitépa, 222; genetic factors in, 222, 286n, 12; at Simões

pertussis, 136, 204-5 physical activity, 16, 254-55, 254, 257-59, 258, 259, 260

Lopes, 222

Pimentel Barbosa reservation, 14–15, 17-19, 18, 20, 25-26, 79, 81, 92, 196; Água Branca village, 18, 82; area of, 18; BR-158, federal road, 25, 40; Caçula village, 18, 81, 88, 125; demarcation of, 81, 83–86; ecology of, 185; location of, 17; Pe'azarupré village, 18, 81, 91: "satellite villages," 125; Tanguro village, 18, 81, 125; topography of, 19; towns near, 25; transportation on, 25. See also Etéñitépa community

plant domestication in Central Brazil, 169–70; Cissus gongyloides, 169; peanuts, 169; pineapples, 169. See also agriculture; corn; crops; farming

Pohl, Johann Emmanuel, 65–66, 279n.11

poliomyelitis, 204-5

polygyny, 33–35, *34*, 41, 45–47; sororal, 41, 45–47. *See also* marriage

population: decline, 1–2, 5–6, 8–10, 14, 51, 120, 150; decline in Mato Grosso, 79, 81, 93; dynamics, 120; recovery and growth, 2, 10, 14, 120, 150. *See also* epidemics; Etéñitépa Xavánte demography; mortality of Etéñitépa Xavánte

Portuguese colonial government, 1, 13, 52, 54–65, 93–94; and Xavánte, 57–65

postmarital residence, 33, 41. *See also* marriage

pottery, 39; prehistoric, 17 protein-energy malnutrition. *See under* nutritional status

protein genetic systems, 95, 100, **101**, 102–6, **103–6**; of Xavánte, 100–102, 106–7. *See also* blood groups; DNA; genetic diversity; genetics of Etéñitépa Xavánte

raiding: cattle, 51–52, 55, 60, 66; mining camps, 55, 57–61; settlers' plantations, 51, 65–66; by Xavánte, 278n. 7. *See also* warfare

rainy season, 19–21, 35, 58–59; temperatures in, 20

Ramkókamekra, 26

Ramos, Alcida, 87, 91, 185

Ravagnani, Osvaldo, 75

regional economy, 94; incorporation of Xavánte, 94

respiratory diseases, 227–28; as cause of death, 209–10, *210*; and environmental factors, 227–28, *229*; fre-

quency of diagnosis, 209, 209. See also tuberculosis

Ribeiro, Darcy, 8

Ricardo, Carlos Alberto, 10

rice: in diet, 181–82, **183**, 258, 260–61; farming, 15, 84, 87, 169–71; harvesting, 171; hulling, 172. See also Xavánte Rice Project

Rio das Mortes, 19, 26, 68–72, 75, 80, 91–92

Robinson, John G., 189

Roncador-Xingu Expedition, 74, 151, 192. *See also* Fundação Brasil Central; March to the West

Roosevelt, Anna C., 12

Sahlins, Marshall, 186 Saint-Hilaire, Auguste de, 65 Salesian missions. *See under* missionaries

Salzano, Francisco M., 3–4, 13, 95–97, 121–22, 204, 222

sanitation: soil contamination, 207; washing, 207; water pollution, 40, 207; water supply, 40, 207, 285n. 5. See also diarrheal diseases; intestinal parasites

Santos, Ricardo Ventura, 13, 251 São Domingos, SPI post, 20, 79– 82, 174, 205–6, 243, 277n. 3; bioanthropological studies at, 95–107, 123, 130–34, 205–6, 238–40, 251; and malaria, 216; oral health at, 238–39, **240**. *See also* epidemics; infectious and parasitic diseases; obesity

São Francisco River, 27, 28 São José de Mossâmedes, 60; description of, 60, 61, 278n. 9. See also *aldeias*; secular missions

São Pedro de Alcântara, 66–67 secular missions, 52, 59–60. See also *aldeias*; Carretão; Directorate; São José de Mossâmedes

sedentarization. *See* settlement Sereburã, elder at Etéñitépa, 70

Serra do Roncador, 19, 72 settlement: of Indians, in Goiás, 55– 57, 60–65; of Xavánte in Goiás, 60–65; of Xavánte in Mato Grosso, 78–80, 173–74. See also *aldeias*; Etéñitépa community; secular missions settlers. *See* colonists

shamans, 141–42 Silva, Aracy Lopes da, 79 Silva, Hermano Ribeiro de, 71 Simões Lopes, SPI post, 79; research by Neel team at, 95–96, 98, 100, 103–6, 206, 215

singing, 31, 40; *da-ño're* singing, 31; songs learned from the ancestors, 142

skin diseases, 220–23, 286n. 11; in children, 220; transmission of, 220. *See also* leishmaniasis; leprosy; pemphigus foliaceus

slaves: African, in mining camps, 51, 58; Indian children as, 57, 67; Indians sold as, 67; Indian war captives as, 55, 57, 66; raiding for, 52, 66

smallpox, 6, 54, 65, 67–68

soils. See under cerrado

sorcery, accusations of, 82; and deaths in epidemics, 141; at Etéñitépa, 142–45; and factionalism, 143–45

