Archaeological Agenda in the Guianas



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Introduction

Seventy years ago, John Gillin wrote in the Handbook of South American Indians that "the archaeology of the Guianas has not been systematically investigated by planned field surveys and coordinated excavations. Our present knowledge is derived from reports of chance finds by ethnologists and travelers, plus a few exploratory excavations" (Gillin 1948: 819). During the last decades, the archaeological agenda in the Guianas has improved regarding coordinated excavations and systematic investigation by planned field surveys. Nevertheless, these developments occurred mainly on the coastal region of Guiana and along the banks of the main rivers, Orinoco and Amazon, and Gillin's declaration withstands to date for the inland uplands of Guiana. The archaeological agendas in each of the five Guianas are determined by geo-political and economic dynamics within each of the four independent nation states

C. Smith (ed.), *Encyclopedia of Global Archaeology*, https://doi.org/10.1007/978-3-319-51726-1 2635-1

and the one overseas department (Fig. 1). The archaeological services in the respective countries and departments are in different stages of development, and their histories, current developments, and future directions are briefly discussed in this entry.

Definition

Before discussing the archaeological agenda in the Guianas, it is needed to first define "Guiana." Guiana is part of Amazonia (Fig. 2) and refers to the geographical region in northern South America encompassing Venezuelan Guayana, Guyana (former British Guiana), Suriname, French Guiana or Guyane (a French overseas department), and the Brazilian territory east of the Rio Negro and north of the Amazon (including the states of Amapá and Roraima and the northern parts of the states of Pará and Amazonas). In the seventeenth century, Christopher d'Acuña glossed this region "the Island of Guiana" because it was surrounded by the Atlantic Ocean and the rivers Orinoco, Rio Negro, and Amazon. The mapping of the Casiquiare channel a century later completed the circumscription by bodies of water. Guiana defined as such measures about 2000 km east to west and about 1500 km north to south. On historical maps (e.g., Fig. 2), a large body of water was fashioned in the unexplored center of Guiana: Lake Parime, on which shore was said to be located Manoa, the Golden City of El Dorado.

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Archaeological Agenda in the Guianas, Fig. 1 Guiana (map by the author; source satellite image: Google Earth, August 27, 2016)

"The Guianas" refers to the three former colonies of, respectively, the United Kingdom (Guyana), the Netherlands (Suriname), and France (French Guiana or Guyane). The Dutch used to have colonies or trading settlements in all five Guianas, yet there presence was most substantial in Guyana and Suriname. The colonies of Essequibo, Demerara, and Berbice (currently located in Guyana) used to be part of Dutch Guiana between 1667 and 1814. Guyana gained independence from the United Kingdom in 1966. Suriname became a constituent country within the Kingdom of the Netherlands in 1954 and gained independence in 1975. Today, French Guiana is an overseas department of France, and thus part of Europe. Venezuelan Guayana (Venezuela declared itself independent from the Spanish Crown in 1811) and the Brazilian territory east of the Rio Negro and north of the Amazon, i.e., the Brazilian states of Roraima and Amapá and the states of Pará and

Amazonas north of the Amazon (Brazil fought for its independence from Portugal in the 1820s), are typically not included under the term "the Guianas."

Shifting borders do not facilitate historical research. For example, Brazilian Amapá was included in the French territory before 1900. Most boundary conflicts were settled through arbitration around the turn of the twentieth century. Nonetheless, the border between Guyana and Venezuela remains contested, as are the interfluvial zones of the upper reaches of the Border Rivers between Guyana and Suriname (also known as the New River Triangle) and between Suriname and French Guiana. Venezuelan Guayana and the Brazilian territories north of the Amazon are typically not included in "the Guianas" though are of interest in the present discussion of the archaeological agendas in Guiana. Based on this geo-political complexity, it is



Archaeological Agenda in the Guianas, Fig. 2 Seventeenth century map of Guiana titled: *Gviana siue Amazonvm regio* (Guiana part of Amazonia) (John Ogilby 1671; hand colored copper engraving; private collection of the author)

thus impossible to define *the* archaeological agenda in the Guianas.

A common archaeological agenda in Guiana is further complicated through the different languages spoken across Guiana: since the 1494 Treaty de Tordessillas, Spanish has been the official language of Venezuela, and Portuguese the official language of Brazil. The official languages of the three Guianas are the official languages of their former colonizers, namely, English, Dutch, and French. Furthermore, there is a plethora of languages resulting from the African Diaspora and languages belonging to the indigenous peoples (mainly belonging to the Carib, Arawak, Tupi-Guarani, Warao, and Yanomami language trunks). In the archaeological agenda in the Guianas however, the voice of Native Peoples remains by and large silent.

Whereas the archaeological agendas in Guiana were predominantly focused upon the pre-Columbian era (before AD 1492) - often illustrated with late nineteenth- and early twentieth-century imageries from indigenous communities- the tendency in the twenty-first century is to broaden the scope to historical archaeology, including but not restricted to plantation-, maritime-, and African Diaspora archaeology. Additionally, there are attempts to develop an archaeological agenda engaging local indigenous communities. Recent developments in the archaeological agenda depend however on a political will to develop much needed policies to enforce the laws, to facilitate archaeological research, and to protect cultural heritage.



Archaeological Agenda in the Guianas,

Fig. 3 Late nineteenthcentury watercolor titled *"Temehri rock on the river Marowijne, Colony of Suriname"* (Hering 1882; Collection Nationaal Museum van Wereldculturen. Coll.no. RV-1403-3508)

Historical Background

Archaeological Agenda in the Guianas in the Nineteenth Century

On the morning of October 16, 1836, at 9 am, the British explorer Robert Schomburgk saw a remarkable rock in the Corentyne (Border River between Guyana and Suriname) and stated: "on the top there are said to be Indian picture-writing [i.e., petroglyphs] but the current run so strong that our attempts to come near them proved in vain." This adventurous exploration is illustrative of the archaeological agenda in the Guianas during the nineteenth and most of the twentieth century, where local guides informed the explorers of the colonies who reported these findings often illustrated with maps, sketches, engravings, and later photographs. Through the centuries, rock art studies have remained a main theme on the archaeological agendas in Guiana.

In 1881, the Dutch National Museum of Antiquities commissioned Suriname-born Christiaan J. Hering to locate and draw the petroglyphs of the Marowijne, as well as to recover some artifacts of the early inhabitants of Suriname. Hering succeeded in recovering traces of earlier occupation such as stone axes, fragments of pottery, a war club, and human bones, and on August 14, 1882, he made rubbings (Collection Dutch National Museum of World Cultures [hereafter: NMvW] Coll.no.RV-1403-1043) and several watercolor paintings (NMvW Coll.no.RV-1403-3508). Hering applied two methods of depicting petroglyphs: an in situ water color painting (Fig. 3) and isolated figures without context. Later that year, he sent the rubbings, watercolor paintings, and recovered artifacts, to the National Museum of Antiquities in Leiden, the Netherlands, and Hering thus established a shared cultural heritage between Suriname and the Netherlands.

Nevertheless, prior to Hering's studies, the French explorer Jules Crevaux had studied and drawn the engravings in the aforementioned rock on August 10, 1878. This nightly study of the petroglyphs of Timehri at Bigiston near the mouth of the Maroni (border river between Suriname and French Guiana), under a full moon rising, was romantically illustrated in a woodcut by Edouard Riou. Also published were sketches by Crevaux of three of the isolated figures and of a fragment of pottery with a zoomorphic appliqué. Crevaux's sketches and Riou's woodcut were already reproduced around the turn of the century in other publications without crediting the French explorer's pioneering efforts in bringing this petroglyph site to the public. The topic of rock art studies will be further discussed under key issues and current debates.

The first archaeological excavation in Guiana took place in 1865. This was the excavation of the Waramuri Shell Mound, located some 120 km northwest of Georgetown, Guyana (Fig. 4). Twenty years earlier, during the establishment of the Waramuri Mission, this mound revealed not only a large amount of shells but also human remains, and William H. Brett, an English missionary in British Guiana, assumed by the symmetry of its outline that this was a burial mound or tumulus of a great chief or warrior fallen in battle. The large number of shells designated it to be a refuse heap or kitchen-midden, yet in order to "clear up the mystery, and perhaps reveal something of the habits of an ancient race," Brett requested the resident teacher "to engage Indians to excavate it, a few days previous to my visit, in November 1865." The description of this first excavation in Guiana, which will be discussed in more detail in a moment, was illustrated with an engraving enticingly titled "Opening of the Cannibal Mound on Waramuri Hill" (Fig. 4). At the time in the UK, the excavation of tumuli was a popular pastime of the nineteenth century wealthy English upper class, who were nicknamed "barrow-diggers," and the excavation methods of the time were applied in Guyana.

Brett allows a peek into the mid-nineteenthcentury archaeological agenda and practice. In his books, he described how a trench of 20 ft in width, narrowing towards the bottom, was cut across the shell mound by the local indigenous peoples. Soon after, human remains were found: broken bones; disarticulated. The broken long bones were interpreted as resulting from the practice of obtaining marrow, and thus an indication of cannibalism. Next to the shells and human remains, several stone axes were recovered as well. Upon the recovery of a child's skull – beaten in and broken open – the local indigenous workers discontinued their work out of fear for supernatural vengeance. The local indigenous community allowed Brett to make a selection of human remains to be further studied in Georgetown under the condition that every human bone removed should be returned to the site.

Brett even engaged in landscape archaeology. Not only did he state that the shell mound is located on the highest point of the hill, and a water spring is nearby; Brett even sent out a search party to explore other parts of Guyana, because he thought it unlikely that these ancient peoples solely resided at Waramuri. The search party found other shell mounds near Akawini and near Siriki on the eastern side of Pomeroon. Another shell mound appeared to be located under the giant Ceiba tree of the Cabacaburi Mission. The word spread rapidly, and additional shell mounds were soon reported, including one near the creek Alaka that would later give its name to the entire archaeological assemblage. Brett affirmed an absence of fragments of pottery, apart from a few coarse clayey slabs that perhaps could be interpreted as baking plates or griddles. More recent excavations and radiocarbon dates (Plew 2005) document preceramic PaleoIndian occupations of these Alaka phase shell-midden deposits as early as circa 7300 BP.

