

**SURVIVING THE CONTACT. THE XAVANTE AND THE DEMOGRAPHIC
IMPACT OF EPIDEMICS ON BRAZILIAN INDIGENOUS PEOPLE FROM
COLONIZATION TO THE MILITARY DICTATORSHIP**

SOBREVIVENDO AO CONTATO. OS XAVANTE E O IMPACTO DEMOGRÁFICO DAS
EPIDEMIAS NAS POPULAÇÕES INDÍGENAS BRASILEIRAS DA COLONIZAÇÃO À
DITADURA MILITAR

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Surviving the contact. The Xavante and the demographic impact of epidemics on Brazilian indigenous people from Colonization to the Military Dictatorship

Sobrevivendo ao contato. Os Xavante e o impacto demográfico das epidemias nas populações indígenas brasileiras da Colonização à Ditadura Militar

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Abstract:

This article aims to analyze the case of genocide of the Xavante in Marãiwatsédé, MT by the Brazilian State during the Military Dictatorship (1964-1985) as a historical example of the scientific limits, deficiencies, and absence of public policies that, together with the dissemination of biased information, constitute the greatest obstacle to fight major epidemics, which leads to one of the greatest human rights violations, the right to life. We intend to bring a historical perspective to demonstrate that the implications and consequences of the contact between the indigenous people and non-indigenous groups since the colonization times, and mainly during the Dictatorship in Brazil, have been catastrophic to their culture, customs, territories, health and even their right to life. Academic research projects with an archaeological approach, for instance, including an active participation of indigenous collaborators, will reveal and promote a better understanding of the impact of the contact and will also enable to reconstruct and preserve their history, culture, memory, and identity, contributing to meet their current needs and claim their rights.

Keywords:

Epidemic; Measles; Genocide; Xavante Marãiwatsédé; Human Rights.

Resumo:

O caso de genocídio dos Xavante de Marãiwatsédé, MT, por parte do Estado brasileiro durante a Ditadura Militar (1964-1985), é analisado nesse artigo como exemplo histórico dos limites científicos, deficiências e ausência de políticas públicas que, em conjunto com a disseminação de informações enviesadas, configuram o maior entrave para se combater grandes epidemias, o que leva a uma das maiores violações de Direitos Humanos, o direito à vida. Pretendemos trazer uma perspectiva de reflexão histórica para demonstrar que as implicações e consequências do contato entre as populações indígenas e não indígenas desde a época da colonização, e principalmente durante a Ditadura no Brasil, foram catastróficas para sua cultura, costumes, territórios, saúde e até o direito à vida. Projetos de pesquisa acadêmica, com abordagem arqueológica, por exemplo, incluindo a participação ativa de colaboradores indígenas, irão revelar e promover uma melhor compreensão do impacto do contato e também permitirão reconstruir e preservar sua história, cultura, memória e identidade, contribuindo para suprir suas necessidades atuais e reivindicar seus direitos.

Palavras-Chave:

Epidemia; Sarampo; Genocídio; Xavante Marãiwatsédé; Direitos Humanos.

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INTRODUCTION

Sedentary life in urban agglomerations and the domestication of previously wild fauna brought humans and animals closer together, causing infectious diseases previously exclusive to fauna to find new hosts in humans (SMITH, 2009). Most infectious diseases depend on a minimum size of population concentration, below which viruses cannot survive (BORGES and CARNEIRO, 2020). Population displacements have spread these diseases throughout Europe, Asia and Africa, and, over the centuries, they have become of low lethality, as societies have gradually acquired immunity to them. Diseases like measles, for instance, have become more common among children. However, European colonization in American territory since the 15th century found fertile ground for major epidemics of infectious diseases, previously unknown to indigenous societies. The impact of these diseases on bodies hitherto without immunity to them has led to unprecedented mortality, impacting these societies demographically and culturally. A situation which has not changed from the European's first contact to the present day (MOLINA, 2020).

Immunological responses to diseases are determined by several factors such as health and nutritional status, age, genetics, and previous exposure to weakened forms of the virus, its toxins, or one of its surface proteins. While this is mostly achieved through vaccination, a long coexistence of virus and host can lessen the fatality rates of the disease in such a way that the spread of infection is immediate, but mortality rates are low. Measles, for example, can cause serious problems or can be lethal to victims without immunity. The infection takes approximately ten days, after which the individual creates immunity for life or, at least, until mature age. Old-aged people (50–75 years and up), whose immune response to an early exposure to virus or who have been vaccinated as children may have weakened, must be revaccinated.

The host - pathogen interactions that influence the virulence, morbidity and mortality of a virus represent a complex balancing act. For the survival of the measles virus in a continuous process of infection of new hosts, a large and dense human grouping, between 250,000 to 500,000 people, is necessary. In smaller and dispersed populations, the virus does not complete its life cycle, neither in individuals who have never been exposed to it, nor in children (COCHRAN and HARPENDING, 2009, p. 86; FURUSE et al., 2010).

Thus, for the virus to evolve to its current form, it needed the right conditions, which were arguably met at the time of increased sedentism, and agglomeration permitted by the development of agriculture. The origins of the first domestication of plants can be traced between 12,000 and 10,000 BP (SMITH, 2009). It had independent origins in different regions around the world and they occurred in different periods, i.e., in northern and southern China, southwestern Asia, Mesoamerica and South America, during a period of profound environmental changes that marked the transition between the Pleistocene (the last Ice Age) and the much warmer Holocene (PIPERNO, 2017).

Clusters with high population densities, associated with a sedentary lifestyle due to agriculture, led humans to domesticate animals for food and transportation, so that the frequency of zoonotic transmission events increased the potential for animal pathogen propagation among

humans (BORGES and CARNEIRO, 2020). Sedentary lifestyle, crowding and close proximity to livestock created suitable conditions for the measles virus to survive and spread among humans (COCHRAN and HARPENDING, 2009, p. 86). The measles virus is believed to have evolved from the proximity of cattle to humans in early urban centers. The population density, sufficient to maintain the life cycle of the virus, was reached among the first urban civilizations located in the ancient river valleys of the Middle East around 5,000-4,500 BP (COCHRAN and HARPENDING, 2009, p. 86; FURUSE et al., 2010).

Several epidemics and pandemics of measles and smallpox spread along caravan routes in the 2nd and 3rd centuries and killed a third of people in some communities (NESSE and WILLIAMS, 1995, p. 63-64). In 340, Ko Hung, a Chinese alchemist, described the difference between smallpox and measles. Three hundred years later, in Egypt, a Christian priest, Ahrun, also differentiated between the two diseases. It is, however, only in the 9th century that measles syndrome is described in more detail by Abu Becr, or Rhazes, as he was also known. Major epidemics identified as such were recorded in the 11th and 12th centuries (FURUSE et al., 2010).

Although measles is mentioned throughout the post-domestication history of animals, the form of its virus that we know today would have originated between the 11th and 12th centuries of our era, when human urban concentrations would have reached the number of 250,000 to 500,000 people (FURUSE et al., 2010). However, as the researchers themselves point out, an ancestral virus, with a distinct survival rate, must have infected populations in a more distant past.

Lack of scientific knowledge about infectious diseases caused by unknown viruses and bacteria, made it possible for many diseases to be confused in what concerns its causes, effects, symptoms and, consequently, its treatment. Still lethal in Europe, Asia and Africa in the 15th and 16th centuries, these infectious diseases, measles, smallpox, whooping cough, chicken pox, bubonic plague, typhus, and malaria, crossed oceans during the Great Navigations. Measles and smallpox have been often confused until the 16th century in the Americas (BRINCKER, 1938, p. 808).