Souza, Carlos M., Jr., 11

SPI (Serviço de Proteção aos Índios-Indian Protection Service), 74–75, 277n. 3, 280n. 16; encouragement of agriculture, 173–74; and health services, 192–93; Indian posts of, 78–79; and pacification of Xavánte, 74–78. See also FUNAI

Spix, Johann Baptist von, 65 splitting. *See* fissioning Stearman, Allyn M., 189

steel tools, 64, 71, 75–76, 170. *See also* contact; pacification

subsistence strategy: changes in, 178–84; effects of Xavánte Rice Project,

179; and links with outsiders, 186; and pensions, 186; shown by time allocation, 179, 180, 180, 181. See also agriculture; fishing; gathering; hunting; time allocation

Suptó, chief of Etéñitépa village, 88, 92

Suruí: and chronic diseases, 250–51, 273; and commercialization of natural resources, 185; genetic diversity, 115–17, **116**; and population relationships, 117, *118*Suyá, 26

Taggia, Friar Sigismundo de, 69–70; visit to Xavánte, 69–70 Tenetehára, 97–98

Tikúna, 98

Timbira, 26, 169; Eastern Timbira, 26; Western Timbira, 26. *See also names of specific groups*

time allocation, 15, 178–82, 180, 180, 181, 254, 255, 284n. 10. See also subsistence strategy

Tocantins River, 17, 19, 27, 29, 52, 55, 66, 68. *See also* inland waterway, Tocantins-Araguaia

trade goods, 39, 64, 75–76, 82, 143–44. *See also* pacification

trekking, 27, 68, 158, 173–74. *See also* gathering

Tsőrepré, ancestral Xavánte village, 49, 70, 72, 75

tuberculosis, 15, 192–94, 203, 228–30; BCG vaccination, 195, 230; at Etéñitépa, 229. *See also* epidemics

Upper Xingu region, 7, 72; indigenous population in, 7, 264–65. *See also* Xingu Park; Xingu River Urban, Greg, 11, 27

Vargas, Getúlio, 73, 75, 280n. 15 Vasconcellos, Dom José d'Almeida, baron of Mossâmedes, governor of Goiás, 59, 60–61 vegetation. See *cerrado*Vickers, William T., 9
Vieira-Filho, João Paulo, 260–61, 264–65
Vila Boa, capital of Goiás captaincy, 54, 62

Waiwái, 115–17, **116**, *118* warã (men's council), 35, 36, 38–40, 47–48; before contact, 49; oratory in, 38. *See also* leadership

warfare, 1, 28, 51, 57–59, 62, 66; "offensive war," 55, 57, 93, 277n. 5. See also attacks on Xavánte villages; raiding

Warodi, chief of Etéñitépa, 36–38, 42, 45–47, 84, 87, 128, 142; Warodi's dream, 38, 87. *See also* leadership

Whitehead, Neil, 64

women, 31–35; age at first birth, 124; and age set system, 31–32; anemia in, 15, 233–34, **234**; and factionalism, 32; as garden owners, 171; and gathering, 157; health of, compared to men, 206; and Jabiru Project, 90; and legend of raid on white village, 71–72; and polygynous marriage, 33–35; reproductive years of, 123; walking and carrying, 259
Wood, Charles, 139–40
Wright, Robin, 9

Xakriabá, 26, 28, 55–57, 59, 276–77n. 2, 278n. 7

Xavánte, 1–4, 8, 11–16, 49, 51, 57; and factionalism, 38–39; genetic studies of, 4, 13–14, 100–119; geographical location, 17–21, 18, 276n. 1; in Goiás, 57–66; and "indigenous image," 11, 39; as a Jê group, 26–29; links with outsiders, 25–26, 88–94; migration westward, 68–71,

279n. 13; population numbers, 17; precontact villages, 76, 77; social organization of, 29–35. See also Central Jê; Etéñitépa community; Pimentel Barbosa reservation; Xavánte reservations; Xavánte Rice Project; Xavánte territory

Xavánte reservations, 13, 17, 18, 19, 20, 25–26; Areões, 17, 79, 92, 196; demarcation of, 80–82; Marãiwasede, 17, 79, 82; Marechal Rondon, 17; Parabubure, 17, 196; Pimentel Barbosa (see Pimentel Barbosa reservation); rice project in, 178; Sangradouro, 17, 33, 79, 195, 237, 252, 254–61, 254, 255, 256, 265–67, 266; São Marcos, 17, 79, 81–82, 84, 95, 195, 206, 254, 265; villages in, 17. See also Xavánte territory

Xavánte Rice Project, 15, 84, 86–87, 94, 175–78, 183–84, 283nn. 8–9; and benefits to village leaders, 178; and development of eastern Mato Grosso, 175; and FUNAI, 175–76; political aims of, 177

Xavánte territory, 17, 21; loss of, 80–83, 94, 120; in Mato Grosso, 71–73; struggle to regain, 80, 83–86, 187

Xerénte, 26, 28–29, 66, 169; separation from Xavánte, 68–69, 279n.
12; and Xavánte fear of disease, 71
Xingu Park, 7; measles epidemic in,
141. See also Upper Xingu region
Xingu River, 17, 71–72, 79, 88. See
also Upper Xingu region
Xokléng, 26

Yanomámi, 4, 95; morphology, 97-98

Zanoni, Col. Ivan, 177 Zoró, 115–17, **116**, *118*