Burial sites were another theme of the archaeological agenda in Guiana during the latenineteenth century. The French explorers Jules Crevaux and Henri Coudreau, as well as the naturalists Charles F. Hartt, Domingo Soares Ferreira Penna, Aureliano Lima Guedes, and Emilío Goeldi, all excavated funerary urns represented by human or animal shapes in cave sites or painted vessels in underground burial chambers. These were the pioneers of the archaeology in what is today Brazilian Amapá. These late-nineteenthcentury collections are partially housed in the Museu Paraense Emilío Goeldi in Belém, Brazil (MPEG; hereafter Museu Goeldi). The collections in the Museu Goeldi were complemented in the twentieth century with the collections by Curt "Nimuendajú" Unckle, Clifford Evans and Betty Meggers, Protásio Frikel, and Peter Paul Hilbert, and the Museu Goeldi established itself as the most important institute for Guiana archaeology. The archaeologists of the Museu Goeldi continue

Archaeological Agenda in the Guianas, Fig. 4 Romanticized depiction of the first archaeological excavation

conducted in Guyana (Brett 1881)

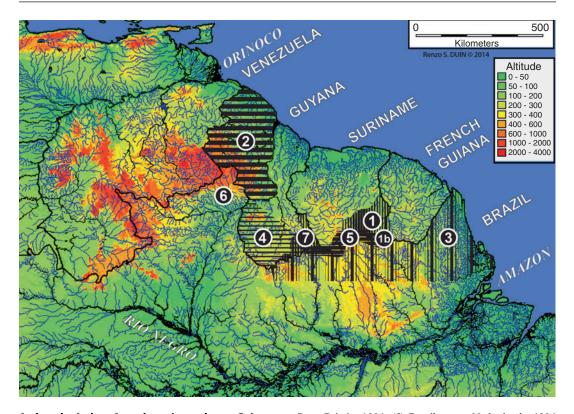


OPENING OF THE CANNIBAL MOUND ON WARAMURI HILL.

to conduct archaeological research in Amazonia, including in the Brazilian States of Amapá, Pará, Roraima, and Amazonas. While the archaeological agenda in Amapá (at the time within the French territory) was mainly focused on funerary urns, the archaeological agenda in the remainder of Brazilian Guiana was focused on rock art (petroglyphs, rock paintings, and rock alignments). Olga Coudreau's well-illustrated travels on the river Cuminá (Erepecuru or Paru de Oeste) contributed to one of the best described series of petroglyphs in the Brazilian state of Pará at the turn of the century.

Archaeological Agenda in the Guianas in the Twentieth Century

Most contributing to the archaeological agenda in the early twentieth century were the boundary disputes between the newly emerging Nation States of Brazil and Venezuela with the British, Dutch, and French colonies, as well as the boundary disputes between these colonies (Fig. 5). These boundary disputes resulted in cartographic expeditions that also provided new information on the indigenous peoples residing in the inland uplands of Guiana and on archaeological assemblages (notably grinding groove complexes, petroglyphs, stone axes, and the occasional fragments of pottery). Exemplary is the work by



Archaeological Agenda in the Guianas, Fig. 5 Contested areas in Guiana with the year of arbitration: (1) France versus Netherlands, 1891; (1b) Suriname versus France (Marouini), ongoing; (2) Great Britain versus Venezuela, 1899, though Venezuela versus Guyana is ongoing; (3) Brazil versus France, 1900; (4) Brazil versus

Claudius H. de Goeje, a Dutch Navy cartographer who extensively published on the ethnography, ethnology, language, and archaeology of Suriname and Guiana as a whole. Due to the more transportable cameras and films (instead of the glass plate negatives), there was an increase in the number of photographs taken in the field, including photographs of grinding groove complexes, petroglyphs, and rock paintings.

As mentioned by John Gillin, travelers and ethnologists reported chance finds. Theodor Koch-Grünberg, for instance, between 1911 and 1913, travelled from Roraima to the Orinoco and reported on the rock art site *Pedra pintada* ("the painted rock"; Upper Parimé, Brazilian State of Roraima). Based on oral traditions, he further reported on the local legend of the Serra do Banco, or *muréi-tepö*, stating that this tabletop

Great Britain, 1904; (5) Brazil versus Netherlands, 1906 (the Tumuc-Humac range is the agreed border), Brazil versus Netherlands, 1931 (cartography of watershed is requested); (6) Brazil versus Great Britain, 1926, and Brazil versus Venezuela, 1929; (7) Guyana versus Suriname (New River Triangle), ongoing dispute

mountain (tepö) is the seat (muréi) of the local indigenous culture hero from ancient times. Koch-Grünberg thus described part of the local mythical landscape or "mythscape," an archaeological landscape approach that is recently gaining grounds in Amazonia. Walter Roth in his 1924 Introductory Study of the Arts, Crafts, and Customs of the Guiana Indians catalogued in a few pages the then known rock engravings, stone axes, funerary urns and other pottery vessals. Other early twentieth-century ethnographers contributing to the archaeology of Guiana were William C. Farabee during his 1913-1916 expedition in the Central Guiana Highlands, and Erland Nordenskiöld and Kurt "Nimuendajú" Unckle in the Brazilian States of Amapá and Pará. The latter posited that the pottery recovered along the Jari was left behind by the Wayapi who traversed this 8

region during their northward migration from the Xingu. Ever since, there have been endeavors to link archaeological assemblages to present-day indigenous communities. For example, the Palikur (an Arawakan-speaking community) have been posited to be the descendants of the archaeological assemblage Aristé (formerly known as Cunany), and the pan-Guiana Koriabo assemblage has been attributed to various Cariban-speaking communities.

During the second half of the twentieth century, a more systematic and scientific approach was advanced, mainly in collaboration with archaeologists trained in the United States of America. Several of the archaeological sites identified in the nineteenth century continued to be visited and excavated throughout the twentieth century. From July 1, 1948, to July 1, 1949, the first systematic archaeological study in Guiana, including planned field surveys and coordinated excavations, was conducted at the mouth of the Amazon by Betty Meggers and Clifford Evans from the Department of Anthropology at Columbia University. They worked under the premise that "fortunately the cultures are simple, the sites are small, and a maximum of data can be secured with a minimum of digging." Their systematic scientific approach was grounded in the processual neo-evolutionary culture-historical cultural ecology approach. In Brazil, their way was paved by anthropologist Charles Wagley, and the Museu Goeldi provided the young graduate student couple a house that served as their in-country residence as well as laboratory for storage and analysis of the large number of archaeological material recovered. This demonstrates the importance of in-country scholars and research institutes. Below follow brief outlines of the development of the archaeological agenda per country during the course of the second halve of the twentieth century. I will discuss the regions from west to east, starting with Venezuelan Guayana and ending with Brazil, which order is purely geographically oriented.

Venezuelan Guayana

Throughout the twentieth century, the archaeological agenda in Venezuela was focused on preColumbian pottery analysis based on stylistic aspects, which was most influenced by Irving Rouse (Gassón 2002). Rouse and José Cruxent's archaeological chronology of Venezuela is founded upon the work by Cornelius Osgood and George D. Howard, who in 1941 conducted a survey of Venezuela (except for Venezuelan Guayana). Osgood was one of three North American archaeologists invited in the 1930s to Venezuela by Rafael Requena (the other two being Wendell C. Bennett and Alfred Kidder II). Preliminary results of the archaeological investigation by Evans, Meggers, and Cruxent along the Orinoco and the Ventuari – a source river of the Orinoco – were presented in 1958 at the 33rd International Congress of Americanists. Other than the banks of the rivers Orinoco and Ventuari, Venezuelan Guayana (comprising the states of Bolívar and Amazonas) remained unexplored, an archaeological terra incognita.

To date, the underpinning of pottery analysis in the Neotropics are the time-space graphs developed and established in the second half of the twentieth century by Rouse and Cruxent (for the Orinoco and the Caribbean) and by Meggers and Evans (for Amazonia and Guiana). Rouse's interest in classification and taxonomy was rooted in his academic background in botany. These timespace graphs are grounded in the concept of a culture-historical mosaic, aimed at fixing classificatory "peoples" in time and space by a set of reference points measured in terms of socioculturally meaningful events such as migrations, contact, and conquest. Recently (and independently of Reniel Rodriguez Ramos in the Caribbean), the Venezuelan archaeologists Rafael Gassón tempted to go beyond these tacitly perpetuated ubiquitous Rouseian Culture Historical mosaics that continue to be the underpinning of the present Caribbean archaeological paradigm.

During the 1990s, the nationalist standpoint in Venezuela sought in past monumental heritage a Venezuelan identity worthy of pride, and Franz Scaramelli and Kay Tarble shifted the archaeological agenda towards colonial archaeology and the archaeology of complex societies. Moreover, during the last 15 years of Hugo Chavez's revolutionary Bolivarian national project, history and cultural heritage became more emphasized in the political agenda, and to date, archaeology is included in assessment programs, community museums, and territorial demarcation projects. Local communities are directly involved in the development of research projects and the production of knowledge about the past. Publications are made for both the general public and for schools communities. The socialist archaeology program has an underlying agenda foregrounding the subaltern subjects: anticolonial struggles of peoples from African descent, indigenous peoples, and local peasants, as well as the role of women in the war of independence and in the struggles against the oligarchies and against the domination by foreign powers. Additionally, the archaeological agenda in Venezuela focused on the first arrivals of Paleo-Indian communities in South America around 30 to 20,000 years ago, to demonstrate a common origin in support of their regional integration program.

Guyana

Throughout the twentieth century, the archaeological agenda in Guyana was focused on pre-Columbian pottery analysis based on stylistic and technical aspects, which was most influenced by the earlier discussed Betty Meggers. A few years after their fieldwork at the mouth of the Amazon, Meggers and Evans arrived in British Guiana to conduct an analogous systematic archaeological study. They revisited the shellmound sites investigated earlier by Brett - as discussed earlier – and named this archaeological assemblage the "Alaka Phase" after one of its sites Alaka (meaning "the shells"). In addition to their archaeological survey, Meggers and Evans conducted an ethnographic study of a contemporary Wai-wai community, which they described concurring with their archaeological terminology: the Wai Wai Phase. In this pioneering ethnoarchaeological study, Evans and Meggers equated an ethnographic community with an archaeological assemblage, which provided the underpinning for ethno-archaeological studies in Guiana. Throughout the twentieth century, archaeologists working in the Guianas, Amazonia, and the Caribbean had the habitual ahistorical practice to illustrate archaeological assemblages with historic and even contemporary ethnographic imageries of indigenous communities. Ethnographic observations of indigenous communities to be used uncritically as analogy for the archaeological record may result in the conceptualization that the communities under study have not developed since the pre-Columbian past. The twentiethcentury model of tropical forest cultures conceptualized in Julian Steward's Handbook of South American Indians and reinforced by the archaeological and ethnographic studies conducted by Meggers and Evans at the mouth of the Amazon and in British Guiana remained the Guiana cultural default model throughout the twentieth century.