Smallpox, for instance, reached Brazil in 1559, first on the coast and later in the north region of the country. In the state of Espírito Santo, it decimated about 600 indigenous slaves, more than 30,000 indigenous people subjugated by the Portuguese died from smallpox in 1662. This number could be larger if we consider the countless deaths in more inhospitable regions of the Brazilian hinterland where Portuguese did not establish a foothold. Measles, in turn, in 1563, exponentially worsened the population drop in indigenous communities (CALAINHO, 2005).

It is estimated that indigenous populations were reduced demographically by 90% in the first 150 years of European colonization, mainly due to these two infectious diseases (MIRANDA, 2017). In Brazil, measles remained an endemic disease until the 20th century, being one of the main causes of infant morbidity and mortality, especially among children under one year of age (DOMINGUES et al., 1997).

Although the measles vaccine was produced and widely applied in the 1960s in Brazilian urban centers, vulnerable segments of society - the urban poor and rural groups - were isolated and excluded from this public prevention policy, actively marginalizing many indigenous communities who were excluded from fundamental rights, including the right to life.

In this article, we will analyze, in an historical perspective, how great epidemics - especially the ones caused by measles - reached indigenous populations and the effect they had on their survival and wellbeing. We discuss the case of the Xavante community of Marãiwatsédé, the indigenous land (IL) located in city of Alto Boa Vista, Bom Jesus do Araguaia and São Félix do Araguaia, in the state of Mato Grosso, who, during the Military Dictatorship (1964-1985), suffered a true genocide of its population (MOLINA, 2020).¹

We suggest that the high impact that the epidemics had on indigenous people, including Xavante of Marãiwatsédé, was exacerbated by the deficiencies and biases in the elaboration and application of Public Policies, which caused disinformation and lack of trust among the affected groups and consequently led to highly increased mortality that could have been prevented otherwise.

Our aim is to provide a historical discussion about the impact of the contact between the indigenous people and non-indigenous groups since the colonization times, and mainly during the Dictatorship in Brazil and bring up some possible ways in the academic research to contribute to the reconstruction and preservation of their history, culture, memory, and identity in order to meet their current needs and claim their rights.

THE COLONIAL PERIOD, INDIGENOUS COMMUNITIES, AND MEASLES

The exact numbers referring to the population size of indigenous communities in the American continent at the time of European colonization remain unknown/uncertain. Julian Steward (1949) attempted to estimate the demography of South America based on population density values according to cultural evolution theory and perspectives. The population size of societies was established by comparing the typological classifications of the technological development of different cultural groups. As a result, Steward estimated the number of approximately 9.1 million people in South America in 1500 (STEWART, 1949, p. 666). Todorov (1991), on the other hand, provides us with significantly higher numbers:

Without going into detail and to give only a global idea (although we do not feel totally entitled to round the numbers when it comes to human lives), we will remember that, in 1500, the population of the globe must be in the order of 400 million, of which 80 million live in the Americas. In the middle of the 16th century, of those 80 million, there were 10. Or, if we restrict ourselves to Mexico: on the eve of the conquest, its population was approximately 25 million; in 1600, it was 1 million (TODOROV, 1991, p. 129. Own translation).

According to Miranda (2017), there is a demographic decrease of approximately 90%, reflected in the decrease in the population to 70 million human beings in the Americas in the subsequent century after the arrival of Europeans. For Brazil specifically, some authors indicate different numbers that vary between 800,000 and 5 million people, depending on the methodology adopted (KENNEDY and PERZ, 2000).

¹ Definitions of genocide are not covered in this article. It is a very complex question in Human Rights and Anthropology. To deepen the discussion on mortality and genocide, see, for example, Molina, 2020.

However, for the Amazon region, there are some specific studies. In the 1990s, Denevan, like Steward, estimated the demography of the Amazon territory, titled as the Great Amazon (east and south of the Andes, north of the Tropic of Capricorn, except for the Chaco region), by extrapolations from population densities. The uniqueness of his study is found in the ecological-cultural parameters, estimating the indigenous population of the region around 1492 to approximately 5.5 million individuals (DENEVAN, 1976; FAUSTO, 2001; PAGLIARO et al., 2005).

Archaeological data for the Amazon indicate the existence of numerous and large villages in wide territories. For the year 1000, researchers suggest the existence of populations with greater ethnic diversity and even greater numbers than those reported by Europeans in 1500 (BARRETO, 2008, 2010; HECKENBERGER, 2005, 2010; MORAES and NEVES, 2012; NEVES and PETERSEN, 2006).

The first Spanish travelers who sailed the Amazon River in 1542, Orellana and Carvajal, described large villages with an extensive number of people, where artisans produced the most beautiful ceramics in the world. However, years later, when colonization reached the Amazon, indigenous groups were no longer as numerous (FAUSTO, 2001; MORAES and NEVES, 2012).

At the beginning of the colonization, indigenous groups, initially those who lived on the coast and, subsequently, the communities that inhabited the interior part of the land, were victims of the subjugation of their bodies through compulsory labor and the expropriation of their lands. To physically defend themselves, refusing slave labor and protecting their lands, these populations were culturally affected in a brutal manner (ALBERT and RAMOS, 2018).

Darcy Ribeiro (1957, 1970), analyzing the accelerated decrease in indigenous demography in Brazil, pointed out infectious and parasitic diseases, often preceded by subsistence problems, as the main factors that impacted these societies. Constant conflicts and war between natives and colonizers and infectious epidemics have often coincided and contributed effectively to the genocide of indigenous populations (ALBERT and RAMOS, 2018). The presence of missionaries, mainly the Jesuits, also led to the dissemination of diseases in a decisive manner between the indigenous communities (MIRANDA, 2017).

In attempts to harmonize the coexistence between indigenous groups and the explorers, the Jesuits annihilated the indigenous cultures, their language and their customs contributing to the expropriation of the territory and the indigenous domination. The ways of subjugating them to forced labor resulted in poor living conditions and confinement, facilitating the transmission of diseases.²

In Bahia, in 1552, the first major epidemic with a high mortality rate among both indigenous and colonizers is attested. A decade later, between 1563 and 1564, an epidemic identified as smallpox, recorded the death of more than 30.000 indigenous (GURGEL, 2011; MIRANDA, 2017). The priest, a Jesuit missionary, José de Anchieta (1984), in one of his letters, describes the epidemic situation:

² However, it must be considered that some indigenous communities had interests in integrating the missions of the Jesuits (and also of other orders) (WILDE, 2009). The construction of space in the colonial universe is very complex and encompasses many factors and indigenous agency.

Some long pits, like a grave, and after being very hot with a lot of fire, leaving them full of embers and, crossing sticks and many herbs, lay there as covered with air and as dressed as they walk, and they roasted, which commonly died afterwards, and their meat, as well as that external fire as well as the interior of the fever, seemed to be roasted. Three of these I found revolving the houses, as they always did, that they started to roast, and, rising by the fire, I bled and healed them by the goodness of God. To others, who from that pestilential scarcely were very badly, I skinned part of the legs and almost all the feet, cutting his corrupt skin with scissors, digging it in the flesh, a pitiful thing to see, and washing that corruption with hot water, with which by the goodness Lord they were healed; of one in particular I remember that with the great pains he did nothing but scream, and, having spent his whole body at the point of death without knowing his parents what to do, but to cry them, which, as we have him with all the scissors that correction of the feet and we left them skinned, soon began to get along and demanded health (ANCHIETA, 1984, p. 251. Own translation).