During the last quarter of the twentieth century, the archaeological agenda in Guyana was very much influenced by Denis Williams. Born in 1923 in Georgetown, Guyana, Williams was a promising young painter who after World War II moved to London, UK, where he resided for 10 years, followed by a period of teaching art and art history at several universities in Africa, including at the School of Fine Art in Karthoum, Sudan. Not insignificant is that Williams resided in Sudan during the time of the most intensive archaeological salvage programs of the twentieth century, namely, the Archaeological Survey of Sudanese Nubia (1963-1969), focusing on an about 130 km stretch of the Nile Valley going to be flooded by the water reservoir resulting from the Aswan Hydroelectric Dam. Upon his return to Guyana, this exposure to the archaeology in Sudan generated Williams's interest in the antiquities in Guiana.

In 1974, in his hometown Georgetown, Williams was appointed director of the newly established Walter Roth Museum of Anthropology, which allowed him to pursue the archaeology of Guiana. He initially focused on the rock art or petroglyphs in the Rupununi Savannas and 5 years later he defended his Master's thesis at the University of Guyana. Next, Williams focused on the paleo-climatic change in the Holocene, and his *Opus Magna* detailing the archaeological evidence and his interpretations of the interaction between environmental change and Guiana prehistory was published posthumously (Williams 2003). Until today, the Walter Roth Museum is the national repository of Guyana archaeological materials and home to the journal *Archaeology and Anthropology*. In collaboration with the Amerindian Research Unit at the University of Guyana, the Walter Roth Museum of Anthropology is the only national institution promoting archaeological research in Guyana.

Of particular interest is that Williams went beyond the study of the past of Guyana and/or his ethnic heritage, and he perceived the prehistory of Guiana as part of the heritage of his country, of his continent, and of humanity as a whole. Furthermore, Williams pointed out that the indigenous peoples of Guiana are becoming increasingly impatient with the Euro-American colonial perspective marginalizing them simply as "Amerindians" rather than acknowledging the historically grounded cultural diversity of independent nations as the Lokono (Arawak), Kali'na (Carib), Warao (independent language), and many others. Williams predicted that the indigenization of archaeology - or the process of Indigenous Archaeologies - throughout the Guianas was certain to determine the role of the development of archaeology in the twenty-first century.

Suriname

Systematic cartographic explorations conducted by the Royal Dutch Geographic Society during the first decades of the twentieth century provided a source of geological, geographical, botanical, ethnographical, and archaeological information regarding the unexplored inland uplands of Suriname. After World War II, archaeological sites were revealed in the coastal hinterland during sand- and shell quarrying for the expansion of the road and railroad systems, as well as during bauxite mining activities. These sites were further studied and excavated due to a personal interest by Dirk Geijskes, director of the Stichting Surinaams Museum (hereafter: SSM). Geijskes was not a trained archaeologist, yet closely followed the work by Evans and Meggers in neighboring British Guyana (as discussed earlier). Geijskes was assisted by the Surinamese-born Piet Bolwerk who would later become the interim director of the SSM and head of the archaeological service. Forester Frans Bubberman and geologist Joost Janssen encountered numerous archaeological sites during their explorations of the tropical forests of the inland uplands of Suriname and reported these sites upon their return in the capital Paramaribo. A total of over two hundred archaeological sites were added to the modest number known prior to 1965 (the foundation year of the Archaeological Service at the SSM), including several new petroglyph sites and dozens of new preceramic Paleo-Indian sites in the Sipaliwini Savanna (Southern Suriname, bordering Brazil).

The increasing number of newly discovered archaeological sites in Suriname urged for a trained archaeologist. Irving Rouse invited Piet Bolwerk to enroll in Yale University to study pre-Columbian archaeology. Instead of contracting the Suriname-born Bolwerk, who had been the head of the archaeological service for seven years, a choice was made for the Dutch national Arie Boomert, who in 1972 had obtained his masters in Dutch prehistory at the University of Amsterdam, the Netherlands. From 1973 to 1975 he inventoried the archaeological activities conducted hitherto, and when the material was sufficiently interesting he conducted additional excavations, on which he published in the following decades. From 1975 to 1981, Aad Versteeg, a teacher Greek and Latin, succeeded Boomert. Until today, Versteeg remains the archaeological advisor for the SSM. In 1980, the Archaeological Service was transferred from the SSM to the Surinamese Ministry of Culture, Youth, and Sport. During the 1980s, due to the political climate, the archaeological service in Suriname became dormant, and few to none archaeological activities were conducted. The efforts and role of Bolwerk in the ground-breaking activities during the 1950's and 1960's in developing archaeology in Suriname prior to the country's independence from the Netherlands have largely been silenced in the literature and almost forgotten.

French Guiana or Guyane française

In French Guiana, the Archaeological Service (*Service Régional de l'Archéologie* [SRA], currently SA) In 2015, departmental and regional

institutes in French Guiana have merged into the Collectivité Territoriale de Guyane (CTG) was established in 1992 within the French Guiana cultural affairs agency (Direction Régionale des Affaires Culturelles [DRAC], today: DAC) that was established that very same year. In 1992, there were about 120 known archaeological sites (mainly chance finds of grinding grooves, petroglyphs, and stone axes). These were basically the sites Émile Abonnenc had inventoried 40 years prior. The law of September 27, 1941, protecting the archaeological heritage in France, became only applicable in French Guiana in 1965. Article II of this law is related to legal aspects as well as to technical and scientific aspects of salvage archaeology or Cultural Resource Management (CRM). To date, the French Institut National de Recherches Archéologiques Préventives (INRAP) conducts most of the CRM projects in French Guiana, after authorization by the Conservateur d'Archéologie of the archaeological service. In the late 1980s, two programs independently boosted the archaeology in French Guiana: the first being the CRM project at Petit Saut (between 1989 and 1994) and the second being the Volontaire à l'Aide Technique (V.A.T), i.e., an alternative service for the compulsory enlistment of people in a national service. Both these programs will be briefly outlined below.

The CRM project for the hydroelectric dam at Petit Saut added 273 newly discovered archaeological sites (of which 182 sites à polissoirs or grinding groove complexes) to the archaeological map, and 125 radiocarbon dates were added to the existing four (4!) radiocarbon dates available before this project started. This project was financed by the EDF (Électricité de France). CRM projects for hydroelectric dams in neighboring countries were of varying success. In Suriname, the CRM projects conducted in the 1960s and 1970s for the hydroelectric dams at Brokopondo, Kabalebo and Avanavero were not as productive as the French Petit Saut project. The Kabalebo and Avanavero reservoirs were never realized, and prior to the revival of these hydroelectric dams projects, an archaeological survey project should be a requirement. Potential for cultural heritage management projects in the existing Brokopondo Lake, including underwater archaeology and engagement of descendent communities, is currently being explored. In Brazil, the 1951 law nº 3124 resulted in CRM projects related to the construction of hydroelectric dams at Tucurui (1977–1978), Samuel (1987–1988), and Balbina (1987–1988), of which only the latter is located in Guiana (near Manaus, in Amazonas State). These Brazilian CRM projects were financed by the World Bank via Electronorte and conducted by archaeologists who were under scientific supervision of the MPEG with the support of the Smithsonian Institution. Although the Petit Saut project provided a significant boost to the archaeological reconnaissance in French Guiana, it concerned solely the circumscribed area of the future reservoir behind the hydroelectric dam.

The dissertation research conducted by Stéphen Rostain (Ph.D. 1994) is the first comprehensive study of the role of the French Guiana coastal area in the grand migrations of indigenous peoples before the arrival of Columbus in the Americas, as well as to understand the settlement of the indigenous communities known in the historical period (after AD1492). Additionally, he studied how indigenous peoples confronted the difficulties posed by their surrounding environment. Rostain's dissertation research followed his post as a Volontaire à l'Aide Technique (V.A.T), a post created by Danièle Lavallée, director of research at the CNRS. Between September 1984 and November 1985, this post was occupied by Alain Cornette, and between 1984 and 1991, Cornette and Rostain combined excavated some two dozen archaeological sites in French Guiana. In 1995 and 1996, Mickaël Mestre - currently archéologue d'opération responsable at **INRAP** occupied this The post. V.A.T. program has since been discontinued.

During the 1990s, CRM projects and the V.A.T. program furthered the archaeological knowledge in French Guiana, though these projects have mainly occurred in the coastal area (*le littoral*; up to about 50 kilometers from the Atlantic Coast) and along the main rivers. Programmatic research projects, let alone systematic

surveys, in the inland uplands are rare to nonexistent and the location of new sites largely depends on chance finds and nonsystematic surveys. The participatory archaeological mapping projects conducted in the Upper Maroni Basin since 1995 by the author (Duin 2017; Duin et al. 2015) in close collaboration with Wayana indigenous communities have provided the locations of dozens of historical and pre-Columbian archaeological sites on both the French and the Surinamese river banks. The interfluvial inland upland areas in-between two rivers or creeks, even those areas indicated in historical sources as occupied by indigenous peoples, remain virtually an archaeological terra incognita, other than the recognition of the hilltop sites with a ditch or moat (locally glossed site à fossé, montagne couronnée, or éperon barré). Thus far, only three sites with a ditch or moat are known in Suriname, though due to the frequency of these sites across French Guiana, more hilltop sites with a moat or ditch are expected to be found in neighboring Suriname and in Brazilian Amapá. Current research projects in French Guiana demonstrate the potential of LiDAR to identify such ditches under a tropical forest canopy.

The first Conservateur d'Archéologie of the SRA-DRAC was Guy Mazière (1992-1998). Most of his work was conducted in collaboration with his wife Marlène Mazière, ingénieur d'études, who had a particular interest in rock art sites. They located numerous grinding groove sites during their fluvial prospections, notably on the Tampok-Waki. (Mickaël Mestre and the author (Renzo Duin) were members of the 1996 Tampok-Waki expedition.) In addition, they conducted interviews with local inhabitants and studied both aerial and satellite imageries to identify potential new sites. Geo-positioning missions to earlier inventoried sites were conducted to verify the location and determine the condition of the site. An inventory conducted among the Kali'na communities in northwest French Guiana was very productive, not the least because of the presence of Sandra Kayamaré (currently administrative at INRAP-Guyane), who herself is a Kali'na. These complementary methodologies enriched the archaeological map (*carte archéologique* or the Patriarch database).

A historical or colonial archaeology program mainly perceived as a support to historical research - ran parallel to the prehistoric of pre-Columbian archaeology programs. In the 1980s and 1990s, Yannick Le Roux - a local art teacher (professeur d'arts plastiques), currently history teacher at the Lycée Félix-Éboué in Cayenne conducted the historical archaeology program in French Guiana. Several estates have been studied, including Poulain, Vidal, and Loyola, all located in the Remire area at the "isle of Cayenne" (île de Cayenne) in the vicinity of the capital Cayenne. A continuous programmatic archaeological study has been conducted at Loyola since 1994 - joint after 1996 by Québécois archaeologists from the University of Laval, Canada. Another architectural and historical study was conducted to the remaining architecture of the French Guiana penal colony or bagne, of which principle remains are found in Saint Laurent du Maroni and on Devil's Island.

Although several indigenous communities belonging to the Arawakan, Cariban, and Tupi-Guarani language trunks are residing across French Guiana, neither an ethno-archaeological program nor a public archaeology program to engage these indigenous communities has been developed systematically, other than a few activities with the Kali'na. Well into the twenty-first century, there was a common practice to selectively use nineteenth- and twentieth-century ethnographic imageries without critical evaluation to illustrate archaeological assemblages. This practice disregarded the historical sources designating socio-politically more complex societies with elements of regional integration. Since the 1960s, Pierre and Françoise Grenand have been conducting ethnographic fieldwork in French Guiana, and they are a source of information for ethno-historical references, notably regarding the Oyapock river basin. With an alternative to the twentieth century tropical forest model, several known and recently discovered archaeological sites are currently being re-evaluated resulting in new insights into the pre-Columbian sociopolitical organization (before AD 1492), how these peoples interacted with their surrounding tropical forest environment, their resilience across the historical divide, and how the archaeological assemblages relate to present-day indigenous communities.

Brazilian Guiana (States of Roraima, Amazonas, and Amapá and Pará North of the Amazon) The twentieth-century model of tropical forest cultures conceptualized in Julian Steward's Handbook of South American Indians was reinforced by the archaeological studies conducted by Meggers and Evans at the mouth of the Amazon. After World War II, the archaeological agenda in Brazil was set to answer two fundamental questions: (1) was the main source of innovation in Amazonia the Andean region or Amazonia? and (2) how complex was the socio-political organization of tropical forest cultures in Amazonia? This agenda was mainly set and developed by North American scholars. Meggers advocated the Andes to be the main source of innovation with Amazonia to be what she glossed a "counterfeit paradise" where local communities could not develop into more complex societies. Alternatively, Donald Lathrap advocated a local Amazonian development for Amazonian cultures, a position which was furthered in the 1980s and 1990s by Anna Roosevelt (1980, 1994) who advocated that maize production could have sustained more complex societies in Amazonia, notably at the lower Orinoco and at Marajo Island in the mouth of the Amazon.

Additionally, between 1990 and 1992, Roosevelt led an excavation at the Caverna da Pedra Pintada (Cave of the Painted Rock) near Monte Alegre in the State of Pará. Archaeological evidence dated the human occupation of the Cave of the Painted Rock around ca. 10,000 years ago, which added a third theme to the archaeological agenda, namely, about the timing and rate of the peopling of the Americas. Pottery found in a nearby riverbank was dated ca. 7,500 years ago, making it among the earliest potteries produced in the Americas. Paleo-Indian projectile points recovered at the border between Brazil and Suriname are also estimated of about 10,000 years ago. The timing and rate of the peopling of Guiana is an important theme in the archaeological

agenda in the Guianas that has not received sufficient attention.

Environmental impact assessment studies, including CRM, for the hydroelectric dam at Balbina (1987-1988), north of Manaus, revealed a large number of new archaeological sites, including petroglyph sites. The archaeological assets defined and protected by Law No. 3924, of July 26, 1961, were only recognized as part of Brazilian Cultural Heritage in the 1988 Federal Constitution, Article 216. Institutional strengthening of the archaeological heritage management was standardized more recently by Decree No. 6844 of May 07, 2009, through creation of the Centro Nacional de Arqueologia (CNA) at the National Institute of Historical and Artistic Heritage (Instituto do Patrimônio Histórico e Artístico Nacional, IPHAN).

Important for the development of the archaeological agenda in Brazil is the Brazilian Archaeological Society (*Sociedade de Arqueologia Brasileira*, SAB), founded in 1980, and their journal *Revista de Arqueologia* (since 1983; originally edited at the Museu Paraense Emilio Goeldi/ CNPq). SAB has established an active online community with regular updates on current affairs and organizes annual meetings. Of particular interest for Guiana is the subdivision SAB-Norte related to the archaeology in northern Brazil.

Disregards long standing archaeological agendas in Venezuela and Brazil, the border area between the Venezuelan State of Amazonas and the Brazilian State of Roraima is the least known region, in what Patricia Lyon in 1974 glossed "the least known continent." The watershed of the Serra Parima is the geopolitical border between these two states in, respectively, Venezuela and Brazil. Beyond its remoteness, there is another reason why this region is an archaeological terra incognita: this is the homeland of the Yanomami. Throughout the twentieth century, many archaeologists used the ethnographic studies of the Yanomami as analogies to interpret the archaeological record; in a sense, the Yanomami represented our contemporary ancestors and were considered to be unchanged since the dawn of time, a true nature folk. Many anthropologists have studied the Yanomami, yet few have studied their origins. Following Napoleon Chagnon's study of what he called "macromovements" of seven communities over a 125-year period, these seven communities all originated from the Serra Parima region. Chagnon further wrote that when the Yanomamö find stone axes when clearing a new site for cultivation, they explain these stone axes as being left behind by the First Beings, particularly Boreawä who was the first to cultivate plantains (which raises the question on the timing and rate of distribution of bananas in South America). The Yanomaman language family is considered an isolate, unrelated to other indigenous languages. Both the origins of the language, as the cultural origins of the Yanomami, have not received sufficient attention. No archaeologist has ever conducted an archaeological study, survey, or excavation in the land of the Yanomami to study the origins of the Yanomami. The history of the Yanomami has thus been silenced in the sense used by Michel-Rolph Trouillot. At present, the archaeological practice in conjunction with local indigenous knowledge encourages a deconstruction of the political processes of history making, aiming to voice local histories, nevertheless, the archaeological past of the Yanomami remains hidden.

Archaeological Agenda in Guiana in the Twenty-First Century

During the 2006 annual meeting of the Society of American Archaeology, Michael Heckenberger responded to Betty Meggers that Amazonia is culturally diverse and that her conceptualization might be true for Guiana. Around the turn of the century, the late Jim Petersen, Michael Heckenberger, and Eduardo Neves spearheaded an alternative to the neo-evolutionary cultural ecology paradigm (which defined Amazonian communities in culture-historical terms wherein economics were perceived as the extrasomatic means of adaptation), and thus, they set the academic archaeological agenda in Amazonia for the twenty-first century (Heckenberger et al. 2001; Heckenberger and Neves 2009). The aim of several programmatic research programs was to gather new data in support of the revisionist model of local Amazonian developments of socio-political societies with regional elements integration. of А new generation of Amazonianists, including in-country trained archaeologists, contested the twentieth-century model through archaeological excavations conducted along the rivers Orinoco, Rio Negro, and Amazon. Archaeological evidence for sociopolitically complex societies was further demonstrated on the Atlantic coast area. The practical archaeological agenda in Amazonia in the twentyfirst century was foremost driven by CRM projects that were conducted on the coastal area and coastal hinterland. The few CRM and programmatic research project in the inland uplands have not yet been brought to a coherent whole, and thus, the twentieth-century model of tropical forest cultures remains popular for the inland uplands of Guiana.

Near Manaus, Heckenberger, Peterson, and Neves directed the Central Amazon Project; together with Neil Whitehead and George Simon, Heckenberger directed the Berbice Archaeological Project in Guyana; and during his long-term research project in the Xingu, Brazil, Heckenberger strongly collaborated with local indigenous communities. This international collaboration, synergy between the established disciplines (anthropology, history, archaeology), in conjunction with close collaboration with local indigenous communities is setting the current archaeological agenda for the Guianas. Heckenberger further promotes building upon previous scholarship, whether it be for nuancing the Arawakan Diaspora or anthropogenic soils. The question whether or not the dark earths in Guiana are similar or different than the Amazonian Dark Earth (ADE) terra preta, or terra preta do Indio, frequently surrounded by terra mulata, in the Brazilian Amazon is only currently being investigated. Although described in early historical sources as "Turkish wheat," a significant presence of corn or maize (Zea mays) has only recently been demonstrated archaeologically in Guiana. Ground-breaking results in understanding pre-Columbian socio-political organization and coupled human-environmental systems are to be expected from research projects currently ongoing in Guiana.

Next to Brazilian nationals being trained in archaeology, Venezuelan nationals, Guyanese and Surinamese nationals are currently being trained in archaeology in in-country universities. These developments are very recent and have instantly adjusted the respective archaeological agendas. For example, the development of a Minor in Archaeology in the History Department at the University of Suriname (since 2014) led to a shift from pre-Columbian to historical archaeology, and a plantation and African Diaspora archaeology program is currently being developed. Most important is the new generation of Amazonian archaeologists taking distance from the twentieth century model of tropical forest cultures. Secondly, a broadening of the scope beyond the pre-Columbian (before AD 1492) into historical archaeology. Thirdly, an engagement of indigenous peoples and maroon communities (descendants of the run-away enslaved African peoples). Last but not least, the political will to implement policies facilitating the archaeological agenda.

The Encuentro Internacional de Arqueología Amazónica (EIAA) has been influential in developing the archaeological agenda in the twentyfirst century. In a few years this international meeting has become the most prominent and effective means to bring Amazonianists together. Of particular significance is its grounding in Amazonia: the first EIAA meeting was held in September 2008 at the Museo Paraense Emílio Goeldi (MPEG), Belém-do-Pará, Brazil (organized by Edithe Pereira, specialist in rock art studies at MPEG). As discussed earlier, the Museo Goeldi has a long history of archaeological research in Amazonia. Two years later, the second EIAA meeting was held in Manaus in collaboration with the Amazonas State University (UES) and was organized by Eduardo Neves from the University of São Paolo (USP). The third EIAA meeting, held in 2013 in Quito, Ecuador, was organized by Stéphen Rostain, and the fourth EIAA meeting was held in 2017 in Trinidad, Bolivia. These EIAA meetings were focused on Amazonia, yet always had a strong Guiana component, embodied by the organizers who have worked in Guiana as well as by several panels and invited speakers. To bring together archaeologists working in Guiana and to discuss key issues and debates pertaining to Guiana, the author (Renzo Duin) has proposed a Guiana Archaeology Meeting. These international meetings are strongly influencing the archaeological agenda for the next decade(s), though strongly depend on each countries legislation in conjunction with economic and political developments.

Venezuela

The Venezuelan Institute for Cultural Patrimony (Instituto del Patrimonio Cultural, IPC) developed during the mid-1990s and its archaeological office is responsible for the approval and supervision of all archaeological projects in Venezuela. Under the direction of Luis Molina, the archaeological office flourished between 2004 and 2012. However, after the death of President Chavez, there has been an economic downturn in Venezuela and governmental institutions including the IPC have a growing lack of funding and researchers. External funding for an archaeological research in the upper reaches of the Middle Orinoco River in Venezuela was offered by The Leverhulme Trust (RPG 2014-234) for The Cotúa Island Reflexive Archaeology Project (2015–2019) led by José Oliver (University College London) in collaboration with the Instituto Venezolano de Investigaciones Científicas (IVIC), República Bolivariana de Venezuela. At present, archaeological research in the country is virtually paralyzed due to the economic downturn and the current political turmoil.