Still in the 16th century, a Jesuit cleric Simão de Vasconcelos, also described a situation of famine that culminated in a great epidemic of what they believed to be smallpox in Bahia:

[...] the last year of 1563, all this captaincy moaned with an almost plague, or pestilent corruption, which took the life of three parts of the Indians (miserable damage!) The year 1564 enters, and we see that it enters with him a terrible famine, with new death, and not a little anguish from the priests who in the villages had been careful [...] (VASCONCELOS, Simão de. Op, cit., v. II, Livro III, p. 101. citado em MIRANDA, 2017, p. 231. Own translation).

In 1563, the plague was also recorded in São Paulo and other regions of the Northeast, where it would have reduced indigenous communities by a proportion of from 500 to 20 individuals (MIRANDA, 2017).

The *descimientos* were expeditions carried out by missionaries and colonizers with the objective of convincing the indigenous peoples considered as hostiles to “descend” from their villages of origin to live in new villages specially created by the Portuguese, in the vicinity of the colonial nuclei, to receive the teachings of the Christian faith and get used to sedentary work. The term “descimientos” comes from the fact that the displacements were made towards the coast, where the first settlements established by the Portuguese were located.

Human hunts as military expeditions organized by colonizers to enslave indigenous people annihilated innumerable villages, leading survivors to malnutrition and epidemic outbreaks of infectious diseases of innumerable orders and, consequently, to exceptionally high mortality rates. Colonizers, explorers and the religious leaders of the *Companhia de Jesus* transmitted numerous diseases. Documents attest the occurrence of epidemic outbreaks of “malaria, *phlegm*, measles, *blood chamber*, cough” (MIRANDA, 2017).

In the state of Maranhão, epidemics devastated its native population to less than a thousand inhabitants. In 1620, a smallpox outbreak brought by a ship from Pernambuco, almost decimated the population of São Luís. In 1696, another violent smallpox epidemic broke out and reached urban centers and rural areas killing hundreds of peoples (MIRANDA, 2017).

All these infectious diseases, since their causes and treatments, such as medicines, were still unknown in the Americas, led to the death of both native people and colonizers. However, the impact caused in both segments is a result of susceptibility and immunity to infectious diseases

(SANTOS et al., 2020). The European colonizers had already acquired a certain level of immunity to these diseases. Forced to live in different environment, to slavery and in bad living conditions, indigenous people were much more susceptible to infectious diseases and more likely to develop complications that lead to death.

Measles and smallpox were alleviated only through cold baths, or, as practiced by Anchieta with bleeding and removal of parts of the body already “corrupted” by the disease, procedures considered to be the most effective (CALAINHO, 2005). It is also described that during the illness it was common for the patient to eat a dark colored porridge made from carimã broth and with genipap water. During the epidemic in Maranhão, bonfires were lit in order to blow the miasmas away with the winds. Bleeding and purgatives, methods derived from Hippocratic medicine, were the only known physical interventions, but they did not prevent the development and the spread of the virus (MIRANDA, 2017).

The appeal to prayer remained. The practice of pleading with the supernatural world to heal unknown wounds has persisted in Brazilian society throughout colonial and pos-colonial times. In 1686, in Olinda, a church dedicated to the cult of São Sebastião was built to rid its inhabitants of the plague’s misfortunes (MIRANDA, 2017). However, the construction of chapels and churches was absolutely useless when terrible conditions of work and malnutrition to which the indigenous were subjected is taken into account.

The indigenous populations along the coast were the first ones to get affected by the diseases and to register high mortality rates. The conflicts that annihilated parts of the native coastal population and the scourge of the first epidemics led the survivors to flee to the interior part of the land where the European presence was not yet identified. However, already infected, natives also spread the pathogens to the most remote and isolated communities (MIRANDA, 2017). In addition to direct contamination, indirect transmission through contamination of water, clothing or other objects extended to the interior regions even before the colonizers reached these regions (MIRANDA, 2017; PLENS, 2016, 2017).

Whether by decimating portions of their populations with conflicts or the spread of infectious diseases or by expropriating their lands with strong consequences for their economic bases, the indigenous ways of life were abruptly modified, leading to a rapid level of malnutrition and an unprecedented spread of the new infections (MIRANDA, 2017).

SCIENCE AND PUBLIC POLICIES IN THE HISTORY OF INDIGENOUS HEALTH

According to the Xingu Project (BARUZZI et al., 1978), in the colonial period the health care of the indigenous people was carried out by missionaries who catechized them and *pari passu* subjected them to forced labor in the name of a “pacification” process of these societies.³ In post-

³ It must be pointed out that these conditions are not applied to all indigenous people., For instance, in the specific case of Paraguay’s Guaranitic missions, it is not appropriate to state that the condition of the Indians was similar to that of slaves (WILDE, 2019).

colonial times, during the Republic, the health situation of native people became even worse. Without any care policy or contact control, the expansion of railway and telegraph lines towards the Mid-west region, led to the genocide of several indigenous groups, whether by directly attacking the population, by occupation of their territories or by the spread of infectious diseases (BARUZZI et al., 1978).

At the beginning of the 20th century, in 1910, with the creation of the Indian Protection Service (Serviço de Proteção ao Índio – SPI) and Localization of National Workers (Localização de Trabalhadores Nacionais – SPILTAN), a new phase of indigenous policy began, which, although it ensured the survival of some groups, did not institute any form of systematic health services, reaching only isolated cases of epidemics (CONFALONIERI, 1989).

It was only in the 1950s that the first attempt was made with the purpose of taking organized health actions to indigenous and rural populations of difficult access through the creation of the Aerial Health Units Service (Serviço de Unidades Sanitárias Aéreas – SUSA), by the Ministry of Health, with vaccination, control of tuberculosis and other diseases spread by contact.

The SPI, created to provide “indigenous protection” of their customs, their land, and their physical conditions, mainly health, assuring their rights, was replaced by the National Indian Foundation (Fundação Nacional do Índio – FUNAI) in December 1967. The main reasons for this change were the wide range of accusations raised and registered by the federal government itself regarding the practice of abuse, violence, corruption with diversion of funds, lack of medical and health care, and genocide committed by SPI officials against indigenous communities. A series of documents proving the SPI’s violations of the indigenous rights can be found at the “Figueiredo Report” (CRUZ, 2018).

FUNAI was responsible for the establishment of another model of health services to indigenous peoples. Through itinerant campaigns, the Flying Health Teams (Equipes Volantes de Saúde – EVS), nine based in regional police stations and one in Brasília, traveled to indigenous territories for health assistance. However, this system lacked both a continuous flow and a systematic record of the indigenous health condition information. A health profile of the native people was not created and the workers of EVS were unprepared to act in intercultural situations (SELAU, 1992).

In turn, the work of the Ministry of Health through the initiative of the physician and indigenist Noel Nutels who created the Service of Aerial Health Units (Serviço de Unidades Sanitárias Aéreas – SUSA) in the 1950s (NUTELS, 1952), renamed in 1968 as the Special Service Unit (Unidade de Atendimento Especial – UAE), focused only on tuberculosis control in some specific indigenous areas (COSTA, 1987). The control of the main endemic diseases, especially malaria, was the responsibility of the Superintendency of Public Health Campaigns (Superintendência de Campanhas de Saúde Pública – SUCAM).