Contemporary Venezuelan archaeology is a mosaic of different theoretical and research programs (Gassón 2017). Core researchers are located at the Central University of Venezuela (UCV), the University of the Andes (ULA), the Venezuelan Institute of Scientific Research (IVIC), and most recently, the University Francisco de Miranda (UNEFM). Additionally, there has been a growing support for museums and local initiatives, as well as dialogues among experts, government agencies, and local (indigenous) communities. These approaches resulted from developments in postprocessual archaeology, critical theory, and postcolonial studies, which were in response to the dominant neoliberal perspective at the end the twentieth century in both economy and world politics. For Venezuela specifically, these developments were embedded in the national project known as the Bolivarian Revolution, which began in 1999 under the presidency of Hugo Chavez and the adoption of the new Constitution of the Bolivarian Republic of Venezuela.

The archaeologists in Venezuela are divided due to differences in academic, political, and personal leadership. This fragmentation along with a reduction of the professional archaeological community resulted from a period of economic and political crisis following the death of President Chavez in 2013 and the rise to power of President Nicolas Maduro. There is a lack of funding for research projects, support of museums and research institutes, as well as for participation in international meetings and conferences. The Venezuelan Society of Archaeologists (SOVAR) and the Venezuelan Association for Archaeology (AVA) have ceased their activities. There is a reduction of archaeologists due to retirement and/or migration to other countries. Last but not least, there is little interest in archaeology among the new generation of Venezuelan students.

Similar to other regions in the Guiana Highlands, the historical long-term dynamics of coupled human-environmental systems resulting in lasting modifications of the landscape, environmental change, and the antiquity of the peopling of Venezuelan Guayana are poorly known. The Gran Sabana Community Archaeology Project aimed at research, preservation, and development of the archaeological heritage of the Gran Sabana region in the Canaima National Park in the state of Bolívar and was the result of a collaborative effort between the indigenous Pemon Arekuna people of the town of Kavanayén and researchers of the Centro de Antropología at the Venezuelan Institute for Scientific Research (IVIC). The earlier discussed political developments in Venezuela brought to a halt this promising project with a landscape approach bridging between archaeology, (ethno-)history, oral histories, paleo-ecology, historical ecology, and traditional (ecological) knowledge. Anticipated government-led mining

projects will severely impact the Gran Sabana and neighboring regions, affecting regional archaeology and the future of local indigenous peoples. This is furthermore pertinent to Guyana heritage programs as Venezuela claims the territory west of the Essequibo (Fig. 5). Erasing archaeological assemblages and the histories of indigenous peoples is supported by the nineteenth- and twentieth-century proclamation that these are "people without history." This tendency of Native American ethnocide owing to capitalist economic expansion is present across the five Guianas.

Guyana

Around the turn of the twenty-first century, Mark Plew of Boise State University, USA, conducted extensive surveys and test excavations at several locations across Guyana. Plew wrote in his 2005 summary of the archaeology of Guyana that although the history of archaeology in Guyana spans over a century, it remains very much in a pioneering stage. Plew's statement is also true for the neighboring countries.

During the past decades, the archaeological agenda in Guyana has moved away from the rudimentary exploration with small descriptive surveys towards a more scientific exploration of prehistory, wherein climate change, conservation, and the studies of human adaptation have become increasingly common. To foster capacity building and public archaeology to increase local awareness, the Amerindian Research Unit (ARU) at the University of Guyana (UG), in close collaboration with the aforementioned Walter Roth Museum of Anthropology established in 2007, the Denis Williams Archaeology Field School. This program in honor of Denis Williams annually engages university undergraduate students and museum employees in a vibrant program possessing immense potential to broaden the horizon. The results of these explorations are published in Archaeology and Anthropology: Journal of the Walter Roth Museum of Anthropology or in the Monographs in Archaeology published through the University of Guyana and the Department of Culture. Currently, the Aishalton petroglyph complex in the Rupununi savannah - containing

hundreds of petroglyphs, studied by Williams in the 1970s – has regained interest for the development of site management and conservation plans resulting from an increasing impact from both economic development and climate change.

Due to the increasing archaeological activities during the last 10 to 15 years, a series of standardized site and documentation forms were introduced by the Walter Roth Museum to ensure more efficient data collection and curation. Furthermore, ethical considerations in archaeological research have become a subject of recent discussion, particularly as it relates to recovery and curation of human remains. These concerns have given rise to the deliberation for the drafting of a repatriation act and the establishment of an ethics board to review archaeological research. Moreover, Guyana faces the global concern regarding the continuous backlog of unanalyzed and catalogued collections, as well as a longstanding issue of storage and curation. These concerns are increasingly pressing due to the fact that the Walter Roth Museum is understaffed, there is an insufficient expertise present in Guyana, and there is limited funding channeled towards research and conservation. At present, the University of Guyana recognizes the importance of archaeology and offers an associate degree in Anthropology while continuing to foster enduring relationships with both resident and nonresident archaeologists.

Historical archaeology – including plantation archaeology and underwater archaeology – has been explored only very recently. The future of underwater archaeology and maritime heritage management is optimistic as Guiana is currently guided by several international conventions, including the 2011 convention on the protection of Underwater Cultural Heritage which was ratified by the government in 2014, and national policies which provide support for the protection of both underwater and terrestrial maritime archaeological heritage sites.

Like other developing countries, including but not restricted to the neighboring countries, Guyana has not yet addressed the need to develop an effective infrastructure geared towards archaeology. At present, several institutions and existing policies provide guidance and share these regulatory responsibilities to some extent. Existing national policies were not designed to address critical areas of archaeology, and although Guyana is a signatory to several UNESCO conventions, the country does not have a coherent legal system to protect the archaeological sites. Governance is to some extent provided through oversights from the Walter Roth Museum of Anthropology (WRMA), the Environmental Protection Agency (EPA), the National Trust of Guyana, the Indigenous Peoples Affairs Ministry, and to a lesser extent the University of Guyana and the Protected Area Commission. Guyana's Maritime Zone Act also makes special provisions for underwater cultural heritage within the territorial sea and contiguous zone in accordance with Article 7and 8 of the UNESCO convention (Maritime Zone act 2010, Protected Areas Act 2011, Environmental Protection Agency Act 1998, NTG Act 1998). These initiatives are mainly advanced by Louisa Daggers (2015). Although these institutions are mandated by law to have some degree of involvement in the protection of cultural resources and the management of archaeological sites and research, the current framework is not the most proficient and transparent as the institutions operate within a fluid environment. At present, the responsibility for oversight of archaeological projects resides with Guyana's Department of Culture, the Walter Roth Museum, and the Environmental Protection Agency which has legal oversight of archaeological activities.

Knowledge and local awareness determines the fate of archaeological site management. Funding is a major constraint to foster the local community engagement through training and workshops to raise public support for the archaeological endeavor. It is expected that the growing support from local communities to protect their local heritage will derive from these initiatives and will eventually facilitate the implementation of a methodological Cultural Research Management (CRM). Participation and close collaboration with the public, in particular with local indigenous communities, is necessary because much of the archaeological cultural landscape is



Archaeological Agenda in the Guianas, Fig. 6 Desectation of historical and pre-Columbian archaeological sites, including historical and Native American graves. Sand extraction activities at Motkreek,

located within indigenous people's territories. Most are very recent initiatives.

In 2017, the indigenous Wapichan Southern Rupununi District Council, invited Renzo Duin to conduct a community-based Wapichan History Project to study the history of the Southern Rupununi and Upper Essequibo Basin. The fieldwork of the Wapichan History Project evidenced that the existing archaeological knowledge of this region is limited, incomplete, and restricted to sites that were readily accessible with the guidance of local residents.

Suriname

Recently it appeared that the archaeological map published by Versteeg in 2003 is used during environmental impact assessment studies, and when no archaeological sites are marked on the respective location, this was reported as such. Best practices are needed to have, at least, the archaeological component of the impact assessment study being conducted by a qualified archaeologist, and implementation of an archaeological project including but not restricted to a pedestrian survey in the area determined for the impact assessment study. Suriname is currently facing a public debate on the risk of unearthing

Suriname, January 2017. Compilation of images of the location and finds. (Source: youtube at https://www.youtube.com/watch?v=QHXPzEmi9H4)

archaeological sites, potentially containing human remains, when no proper archaeological impact assessment study has been conducted. During the writing of this entry, such an event occurred at Motkreek (Fig. 6). Archaeology is not preventing economic development, and as in neighboring countries, CRM projects most certainly will provide a boost to the archaeological knowledge of Suriname's past.

In 2012, a Department of History was created under the new Faculty of Humanities at the Anton de Kom University of Suriname (UvS). The Chair of the Department, Maurits Hassankhan, further lobbied for a Minor in Archaeology in the Department of History which started in 2014, and the first Surinamese students trained in archaeology at the UvS are slated to graduate with a BA in 2017. In 2014, the Archaeological Steering Committee was established by ministerial decree to revive the Archaeological Service in Suriname. The Archaeological Service, under the Ministry of Education, Science and Culture (Ministerie van Onderwijs, Wetenschap en Cultuur, MinOWC), is a government service seeking to direct, manage, execute, and communicate on all matters of archaeological activity in Suriname. In 2015, the government of Suriname by ministerial order NB/MP/no.458/14

Instelling Stuurgroep Activering Archeologische Dienst established a steering committee to activate the Archaeological Service after years of inactivity. At present, staffing, an inventory of known archaeological sites, policy for land and water, permitting procedures, as well as guidelines for private sector and government, are currently under development. Spearheading this effort was the report Suriname Center for Archaeology: a National Strategy for Research, Policy, and Practice commissioned by the MinOWC, Directoraat Cultuur, and written by Cheryl White and Renzo Duin (the author of this entry). The Archaeological Steering Committee is currently developing policy and an archaeological permitting process, both awaiting approval by the Council of Ministers. The history of the archaeology in Suriname and these recent developments are discussed in more detail in Archaeology in Suriname (Duin and White 2017). These recent developments broadened the scope of archaeology in Suriname beyond pre-Columbian archaeology, and the new archaeological agenda in Suriname also includes historical archaeology, plantation archaeology, underwater archaeology, and an archaeology of engagement with local indigenous peoples and maroon communities contributing to a more nuanced understanding of the past, as well as a contribution to local pride of place and practice and a raised awareness of the history and cultural diversity of Suriname.