Trying to minimize and repair the deficiencies of this system, FUNAI entered into several agreements with religious entities, non-governmental organizations, and research projects, such as the Xingu Project of the Medical School of the Federal University of São Paulo (Escola Paulista de Medicina da Universidade Federal de São Paulo – EPM/UNIFESP) (BARUZZI et al., 1978; CONFALONIERI,

1989). Public resources were spent on the purchase of medicines, daily allowances, transportation and removal of patients, as well as on the payment for medical and outpatient services in hospitals, which were mostly private. As time went by, FUNAI's own health actions in the indigenous villages became increasingly sporadic, and the professionals who performed the services were progressively fixed in urban centers.

The measles vaccine was introduced in Brazil in the 1960s. In 1973 was created the National Immunization Program (Programa Nacional de Imunizações – PNI), with the purpose of organizing, implementing, and evaluating immunization actions across the country with vaccination campaigns in several urban areas of the country. During the Military Dictatorship (1964-1985), the indigenous health conditions continued to be neglected. The government did not implement any new or appropriate public policy assistance to indigenous societies concerning their health status, not even for vaccinations. The records state that in 1979, 70% of the indigenous population in Brazil was in poor health condition (BARUZZI et al., 1978; DOMINGUES et al., 1997; SELAU, 1992).

The real numbers and impact of indigenous mortality due to infectious diseases is still an issue to be studied and carefully investigated (ALBERT and RAMOS, 2018). Until recently, it was difficult to understand how long these diseases took to decimate whole societies. However, recent descriptions demonstrate the intensity of the impact of indigenous peoples' contact with Western diseases. Rubens Valente (2017) documented that contacts with indigenous communities during the Military Dictatorship in Brazil (1964-1985) were responsible for the death of dozens of people in just under 48 hours, since the moment of contact due to infection with the flu or measles virus.

Table 1. Infectious diseases, indigenous groups and number of individuals infected, and number of deaths by year.

Source: Compiled data from VALENTE, 2017.

Disease	Indigenous group	Region	When	Total number of individuals infected	Deaths
the flu	Xikrin (subgrup kayapó)	Bacajá region (Pará)	1950's	155	60
the flu	Non-identified	Iri region (uncertain)	1972	40	Non-quantified
the flu	Panará	Iri region (uncertain)	1973	35	Non-quantified
the flu	Guajá	Maranhão	1982	7	3
the flu	Arara	Next to Altamira	1982	Non-quantified	7
the flu	Matis	Atalaia do Norte (Amazonas)	1982	138-140	38-48
the flu	Guajá	Maranhão	1975-1980	54-91	29-62
the flu	Panará	Iri region (uncertain)	1974-1975	105-240	23-248
the flu / tuberculosis	Yanomami	Pacu river (Roraima)	1977	58	1
the flu / malaria	Asurini	Next to Altamira (Pará)	1971	74	13-36
the flu/ pneumonia	Pacaá-novo (Wari)	Next to Guajará-Mirim (Rondônia)	1961	90	At least 2

the flu / measles	Kararaô	Porto de Moz (Pará)	1965	48	40-44
the flu / measles	Tapayuna (Kajkwakratxi)	Mato Grosso	1969/1971	200	44-160
the flu / measles	Yanomami	Catrimani region (Roraima)	1974	Non-quantified	10
the flu / tuberculosis	Tirió	Parque Nacional do Tumucumaque (Amapá)	1970	220	3
malaria	Parakanã	Next to Altamira (Pará)	1976	40	11
malaria	Parakanã	Next to Altamira (Pará)	1979	113	4
malaria	Yanomami	Next to Ajari (Roraima)	1990's	> 20	> 20
malaria	Non-identified	Next to Tabatinga (Amazonas)	1985-1986	Non-quantified	> 20
malaria	Guajá	Maranhão	1982	Non-quantified	17
malaria / the flu / pneumonia	Panará	Parque do Xingu	1975	79	10
measles	Kayabi	Teles Pires and dos Peixes rivers (Mato Grosso)	1966	Non-quantified	130-198
measles	Xavante	São Marcos (Mato Grosso)	1966	Non-quantified	160
measles	Pacaá-novo (Wari)	Next to Guajará-Mirim (Rondônia)	1970	27	7
measles	Yanomami	Caburi region (Macapá)	1973	Non-quantified	> 30
measles	Wakatauteri (Yanomami)	Next to Catrimani river (Roraima)	1976-1977	Non-quantified	68
measles	Xavante	Non-identified	1962	Non-quantified	70
measles	Non-identified	Alto dos Solimões (Amazonas)	1973	Non-quantified	18
measles	Kayapó	Mato Grosso	1974-1975	Non-quantified	At least 2
measles	Waimiri-atroari	Roraima	1971-1985	Non-quantified	209-2600
measles	Xavantes	São Marcos	1974-1975	176	105
measles	Suraí	Rondônia	1971-1974	400-500	20-400
measles / smallpox	Ofayé	Mato Grosso	1940-1976	200	176
measles	Tenharim (Kawahiva)	Amazonas	1974	Non-quantified	Non-quantified
smallpox	Guajajara	Maranhão	1900	82	28

Epigenetics approaches to research conducted during the 1960's argued in favor of a supposedly higher vulnerability and susceptibility of indigenous peoples to infectious disease epidemics (SANTOS et al., 2020). Francis Black (1966, 1975, 1994a, 1994b; BLACK et al., 1977) stated that the genetics of Indigenous peoples made them more biologically vulnerable compared with "more diversified" populations.

This view was used as an excuse to explain how so many indigenous peoples have died since the first contact with the colonizers and were dying during the acceleration of the socio-economic processes characterized by new political conjectures from the Military Dictatorship.

However, such an approach does not address the ways that structural, social, cultural, and economic factors like poor health conditions, socioeconomic inequality, and environmental degradation often pose more significant health risk than genetic predisposition alone.

James Neel (1977a, 1977b, 1977c), questioning Black's deterministic role of genetics in immunity, understands individuals as having agency in altering their genetic destiny (ROZEK et al., 2014; SANTOS et al., 2020). During the 1960's, Neel et al. (1964, 1970; NEEL, 1968) analyzed the blood of indigenous from the Xavante communities and detected antibodies in a high percentage of individuals who tested positive for measles and pertussis. This data shows that this community had already been exposed to a series of epidemics in the past and the high level of mortality was a result of the historical process of violence against these populations, which led to poor socioeconomic and health conditions (NEEL, 1968, 1994).

According to the newspaper *Estado de São Paulo*, in 1969, based on an interview with Father Antonio Iasi, the Tapayuna communities were located between the Sangue and Arinos rivers, about 300 km from Cuiabá, capital of the state of Mato Grosso (BATISTA DE LIMA, 2012). During the overflight of the "Expedição Peret", a contact expedition with the Tapayuna at the request of FUNAI, the sertanista Américo Peret calculated the indigenous area of 1,200 thousand hectares and about 1,200 natives, a number estimated by the size of the cassava plantation measured for every 50 people, although rubber tappers and farmers insisted, in 1968, that there would only be approximately 80 indigenous (BATISTA DE LIMA, 2012, p. 71; VALENTE, 2017).

During the first contact between Peret and the Tapayuna, he managed to reach the indigenous villages against the Tapayuna's will (BATISTA DE LIMA, 2012, p. 71). Hedyll Valle Jr., author of the report for *Fatos e Fotos*,⁴ during the "Peret expedition", got a strong flu. Although the journalist tried to remain isolated from the Tapayuna group by staying in a shack that served as a food depot this strategy was not enough to avoid the contamination of indigenous community, and the infection quickly spread among the Tapayuna. The team of the expedition carried about two hundred doses of vaccine but the Tapayuna refused to take it (BATISTA DE LIMA, 2012, p. 71).

The consequences could not have been more devastating. The flu outbreak in a short period of time decimated the Tapayuna population almost entirely. Peret reports that he cried when he saw the bodies of the indigenous killed by the flu in the middle of the forest and dead children suckling from their mothers (BATISTA DE LIMA, 2012, p. 73). This event is still remembered by the few survivors of the episode interviewed by Batista de Lima (2012).

Ngejwotxi, one of the interviewees, says that she saw in the woods children whose parents had recently died of the flu and the adults who met these children were so weakened also by the flu that they were unable to help them.

The baby sucked on the dead mother's breast, crying, full of bees on her face, in her eyes, entering her nose. And these boys and girls from five years old, they followed, but they did not reach the village, they did not reach the people and they died on the way [...].

⁴ *Fatos & Fotos*, a weekly magazine produced by the publisher Bloch, popular between the years 1960-80 in Brazil.

Those little kids stayed right there, nobody cared because there were a lot of kids without a mother and father. Girls and boys aged three and four, they stayed there without sleep, calling “father, mother [to] where did you go?” (BATISTA DE LIMA, 2012, p. 105-106. Own translation).

Tariri and Pará (other Tapayuna survivors), during the flu epidemic outbreak, walked through the indigenous villages trying to find a solution and to help other indigenous peoples, until they met with a group that wanted to know where Father Tahati was. Tariri then explained:

He is taking a photo [referring to the priest], a lot of people are dying there. We passed among all those dead. “And did you see the children?” “Is anyone alive?” On the road you could see the children who had died on the way. Tariri said “there are a lot of vultures in the village. Everyone is dying and so are their young children. When we were walking, we saw the dead on the road. We came by, until I met you. How are we going to do with Wotká?” “I’m going to call the priest” (BATISTA DE LIMA, 2012, p. 105-108. Own translation).

After the flu epidemic outbreak, the indigenous communities suffered from hunger, and consequently, a rapid population decline. The few survivors were taken by the missionaries to a new location on the Parecis River where huts were built to accommodate them. The Tapayuna remained there and cultivated fields until they were transferred to Parque do Xingu. The “Tapayuna Indigenous Reserve” was extinguished by then President Ernesto Geisel, after “Operation Tapayuna”, in 1971, attested that there were no more indigenous survivors in the area that had been demarcated for the reserve (BATISTA DE LIMA, 2012, p. 72-73)⁵.

As pointed out by Coimbra Jr. (1987, p. 27), in general, three patterns of behavior in different indigenous groups after the epidemic period can be observed:

- a) dispersion and escape of its members, some of whom are asymptomatic, but with the virus incubated;
- b) agglomeration of the inhabitants of the village in the same communal residence;
- c) voluntary interruption of basic subsistence activities.

The demographic decline generated by epidemic outbreaks without primary medical care has dramatically compromised the ecology and socio-cultural patterns of indigenous communities, changing the pattern of use of natural resources and the spatial organization of the village (COIMBRA JR., 1987, p. 29).

The terribly detailed reconstruction of the flu epidemic episode among the Tapayuna was possible by historical documentation, FUNAI records, the media and, later, by historical and anthropological investigations (BATISTA DE LIMA, 2012). However, the cultural impact of epidemics, their consequences on customs and ways of life in the recent past of most indigenous populations, is still something to be understood.

⁵ The reserve was extinguished by Decree 77,790, of June 9, 1976.

THE DIASPORA OF THE XAVANTES OF MARÃIWATSÉDÉ

The Xavante are an indigenous group which has been living in the Central-West region of Brazil at least since the colonial time according to the historical records (LOPES DA SILVA, 1998). They remained isolated for much of the Brazilian colonial and post-colonial periods. At the beginning of the 18th century, they inhabited the current state of Goiás and Tocantins. The documentation, consisting of letters from the colonial governors heading to Lisbon, narrates conflicts between the Xavante and non-Indians, reporting that the indigenous peoples resisted the invasion of their lands, and counterattacked the colonizers' settlements.

The Xavante continued to resist the pressure of colonization for several decades, migrating to the west, where they remain until the present day. Their gradual movement towards the west was motivated by three main factors of social pressure: 1) the hunting and enslavement of indigenous communities by colonial expeditions; 2) the European exploration of the region in search of noble metals and precious stones; and 3) the interest of non-Indians, who were already in the east of the Mato Grosso state in the early twentieth century, because of land exploration and agricultural and pastoral activities (OPAN, 2013).

The westward movement of Xavante started with the crossing the Araguaia River and Bananal Island between 1820 and 1840, when they clashed with the Karajá group, before reaching the eastern Mato Grosso. They founded a village in a dense riparian forest and named it after the nearby Marãiwatsédé River (LOPES DA SILVA, 1998; OPAN, 2013; VALENTE 2017).

In the first half of the twentieth century, several droughts in Northeastern Brazil provoked a migration of non-Indian peasants to the east of Mato Grosso looking for a piece of land on which to survive. They spread out on the left bank of the river Araguaia, in the current municipality of *São Félix do Araguaia*. It did not take long for the non-Indians to advance on Marãiwatsédé, setting off a long period of reciprocal aggression and violent land conflicts with the indigenous populations (VALENTE, 2017). The Xavante of Marãiwatsédé reacted to the invasions of their lands and were hunted and murdered by the non-Indians during land expeditions and conquests. At the end of the process, the government gave the land to a big landowner and the Xavante were enslaved for two years, after which the remaining Xavante survivors were encouraged or forced by the State to move to São Marcos territory, in line with the policy called "march to the west" as a way of "pacification" of this indigenous group, considered as "aggressive warriors" (OPAN, 2013).

The program of "pacification" of the indigenous populations implied the momentary renunciation of their ways of life, placing them in a situation of fragility, almost always exploiting the condition of slavery, on livestock or agriculture fronts in analogous jobs (CRUZ, 2018). In this way, the Xavante were settled on missions, where once again hunger, weakness and the transmission of infectious diseases were present, drastically reducing their population.

Still in the context of the "pacification" of the Indians of the West of Brazil, in the 1950s, the Xavante of Marãiwatsédé were contacted under the influence of the nationalist ideology of occupation of the Brazilian Amazon (CRUZ, 2018; VALENTE 2017). Given the greed for the land, the

state government alienated and granted in favor of private individuals and large companies from the south and southeast of the country, about 6,427,000 hectares of land traditionally occupied by indigenous people for large agricultural and colonization projects between 1952 and 1961, contrary to the express provision of the 1946 Federal Constitution.

This policy of occupation of indigenous territories benefited private entrepreneurs such as Ariosto Da Riva, from the real estate sector, who, in 1952, started a colonization project in the indigenous territory that culminated in the creation of the municipality of Naviraí / MS. Da Riva later acquired and occupied an extensive area of half a million hectares of land in the northeastern region of the state, in Xavante isolated community was living with no previous contact with the non-indigenous populations (ASSIS et al., 2016).

As the workforce for the implementation of large farming on this territory was highly limited the Indians were compelled to accept either slavery or work within the infrastructure of this enterprise, receiving only food in exchange for their work. To do so, they went to live near the farm's headquarters (ASSIS et al., 2016).