French Guiana (Guyane)

The archaeological agenda in French Guiana in the beginning of the twenty-first century broadly followed the archaeological agenda from the late twentieth century. Yearly reports are published in the *Bilan Scientifique*. The preventive rescue archaeology projects conducted by INRAP continue to contribute to the growing archaeological dataset. The archaeologists working at INRAP to date are essentially the same who worked here at the turn of the twenty-first century. The new *Conservateur d'Archaeology* of the Archaeological Service in French Guiana Nicolas Payraud (2014-present) is advocating the end of nonsystematic exploratory missions in the interior of French Guiana, and his training and interest in history has shifted the archaeological thematic agenda towards the historic period.

Brazil

Major advances made in Brazilian archaeology in recent decades are currently coming to a halt. Institutional strengthening of the archaeological heritage management was standardized by Decree No. 6844 of 07 May 2009 through creation of the Centro Nacional de Arqueologia (CNA) at the National Institute of Historical and Artistic Heritage (Instituto do Patrimônio Histórico e Artístico Nacional, IPHAN). Main activities of the CNA are authorization and permission to conduct archaeological research, monitoring and supervision of such research, and the implementation of various socialization activities of the archaeological heritage. The CNA further developed policies and strategies for the management of the Brazilian Archaeological Heritage, the modernization of legal instruments, and the monitoring of archaeological research that in two decades, increased from about five to almost 1000 projects per year. The CNA is currently developing a Strategic Master Plan (Plano Diretor Estratégico) defining a national policy for the Brazilian Archaeological Heritage in all its aspects: identification, research, protection, promotion, and socializing. However, the present political situation - impeachment of the president, resignation of ministers, policies being under attacked in the Congress, etc. - weighs heavy on IPHAN and its Superintendências for each State. This change in political will have ramifications for the archaeological agenda regarding the Brazilian territories in Guiana.

Amazonian archaeology has made major advances in recent decades, particularly in understanding coupled human-environmental systems. Like other tropical forest regions, prehistoric social formations were long portrayed as smallscale, dispersed communities that differed little in organization from recent indigenous societies and had negligible impacts on the essentially pristine forest. Recent archaeological projects have documented novel pathways of early foraging and domestication, semi-intensive resource management, and domesticated landscapes associated with diverse small- and medium-sized complex societies. Late prehistoric regional polities were articulated in broad regional political economies, which collapsed in the aftermath of European contact. Field methods have also changed dramatically through in-depth local and regional studies, interdisciplinary approaches, and multicultural collaborations, notably with indigenous peoples. Contemporary research highlights questions of scale, perspective, and agency, including concerns for representation, public archaeology, indigenous cultural heritage, and conservation of the region's remarkable cultural and ecological resources. These projects providing new insights were however mainly conducted along the Amazon River and the Rio Negro, or outside of the Guiana territories. Significant for the archaeological agenda in Guiana have been the archaeological surveys and excavations conducted since 2005 in the Brazilian state of Amapá, as will be discussed in a moment under "Megalithic Sites," which brings me to the current debates and key issues.

Key Issues/Current Debates

Pottery Analysis: Reassessing the Culture Historical Paradigm

Underpinning the ceramic analysis in the Neotropics to date are time-space graphs developed and established in the second half of the twentieth century by Irving Rouse and José Cruxent for the Orinoco and the Caribbean and by Betty Meggers and Clifford Evans for Amazonia and Guiana. These two areas broadly correspond with two of the four principal geographic areas or "divisions" presented by George D. Howard in 1947. These time-space graphs are grounded in the concept of a culture-historical mosaic, aimed at fixing classificatory "peoples" in time and space by a set of reference points measured in terms of socioculturally meaningful events such as migrations, contact, and conquest. Nevertheless, the development of archaeological and deep-historical research in the twenty-first century has demonstrated that both Amazonia and the Caribbean are more heterogeneous and dynamic than anticipated from the constraining definition of the twentieth-century tropical forest culture model.

Reconceptualization of social and historical processes is required since recent socio-cultural anthropological studies have demonstrated that social phenomena occur in complex dialectical relationships of negotiating discontinuities and contested practices. To understand the kaleidoscope in pottery styles (some are pan-Amazonian or pan-Guiana ["Horizons"], others are local; some are long-term ["traditions"], others are short-lived; with in-between all types of variants, hybrids, co-existence of styles, and sloping horizons), a dynamic multiscalar relational alternative to the static space-time graph is anticipated. A critical reassessment of the existing taxonomic systems is necessary because the space-time graphs from Meggers and Evans on the one hand, and those from Rouse and Cruxent on the other, have developed independently and have sprouted from different methodological paradigms.

A predicament for archaeologists working in Guiana is the independent development for pottery type classification in each of Howard's geographical divisions, because there is no uniform cultural and period terminology. Meggers and Evans applied a different paradigm for pottery type classification than Cruxent and Rouse who emphasized difference rather than similarities. The ramification of this, as already acknowledged by Evans and Meggers, is that "a sequence of change such as that encompassed within our Mabaruma Phase, for example, may be represented by two or more styles in their scheme" (Evans and Meggers 1960: 12). Because different paradigms are applied, it is inappropriate to simply equate, for example, the Mabaruma Phase (as defined by Evans and Meggers) with the Barrancoid Series (as defined by Cruxent and Rouse). In addition, the Arauquinoid Horizon distinguishable in the chronology by Rouse (1986) is absent by Evans and Meggers (1960). Rostain (1994) broadly followed the Amazonian nomenclature (Meggers and Evans 1957; Evans and Meggers 1960), though incorporated the term "Arauquinoid" from the Venezuelan nomenclature (Cruxent and Rouse 1958) to define several local styles in French Guiana and Suri-Thémire, Barbakoeba name. such as and Hertenrits. To complicate the matter even more, Rostain used the French term *tradition* instead of the term "Horizon," to describe the Arauquinoid, which should not be confused with the term "tradition" denoting what Rouse glossed "Series." Moreover, Meggers and Evans (1961) proposed four horizon styles for Lowland South America based on pottery decoration and rim shape, namely, "zoned hachure," "incised rim," "polychrome," and "incised-and-punctate." The latter horizon encompasses diverse styles from Arauquín, Mabaruma, Itacoatiara, Konduri, Santarém, and Mazagão. Versteeg, following Rostain, combined the nomenclature from the Orinoco-Caribbean and the Amazonian regions in his studies of archaeological assemblages in Suriname, and this borrowing of terms has largely occurred without critical evaluation of the nature of both paradigms of pottery type classification.

For decades, Neil Whitehead advocated that it is necessary to reconceptualize basic social and historical processes in this region, rather than just to add "new data" to "old theory." The "old theory" is one of time-space graphs developed and established by Irving Rouse. This "old theory" is grounded in the concept of a culture-historical mosaic aimed at fixing "typological peoples" in time and space by a set of reference points measured in terms of socio-culturally meaningful events such as migrations, contact, and conquest, with intervals of homogeneous "empty time," resulting in a reduction of each nation into a bounded and independent unit of analysis. The need for a comprehensive alternative to the present pottery type classification that can be used across Guiana - from the Orinoco across the Guiana Highlands to the mouth of the Amazon urges a reconceptualization of social and historical processes in the region, which brings me to the next topic of debate.

Socio-Politically Complex Societies (or the Maize – Manioc Dichotomy)

Throughout the twentieth century, indigenous Amazonian societies, contrary to their Andean neighbors, were envisioned as small-scale, socio-politically autonomous communities with minimal impact on the natural environment. In Northwest South America, Gerardo ReichelDolmatoff had unearthed baking plates or "griddles," which he linked to the cultivation of manioc or cassava, which in later periods were replaced by manos and metates, which he related to the preparation of maize. Until very recently, archaeologists in Amazonia and the Caribbean have, without critical evaluation, interpreted griddles as baking plates for cassava bread. Furthermore, Carl Sauer had emphasized the presence of rootcrop agriculture, such as manioc, one of "vegetative planters," in lowland South America, as contrasted with the presence of "seed planters," with an emphasis on maize, in Meso-America and the Andean region. Societies based on root-crop agriculture - predominantly manioc - were presumed unable to produce the necessary surplus allowing for socio-politically complex societies at the level of the chiefdom.

Although early historical sources described the presence of large and numerous indigenous communities on the river banks of the Orinoco and Amazon, early twentieth-century ethnographic studies trumped the historical referents. When Anna Roosevelt in 1980 published Parmana, Prehistoric Maize and Manioc Subsistence along the Amazon and Orinoco, she put the default model to the test, in that maize or corn (Zea mays) potentially allows for larger and permanent settlements resulting in socio-politically complex societies comparable to the Circum-Caribbean culture pattern. After that, she demonstrated the presence of chiefdom level societies at the island of Marajoara in the mouth of the Amazon. This debate on sociopolitical complexity in Amazonia rooted in a maize/manioc dichotomy ran into a deadlock in the last quarter of the twentieth century. Most recently, phytolith studies in raised-fields on the French Guiana coast demonstrated a significant presence of maize (Zea mays). These recent paleo-ecological findings urge a rethinking of the agricultural potentiality of the Guiana landscape and the diversity and the scale of pre-Columbian socio-political complexity in Guiana. In conjunction with a model of a ritual economy driving a society of social houses (Duin 2009, 2012), the debate on socio-political complexity in Guiana is recently gaining grounds.

Megalithic Sites

Since 2005, a Brazilian archaeological team from the Instituto de Pesquisas Científicas е Tecnológicas do Estado do Amapá (IEPA), led by Mariana Petry Cabral and João Darcy de Moura Saldanha, has conducted systematic archaeological surveys and excavations in the Brazilian state of Amapá. Most momentous is their work at the megalithic site at Calçoene, glossed "the Brazilian Stonehenge." This is one of several ceremonial/funerary sites containing megalithic structures and chambered tombs. Large granite blocks - some measuring over three meters above the ground surface - have been placed on top of hills in a circular arrangement varying from less than 10 m in diameter to over 30 m in diameter. Though local informants had already indicated these stone circles to Nimuendajú, and later to Evans and Meggers, these megalithic sites in Guiana did not receive sufficient attention.

In 1869, C. Barrington Brown traversed a stone circle in British Guiana (today: Guyana). He described this site as a circle of upright slabs of greenish felstone porphyry, 2-3 ft in height [about halve to 1 m tall], and some 5 or 6 ft apart [about one and a half to 2 m distanced], placed in a true circle of about 30 ft [about 10 m] in diameter. Remarkable is the footnote in Brown's article published only a year earlier wherein he stated that the circle of stones is "very like that on Stanton Moor, shown in Fergusson's 'Rude Stone Monuments'." When archaeologists refer to this stone circle in Guyana, none address the footnote wherein Brown compared this circle of stones in Guyana with the stone circle on Stanton Moore, UK. None of the archaeologists referring to this stone circle have visited the site, let alone conducted a comprehensive archaeological study of and a regional survey around this site with a circle of stones encountered and described by Brown almost 150 years ago.