The withdrawal and conquest of indigenous lands occurred with an intense hunting of the Xavante population. Armed squatters opened bites in the middle of the forest and, in compelling the expulsion of the indigenous people from their lands, many individuals, including children, were murdered. According to Damião Paradzané, "Before the withdrawal from our land, many Xavantes were killed. The farmers of that time and a lot of bandits. They shot and killed. Tseretemé, Tsercnhitomo, Tsitomowe, Pa'rada, Tseredzaró died, all shot to death" (PARADZANÉ, Cacique Damião, Cacique da aldeia Marãiwatsédé. 08/12/2010. Marãiwatsédé, Terra dos Xavante).⁶

In 1962, Ariosto Da Riva associated with the Ometto family from the interior of the state of São Paulo who worked in the sugar sector and envisioned the expansion of their business to other regions. Together they formed the Suiá-Missú agricultural sector, expanding Da Riva's farm to almost 1 million hectares into the Marãiwatsédé territory (PARADZANÉ, Cacique Damião, Cacique da aldeia Marãiwatsédé. 08/12/2010. Marãiwatsédé, Terra dos Xavante).⁷ However, Ariosto Da Riva abandoned the partnership when he acquired 400,000 hectares of highly fertile land in a neighboring area where the municipality of Alta Floresta is located today. The Ometto family remained as the sole owners of the Suiá-Missú Farm (ASSIS et al., 2016).

In the meantime, a series of conflicts between the farm employees and the indigenous people, resulted in the Xavante of Marãiwatsédé to become a problem for the farm owners. A removal process was carried out to expel them to the floodplain area of the Suiá-Missú farm (ASSIS et al., 2016). This region was a swampy area for eight months a year and did not offer conditions neither for

⁶ Comunidade Xavante de Marãiwatsédé fala à sociedade brasileira.

<https://maraiwatsede.org.br/content/comunidade-xavante-de-mar%C3%A3iwats%C3%A9d%C3%A9-fala-%C3%A0-sociedade-brasileira#:~:text=Antes%20da%20retirada%20de%20nossa,Tseredzar%C3%B3%20tudo%20morto%20com%20tiro.> Own translation.

⁷ Comunidade Xavante de Marãiwatsédé fala à sociedade brasileira.

<https://maraiwatsede.org.br/content/comunidade-xavante-de-mar%C3%A3iwats%C3%A9d%C3%A9-fala-%C3%A0-sociedade-brasileira#:~:text=Antes%20da%20retirada%20de%20nossa,Tseredzar%C3%B3%20tudo%20morto%20com%20tiro.> Own translation.

planting nor hunting. Nevertheless, the Xavante remained there for almost two years (ASSIS et al., 2016), and given the unhealthy condition of the area, a high mortality rate reached the community. In 1966, the group tried to return to the vicinity of the property headquarters becoming an obstacle to the developmental perspective of the farm, which received support from the Military Regime and was subsidised by the federal government through the Amazon Development Superintendence (Superintendência do Desenvolvimento da Amazônia – SUDAM).

Unexpectedly, without having been communicated or consulted, and in the middle of a celebration, the Xavante of Maraiwatsédé were compulsorily transported by plane to the Salesian Mission of São Marcos, a village located more than 400 km south of their original territory. The SPI, the Brazilian Air Force (Força Aérea Brasileira – FAB), and the Salesian Mission participated in the transfer of the remaining 263 Xavantes, at the request of the Suiá-Missú owners. By that time São Marcos was settled by other Xavante groups, some of them hostile to the Maraiwatsédé Xavante.

Children were the first to be forced to board the plane, compelling their parents to board “voluntarily”. It is worth mentioning that this conduct of coercion is considered as a crime of genocide, in art. 1, “e”, of the Law 2,889 / 56.

According to Cláudio Romero, “on August 14, 1966, the FAB aircraft landed there and took the Indians, but not all because many old people ran into the bush and neither got on the plane nor tied up. I don’t know if these Indians died there or were killed” (ASSIS et al., 2016, p. 29).

The version of the Identification Report of the Marãiwatsédé indigenous area (ASSIS et al., 2016, p. 43), indicates that “most of the local residents confirmed that they knew of the existence of these villages, and many said that they frequently saw the Indians returning, every year, to visit their dead relatives and collect abundant materials in the region”. This information, crucial to ascertain how many indigenous people were still in the territory, was concealed by the president of the FUNAI, Ismarth de Araújo Oliveira, who on June 7, 1974, issued a certificate alleging the absence of indigenous communities in the area of the enterprise denominated the as Agropecuária Suiá-Missú (ARAÚJO, 2020c).

The National Truth Commission attributes the withdrawal of the Xavante from Marãiwatsédé to the negotiations between Orlando Ometto, owner of the Suiá-Missú farm, and Abreu Sodrê, representative of the military government, to obtain FAB airplanes for the compulsory removal of the Xavante with permission from the SPI (ARAÚJO, 2020a, 2020b). The authorization was signed by Nilo Oliveira Vellozo on July 11, 1966 with the support of Salesian priests from San Marcos (ASSIS et al., 2016).

In São Marcos, the Xavante culture of Marãiwatsédé starts to break down sharply under the imposition of new cultural rules and non-indigenous conducts for time control, school attendance, language use, and personal relationships. The children were placed in Salesian boarding schools, away from their family. The disruption of their customs and compelled survival in a territory that did not allow hunting and farming as in their original lands, caused serious health problems to the indigenous population (ARAÚJO, 2020a, 2020b).

But the most serious and unexpected situation to be faced by the Xavante people was yet

to come. In the transfer from Marãiwatsédé to the new territory, an ongoing measles epidemic outbreak in São Marcos was responsible for the decimation of 1/3 of the newly transferred population, resulting in the death of 85 Xavantes (Table 1). The *Diário da Noite* newspaper, September 14, 1966 edition, had the headline: “Death is a receptionist in the village of Xavantes”.

Although the disease was already widespread in São Marcos, when the forced transfer of the Xavante from Marãiwatsédé was carried out by the military, no sanitary measures were taken by the government to protect the indigenous people. The dead were thrown into a mass grave, making it impossible to carry out the funerary rituals and burial customs characteristic of Xavante tradition. The opening of mass graves and the eviction of dead family members are still remembered today as an act of disrespect, pain and helplessness by the survivors and witnesses of the event (ARAÚJO, 2020c; ASSIS et al., 2016).

The Xavante of Marãiwatsédé stayed in São Marcos from 1966 to 1972 (ARAÚJO, 2020a). Due to the high mortality in São Marcos, they moved to Couto Magalhães, where they have lived for ten following years, from 1972 to 1982. However, despite the different forms of violence they were recurrently exposed to, the Xavante of Marãiwatsédé were also harassed by other indigenous groups in the localities where they passed by and settled, being identified as the culprits for the problems faced by those communities and accused of being responsible for witchcraft against those groups. This stigma persisted, forcing them to move from time to time in search of new territory to live in. Thus, between 1982 and 1984 they went to Areões and, finally, to Pimentel Barbosa, where they settled from 1984 to 2004 (ASSIS et al., 2016).

In 1981, the Ometto Group’s estate sold the Liquifarm Agropecuária Suiá-Missú S/A to a subsidiary of Agip do Brasil, controlled by the Italian oil conglomerate Eni-Agip (ASSIS et al., 2016). Faced with a strong pressure from European NGOs due to the fact that the company was occupying indigenous land, the Suiá-Missú farm remained under the control of that company until 1992. During the World Environment Conference, ECO 92, the Xavante of Marãiwatsédé managed to pressure the Italian company to make a public statement that the land would be handed over to FUNAI for the demarcation of the Indigenous Land (Terra Indígena – TI). As a consequence, in 1992, 165 thousand hectares of land were returned by the Italian company to the indigenous people (ARAÚJO, 2020c, ASSIS et al., 2016).