Both in the case of the megaliths in Brazilian Amapá and in the case of the stone circle in Guyana, it seems that twentieth-century archaeologists did not dare to compare the pre-Columbian megalithic structures erected by Native American indigenous peoples from Guiana with the European megalithic structures, because this would necessarily lead to a rethinking of the socio-political complexity of the pre-Columbian indigenous cultures of Guiana. Recent archaeological excavations at the megalithic sites in Brazilian Amapá present new data urging to rethink the twentieth-century model of tropical forest cultures.

Rock Art Sites: A Regional Perspective

Rock art has been a research topic throughout the centuries. In 1907, Theodor Koch-Grünberg published the first general overview of South American rock art wherein he stated that this was not so much a religious Bilderschrift ("hieroglyphics") as a means to remember (Erinnerung), resonating with Susanne Küchler's (1993) distinction between landscapes of memory (read as a landscapes text) versus as memory (transformative process of embodiment). During the late 1970s and 1980s, Cornelius Dubelaar would pioneer anew the systematic research of rock art in South America. There have been two modes to study the petroglyph sites: (1) sketching, or photographing the petroglyphs in situ, including situating the rock with petroglyphs in its natural setting, and (2) photographing, drawing, or making rubbings of the individual petroglyphs. Whereas both methods existed concurrently during the turn of the twentieth century, the systematic scientific approach gaining grounds throughout the twentieth century focused on the cataloguing and categorizing of individual images detached from their context, aiming to "discover" an interpretation. An alternative to this scientific "reading" of petroglyphs, inscribing memory into the landscape, the transformative process of embodied memory is more dynamic, as "people learn about the ancestral past by moving through the landscape, whereby landscape holds potential for encoding meaning" (Morphy 1995: 196; emphasis added).

Next to the paradigm shifting methodology, it is also needed to broaden the regional perspective beyond the geo-political borders. For example, Edithe Pereira, the leading Brazilian scholar in rock art sites, studied the petroglyphs along the rivers Erepecuru (or Cuminá and Paru de Oeste) first described and depicted systematically and in detail by Olga Coudreau at the turn of the twentieth century. In addition, Dubelaar studied, described, and depicted the petroglyphs along the Corentyne (Border River between Suriname and Guyana). Only in going beyond the geopolitical borders, it becomes evident that these two clusters are connected in the Sipaliwini Savanna at the border between Suriname and the Brazilian state of Pará. At this place, near the watershed, is located a unique standing rock with several double-headed anthropomorphic petroglyphs discovered by Bubberman in 1969. Moreover, two caves with hundreds of petroglyphs are located, respectively, in southern Suriname (Werehpai; discovered in 2000 and first published in 2016 by Aad Versteeg) and in northern Pará (Tühtakáriwai; first published in 1963 by Protásio Frikel), with in between these two cave sites a barren granite sacred plaza by Frikel glossed "Zeremonialplatzes am Waipá." This is the very same region in which Trio and Wayana situate Samuwaka, the lost city of the First Nations of Guiana. I posit that these two clusters of petroglyphs along the Corentyne and the Paru de Oeste joining at the Sipaliwini Savanna have to be conceived from a regional perspective and thus allowing for a "short-cut" across Guiana. I argue that an archaeological landscape perspective rather than a classification and categorization of isolated images will allow for a regional integration providing new insights into the meaning of rock art sites.

Engaging Descendent Communities and Indigenous Archaeologies

Although it may seem obvious, archaeologists working in Guiana have generally not worked in close collaboration with indigenous peoples or maroon communities (descendants of run-away enslaved African peoples) up until very recently. A few case studies demonstrated how indigenous perspectives provided insights into local mythscapes, though there has not yet been a systematic approach of Guiana indigenous oral histories in archaeological landscape studies. Local peoples often merely served as guides or were observed in ethno-archaeological studies. Mainly, this is because of the Euro-American standpoint from archaeologists working in Guiana that archaeology is a "scientific" discipline. The public archaeology project in the Reserva Uaçá, Brazilian Amapá, is an example of collaborative research in the sense that researchers from different disciplines work together. Furthermore, frictional discourses between western scientific knowledge and local indigenous lore were published as well, for instance, in the case of shell mounds. Innovative in this project was that Eduardo Neves provided training in excavation techniques to local indigenous people and dialogues on reciprocal learning rearticulated archaeology from the study of "things left behind in the ground" to "reading the tracks of the ancestors," wherein chronology, one of the cornerstones of archaeology and history, was de-emphasized.

Most "participation" or "collaboration" projects with local communities are, at best, restricted to the on-the-ground data gathering activities, comparable to Brett's ordered excavation conducted in the Waramuri Shell Mound in British Guyana 150 years ago. The decolonization of the archaeological agenda, as advocated and advanced in other parts of the world, notably in Australia and North America, is falling behind in the Guianas. At present, the University of Guyana is the only institute in the Guianas who has an Amerindian Research Unit, and its director, Louisa Daggers, is of mixed blood. Utmost needed is a Guiana-based institutional framework through which indigenous peoples and local communities will be actively involved in the research design and implementation phase of the data gathering scheme, on-the-ground data gathering activities, analysis and reporting to the national archaeological service, as well as in the outreach and publication phase of the archaeological projects. Rare are the archaeological projects where research goals are developed jointly, training is provided, support is tacit, information flows freely, with the aim to realize the needs of all parties. Exemplary in Guiana are the Venezuelan Gran Sabana Community Archeology project and the author's (Renzo Duin) long-term research

projects in the Upper Maroni Basin (Suriname and French Guiana). The Brazilian archaeological society, Sociedade de Arqueologia Brasileira (SAB), is currently promoting an archaeological agenda with strong attention to public archaeology and an archaeology of engagement with local communities (indigenous peoples and maroon communities), with attention for local social memory and indigenous histories. New modes of archaeology, ethno-archaeology, ethno-history, and indigenous archaeologies are currently emerging out of long-term collaborations between archaeologists and descendent communities (both indigenous peoples and descendants of run-away enslaved African peoples).

Historical Archaeology

The archaeological agenda in the Guianas was mainly set for the pre-Columbian period (before AD 1492) also glossed "prehistory." Historical Archaeology was initially a handmaiden to historical research and mainly focused on architectural and technological oriented objectives. In Venezuela, historical archaeology developed in conjunction with a political nationalist agenda. In Brazil, historical archaeology was mainly focused on military and religious sites. In the Guianas, historical archaeology was mainly focused on plantamaritime sites (mainly tion estates and fortifications). It is only in the last few years that the historical archaeological agenda in Guiana is broadly gaining interest; this is mainly due to the fact that UNESCO requires archaeological evidence when historical sites are proposed for the UNESCO World Heritage List.

Heritage Sites in Peril

Because of the sheer size of the countries, states, and departments, covered with over 90% with tropical rainforest, lack of roads in the inland uplands, and understaffed archaeological services, it is logistically impossible to inspect the condition of the known heritage sites on a regular basis, let alone a systematic inventory of potentially threatened archaeological sites that have not yet been discovered. Heritage protection by law needs to be in conjunction with local awareness building through a methodical public archaeology program, because when local communities begin to value the heritage, they are more prone to protect it. Additionally, local heritage awareness building may aid in local pride of place and practice. Parallel to this heritage awareness building is needed a social program, because for most people residing in impoverished conditions, wildcat gold mining, illegal logging activities, or the sale of archaeological materials (whether historical machinery sold as scrap metal, or the trade in funerary urns) often is the only means to earn some income. Because all five Guianas share this thread, and most activities of this heritage in peril contain a border crossing component (individuals illegally crossing geo-political nation state borders and/or archaeological objects illegally crossing geo-political nation state borders), a trans-Guiana law for Guiana heritage protection is utmost needed.

In Suriname, for example, almost no plantation heritage is protected by law and there is no legal restraint against removing materials from the sites. Old machinery and metal constructions are sold as scrap metal, and graves and stone foundations are bulldozed away when the land is being repurposed for infrastructure-related development. Both historical and pre-Columbian archaeological sites are being destroyed during these land development activities. During the midtwentieth century, land developers, mining companies, and sand extraction companies informed the director of the Stichting Surinaams Museum and allowed for archaeological excavations resulting in the study of numerous archaeological sites. Today, one of the goals of the revival of the Surinamese Archaeological Service is to promote archaeological awareness among the relevant stakeholders, as well as to draft new laws to protect Suriname's archaeological heritage and to facilitate the study of archaeological sites in peril.

In January 2017, it became public that human remains had been recovered during sand extraction activities at Motkreek, Commewijne, Suriname (Fig. 6). Further archaeological research needs to be conducted to determine the period and cultural affiliation of the finds. The indigenous communities in Suriname have requested a respectful treatment of the human remains and cultural finds. An appropriate cultural research management policy comprising preventive archaeological studies could have prevented the desecrating unearthing of human and cultural remains.

Synergy Between Protecting Archaeological Sites and the Natural Environment

During the 2015 COP21 United Nations Conference on Climate Change in Paris, it was recognized that the carbon stock in tropical forests play a fundamental role in climate change mitigation. Scientific research has established that indigenous reserves in the Brazilian Amazon have been most effective at avoiding deforestation in areas with high deforestation pressure, and pan-tropical studies demonstrated that forest cover and carbon stocks are best maintained by collective longterm use-rights management systems. Involving local and indigenous populations is key to effective environmental control. Furthermore, descendant communities have intrinsic rights to their history and to the places where this history occurred.

A little known case already embodies the protection of both the natural environment and archaeological heritage, namely, the Hertenrits Nature reserve in northwest Suriname, established in 1972. This is the smallest of all nature reserves in Suriname, and it was initiated precisely because of its cultural heritage. In 1957, Dirk Geijskes conducted pioneering excavations in a manmade mound named Hertenrits. Several decades later, Aad Versteeg conducted further archaeological studies at this site that became the type-site for the Hertenrits cultural assemblage. Next to the Hertenrits mound are six other man-made mounds, all surrounded by a network of canals and agricultural raised-field. More than 40 years ago, Suriname was thus taking the lead in a combined nature-culture heritage protection. Moreover, in the 1986 policy on nature preservation in Suriname, it was explicitly stated that local inhabitants residing in tribal formations would maintain their traditional rights and interests in the to-be established nature reserves.