Shortly before ECO 92, FUNAI had started research studies to identify the area (process no. 1318/92), which resulted in the recognition of a first area of traditional community ownership (order no. 22, of July 29, 1992). Ordinance of the Ministry of Justice No. 363, of 09/30/1993 declared the Marãiwatsédé Indigenous Land (TI) as a traditional occupation territory of the Xavante.⁸

However, just a month after the ECO 92, encouraged by mayors of the region, the land was auctioned off by local landowners and politicians and then illegally occupied by farmers and squatters. In 1998, President Fernando Henrique Cardoso ratified a portion of the area identified as the Indigenous Land Marãiwatsédé. The FUNAI Working Group, coordinated by the anthropologist

⁸ <https://mpf.jusbrasil.com.br/noticias/664073799/mpf-esclarece-quanto-as-noticias-veiculadas-relativas-a-possivel-tentativa-de-nova-invasao-a-terra-indigena-maraiwatsede?ref=amp>

Patrícia de Mendonça Rodrigues, identified a total area of 200 thousand hectares of land under traditional occupation by the indigenous group of Marãiwatsédé, of which only 165,241 hectares were approved as such (ASSIS et al., 2016).⁹

In 2003, the court authorized the return of the Xavante to their lands, but the squatters appealed. Between November 2003 and August 2004, the Xavante were living on the edge of the route BR 158 waiting for an outcome. On the one hand, the Indians, on the other, non-indigenous armed, squatters, in addition to the presence of federal state deputies, separated by police force (ASSIS et al., 2016).

In August 2004, the Federal Supreme Court unanimously accepted the appeal from the Federal Public Ministry (Ministério Público Federal – MPF) for the return of the Xavante to their territories. But they were only able to occupy 1/4 of the area, as the squatters remained on their land. The indigenous people were confined to less than 11% of the area they could occupy, until the removal of all squatters in 2012 and 2013 (ASSIS et al., 2016).

The MPF filed a Public Civil Action requesting the immediate evacuation of the area. In 2007, a judgment of merit was issued, determining the departure of the squatters. However, the sentence was suspended, and only in 2010, the Xavantes' right to their lands was recognized by the courts. An urban infrastructure was built in this nucleus and the disintrusion process started only in 2012 and ended after two years, in 2014.

In 2016 the MPF applied another Public Civil Action against the Union, the state of Mato Grosso, FUNAI and three heirs of Fazenda Suiá-Missú for violating the rights of the Xavante people of Marãiwatsédé under the connivance of the Military government (ASSIS et al., 2016).¹⁰

Although there was a repeated possibility of the Marãiwatsédé group returning to their homeland, along the years of unlawful occupation their native territory suffered from serious environmental degradation and damage. According to data from the National Institute for Space Research (Instituto Nacional de Pesquisas Espaciais – INPE) from October 2012 and mapped by the Socio-Environmental Institute (Instituto Socioambiental – ISA), the presence of non-indigenous invaders in the TI of Marãiwatsédé has greatly deforested the area surrounding the Xavante village, making it the most degraded territory in the Legal Amazon (ASSIS et al., 2016).¹¹ In addition, because of the long process of the removal of the invaders from the area, with active participation and the positioning of the media on the side of the occupants, a discriminatory and hostile social environment was created against the Xavante communities (ASSIS et al., 2016).

INFORMATION AND MISINFORMATION: THE ROLE OF THE PRESS IN THE XAVANTE ISSUE

The legal disputes over indigenous lands between the Xavante Marãiwatsédé group and non-indigenous groups, in the state of Mato Grosso, which began in 1993 and lasted until 2012, is

⁹ <http://www.mpf.mp.br/mt/sala-de-imprensa/Documentos%20para%20link/acp-maraiwatsede-02-12.pdf>

¹⁰ <http://www.mpf.mp.br/mt/sala-de-imprensa/Documentos%20para%20link/acp-maraiwatsede-02-12.pdf>

¹¹ <http://www.mpf.mp.br/mt/sala-de-imprensa/Documentos%20para%20link/acp-maraiwatsede-02-12.pdf>

an example of discrimination and hostility committed against indigenous group. In 2012, the Federal Supreme Court (Supremo Tribunal Federal – STF) decided for the removal of the invaders from the indigenous territory. Although the judicial decision was in favor of the indigenous group, the local, regional and even national media took a different position according to the type of journalism they exercised on the case, thus affecting the readers' opinion about the conflict (AIROSO DA MOTTA and OLIVEIRA, 2015a, 2105b).

In the local newspaper, *Gazeta do Vale do Araguaia*, opinionative journalism supported by the urban population favoring the occupation of land by non-indigenous people prevailed. The *Diário de Cuiabá*, although with a greater mix between informative and opinionated journalism, maintained, like the *Gazeta*, a prejudiced discourse about the indigenous population. In both newspapers, the population consulted referred to the Indians pejoratively, judging the use of land by this social segment as an economic waste. The newspaper *O Estado de São Paulo*, which in this specific case positioned itself with more neutral and less opinionated texts, tended to understand the indigenous trajectory as a whole until the time of the land dispute, having argued more in favor of the indigenous (AIROSO DA MOTTA and OLIVEIRA, 2015a, 2015b). It is worth mentioning that none of the analyzed newspapers sought to consult the indigenous people themselves on the matter. Only non-indigenous people and representatives of the FUNAI had their opinions represented in the three newspapers (AIROSO DA MOTTA and OLIVEIRA, 2015a, 2015b).

CONCLUSIONS

The implications and consequences of the contact between the indigenous communities and non-indigenous groups since the colonization times, and mainly during the Dictatorship in Brazil, have been catastrophic to the culture, customs, territories, health and even their right to life of the former (CRUZ, 2018). Most of the details of the impact still remain to be revealed and understood. With no immunological defenses, forced to slavery, exposed to poor health conditions, socioeconomic inequality, and environmental degradation, the indigenous communities had their rights violated, suffered from indiscriminate mass killing, and had their land appropriated and exploited (VALENTE, 2017).

This situation became even more evident with the Covid-19 pandemic. Current pandemics has been affected the indigenous people in a huge proportion since April, mainly during July and August:

<https://g1.globo.com/mt/mato-grosso/noticia/2020/06/29/mais-de-100-indigenas-da-etnia-xavante-em-mt-contraem-o-novo-coronavirus-e-novemorrem-com-a-doenca.ghtml> (More than 100 Xavante indigenous people in MT contract the new coronavirus and nine die from the disease - By Eunice Ramos, TV Centro América - 06/29/2020 10:48 AM)¹²

¹² Original text in Portuguese: Mais de 100 indígenas da etnia Xavante em MT contraem o novo coronavírus e nove morrem com a doença - Por Eunice Ramos, TV Centro América - 29/06/2020 10h48.