Future Directions

Though most archaeologists consider Guiana to be a distinct geographical unit of research, the geo-political borders and language barriers have not facilitated trans-national collaboration. The archaeological agenda in the Guianas is diverse and largely conditioned by the history of each country. To date, the archaeological agenda in French Guiana remains mainly directed by the agenda in France. The archaeological agenda in Suriname has been dormant for decades. The archaeological agendas in Guyana, Brazil, and Venezuelan Guayana are founded upon a strong collaboration with North American (USA) scholars, yet have developed concurring in-country politics. At the academic level, close collaboration between the archaeological services in the five Guianas in conjunction with nonresident archaeologists is utmost needed, because neither archaeological assemblages nor presentday indigenous and maroon communities are bound by modern geo-political nation state borders. This pluri-cultural and multinational awareness in the archaeology of Guiana may contribute to the construction of citizenship political agenda's in each of the five Guianas. Furthermore, at the legislative level, a trans-Guiana law for cultural heritage protection is utmost needed because the five Guianas currently face similar concerns yet the different national laws prevent border crossing actions. Without a systematic archaeological awareness and social benefits plan for local communities, the laws and legal decrees will remain ineffective, in particular where a systematic monitoring of the condition of archaeological heritage sites is impossible due to the remoteness of sites and the understaffing of national the archaeological services and museums. Ongoing socio-economic developments and political will in each country will continue to affect the archaeological agenda in the Guianas.

Recent events indicate the future needs and directions for an archaeological agenda in Guiana. First, there is a need to stimulate dialogues between archaeologists, government agencies, and local communities. Second, political will is needed to implement laws for CRM, salvage, or rescue archaeology programs (either as standalone projects or as embedded in environmental impact assessment studies), which have been very fruitful in French Guiana. Third, stimulation of a productive research and working environment through in-country university programs and research centers that will train the next generation of Guiana-born archaeologists who based on their own background and research interests may shift the archaeological agenda. Furthermore, both Native Americans (Amerindian or indigenous communities) and descendants of run-away enslaved African individuals (Maroon communities) should be more actively involved in the participation and control on this scientific knowledge production and allowing for a local voice and indigenous perspectives to inform and direct the archaeological agenda in Guiana. Fourth, engaging local communities, by means of developing and financially supporting local museums, research centers, and public archaeology programs for conservation of collections, fundamental research, and outreach in the region. Fifth, promoting international Guiana oriented meetings which will offer a meeting ground for archaeologists working in one or more of the five Guianas, and to connect with different stakeholders.

Whereas the decolonization of archaeology has been ongoing for several decades in other parts of the world, notably in North America, Australia, and Africa, the engagement of Indigenous Peoples and Maroons (descendants of run-away enslaved African peoples) is only recently developing in Guiana. French Guiana lacks an archaeology curriculum at the Université de Guyane, and it is only recently that archaeological training of Brazilian, Guyanese, and Surinamese students occurs in their own country. It is anticipated that the growing number of locally trained archaeologists working in their own country will further the archaeological agenda in Guiana, yet the prospect of archaeologists from Indigenous or Maroon communities looms far at the horizon. The University of Guyana is the only University in Guiana with an Amerindian Research Unit, though this institution is understaffed and underfunded. With the current developments of а new

multidisciplinary direction of research into the archaeology, (ethno-)history, and anthropology of Guiana, in conjunction with an engagement of local indigenous peoples and maroon communities, the archaeological agenda in Guiana is opening up new opportunities and new horizons.

International Perspectives

Renzo Duin (Ph.D. 2009) is born and raised in the Netherlands and has been trained at the University of Florida, Gainesville, USA, in the four-field anthropology approach. Since 1995 he has conducted archaeological, (ethno-)historical, and ethnographical studies in the Neotropics, with long-term research projects with the indigenous peoples of the Maroni (Border River between Suriname and French Guiana). His international training, language skills, recognition of local indigenous knowledge and perspectives, and a close collaboration with in-country institutions and Guiana-based scholars have provided the author with a unique international perspective needed to write the present article. Additionally, lead scholars in Guiana archaeology and archaeologists at the national archaeological services have contributed to this entry, yet all interpretation of their contributions remains the responsibility of the author (in alphabetical order: Cristiana Barreto, Mariana Cabral, Diogo Costa, Louisa Daggers, Rafael Gassón, Helena Lima, Irene Meulenberg, Nicolas Payraud, Edithe Pereira, Mark Plew, Stéphen Rostain, João Darcy Saldanha, Denise Schaan, and Aad Versteeg). Currently, the author is the convener of the first Guiana Archaeology Meeting, inviting archaeologists working in all five Guianas to discuss the current status-quo as well as future directions of the archaeological agenda in Guiana.

Cross-References

- ► Agricultural and Social Earthworks in the Guianas
- Brazil: Cultural Heritage Management Education

- ► Brazil: Historical Archaeology
- Descendent Communities in French Guiana: Amerindians
- ▶ Ethics of Commercial Archaeology: Brazil
- French Guiana: Archaeology and Indigenous Peoples
- French Guiana: Archaeology and Minority Communities
- ▶ The Guianas: Pre-Columbian Heritage
- ► The History of the Research of Amazonian Dark Earths in Brazil
- ► Tourism, Archaeology, and Ethics: A Case Study in the Rupununi Region of Guyana
- Traditional Communities and National Legislation in Brazil
- ► Tupi-Guarani Archaeology in Brazil

References

- Brett, William. 1881. Mission work among the Indian tribes in the forests of Guiana. London : Society for Promoting Christian Knowledge.
- Cruxent, José, and Irving Rouse. 1958. An archaeological chronology of Venezuela. Two Volumes. Pan American Union Social Science Monographs, No 6. Washington.
- Daggers, Louisa B. 2015. CRM archaeological infrastructure for Guyana and developing countries. Archaeology and Anthropology: Journal of the Walter Roth Museum of Anthropology 19 (2): 51–57.
- Duin, Renzo. 2009. Wayana Socio-Political Landscapes: Multi-Scalar Regionality and Temporality in Guiana, PhD dissertation, Department of Anthropology, University of Florida.
- Duin, Renzo. 2012. Ritual Economy: Dynamic Multi-Scalar Processes of Socio-Political Landscapes in the Eastern Guiana Highlands. *Revista Antropológica* (117–118): 127–174.
- Duin, Renzo. 2017. Indigenous Archaeologies and Histories in Suriname: from pre-Columbian archaeology and ethno-archaeology to a community-based archaeology of engagement. In *Archaeology in Suriname*. Renzo Duin and Cheryl White (eds.) pp. 73–100. Paramaribo: IMWO.
- Duin, Renzo, and Cheryl White, eds. 2017. Archaeology in Suriname. Paramaribo: Instituut voor Maatschappijwetenschappelijk Onderzoek (IMwO), Anton de Kom Universiteit van Suriname.
- Duin, Renzo S., Kilian Toineike, Tasikale Alupki, and Aimawale Opoya. 2015. Archaeology of engagement: Indigenous people, social memory, and making history in the upper Maroni Basin, Northern Amazonia. *Current Anthropology* 56 (5): 753–761.
- Evans, Clifford, and Betty J. Meggers. 1960. Archaeological investigations in British Guiana, Bulletin 177.

Washington, DC: Smithsonian Institution, Bureau of American Ethnology.

- Gassón, Rafael A. 2002. Orinoquia: The archaeology of the Orinoco River basin. *Journal of World Prehistory* 16 (3): 237–311.
- Gassón, Rafael A. 2017. Guía Reciente de Arqueología de Venezuela para uso de Nacionales y Forasteros (forthcoming).
- Gillin, John. 1948. Tribes of the Guianas and the Left Amazon Tributaries. *Handbook of South American Indians*, 3: 799–860.
- Heckenberger, Michael. 2005. *The Ecology of Power*. London: Routledge.
- Heckenberger, Michael, and Eduardo Neves. 2009. Amazonian archaeology. Annual Review of Anthropology 38: 251–266.
- Heckenberger, Michael J., James B. Petersen, and Eduardo Goés Neves. 2001. Of lost civilizations and primitive tribes, Amazonia: Reply to Meggers. *Latin American Antiquity* 12 (3): 328–333.
- Küchler, Susanne. 1993. Landscape as Memory: The Mapping of Process and Its Representation in a Melanesian Society. In *Landscape: Politics and Perspectives*. Barbara Bender (ed.) pp. 85–106. Oxford: Berg.
- Meggers, Betty J. 1992. Amazonia: Real or counterfeit paradise? Invited review on moundbuilders of the Amazon by Anna C. Roosevelt. *The Review of Archae*ology 13 (2): 25–40.
- Meggers, Betty J. 2001. The continuing quest for El Dorado: Round two. *Latin American Antiquity* 12 (3): 304–325.
- Meggers, Betty J., and Clifford Evans. 1957. Archaeological investigations at the mouth of the Amazon, Bulletin 167. Washington, DC: Smithsonian Institution, Bureau of American Ethnology.
- Meggers, Betty J. and Clifford Evans. 1961. An Experimental Formulation of Horizon Styles in the Tropical Forest of South America. In *Essays in Pre-Columbian Art and Archaeology*. Samuel K. Lothrop and others. pp. 372–388. Cambridge: Harvard University Press.
- Morphy, Howard. 1995. Landscape and the Reproduction of the Ancestral Past. In *The Anthropology of Landscape: Perspectives on Place and Space*. Eric Hirsch and Michael O'Hanlon (eds.) pp. 184–209. Oxford: Clarendon Press.
- Plew, Mark G. 2005. *The archaeology of Guyana*, BAR international series 1400. Oxford: Archaeopress.
- Roosevelt, Anna C. 1980. Parmana, prehistoric maize and manioc subsistence along the Amazon and Orinoco. New York: Academic.
- Roosevelt, Anna C. 1994. Amazonian Indians from prehistory to the present: Anthropological perspectives. Tucson: University of Arizona Press.
- Rostain, Stéphen. 1994. L'Occuation Amérindienne Ancienne du Litoral de Guyane. Two Volumes. PhD thesis. ORSTOM.
- Rostain, Stéphen. 2008. The archaeology of the Guianas: An overview. In *Handbook of South American*

archaeology, ed. Helaine Silverman and William Isbell, 279–302. New York: Springer.

- Rostain, Stéphen. 2013. Islands in the rainforest: Landscape management in pre-Columbian Amazonia. Walnut Creek: Left Coast Press.
- Rouse, Irving. 1986. Migrations in prehistory: *inferring population movement from cultural remains*. New Haven: Yale University Press.
- Saldanha, João Darcy M., and Mariana P. Cabral. 2010. A Arqueologia do Amapá: re-avaliação e novas perspectivas. In Arqueologia Amazonica, ed. Edithe Pereira and Vera Guapindaia, 95–112. Belém: Museu Paraense Emilio Goeldi.
- Versteeg, Aad H. 2003. Suriname before Columbus. Paramaribo: Stichting Surinaams Museum.
- Whitehead, Neil L. 1994. The ancient Amerindian polities of the Amazon, the Orinoco, and the Atlantic Coast: A preliminary analysis of their passage from antiquity to extinction. In *Amazonian Indians from prehistory to the present: anthropological perspectives*, ed. Anna Roosevelt, 33–54. Tucson: University of Arizona Press.
- Williams, Denis. 2003. *Prehistoric Guiana*. Kingston: Ian Randle Publishers.