<https://edition.cnn.com/2020/07/01/americas/brazil-covid-19-xavanteintl/index.html>; (Five days of death as Covid-19 strikes an indigenous community in Brazil - Rodrigo Pedroso and Shasta Darlington – July 1, 2020)

<https://politica.estadao.com.br/noticias/geral,lider-xavante-morre-por-covid-19-em-mato-grosso-etnia-ja-perdeu-mais-de-20-indigenas-para-adoenca,70003357991> (Xavante leader dies by Covid-19 in Mato Grosso; ethnic group has lost more than 20 indigenous people to the disease - Bruna Pinheiro – July 8, 2020)¹³

<https://www.bbc.com/portuguese/brasil-53354443> (How the indigenous people of Mato Grosso found themselves in the new epicenter of the Covid-19 pandemic in Brazil - Juliana Arini – July 9, 2020)¹⁴

<https://edition.cnn.com/2020/07/13/americas/brazil-coronavirus-indigenousweir/index.html> (Brazilian native leader fights off coronavirus to take on the President - Bill Weir – July 13, 2020)

It is critical to allow indigenous groups to protect themselves from further encroachment on their territories. On July 24, the secretary of the Special Secretariat for Indigenous Health (Sesai), Robson Santos da Silva, announced that a Task Force would travel through the nine major regions of the Special Indigenous Sanitary District (DSEI) Xavante, in Mato Grosso, to perform medical care and tests for Covid-19. However, many indigenous groups, including the Xavante in São Marcos, refused to make therapeutic use of hydroxychloroquine in patients with positive tests for Covid-19. The Xavantes understand that there is no security regarding the use of the medicine.¹⁵

We want and need help in terms of health, but with hospitals, facilities, doctors, Casai (Casa de Apoio à Saúde Indígena) closer to us. We don't need the government here advertising itself. Taking a picture and recording a video to say that you do something that is not true (PARIDZANÉ, Cacique Damião. TI Marãiwatséde. Conselho Indigenista Missionário – CMI. 21/08/2020. Roberto Santana, assessorial de comunicação).¹⁶

The abuse of authority and the government's neglect of indigenous people has a huge role to play in enforcing the seizure of their territories and the huge mortality from infectious diseases, for instance when they prohibited, in August, the entrance of the French NGO *Doctors without Borders* (*Médecins sans Frontières* - <https://www.doctorswithoutborders.org/>) to help the indigenous groups

¹³ Original text in Portuguese: Líder xavante morre por covid-19 em Mato Grosso; etnia já perdeu mais de 20 indígenas para a doença – Bruna Pinheiro – 08 de julho de 2020.

¹⁴ Original text in Portuguese: Como povo indígena de Mato Grosso se viu no novo epicentro da pandemia de covid-19 no Brasil - Juliana Arini – 9 de julho de 2020.

¹⁵ Link: https://cimi.org.br/2020/08/sem-consulta-previa-e-denunciando-atraso-terras-indigenas-xavante-se-negam-a-receber-forca-tarefa-da-sesai-com-militares-e-cloroquina/?fbclid=IwAR3YwDNwhfjv8SHf7WMml1YYsssbGZ5L-nz_Wm_QMqEoeOpW6uAg_d_BZ61c_

¹⁶ Link: https://cimi.org.br/2020/08/sem-consulta-previa-e-denunciando-atraso-terras-indigenas-xavante-se-negam-a-receber-forca-tarefa-da-sesai-com-militares-e-cloroquina/?fbclid=IwAR3YwDNwhfjv8SHf7WMml1YYsssbGZ5L-nz_Wm_QMqEoeOpW6uAg_d_BZ61c_

in Mato Grosso to combat the spread of coronavirus.¹⁷

The materiality of the relationship between space and people creates “places of memory” (BOWSER and ZEDEÑO, 2009, p. 1-6; NORA, 1989 – *lieux de mémoire*) that unfold on social, political, economic, and symbolic aspects of the landscape. It is at the core of archaeological research and investigations. Furthermore, “People remember or forget the past according to the needs of the present, and social memory is an active and ongoing process [...]. Social memory is often used to naturalize or legitimate authority [...] Common use of social memory is to create and support a sense of individual and community identity” (VAN DYKE and ALCOCK, 2003, p. 3). Like artifacts, landscapes and spaces also have their “biography”, or their life cycle: they are abstractly conceived, produced, used, branded, modified, discarded, reused, and ultimately abandoned. The creation of places depends on the innumerable interactions between people and a given space characterized by different natural configurations and histories. People and places are modified constantly, giving different meanings to the social memory (BOWSER and ZEDEÑO, 2009, p. 8-9), in a way that “memories are not ready-made reflections of the past, but eclectic, selective reconstructions” (LOWENTHAL, 1985, p. 210).

Social memory confers meanings to named places (ROKSANDIC, 2016). Revitalization of the language has been proved as a means of maintaining identity and social cohesion of the colonized indigenous people (SILVA and NOELLI, 2017). The names persist long after the people are forced to move from the territory. Archaeological and linguistic methodologies can be used to reconstruct the extent of the territorial loss and ascertain the long-term relationship of Xavante people with their land by examining the distribution of Xavante place names on the larger territories; the social memory of their sacred places; archaeological evidence of the landscape used by the Xavante. By applying different fields of inquiry (archaeology, linguistics, ethnography, bioarchaeology), these key aspects of Xavante history can document the colonial history of the Xavante people on their traditional territory and reveal the colonization movement process on the Xavante territory¹⁸.

¹⁷ “The Brazilian government did not authorize the organization *Médecins Sans Frontières* to provide services to seven indigenous communities in Mato Grosso do Sul. The Terenas asked the French NGO for help in July to combat the spread of coronavirus in the villages”. Original text in Portuguese: “O governo brasileiro não autorizou a organização Médicos sem Fronteiras a prestar atendimento em sete comunidades indígenas no Mato Grosso do Sul. Os Terenas pediram ajuda à ONG francesa em julho para combater o avanço do coronavírus nas aldeias” (Cristiane Capuchinho, https://www.rfi.fr/br/brasil/20200821-brasil-impede-m%C3%A9dicos-sem-fronteiras-de-atender-ind%C3%ADgenas-contra-covid-19-no-ms?fbclid=IwAR01FS08_Fu81Qqz-D8gOcJL9In2fgkjltdRd2Lma_7-iWhPRBiaWPsE0k).

¹⁸ These are the objectives of the research project entitled *Colonization of the sacred places of the Xavante territory of Marãiwatsédé and São Marcos*, recently approved by *Trans-Atlantic Social Innovation*. The purpose of this research project is to evaluate, through archaeology and linguistics, this process which led to the taking of the territory of the Xavante indigenous communities of Marãiwatsédé and São Marcos, in the state of Mato Grosso, Brazil. In order to do so, interviews will be carried out for a linguistic evaluation of the memory of the sacred sites and their cultural importance. Simultaneously, archaeological surveys will be carried out to understand the sacred sites, their cultural meaning, and the territorial distribution during this period. The project will contribute to the understanding of the social, political and cultural dynamics that reconfigured the way of life of the Xavante populations in Brazil. The project stems from the interest of the indigenous communities to reclaim the memory of their territory and sacred spaces. Firmly based in community participatory archaeology the project will provide strategies and guidelines for the maintenance of their traditional customs and culture. This project aims to rescue the memory of territorial occupation and return recognition and respect to the sacred places of the Xavante.

There is still a long path to get to achieve the inclusion of the indigenous people in the equality of human rights and to minimize the harmful consequences of contact and the Brazilian colonial and military historical context. However, conducting academic research projects, such as archaeological surveys and linguistic approaches with active participation of with indigenous contributors, sharing their knowledge and experiences from both an academic as well as a human rights perspective, will enable to reconstruct and preserve their history, culture, memory, and identity. It will also bring an important contribution to the promotion and visibility of their current needs and rights.

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